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5718	Zillig, John A., Dubuque.
6130	Zimmerman, Chas. F., Des Moines.
6355	Zeiger, Frank W., Garner.
6447	Zimmerman, Joe J., Coffee Creek, Mont.
6640	Zimmerman, W. J., Des Moines.
7067	Zimmerman, Chas. J., Waterloo.
7139	Ziepprecht, Carl W., Dubuque.
7186	Zender, M. J., Council Bluffs.
7364	Zastera, Frank, Cedar Rapids.
7450	Zimmerman, Julius, Kelley.
7541	Zergan, Geo. F., Holyrood, Kan.
7976	Zimmerman, W. D., Keokuk.
8189	Zinn, Edgar, Ft. Dodge.
8218	Zimmermann, Wm., Cedar Rapids.
8489	Zopi, Peter, Jr., Waterloo.
8791	Zastera, Joseph V., Cedar Rapids.
8853	Zender, Chas. H., Cresco.
8901	Zastera, Chas. H., Cedar Rapids.
9265	Zopi, Geo. J., Onalaska, Wash.
9499	Zimmerman, Wm., Dubuque.

STATE OF IOWA

1924

REPORT OF THE

State Mine Inspectors

FOR THE

Biennial Period Ending December 31, 1923.

INSPECTORS

W. E. HOLLAND, Centerville, Iowa

R. T. RHYS, Ottumwa, Iowa

EDWARD SWEENEY, Des Moines, Iowa

L. E. STAMM, Secretary, Des Moines, Iowa

Published by
THE STATE OF IOWA

State Mine Inspectors

REPORT OF THE

FOR THE

Biennial Period Ending December 31, 1923

DES MOINES

W. E. HOLLAND, Governor, Iowa

R. T. RHYS, Inspector

EDWARD SWEENEY, Inspector

LETTER OF TRANSMITTAL

Hon. N. E. Kendall, 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 1922 and 1923.

Very respectfully submitted,

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

DES MOINES, IOWA, MAY, 1924.

MINE INSPECTION IN IOWA

State Inspectors—

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

District No. 2—R. T. RHYS, Ottumwa.

District No. 3—EDWARD SWEENEY, Des Moines.

Secretary—L. E. STAMM, 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. SHIVERS, Secretary, 3209 School Street, Des Moines.

J. RITTER, Centerville, Iowa.

DAVID ANDERSON, Route 5, Albia, Monroe County.

JOHN CALDWELL, 513 N. 8th St., Centerville, Appanoose 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 May 10, 1924. Compensation of members of the board \$5.00 per day and necessary expenses.

The 23 coal producing counties of the State of Iowa for the calendar year ending December 31st, 1922, produced 4,679,688 tons of coal, and gave employment to 13,790 men in and around the mines of the state.

This production (the lowest in years), was not for the full calendar year, however, as the mines of the state were shut down on March 30th pending an agreement between the miners and operators of the state, and were not opened for production until the latter part of August of that year. Hence no coal was produced (except that which was produced by the small non-union mines) for a period covering nearly five months.

For the second period of this report, the calendar year ending December 31st, 1923, the 23 coal producing counties did some better, producing 6,120,332 tons of coal, but this production was not up to the standard of former years. This may be attributed to a number of causes. During the world war Iowa was zoned as to coal shipments and on account of most of the coal production of Illinois and Kentucky being used in the East, the zoning was favorable to the Iowa mines, so much so that in 1917 Iowa reached her highest level in mining, producing more than 9,000,000 tons of coal. During the war time many new mines were opened in Illinois and Kentucky, and with the war over, their natural outlet for coal mined was in the territory furnished in war time by Iowa coal mines. The increased shipment of this foreign coal into Iowa territory caused a decrease in production in Iowa. This trade has never been fully recovered. Since war times the conditions in the mining industry have been so unfavorable that the highest annual production has been less than seven million tons of coal.

During the war period Iowa mines showed what could be done in the way of production, when more than nine million tons of coal were produced in 1917. Then the miners, numbering but a few more than now employed, had almost continuous employment in the mines. During the past year the shipping mines of this state worked an average of 186½ days as compared to 1917, when the shipping mines of the state worked an average of 239 2/3 days. Had the mines of Iowa been able to have worked as many days in 1923 as in 1917 the production would have been fully as large. The question of production then comes to this: Not more mines being opened or more men employed, but to more continuous operation of the mines already opened and producing. Why is it that Iowa does not produce more coal each year?

Many factors enter into the production and distribution of Iowa coal. We know that Iowa coal tests high in B.T.U. values (heating values), no one can doubt that, as numerous analyses show this to be true. Likewise as to storage qualities; no coal produced in other states will store better, if as well, experiments have demonstrated this also to be true. And no coal is better adapted to burning in furnaces for house heating purposes than the coal mined right here in Iowa. Why then this turning from Iowa coal to coal produced in other states? Is it because we think the grass on the other side of the fence looks greener and better? Or because the fellow who sells the coal produced in other states is just a little bit better booster? Perhaps both of these may have something to do with it, but we believe the cause to be chiefly because your dealer can make just a little more by handling the foreign coal, and you, Mr. Consumer become a party to this and allow the money which should remain in your own state and help make business better here, go into another state and be a loss here, simply because you are persuaded to burn Illinois coal or Kentucky coal by your dealer. Do you know that by doing this you are paying about three dollars more per ton for coal to heat your home? Your dealer doesn't care so long as he is making good. If you would insist on burning Iowa coal a good many million dollars would remain in this state to go into other channels of business, and to help make times better. Just how many million dollars would remain in Iowa if a majority of the people of the state would use Iowa coal? Making a comparison of production in Iowa in 1917 when the state produced more than nine million tons and in 1923 when the state produced but little over six million tons, the money value lost to Iowa by reason of her people buying and using Illinois and Kentucky coal, would approximate *Fifteen Million Dollars*. Does that mean anything to you? Then buy Iowa coal during all of 1924 and 1925 and the mines of Iowa will be able to give steady employment to more than 15,000 miners, and the money will remain in the state and all lines of business will be highly benefited. There is only one way to make a product of value to the state producing it, and that is to find an outlet for this product at a fair value to the producer. There would be a chance for cheaper coal if all the miners were given steady employment.

All Iowa coal should be consumed in this state for the good of the state. The railroads running into and through the state, have always used more than 50 per cent of the coal mined in Iowa each year. The people of the state could easily use the other 50 per

cent, of even an increased production. Tests made have shown that Iowa coal gives better service on railroads than other coals and so Iowa coal is in demand by the railroads. Statistics show also that Iowa consumes approximately 14 million tons of coal each year, in her homes, in her manufactories and in railroad use, so that if Iowa people burned Iowa coal an increased amount could be produced each year, and millions of dollars remain in Iowa to boost all lines of business. Just think of that, Mr. Consumer. You cannot expect to boost your own line of business and let your money go into some other state. Make up your mind to use Iowa coal and have this money remain here.

The mine inspectors of this state are glad to note an increased disposition on the part of the operators of the state to keep the mines of the state in condition that will comply with the mining laws.

Tables of statistics, showing coal production, distribution, number of men employed, days worked, etc., will be found in another part of this report.

TONS OF COAL OF DIFFERENT SIZES MINED IN IOWA IN 1922-1923.

Districts	1922.			
	Number of tons produced lump coal	Number of tons of run of mine coal produced	Number of tons coal produced	Total number of tons of coal produced
First District	1,089,115	475,673	100,928	1,615,714
Second District	562,345	981,989	237,540	1,791,874
Third District	749,125	162,563	309,749	1,372,397
Totals	2,399,585	1,560,265	729,237	4,679,087

Districts	1923.			
	Number of tons produced lump coal	Number of tons of run of mine coal produced	Number of tons coal produced	Total number of tons of coal produced
First District	1,198,171	836,836	125,834	2,160,841
Second District	533,761	1,447,237	321,423	2,302,441
Third District	944,342	224,383	438,825	1,607,550
Totals	2,676,274	2,508,456	886,082	6,120,812

REPORT IOWA MINE INSPECTORS

COAL PRODUCTION IN IOWA.

For Calendar Years 1922 and 1923.

FIRST DISTRICT.

Counties	1922		1923	
	Tons of coal of all grades produced	Average number of employees	Tons of coal of all grades produced	Average number of employees
Appanoose	880,261	3,599	1,017,308	3,027
Lucas	439,107	1,020	704,321	906
Monroe (Part)	304,276	476	308,341	542
Wayne	33,565	106	31,385	135
Pace	39,006	115	15,917	48
Adams	19,015	90	15,361	33
Taylor	12,381	46	12,808	44
Totals	1,615,711	5,458	2,160,341	5,385

SECOND DISTRICT.

Monroe (Part)	934,309	2,472	1,200,471	1,903
Marion	566,956	1,371	777,869	1,423
Wapello	93,353	311	94,959	279
Jasper	89,992	306	112,496	363
Mahaska	77,063	222	84,684	324
Van Buren	18,298	60	16,379	48
Keokuk	11,228	31	12,332	32
Jefferson	5,759	22	3,680	14
Davis	600	4	440	3
Totals	1,791,397	4,862	2,302,441	4,770

THIRD DISTRICT.

Polk	605,736	1,613	755,642	1,348
Dallas	374,607	945	694,837	1,233
Boone	227,236	656	140,927	414
Guthrie	14,189	43	6,431	33
Greene	4,603	55	3,716	67
Weber	3,584	19	10,116	36
Warren	41,129	138	55,721	172
Story	1,242	5	1,000	9
Totals	1,373,387	3,478	1,657,550	3,574

TOTAL BY DISTRICTS AND YEARS.

First District	1,615,714	5,455	2,160,341	5,385
Second District	1,791,337	4,862	2,302,441	4,770
Third District	1,373,387	3,478	1,657,550	3,571
Totals for 1922-1923	4,679,688	13,790	6,120,332	13,726

STATISTICS OF IOWA MINING

COAL PRODUCTION OF IOWA.

Calendar Year 1922.

Counties	Prepared Lump Coal	Run of Mine Coal	Slack Coal	Total Production
Monroe	294,863	742,335	101,487	1,138,685
Appanoose	885,451	2,700	29,063	888,254
Polk	319,443	112,117	174,176	605,736
Marion	223,948	181,616	151,436	556,999
Lucas	471,763	171,024	25,729	668,516
Dallas	239,446	5,508	137,653	382,607
Boone	162,847	28,863	35,516	227,226
Wapello	49,649	22,628	21,078	93,355
Jasper	26,456	50,662	12,962	89,992
Mahaska	23,071	44,371	9,620	77,063
Warren	23,412	.....	17,707	41,129
Wayne	29,114	.....	1,431	30,545
Pace	39,006	.....	.....	39,006
Adams	18,949	.....	66	19,015
Van Buren	6,333	9,829	2,104	18,266
Guthrie	.....	14,189	.....	14,189
Taylor	12,381	.....	.....	12,381
Keokuk	3,949	4,000	3,277	11,225
Jefferson	2,018	3,528	218	5,759
Greene	3,976	.....	717	4,693
Weber	.....	3,584	.....	3,584
Story	.....	1,242	.....	1,242
Davis	500	.....	100	600
Totals	2,350,583	1,569,861	729,227	4,649,671

COAL PRODUCTION OF IOWA.

Calendar Year 1923.

Counties	Prepared Lump Coal	Run of Mine Coal	Slack Coal	Total Production
Monroe	191,705	1,267,160	101,947	1,560,812
Appanoose	955,467	17,899	43,849	1,017,215
Marion	305,974	268,312	202,582	776,869
Polk	379,133	150,868	225,622	755,642
Lucas	86,229	678,642	39,490	794,361
Dallas	444,352	1,438	239,047	684,837
Boone	92,774	41,327	5,930	140,031
Jasper	39,125	63,571	18,800	121,506
Wapello	49,922	23,129	21,088	94,096
Mahaska	22,078	49,732	12,551	84,361
Warren	20,443	17,463	17,815	55,721
Wayne	39,774	.....	611	40,385
Pace	18,917	.....	.....	18,917
Van Buren	9,245	5,630	1,492	16,379
Adams	15,361	.....	.....	15,361
Taylor	12,808	.....	.....	12,808
Keokuk	2,983	5,819	3,580	12,382
Weber	1,175	3,591	.....	4,766
Guthrie	2,321	5,204	6	7,521
Greene	3,976	400	400	4,776
Jefferson	7	3,670	8	3,685
Story	1,000	.....	.....	1,000
Davis	340	.....	100	440
Totals	2,676,274	2,307,976	996,087	6,120,332

REPORT IOWA MINE INSPECTORS

MINES, OUTPUT AND EMPLOYES.

Number of Mines, Output of Coal, Number of Miners and Other Employees for Calendar Years 1922 and 1923.

District No. 1, 1922.

Counties	Mines in county	Amount of coal of all grades produced	Number of miners and loaders employed	Number of other inside employees	Number of total employees	Total number of employees in and around the mines
Appanoose	80	880,264	2,581	708	310	3,599
Lucas	5	439,107	917	304	69	1,090
Monroe (Part)	5	304,376	331	108	37	476
Wayne	4	39,566	76	25	10	115
Page	5	30,006	86	10	19	115
Adams	12	19,015	73	6	11	90
Taylor	12	12,381	36	5	5	46
Totals	108	1,615,714	3,530	1,164	461	5,455

District No. 1, 1923.

Appanoose	85	1,017,208	2,644	645	305	3,627
Lucas	5	390,341	896	321	85	1,342
Monroe (Part)	5	704,321	666	273	77	966
Wayne	5	31,385	103	12	10	125
Page	3	18,917	36	6	6	48
Taylor	2	12,808	34	6	4	44
Adams	10	15,351	65	17	11	93
Totals	116	2,160,341	3,824	1,083	448	5,385

District No. 2, 1922.

Monroe (Part)	14	934,309	1,643	645	184	2,472
Marion	23	509,996	921	318	132	1,371
Wapello	41	93,356	225	36	50	311
Jasper	12	89,992	200	111	49	369
Mahaska	29	77,063	158	31	33	222
Van Buren	14	18,298	48	4	17	69
Koekuk	7	11,233	23	2	6	31
Jefferson	5	5,759	16	2	4	22
Davis	1	900	6	0	1	4
Totals	146	1,791,974	3,237	1,149	476	4,862

District No. 2, 1923.

Monroe (Part)	14	1,200,471	1,273	483	147	1,903
Marion	27	777,809	909	356	148	1,413
Jasper	12	112,096	154	71	35	263
Wapello	41	94,060	200	30	40	270
Mahaska	37	84,684	162	28	34	224
Van Buren	12	16,379	33	5	10	48
Koekuk	7	13,383	24	1	7	32
Jefferson	5	3,982	12	2	4	14
Davis	1	440	3	0	2	3
Totals	153	2,302,441	2,776	974	426	4,170

STATISTICS OF IOWA MINING

MINES, OUTPUT AND EMPLOYES.

Number of Mines, Output of Coal, Number of Miners and Other Employees for Calendar Years 1922 and 1923.

District No. 3, 1922.

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 in and around the mines
Polk	21	605,736	974	479	160	1,613
Dallas	6	374,907	574	277	94	945
Boone	8	227,226	384	210	52	656
Guthrie	6	14,139	33	3	42	42
Greene	3	4,093	31	18	6	55
Webster	3	3,584	15	1	3	19
Warren	2	41,120	76	48	14	133
Story	1	1,242	4	1	1	3
Totals	50	1,272,307	2,101	1,066	386	3,473

District No. 3, 1923.

Polk	22	755,642	961	435	153	1,549
Dallas	7	684,337	831	392	110	1,332
Boone	10	140,027	265	106	43	414
Warren	4	55,721	107	46	19	172
Guthrie	5	6,431	29	6	6	35
Webster	4	19,116	27	5	4	36
Greene	3	3,776	20	4	3	27
Story	1	1,000	7	1	1	9
Totals	56	1,607,560	2,247	980	338	3,574

REPORT IOWA MINE INSPECTORS
DISTRIBUTION OF COAL PRODUCED.

District No. 1, 1922.

Counties	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 railroads	Used at mines for mine purposes
Appanoose	889,264	89,077	254,069	235,353	286,239	15,290
Lucas	439,167	5,276	33,992	3,331	375,265	13,310
Monroe (Part)	294,376	12,493	57,529		132,088	2,273
Wayne	30,565	17,192	19,328	3,045		
Page	30,096	30,096				79
Adams	19,015	18,945				9
Taylor	12,881	4,874	7,521			
Totals	1,615,714	177,842	364,270	241,749	793,592	39,952

District No. 1, 1923.

Appanoose	1,017,208	79,062	251,090	280,743	382,263	20,337
Monroe (Part)	360,341	14,087	88,049		255,784	2,431
Lucas	794,321	3,347	37,276	425	643,452	19,821
Wayne	31,385	18,263	12,487	84		711
Page	18,917	18,432	483			
Taylor	12,898	3,459	9,253	55		50
Adams	15,361	15,366				5
Totals	2,160,341	151,947	368,640	281,397	1,281,439	43,355

District No. 2, 1922.

Monroe (Part)	934,309	24,128	234,401	1,053	626,057	28,722
Marion	599,966	45,187	267,751	13,539	220,253	16,403
Wapello	93,355	89,338	3,898			489
Jasper	89,592	16,251	34,293		35,057	4,480
Mahaska	77,063	51,986	5,637	90	18,446	998
Van Buren	18,268	10,730	7,497			35
Keokuk	11,225	10,514				721
Jefferson	5,759	5,736				23
Davis	690	450	150			
Totals	1,791,577	254,324	554,537	14,982	899,817	51,874

District No. 2, 1923.

Monroe (Part)	1,290,471	22,810	66,840	262	1,078,263	31,176
Marion	777,589	64,189	308,152	864	291,406	23,297
Jasper	112,496	22,430	30,737		52,419	6,920
Wapello	94,090	88,686	4,710			694
Mahaska	84,684	50,074	6,307	125	26,649	1,529
Van Buren	16,379	9,225	7,118			16
Keokuk	12,332	11,772				560
Jefferson	3,680	3,316				20
Davis	440	440				
Total	2,302,441	272,933	513,854	1,251	1,448,737	65,132

DISTRIBUTION OF COAL PRODUCED.

District No. 3, 1922.

Counties	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 railroads	Used at mines for mine purposes
Polk	665,736	275,792	242,040	350	73,631	13,428
Dallas	374,607	13,431	274,616	9,350	74,926	2,282
Boone	227,226	45,025	101,975		75,060	4,266
Guthrie	14,189	14,165				24
Greene	4,693	4,655				38
Webster	3,584	3,584				
Warren	41,130	6,397	31,993			2,820
Story	1,242	1,042				200
Totals	1,272,397	364,021	650,534	9,700	224,517	23,058

District No. 3, 1923.

Polk	755,641	293,305	312,476	370	135,834	13,618
Dallas	684,837	18,668	452,638	15,922	193,027	4,581
Boone	140,027	51,542	48,775		36,177	3,531
Warren	55,721	6,497	1,400	31,233	12,624	3,967
Guthrie	6,431	6,415				26
Webster	10,116	10,116				
Greene	3,776	3,776				
Story	1,000	1,000				
Totals	1,657,550	391,319	815,289	47,525	377,662	25,723

COAL PRODUCTION AND DISTRIBUTION IN IOWA BY COUNTIES
1922.

Counties	Tons of coal of all grades produced	Sold to local trade, not shipped	Shipped to points within the state	Shipped to outside the state	Sold to railroads	Used at mines for mine purposes
Monroe	1,138,098	36,623	291,921	1,050	758,145	30,957
Appanoose	890,264	89,077	254,996	233,353	286,230	15,280
Polk	606,736	275,722	242,040	30	73,631	13,428
Marion	509,906	45,185	267,751	13,839	229,253	16,463
Lucas	420,107	5,276	33,562	3,351	375,266	13,310
Dallas	374,957	13,431	274,616	9,350	74,926	2,282
Boone	327,236	45,023	191,975		75,900	4,266
Wapello	163,350	89,338	3,808			489
Jasper	89,962	16,251	54,330		35,007	
Mahaska	77,063	31,988	5,637	99	18,446	968
Warren	41,120	6,397	31,563			2,829
Wayne	39,565	17,192	19,328	3,045		
Page	39,096	30,006				
Adams	19,615	18,945				70
Van Buren	18,268	10,736	7,497			35
Guthrie	14,189	14,165				24
Taylor	12,381	4,851	7,521			721
Keokuk	11,235	30,514				9
Jefferson	7,570	5,736				23
Greene	4,663	4,652				38
Webster	3,584	3,584				300
Story	1,242	1,045				
Davis	600	456	156			
Totals	4,679,885	796,187	1,569,341	266,431	1,917,922	105,881

1923.

Monroe	1,500,812	36,897	154,880	261	1,334,047	34,557
Appanoose	1,017,208	79,062	251,090	280,743	282,293	20,337
Marion	777,869	64,180	286,152	86	291,456	23,267
Polk	755,642	295,261	312,476	374	135,831	13,638
Lucas	704,821	3,247	37,226	435	643,452	19,821
Dallas	684,837	18,668	452,628	15,922	195,027	4,581
Boone	140,927	15,512	48,775		36,177	3,531
Jasper	112,646	21,629	39,727		52,419	6,929
Wapello	94,000	88,686	4,710			634
Mahaska	84,684	39,974	6,307	125	26,610	1,529
Warren	55,721	6,397	1,400	31,233	12,624	3,967
Wayne	31,236	18,298	12,457	84		711
Page	18,917	18,432	482			
Adams	16,379	9,225	7,118			16
Van Buren	15,361	15,366				5
Taylor	12,808	3,456		55		56
Keokuk	12,322	11,722				560
Webster	10,116	10,116				
Guthrie	6,421	6,413				26
Warren	3,726	3,726				
Jefferson	3,680	3,316				30
Story	1,000	1,000				
Davis	440	440				
Totals	6,120,322	826,199	1,727,783	330,083	3,107,838	134,210

AVERAGE DAYS OF EMPLOYMENT
1922.

Counties	Miners and Loaders		Other Employees		Surface Employees	
	Average days in shipping mines	Average days in mines	Average days in shipping mines	Average days in local of wagon	Average days in shipping mines	Average days in local of wagon
Monroe	150 1/4	132 1/2	152	107 1/2	140 1/2	138 1/2
Appanoose	117	100 1/2	122 2-11	120 3-7	124 1/2	100 1/2
Polk	130 1/2	137 1/2	130 1/2	100 1/2	154	160 1/2
Marion	132 4-7	119	146 2-7	126 1/2	152 6-7	125 1/2
Lucas	127 1/2	65	139 1/2	60	132 1/2	66
Dallas	144	141	167 1/2	167 1/2	167 1/2	150
Boone	135 1/2	176 1/2	142 1/2	156 1/2	142 1/2	150 1/2
Wapello	219	130 1/2	219	148 1/2	219	150 1/2
Jasper	122	137 4-7	122	157 1/2	122	143 1/2
Mahaska	162	180	176	140	178	180
Warren	162	180	141	180	141	144 1/2
Wayne	141	144 1/2		149	125	151
Page		151		175		121 1/2
Adams		119 1/2		178		226
Van Buren		182		170		245
Guthrie		264		285		196 1/2
Taylor		148		54		141 1/2
Keokuk		132 1/2		108		125
Jefferson		130 1/2		122		212
Greene		122		180		173
Webster		212		173		180
Story		173		173		150
Davis		180		180		150

1923.

Monroe	199	67	218	60	231	52
Appanoose	141	121	160	141	155	134
Marion	161	192	152	154	185	182
Polk	195	177	227	172	240	188
Lucas	178	304			184	104
Dallas	174	88	229	222	222	88
Boone	200	177	177	88	175	88
Jasper	136	133	177	161	201	200
Wapello	175	155	175	164	175	164
Mahaska	184	150	190	150	200	150
Warren	141	132	147	152	151	156
Wayne	300	276	300	255	300	255
Page		153		183		161
Adams		149		145		102
Van Buren		200		200		200
Taylor		222		202		285
Keokuk		124		129		116
Webster		137		87		87
Guthrie		111		52		133
Greene		111		111		136
Jefferson		150		150		150
Story		50		50		48
Davis						

LOCAL OR WAGON MINES

Mines, Output and Employes by Counties
1922.

Counties	Wagon or local mines	Tons of coal of all kinds produced	Miners and employes	Other Underground Employes	Surface employes	Total number of employes
Monroe	3	8,153	14	3	4	21
Appanoose	3	72,490	266	56	49	371
Polk	11	177,536	333	52	52	496
Marion	16	36,644	109	25	26	160
Lucas	1	838	1	1	6	8
Boone	5	10,714	26	13	43	87
Wapello	46	89,933	214	34	33	283
Mahaska	39	16,006	48	9	15	72
Warren	10	55,372	14	16	147	177
Wayne	28	19,259	14	2	20	26
Greene	1	11,305	24	3	4	33
Page	3	39,006	6	10	19	115
Adams	3	19,615	73	6	11	96
Van Buren	17	18,308	48	4	17	69
Guthrie	6	14,189	33	3	6	42
Taylor	1	2,604	6	2	2	8
Keokuk	7	11,233	23	2	6	31
Greene	3	5,150	18	2	4	22
Jefferson	10	4,463	31	18	6	55
Webster	3	3,584	15	1	3	19
Story	1	1,342	4	1	1	4
Davis	1	600	3	1	1	4
Totals	206	609,823	1,508	315	307	2,130

1923.

Monroe	6	5,904	24	5	5	34
Appanoose	33	79,646	278	72	49	388
Polk	12	173,654	399	47	37	383
Marion	17	41,344	145	26	25	196
Lucas	1	703	8	1	1	9
Boone	6	22,673	61	11	13	83
Wapello	36	34,690	209	30	40	270
Mahaska	11	18,189	43	5	15	63
Warren	36	56,408	114	17	28	159
Wayne	2	2,700	47	21	5	53
Greene	4	5,965	48	3	5	59
Page	3	3,787	21	3	5	25
Adams	10	18,361	65	17	11	93
Van Buren	5	16,379	33	5	10	48
Guthrie	2	6,431	29	3	6	35
Taylor	2	12,808	31	6	4	44
Keokuk	7	12,323	24	1	7	32
Jefferson	2	3,680	13	2	2	14
Greene	3	3,776	23	4	3	27
Webster	4	10,116	27	1	4	36
Story	1	1,000	7	1	1	9
Davis	1	440	3	1	1	3
Totals	203	634,371	1,487	311	274	2,072

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

1922.

Counties	Kgs of black powder used at mines in 1922	Pounds of dynamite used at the mines	Pounds of permissible explosives used	Number of mining machines in operation	Number of horses and mules used at the mines	Days mines were closed down or partially closed down on account of strikes or discharges with employes	Curtailment in tons production because of discharges
Monroe	63,623	138,961	.....	3	289	1,923	836,634
Appanoose	38	4,545	.....	21	219	9,975	308,638
Polk	29,997	53,620	90,355	21	123	2,844	366,551
Marion	35,743	38,800	.....	2	113	974	425,362
Lucas	23,272	16,890	.....	1	17	661	433,100
Dallas	25,258	12,341	.....	2	65	713	308,900
Boone	9,018	5,017	.....	2	37	363	169,688
Wapello	7,644	3,384	.....	3	29	1,360	28,622
Jasper	4,398	1,300	.....	10	24	144	99,300
Mahaska	4,736	7,392	.....	3	35	1,138	35,133
Warren	1,037	7,725	.....	4	2	145	17,400
Wayne	.....	400	.....	2	8	270	16,300
Page	.....	3,900	.....	3	.....	78	5,340
Adams	1,739	.....	.....	.....	.....	.....	.....
Van Buren	1,422	215	.....	.....	.....	.....	.....
Guthrie	20	22	.....	.....	.....	42	364
Taylor	.....	1,459	.....	.....	.....	.....	.....
Keokuk	448	1,456	.....	.....	.....	.....	.....
Jefferson	469	415	.....	.....	.....	.....	.....
Greene	283	.....	.....	.....	.....	30	450
Webster	130	315	.....	.....	.....	.....	.....
Story	80	177	.....	.....	.....	158	600
Davis	50	.....	.....	.....	.....	.....	.....
Totals	307,623	300,530	50,355	83	1,117	19,449	3,494,821

1923.

Monroe	92,099	181,888	.....	3	253	514	58,182
Appanoose	101	3,333	.....	28	281	53	6,993
Marion	47,877	37,942	4,635	4	133	7	739
Polk	36,071	39,066	43,174	18	106	111	2,969
Lucas	34,409	29,621	.....	5	75	7	5,550
Dallas	46,889	25,813	41	4	58	2	840
Boone	1,277	11,508	.....	4	25	3	300
Jasper	2,465	1,056	56	16	12	.....	.....
Wapello	5,990	2,909	25	1	26	.....	.....
Mahaska	5,226	10,913	825	2	31	30	2,000
Warren	1,662	7,372	.....	7	4	.....	.....
Wayne	.....	536	.....	.....	.....	.....	.....
Page	.....	3,100	.....	2	.....	.....	.....
Van Buren	1,170	445	75	.....	.....	.....	.....
Adams	.....	1,770	.....	1	.....	.....	.....
Taylor	.....	1,306	.....	.....	.....	.....	.....
Keokuk	482	1,350	.....	.....	.....	.....	.....
Webster	.....	40	.....	.....	.....	1	7
Guthrie	.....	.....	.....	.....	.....	.....	56
Greene	220	.....	.....	.....	.....	.....	.....
Jefferson	311	15	.....	.....	.....	.....	.....
Story	.....	.....	.....	.....	.....	.....	.....
Davis	48	.....	.....	.....	.....	.....	.....
Totals	277,156	309,132	48,445	83	1,018	1714	77,610

**STRIKES, LOSS OF OUTPUT, DAYS IDLE IN IOWA COAL MINES
FOR CALENDAR YEAR 1922**

Counties	Number of days mines were shut down because of strikes or disagreements with employes in 1922	Estimate of curtailment of output because of such strikes, etc.	Number of days mines were idle for lack of railroad cars in 1922	Estimate of loss of output in tons because of lack of rail- road cars in 1922	Number of days mines were idle because of lack of orders or sales in 1922.	Estimate of total tons mine output on order or sales in 1922
Monroe	1,222	836,054	31	24,394	375	282,873
Appanoose	9,075	808,638	361	48,779	1,937	229,581
Polk	2,384	399,591	19	8,015	473	105,642
Marion	974	425,303	62	46,056	692	119,577
Lucas	651	433,159	98	87,773	47	37,125
Dallas	713	308,909	10	3,729	36	34,736
Boone	363	109,698	20	4,089	224	30,652
Wapello	1,254	28,623	3	713	22	28,463
Adams	144	99,309	20	161	161	84,630
Mahaska	1,138	38,153	3	651	970	12,945
Warren	145	17,460	6	806	13	1,490
Wayne	279	36,300	6	806	74	2,500
Page	78	5,340	.....	.....	.....	.....
Adams	.....	.....	.....	.....	.....	.....
Van Buren	.....	.....	.....	.....	.....	.....
Guthrie	42	394	.....	.....	.....	.....
Taylor	.....	.....	.....	.....	.....	.....
Keokuk	.....	.....	.....	.....	.....	.....
Jefferson	.....	.....	.....	.....	.....	.....
Greene	36	456	.....	.....	.....	.....
Webster	.....	.....	.....	.....	.....	.....
Story	158	606	.....	.....	.....	.....
Davis	.....	.....	.....	.....	.....	.....
Totals	19,449	3,494,821	616	225,188	6,324	974,493

1923

Monroe	51½	58,152	29	13,316	1,589	683,411
Appanoose	53	6,993	207	30,002	7,308	363,328
Marion	.....	730	54	21,225	649	253,023
Polk	11	2,969	19	7,806	901½	277,579
Lucas	7	5,500	115	134,500	112	139,300
Dallas	2	840	43½	21,584	456	214,599
Boone	.....	300	.....	.....	490	51,354
Jasper	.....	.....	.....	.....	287	119,725
Wapello	.....	.....	.....	.....	2,235	44,715
Mahaska	30	2,000	1	206	1,613	28,919
Warren	.....	.....	.....	.....	229	16,590
Wayne	.....	.....	.....	.....	102	1,620
Page	.....	.....	.....	.....	312	2,110
Van Buren	.....	.....	15	500	360	2,300
Adams	.....	.....	.....	.....	112	600
Taylor	.....	.....	.....	.....	10	82
Keokuk	.....	.....	.....	.....	.....	.....
Webster	.....	.....	.....	.....	.....	.....
Guthrie	.....	.....	.....	.....	.....	.....
Greene	7	56	.....	.....	.....	.....
Jefferson	.....	.....	.....	.....	78	1,548
Story	.....	.....	.....	.....	.....	.....
Davis	.....	.....	.....	.....	.....	.....
Totals	171	77,610	477½	229,738	16,584½	2,701,645

MINES, OUTPUT AND EMPLOYES BY COUNTIES

1922.

Counties	Number of Mines	Tons of coal of all grades produced	Miners and hand- lenders employed	Other Under- ground em- ployes	Surface employes	Total number of employes
Monroe	19	1,138,685	1,974	753	211	2,938
Appanoose	80	889,384	2,561	798	318	3,599
Polk	21	905,736	974	479	169	1,613
Marion	23	599,596	921	318	132	1,371
Lucas	5	439,107	647	394	69	1,028
Dallas	6	374,697	371	277	94	945
Boone	8	227,226	334	219	52	605
Wapello	41	95,315	225	36	50	311
Jasper	12	80,942	209	111	49	369
Mahaska	39	77,063	158	31	23	222
Warren	2	41,120	76	48	14	138
Wayne	4	37,565	76	25	19	119
Page	5	39,006	86	30	19	115
Adams	7	19,615	73	6	11	90
Van Buren	14	18,268	48	4	17	69
Guthrie	6	14,189	33	5	6	42
Taylor	12	12,381	36	5	5	46
Keokuk	7	11,235	23	2	6	31
Jefferson	5	5,739	16	2	4	22
Greene	3	4,663	31	3	6	55
Webster	3	3,584	15	1	3	19
Story	1	1,342	4	.....	1	5
Davis	1	600	3	.....	1	4
Totals	304	4,679,655	9,168	3,349	1,273	13,790

- 9858 Glynn, Leo K., Chicago, Ill.
9877 Guy, Finley M., Davenport.
9926 Gleason, Wm. J., New Hampton.
9927 Groh, Edmund P., St. Paul, Minn.
9928 Grieves, J. Weller, Jewell.
9976 Geist, Oscar E., Norfolk, Neb.
9987 Goode, Dellmer D., Des Moines.
10095 Glennon, Kathryn G., Davenport.
10108 Grant, Harry C., Clearfield.
- H**
- 99 Hyde, M. J., Brandon.
548 Hagensick, H. H., Elkader.
1142 Hamilton, Catherine B., Nora Springs.
1518 Hansen, H. C., Des Moines.
1686 Haskell, Geo. E., Venice, Calif.
1689 Hammer, Alfred, Des Moines.
1722 Harris, T. C., Tabor.
1820 Hinkle, Geo. W., Harward.
2205 Harlan, C. L., Harlan.
2206 Horton, Frank A., Perry.
2242 Hammer, Alvin G., Des Moines.
2417 Huston, Jas. T., Clinton.
2461 Hite, Robert B., Ctranda.
2496 Hoag, Edward H., Strawberry Point.
2540 Henderson, Josiah S., Oskaloosa.
2709 Hadden, David E., Alta.
2715 Howe, A. J., Glenwood.
2731 Harlan, Oscar F., Council Bluffs.
2744 Hugg, A. A., Middleport, O.
2782 Hampton, R. B., Des Moines.
2804 Hoag, E. L., Minneapolis, Minn.
2837 Higley, Wm. H., Whitwood, S. D.
2904 Hummel, Mathias, Grundy Center.
2910 Hamilton, R. G., Seattle, Wash.
3078 Henry, Charley, Alhambra, Calif.
3089 Hall, Lincoln, Lake City.
3110 Havercamp, John J., Muscatine.
3136 Hubbard, H. C., Humboldt.
3160 Harding, John, Davenport.
3165 Huston, Joseph E., Huntington Beach, Calif.
3220 Hibner, Geo. M., Marion.
3313 Haas, Fred, Marengo.
3384 Hagensick, August E., Iowa Falls.
- 3421 Henderson, Elliott L., Sakt Lake City, Utah.
3431 Horner, T. E., Osage.
3460 Huff, T. C., Baker, Ore.
3498 Hamler, E. C., Burlington.
3640 Howland, G. W., Cedar Rapids.
3659 Hunter, J. P., Albion.
3674 Horsman, U. O., Des Moines.
3677 Henderfer, J. L., Waterloo.
3692 Hofer, A. E., Solon.
3706 Hall, L. G., Coggan.
3712 Harrison, J. C., Alton.
3718 Holmes, W. L., White City, Kan.
3756 Hunt, Homer, Camanche.
3785 Haslach, John A., Melrose.
3806 Hendrix, Norbury T., Clinton.
3845 Hill, Olin E., Clinton.
3852 Huff, Frank B., Pavette, Ida.
3853 Hagan, James H., Forest, Ill.
3886 Henderson, C. B., Long Beach, Calif.
3899 Hedges, Florence L., San Bernardino, Calif.
3943 Herbert, Frank, Bridgewater.
3975 Haire, Will W., Ft. Dodge.
4013 Homann, Richard, Des Moines.
4026 Honnold, F. J., Leon.
4060 Haas, Daniel J., Dubuque.
4066 Hapman, John, Burlington.
4085 Hoffman, G. W., Ridgeway.
4111 Horner, Kate Z., Sioux City.
4129 Hingtzen, N. J., Dubuque.
4142 Henry, W. P., Des Moines.
4143 Harr, John L., Nora Springs.
4167 Hamaker, G. E., Portland, Ore.
4195 Harlan, Oren O., Marionville, Mo.
4204 Henning, Wm. E., Clinton.
4234 Hughes, Ralph E., Des Moines.
4256 Halstead, Alice, Muscatine.
4266 Hazlett, John C., Muscatine.
4273 Hood, E. J., Clarion.
4284 Henry, John M., Strawberry Point.
4294 Harrison, J. W., Guthrie Center.
4298 Holland, John E., Mt. Pleasant.
4317 Harrison, Fred W., Los Angeles, Calif.
4327 Hoagland, Fred T., Pomona, Calif.
4355 Hutchinson, Jas. A., Truro.
4412 Hoot, Grant, Long Beach, Calif.
4424 Hufford, G. E., Des Moines.
4484 Hamilton, L. C., Clarion.

- 4582 Hedley, John E., Dubuque.
4573 Held, Wm., St. Louis, Mo.
4614 Haygarth, W. W., Spencer.
4618 Hills, F. N., Russell.
4657 Halbert, M. M., Blair, Neb.
4694 Hughes, Edward J., Portland, Ore.
4720 Henderson, Harry H., Oskaloosa.
4744 Hamilton, Ralph C., Keota.
4752 Hoy, Andrew, Palo Alto, Calif.
4787 Haffner, F. F., Corydon.
4807 Harris, Lewis C., David City, Neb.
4831 Helgeson, P. A., Lake Mills.
4848 Hanske, Ed A., Bellevue.
4849 Hintz, Louis W., Boone.
4873 House, J. G., Burlington Jet, Mo.
4896 Hack, Leon D., Livermore.
4900 Helberger, Mat. G., Grundy Center.
4909 Holtzinger, P. S., Pleasanton, Neb.
4969 Harrod, I. E., Burlington, Vt.
4974 Heiden, L. F., Mankato, Minn.
4989 Harvey, Robt. W., Missouri Valley.
4991 Hully, H. D., Griswold.
4996 Harlan, Will D., Galena, Kan.
5017 Horton, F. E., Sioux City.
5068 Hageboeck, Wm. H., Lake Park.
5098 Hannum, W. J., Sioux City.
5139 Horton, C. D., Calmar.
5150 Hatlestad, Martin L., Radcliffe.
5151 Hummel, Joseph F., Grundy Center.
5162 Hansch, Harry H., Long Beach, Calif.
5206 Harper, Jas. A., Jr., Greenfield.
5213 Hartman, Chas. P., Nevada.
5214 Henry, A. L., New Hampton.
5227 Higley, L. E., Hot Springs, S. D.
5235 Harris, H. H., Orient.
5264 Hastings, W. C., Newman Grove, Neb.
5310 Harrison, Burton Z., Cumberland.
5321 Hood, T. R., Clarion.
5322 Hambleton, Will M., Woodworth, N. D.
5349 Heiber, Benj., Cedar Falls.
5411 Hemenway, J. R., Sioux City.
5573 Hays, W. S., Cheyenne, Wyo.
5601 Hubbert, Fred P., Canon City, Colo.
- 5624 Higgins, Edward A., Minneapolis, Minn.
5651 Hartsock, Leslie M., Clarion.
5697 Halden, Will R., Grundy Center.
5704 Henry, James I., Council Bluffs.
5722 Hoover, Judson W., Galesburg, Ill.
5729 Harwood, Miner F., Strawberry Point.
5801 Hofman, Frank P., Ottumwa.
5827 Halbert, C. B., Elliott.
5831 Hill, Merton J., Churdan.
5860 Haire, John, Jr., Ft. Dodge.
5867 Hoover, Geo. D., Des Moines.
5879 Hansen, Chas., Des Moines.
5913 Halden, J. W., Moravia.
5919 Harris, Irving, Marysville, Calif.
5932 Hall, Guy F., Pershing.
5980 Helmer, M. H., Bode.
5993 Hansen, Martin B., Davenport.
6044 Heginsbotham, W. E., Holyoke, Colo.
6045 Higley, D. J., Grandview.
6062 Hamilton, Jno. R., Keota.
6160 Holloway, C. L., Des Moines.
6161 Hayes, R. B., Des Moines.
6187 Harvey, A. S., Washington.
6281 Horton, Grant, Brighton.
6286 Hansen, Otto T., Sioux City.
6311 Halloran, T. J., Sioux City.
6321 Hlt, Stephen A., Broadus, Mont.
6322 Holbrook, T. A., Newark, N. Y.
6334 Head, M. W., Imogene.
6336 Hill, Earl, Greeley, Colo.
6350 Hansen, N., Exira.
6384 Hadley, Lyell, Anita.
6393 Hepler, Geo. K., San Francisco, Calif.
6411 Hurd, John W., Manly.
6457 Hild, R. J., Des Moines.
6499 Harlan, Shirley D., Butler, Mo.
6517 Hartman, Perry V., Granville, Ill.
6524 Hanson, John F., Waterloo.
6525 Hiatt, Arthur R., Stockport.
6531 Herejk, W. J., Jr., Belle Plaine.
6553 Hilliard, Ves. E., Long Beach, Calif.
6588 Henriksen, Jesse, Arthur.
6605 Hild, Harry, Des Moines.
6606 Hill, Albert E., Greene.
6626 Harlan, Robt. N., Freeport, Ill.
6634 Higbee, H. G., Webster City.

- 6635 Hyde, Clarence B., Des Moines.
- 6643 Hutchinson, Joe W., Central City, Neb.
- 6649 Hicks, A. M., Hardin, Mont.
- 6683 Hanson, Wm. K., Aspin, Colo.
- 6702 Hopkins, R. H., Colo.
- 6716 Hopson, W. H., LeClaire.
- 6759 Herrick, E. A., Ottumwa.
- 6761 Hully, Chas. I., Elliott.
- 6763 Holland, H. K., Neilsville, Wis.
- 6857 Hastings, P. H., Alta Vista.
- 6866 Hesse, Blanch M., Fresno, Calif.
- 6909 Harris, R. L., Wilton Junction.
- 6945 Hattenhauer, W. B., Streator, Ill.
- 6947 Hawley, H. C., Clarinda.
- 6991 Harker, Stewart W., Hawarden.
- 7013 Hill, David W., Davenport.
- 7014 Hatter, Orville E., Millersburg.
- 7020 Hatton, Henry T., Keokuk.
- 7034 Hughes, Bert, Emmetsburg.
- 7068 Hanson, John P., LeMars.
- 7070 Hydinger, H. E., Sidney.
- 7147 Hauma, Harry F., Oskaloosa.
- 7148 Heyl, Frederick, Marble Rock.
- 7204 Haverick, W. V., Council Bluffs.
- 7224 Hope, Leona, Little Sioux.
- 7288 Hieber, Wm. A. N., Los Angeles, Calif.
- 7307 Hazleton, Will W., Calmar.
- 7309 Hollebrands, A. J., New Sharon.
- 7371 Hartig, Albert J., Dubuque.
- 7373 Holmes, Clifford J., Hartford.
- 7397 Hagler, A. A., Oakland, Calif.
- 7398 Higgins, Edward J., Emmetsburg.
- 7399 Husting, Victor A., Osage.
- 7400 Hofmaster, W. A., Clear Lake.
- 7420 Heide, Charlotte A., Durand, Ill.
- 7426 Henderson, Lauren R., Muscatine.
- 7491 Hall, C. E., Iowa City.
- 7492 Halden, Walter L., Phoenix, Ariz.
- 7522 Hunter, Malcom D., Buffalo Center.
- 7536 Hansen, Christian, Woonsocket, S. D.
- 7583 Harding, Merrill J., Des Moines.
- 7651 Hofmann, Frederick E., Boyd, Minn.
- 7686 Humphrey, Rollin E., Glenwood.
- 7703 Hagensick, R. H., Elkader.
- 7704 Holyoke, Thos. S., Topeka, Kan.
- 7764 Hoyer, John, Ackley.
- 7786 Harrold, Ray H., Pasadena, Calif.
- 7813 Hansen, Oscar A., M. D., Kantowl, Ill.
- 7833 Horns, Edward H., Des Moines.
- 7871 Hampsher, Don C., Oskaloosa.
- 7956 Herring, Earl G., Omaha, Neb.
- 7970 Hussol, Alfred W., Wolf Point, Mont.
- 7971 Harris, A. A., Idaho Falls, Idaho.
- 7995 Heinrich, G. A., Osceola.
- 7999 Haupt, Wm. G., Des Moines.
- 8091 Hartmann, Elmer H., Waverly.
- 8206 Hulse, W. P., Jolley.
- 8210 Hill, C. A., Ottumwa.
- 8220 Hughes, W. C., Hamilton, Ill.
- 8221 Hemping, Harry, Fremont, Neb.
- 8227 Hansen, Henry, Fairchild, Wis.
- 8265 Hess, John H., Albia.
- 8266 Hillman, Jas. F., Carson.
- 8267 Hull, John C., Batavia.
- 8281 Hodapp, Michael E., Chicago, Ill.
- 8299 Hill, Fred E., Lander, Wyo.
- 8305 Healy, Raymond W., Long Beach, Calif.
- 8309 Hartford, H. H., West Point, Neb.
- 8319 Hauth, Henry F., Hawkeye.
- 8320 Hill, Fred H., Melrose.
- 8342 Hess, J. Earl, St. Ansgar.
- 8366 Homan, Frank P., Mandan, N. D.
- 8395 Hough, H. Herbert, New Hampton.
- 8454 Hamilton, Cecil H., Thornburg.
- 8459 Hutchinson, F. A., Tekamah, Neb.
- 8476 Horak, F. E., Cedar Rapids.
- 8477 Henrickson, Henry, Clinton.
- 8478 Harden, Harriett, Casey.
- 8496 Hanson, D. J., Farley.
- 8496 Haflner, Geo. W., Sigourney.
- 8516 Hill, W. A., Des Moines.
- 8534 Hoover, W. Geo., San Bernardino, Calif.
- 8558 Hofstadter, Anna, West Bend.
- 8585 Honeyman, Jas. S., Villisca.
- 8590 Henry, Wm. E., Des Moines.
- 8603 Hennelberg, Harry E., Springfield, Mass.
- 8607 Heerema, John, Pella.
- 8609 Helmer, Walter J., Delaware.
- 8613 Hanson, J. W., Northwood.
- 8656 Holdeman, Jos. J., Malvern.
- 8662 Hansen, Robert, Chicago, Ill.
- 8666 Howe, Andra R., Greenfield.
- 8685 Herrald, Mansfield B., Boone.
- 8733 Hebner, Manton M., Keokuk.
- 8762 Hartman, Fred W., Des Moines.
- 8765 Holmes, Harold H., LaCrosse, Wis.
- 8813 Hagan, Park K., Muscatine.
- 8817 Heiman, Gus E., Van Nuys, Calif.
- 8820 Hutchison, Wm. E., Clinton.
- 8875 Hanson, Clarence E., Muscatine.
- 8912 Hutchison, A. L., Tekamah, Neb.
- 8915 Huston, R. R., Castle Rock, Colo.
- 8917 Heidenreich, Arthur C., Des Moines.
- 8918 Haunsmann, Geo. H., Iowa City.
- 8957 Howell, C. E., Dayton.
- 8960 Hartman, Bertha K., Des Moines.
- 8970 Harrington, Dan., Utica, Ill.
- 8975 Hemphill, T. N., Osceola.
- 8986 Haxton, Chester E., Britt.
- 8997 Healy, Sister Mary A., Davenport.
- 9020 Holt, Adelbert O., Oskaloosa.
- 9026 Herring, Edw. G., Long Beach, Calif.
- 9035 Husa, Wm. J., Iowa City.
- 9071 Hoagland, Clifford P., Chicago, Ill.
- 9088 Heisen, Harry C., Marshalltown.
- 9091 Hess, Frank P., Davenport.
- 9098 Harriman, E. W., Des Moines.
- 9104 Haskins, Jas. E., Sheffield.
- 9115 Heidenreich, Muzelle, Des Moines.
- 9127 Hekel, Alfred S., Waterloo.
- 9128 Harvey, Raymond, Stanford, Mont.
- 9131 Hohmann, M. R., Detroit, Mich.
- 9132 Hahn, Robt. C., Miami, Fla.
- 9178 Harness, Wm. C., Soldier.
- 9180 Harshburger, Belle, Oconto, Neb.
- 9181 Hansman, L. C., Maurice.
- 9205 Harlan, Francis M., Defiance.
- 9238 Hickey, Geo. W., Vail.
- 9239 Hohn, Vernon E., Ringsted.
- 9240 Honoroff, David, Uniontown, Pa.
- 9271 Hahn, Mrs. Robt. C., Miami, Fla.
- 9276 Handley, Chas., Jr., Eureka, Utah.
- 9277 Hayles, W. H., Ft. Madison.
- 9278 Harrington, Edwin, Muscatine.
- 9279 Hunter, B. B., Davenport.
- 9291 Hansen, H. T. S., Waterloo.
- 9313 Henry, Edw. F., Des Moines.
- 9332 Hemmenway, Max V., Denison.
- 9334 Huxtable, Frank A., Mason City.
- 9335 Heerema, Yella, Leighton.
- 9379 Hoerlein, Chas. L., Jacksonville, Ill.
- 9380 Hansen, Wm. B., Rock Valley.
- 9417 Henneger, Albert G., East Dubuque, Ill.
- 9418 Hingting, Clementine, Dubuque.
- 9437 Hingsel, John H., Omaha, Neb.
- 9441 Hyrup, Jas. L., Pontiac, Ill.
- 9446 Haskins, Ernest H., Des Moines.
- 9464 Hastings, J. W., Des Moines.
- 9465 Hunter, R. A., Pleasanton, Neb.
- 9466 Hewitt, William E., Portland, Ore.
- 9467 Hagestrom, Chas. E., Sioux City.
- 9468 Haun, Blair A., Des Moines.
- 9469 Halseher, Gilbert H., Dyersville.
- 9480 Hawn, Harry J., Denver, Colo.
- 9490 Hill, Leon W., Sioux City.
- 9491 Hillgardt, Paul J., Cedar Falls.
- 9531 Hughes, Mark V., Sioux City.
- 9537 Henry, Arch S., Evely.
- 9555 Hartig, Olga T., Oakland, Calif.
- 9569 Hincley, Harold H., Maquoketa.
- 9628 Holton, Wm. O., Somerton, Ariz.
- 9645 Hendershot, Elton C., Centerville.
- 9653 Hirschman, Albert B., Fullerton, Calif.
- 9657 Halweg, Edw. H., Lime Springs.
- 9658 Hemping, Wm. S., Davenport.
- 9672 Hrabak, Joseph, Jr., Chelsea.
- 9685 Hess, Raymond B., Des Moines.

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 Second Inspection District comprises the counties of Marion, Jasper, Mahaska, Keokuk, Wapello, Jefferson, Van Buren, Davis, and the part of Monroe that lies north of the main line of the Chicago-Burlington & Quincy Railroad.

During the biennial period ending December 31, 1923, the mines of the district produced 4,094,018 tons of coal, and gave employment on an average to 4,516 men. Although the out-put of the district in this last biennial period was not as large as in some of the former biennial periods, never-the-less the district held its position as the largest coal producing district in the state.

All of the above counties have been coal producers from an early period. Mr. Park C. Wilson, the first state mine inspector of Iowa, in his first biennial report to Governor John H. Gear, for the years 1880 and 1881, reports that in 1881 the above counties had a total of 236 mines in operation, and that 3,205 men were employed in and around the same. A great majority of the above mines were very small, and operated only during the winter months. It is also evident from the above report that the number of men reported as being employed in and around the mines at that time were the maximum number of men employed during the winter, and not the average for the year as computed in this report.

In the forty-three years that have passed since the above biennial report was made probably the two methods of mining (room and pillar and long-wall method) that are used in the state have been changed but little, but the condition under which coal mining is carried on has made considerable change for the better.

In the early days of mining the hours of labor were long. Starting and quitting time varied as the strength and the endurance of the individual miner. In nearly all the mines at that time the shots were fired at any time of the day, and for this reason the mine air was seldom clear of powder smoke during working hours. The blame for this condition of the air was not altogether the fault of the operator for Inspector Wilson makes the following report:

"I recommended the men to pass a law regulating their firing, but they said they could not make coal enough by firing twice a day and for that reason they would rather have the smoke and be allowed to fire at will."

In those days the miners were paid but once a month; company stores flourished in every coal camp; rates of wages changed with

the season of the year, and sometimes oftener; and local strikes were frequent which made mining life to resemble a continued warfare from which neither the operators nor the miners realized any permanent good.

Probably nothing shows more clearly the difference between the method of settling disputes between the operators and miners of the early period and those of today, and also that shows the great improvements that have come to pass in mining conditions since the first biennial report of State Mine Inspector Wilson, was made forty-three years ago, than is seen in what is known as the "Des Moines Agreement."

In the years prior to the adoption of the "Des Moines Agreement" there was no uniformity of action. It was a case of every man for himself. Some of the operators required their employees to sign an individual contract, whereby each individual mine worker, before he was allowed to start to work, agreed in writing to do or not to do certain things while in the employment of his employer. These individual contracts designated the operator as "Party of the first part" and the miner as "Party of the second part" and as a rule the contracts contained clauses as follows:

"* * * * That I (party of the second part) will in no manner, directly or indirectly, join with or encourage any miner's strike, or join any miner's union, or do any act whatever calculated to interrupt, hinder, or in any way interfere with the continuous working of said mine. That I will not while in the employ of said company be governed by any strike, or effort of any kind to interrupt, delay or hinder work in said mine by men employed in other capacities in and about said mine. I agree to continue my work individually, or with others occupying similar positions as myself, to the best of my ability, same as though no strike had occurred.

"* * * * It is distinctly agreed by both parties hereto and this agreement is made with the express understanding that in case the said Second Party breaks, violates or infringes any of the agreements and stipulations set forth in rule four hereof, that he shall forfeit to the said First Party a sum of money equal to fifteen days' full wages at the rate specified in rule 5, and said First Party shall retain said amount from the wages for the Second Party for the use and benefit of the said First Party forever.

"* * * * Nothing in this agreement shall be construed to prevent the said First Party from discharging the said Second Party at any time and thus terminating this agreement, or to prevent the said Second Party from quitting the employ of said First Party at any time except when a strike or general stoppage of work is impending or in progress.

"* * * * The Party of the First Part reserves the right of closing the mines at any time, or of discharging such miners as it may think proper, including said Second Party."

The above clauses are not quoted here for the purpose of criticising or to throw unfavorable reflection on any one, but for the purpose of showing the great difference between the individual contract of long ago and the Des Moines Agreement of today, which will be found appended to this report. No doubt the old individual contracts with their hard and exacting terms were generally looked upon in those days as being proper and reasonably fair to the miners, as much so probably as the present liberal and considerate agreement is looked upon as being fair to the miners of today. Both of these agreements, the old and the new, express with considerable accuracy the industrial ethical standard of their times. What was generally thought to be fair mining terms forty-three years ago, would be considered unfair today by both parties. What was then emphatically refused and was declared to be absolutely impossible to grant, is now enjoyed and long conceded. The dire consequences that were predicted in those days, and the utter ruin that was said would follow, if this or that mining reform was allowed, happily never materialized. The recognition of the right of the miners to form and join a union, did not increase the number of strikes but made their occurrence decidedly less frequent. The abolishing of the company store did not bankrupt the coal industry but gave it confidence to stand on its own feet and be self-sustaining as it should be. The adoption of the eight-hour day, and the system of shooting shots but once a day, and the employment of Shot Firers, did not decrease the output of coal per miner, but to the contrary the same has increased. And so if the history of mining in the past is any criterion to go by, it is reasonable to presume that what may seem today to be an extreme and an unfair demand, in the years to come will be looked upon as natural and fair, for time will change not only the opinion of men on mining questions but it will also change and modify general conditions that have a direct and indirect bearing on coal mining, and therefore will make it possible to grant then, what probably the industry is unable to stand today.

It is to be regretted that the coal mining industry of our state is not receiving from some of our people the consideration and the patronage it deserves. The long and continued depression of the industry has brought many of the coal operators face to face with financial ruin, and a large number of the miners and their families to the verge of want. Various remedies are proposed to restore the industry to normalcy, but the most common one suggested, especially by those not well informed in the coal business, is the

lowering of the price of Iowa coal, and by this I suppose is also meant the lowering of wages of the Iowa miners. Those men that have been in the mining business for some length of time, know to their regret from actual experience, that to reduce wages on the theory that it will result in an increased demand for coal, has always utterly failed whenever tried, and that the real result has been not improvement but a general demoralization of the whole industry. The demand for some commodities, and coal is one of them, is not appreciably increased by making on them a low price. If this was not so Iowa coal ought to be in great demand today, and every mine and miner in the state working full time, for a very large portion of it is offered for sale much below the cost of production. For any one who is not using Iowa coal, but is paying high price for Eastern coal, to prescribe reduction in wages and in the price of Iowa coal, as a cure for the present ills of the coal industry in our state is not consistent nor is the remedy proposed well taken. In my humble judgment the best and the most probable cure would be for more Iowa people to buy Iowa coal.

It is estimated that the annual coal requirements of our state of recent years is about 14,000,000 tons. The total coal production of all Iowa mines however in 1923, was only 6,120,332 tons. Out of the above total production, 134,210 tons of it must be deducted for what was used at mines for mine purposes, and 330,083 tons that were sold and shipped to points outside of the state. Even if every pound of Iowa coal that was sold to the different railroads in our state in 1923, was consumed by them within the state, this would only leave 5,656,039 tons as the total amount of Iowa coal that was sold within the state in 1923, of which 3,107,838 tons was sold to the railroads. This being so, it is evident that over 8,300,000 tons of coal was shipped into Iowa from points outside the state during the same period. Or about 2,200,000 tons more than the total production of all the mines of the state in 1923.

Nearly all the coal that is shipped into Iowa, comes from Illinois, Indiana, Kentucky, West Virginia, and Pennsylvania. Just exactly how much of the above 8,300,000 tons of Eastern coal that was used by the railroads, and just what portion of it was used by other consumers is not known, but a conservative estimate would be that 50% of it was used by the railroads, and the other 50% of it was used by house-holders and manufacturers for domestic and steam purposes. If the whole country was taken into consideration the above percentage of coal taken by the railroads would be too high, but considering Iowa only the above estimate

is about 1% less than what the railroads have been taking of the total production of Iowa mines for the last several years. Knowing that the total amount of Iowa coal that was sold in 1923, to consumers within that state, exclusive of the railroads, to be little over 2,500,000 tons, and estimate that the same class of consumers bought one-half of the 8,300,000 tons of Eastern coal that was shipped into the state, we find that the total coal requirements of the state in 1923, for domestic and steam purposes, exclusive of the railroads, was about 6,700,000 tons, when during the same year the actual number of tons of Iowa coal that was sold to Iowa consumers, exclusive of the railroads, was only a little over 2,500,000 tons. In other words the coal consumers of Iowa, exclusive of the railroads, bought in 1923, about 4,200,000 tons of Eastern coal, which is not far short of being twice as much as they bought of Iowa coal. This fact also should not be overlooked, that if the people of Iowa had bought about 6,700,000 tons of Iowa coal, which as stated above is estimated to be the coal requirements of the state for domestic and steam purposes, exclusive of the railroads, that the mines of Iowa would have to produce in 1923, not only the above 6,700,000 tons, and the 3,107,838 tons of Iowa coal that was taken by the railroads in the same year, or a total of over 10,000,000 tons, but in all probability they would be required to produce a tonnage far in excess of the above total. Because the records of the past show that the more Iowa coal the railroads were required to haul, the more Iowa coal they would buy for their own use to do the hauling. And if they would continue to buy the same percentage of the total production of the Iowa mines, as they have taken for the last several years, the requirements of the railroads for Iowa coal would increase from 3,107,838 tons, which was the amount they took in 1923, to that of 5,400,000 tons—that is if the people of Iowa would buy 6,700,000 tons of Iowa coal instead of about 2,500,000 tons as they did in 1923. It is not meant by this to say that if the mines of Iowa had produced 4,200,000 tons more coal in 1923 than they did, that the railroads would consume 2,300,000 tons of this increase tonnage to transport it. Or is it meant to say that they would consume more coal than they do now, but what is meant is that if 4,200,000 tons more Iowa coal had been sold within the state the railroads in all probability would have found it to their interest to take more Iowa coal and less Eastern coal to do the transporting. Instead of the railroads using Eastern coal in their locomotives to haul Eastern coal to Iowa consumers as they do now, they would then use Iowa coal to haul Iowa coal.

All the railroads as a general rule buy their coal direct from the producer, but practically all other coal consumers buy it through jobbers and retail dealers. What was the exact average retail price of coal in Iowa in 1923 is not known, but after allowing for a liberal estimate on the amount of Mine Run, and Steam coal that were bought or consumed in this state last year, and after taking cognizance of the fact that these two grades of coal retailed at a lower price than standard lump coal, nevertheless it would be conservative to say, after taking the state as a whole and averaging the retail price of all grades of coal including coke and anthracite coal that retailed from \$16.00 to \$20.00 per ton, that in 1923 the average retail cost of Eastern coal to the Iowa consumer, exclusive of the railroads, was about \$10.50 per ton, and that of Iowa coal about \$7.50 per ton. Or stating it in another way—it cost the coal consumers of Iowa, exclusive of the railroads, \$44,100,000.00 for the 4,200,000 tons of Eastern coal they bought last year, when they could buy the same number of tons of Iowa coal for \$31,500,000.00, or for \$12,600,000.00 less. Whatever portion of the above \$44,100,000.00 remained here in Iowa as the retailer's profit, it was offset and probably more than offset, by what was missed from the railroads for what they would pay for the increase tonnage of Iowa coal they would have taken if the people of Iowa had bought Iowa coal instead of Eastern coal. It is fair, therefore, to compute that between the money that was sent out of the state for coal, and the money that missed coming into the state which should have come from the increased sale of railroad coal, that the state of Iowa was impoverished in 1923 of the above total sum of \$44,100,000.00.

It is not claimed that Iowa coal is the best in the world, but it is claimed, and the same can be substantiated by the impartial tests and the analysis that has been made of Iowa coal by the United States Bureau of Mines, Pittsburgh, Pennsylvania, and by the Iowa State College, at Ames, that millions of tons of coal are shipped into Iowa every year from Eastern states that are no better than Iowa coal; and a very large quantity of it is inferior to Iowa coal, and although this is true the unexplainable thing is that the Iowa consumer will pay an exorbitant price for the former when he could buy the latter for much less money.

Patrons of Eastern coal should bear in mind that all the coal veins in the Eastern states are not uniform in quality. That it is not uncommon for a certain vein of coal to be of a fair uniform

quality in one mine or district and not in another. There are poor veins of coal in all the above states, and a large quantity of this poor grade is sold here in Iowa on the high reputation it has in some mine or district where it is uniform in quality. Also the greatest part of the best grades of Eastern coal, in normal times and especially in the winter season, finds ready market close to home, but the poorer grade must travel farther to find a buyer. Therefore, when a retail coal dealer offers to sell the Iowa consumer Eastern coal, the fact that it is from the East, and retailing at a high fancy price, is no proof that it is better than Iowa coal because the latter is mined here at home, and is retailing at a moderate price, but it does mean very often that there is more profit in Eastern coal for the retail dealer, and evidently it is this fact of larger profit to the dealer that accounts for so much Eastern coal selling here in Iowa. The dealer naturally advertises and pushes the sale of the coal he makes the most profit on. He makes it an object to educate the community in which he conducts his business to use the kind of coal that he finds it the most profitable for him to handle. He seldom orders or keeps on hand a supply of coal other than his choice, and thus many a town in Iowa is practically a closed market to Iowa coal. The consumer, therefore, has very little to choose from but is obliged to take what is highly recommended to him by the dealer as the best and the cheapest coal he can buy. No one blames the dealer for this. He is doing what every other successful business man is doing, and no one in his right mind should expect him to do different. To reverse this condition so as to make it more profitable or at least equally as profitable for the dealer to handle Iowa coal, is a task that the operators and miners of Iowa must perform, or to suffer the result of no coal business, and no work.

Taking the country as a whole there is not the slightest doubt but what the coal mining industry in the last seven years has been over-developed until there is at the present time an excess of mines and miners to produce the coal requirements of the country and it is inevitable that a deflation in mines and miners is an economic necessity. Mines that cannot be operated except at a high cost will have to be eliminated, and the surplus of miners will have to find other employment than coal mining. While the above condition is true of the country at large, the same cannot be said to be true of our own state, for if every coal mine in Iowa had worked full time in 1923, and every pound of coal they produced was sold and consumed here at home, they would still be short

four or five million tons of producing enough to supply the coal requirements of the state. To supply all the coal requirements of the state many more mines would have to be opened, and several thousand more miners employed than are now employed at the present time. This being true it seems unnecessary and very unfair that the mines and the miners of Iowa should be deflated at a great financial loss to the operator are a great hardship to the miners, in order that mines and miners in other states that are producing coal greatly in excess of their own requirements may continue working, and all of this because Iowa people will not buy Iowa coal. If those of our Iowa people who are buying Eastern coal were paying less for it than they are asked to pay for Iowa coal, or if the mines of the state were producing coal in excess of our requirements, then no Iowa operator could expect their patronage, nor could they expect anything else but deflation, but the very opposite of this is the case. What if Iowa "Where the tall corn grows" were to buy from Eastern states \$44,100,000.00 worth of corn every year and to consume it here in Iowa, when the same number of bushels of as good corn, if not better, could be bought here at home for \$12,600,000.00 less money. To say the least it would show a very poor business judgment. Yet there is very little difference between buying \$44,100,000.00 worth of coal from eastern states as there would be in buying that much worth of corn from the same states. To buy the former is almost as ridiculous and unnecessary as it would be to buy the latter from them. What is more unreasonable and unfair than to see people, and especially business men, who are living in what may be termed mining communities, buying their coal from Kentucky, or some other Eastern state, when the mines of that neighborhood are idle because of the lack of demand for coal, and when likely as not the operators and miners of that locality are buying their groceries and clothing from them? Why then should Iowa consumers continue to pay Eastern states millions and millions of dollars more than is necessary for coal every year when at a great saving to themselves they could also enrich their own state and thereby be the means of saving their friends and neighbors here at home from financial losses and the homes of many miners from suffering and want.

Severe as the present depression is, I am optimistic enough to believe that it is not without its blessings. It will surely emphasize as nothing else could that when the operator is not prospering the miner can't. That when the former suffers from business depression the latter also suffers. It will bring them close together because of their common plight, and into a fuller realization that after all they are partners in the same business, and as good partners should work together to win for their business and their product the recognition and the patronage it deserves from the people of Iowa.

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 Raecoon 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 also done on the south side of the Raecoon 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 Raccoon 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 Phildia. 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 Waukee. 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 684,837 tons of coal, and the mining companies of the county gave employment to 1,333 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 portions 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 at-

tempted 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 operations have been commenced in this county during the 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 country 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 coal 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 all 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 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 only 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 these 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 operating 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.

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, DISTRICT NO. 1.
1922 and 1923.

Date and hour of Accident	Name, Age, Nativity and Occupation	Married or Single	No. of Children	Cause of Death	Employing Company and County
1922					
Oct. 15, 1:40 p. m.	Vit Boetsch, 49, Austrian, miner	Married	6	Fall of rock	Appanoose Coal & Fuel Co., Appan's
Oct. 26, 2:00 p. m.	Bobt. C. Whalen, Sr., 61, Amer., min.	Widower	6	Fall of coal	Central Iowa Fuel Co., Lucas
Nov. 18, 10:00 a. m.	Andy Green, 50, American, miner	Married	1	Fall of slate	Iowa-Kabraska Coal Co., Lucas
Dec. 7, 8:30 a. m.	Wm. Edwards, 30, American, boiler	Single	0	Run over by car	Central Iowa Fuel Co., Lucas
Dec. 8, 11:00 a. m.	John M. Linn, 47, American, miner	Married	1	Run over by car	Central Iowa Fuel Co., Lucas
Dec. 26, 1:30 p. m.	Jule Lannet, 43, French, shot. instr.	Married	2	Blown out shaft	Hocking Coal Co., Monroe
1923					
Jan. 26, 1:40 p. m.	Paul Mingshino, 22, Italian, mach. run.	Single	0	Electrocuted	Dan Clarke Coal Co., Appanoose
Jan. 26, 2:00 p. m.	Dave Laney, 28, Amer., machine runner	Married	2	Fall of slate	Central Iowa Fuel Co., Lucas
June 7, 11:5 a. m.	Mike Martin, 46, Austrian, miner	Married	9	Fall of slate	Hocking Coal Co., Monroe
Aug. 7, 11:5 a. m.	Ray Moskoven, 31, Italian, miner	Married	2	Fall of coal down shaft	Central Iowa Fuel Co., Lucas
Aug. 7, 8, 10:20 a. m.	Fred Morozov, 28, American, miner	Single	2	Fall of slate	Hocking Coal Co., Monroe

NON-FATAL ACCIDENTS, DISTRICT NO. 1, 1922.

Date and Hour of Accident	Name and Occupation	Cause of Accident	Nature of Injury	Employing Company and County
Jan. 10,	A. M. Dewey, Williams, spragser.	Caught bet. cars	Head bruised.	Hocking Coal Co., No. 5, Monroe
Jan. 17,	Jno. Steel, track layer.	Car ran off track	Leg bruised.	Hocking Coal Co., No. 5, Monroe
Jan. 20,	Virgil Singleton, miner.	Fall of slate	Leg bruised	Hocking Coal Co., No. 5, Monroe
Jan. 23,	Lawrence Bates, miner.	Fall of coal from car	Hand mashed	Hocking Coal Co., No. 5, Monroe
Jan. 25,	10:20 A. M. Oscar Engstrom, driver	Caught by car	Bruised leg.	Graham Coal Co., Monroe
Feb. 17,	3:45 P. M. David Vink, miner	Fall of coal	Right leg, broken	Graham Coal Co., Monroe
Feb. 17,	3:45 P. M. David Vink, miner	Fall of coal	Right leg, broken	Graham Coal Co., Monroe
Mar. 2,	8:10 A. M. Glen Martin, driver	Fall of slate	Bones of foot broken.	Hocking Coal Co., No. 5, Monroe
Mar. 23,	A. M. Wm. Lewis, driver	Caught by car	Tom mashed	Hocking Coal Co., No. 5, Monroe
Sept. 12,	A. M. Steve Hoff, miner	Fall of bad rock	Broken leg.	Vesuvius Coal Co., Appanoose
Sept. 22,	A. M. Steve Hoff, miner	Fall of bad rock	Broken leg.	Vesuvius Coal Co., Appanoose
Nov. 17,	1:30 P. M. Chf Coobert, driver	Kicked by mule	Fractured rib	Hocking Coal Co., No. 5, Monroe
Dec. 6, 10:40 A. M.	Wm. Campbell, track layer	Fall of rock	Bruised back and side	Hocking Coal Co., No. 5, Monroe
Dec. 10, 9:00 A. M.	Wm. Johnson, driver	Fall of coal	Bruised back and side	Citizens Coal Co., Appanoose
Dec. 21, 9:00 A. M.	Dr. K. Granger, driver	Fall of coal	Bruised back and side	Hocking Coal Co., No. 5, Monroe
Dec. 23, 2:30 P. M.	Dr. K. Granger, driver	Caught bet. car & rib.	Bruised shoulders.	Hocking Coal Co., No. 5, Monroe
Dec. 27, 1:00 P. M.	Tom Sincos, miner	Run over by car.	Ankle broken, foot amp'd	Rosebrook Coal Co., Appanoose
Dec. 27, 1:00 P. M.	Tom Sincos, miner	Run over by car.	Ankle broken, foot amp'd	Albia Coal Co., Monroe

NON-FATAL ACCIDENTS IN DISTRICT NO. 1, 1923.

Date and Hour of Accident	Name and Occupation	Cause of Accident	Nature of Injury	Employing Company and County
Jan. 9, 3:30 P. M.	Burdette, miner	Fall of brushing	Right leg injured	Lodwick Coal Co., Appanoose
Jan. 12, 3:30 P. M.	John Clarkson, driver	Caught and, empty car	Foot bruised	Hocking Coal Co., Monroe
Jan. 16, 8:30 A. M.	Clarence, miner	Sledging coal	Arm cut, foot hurt	Citizens Coal Co., Appanoose
Jan. 26, 10:30 A. M.	Ralph Level, driver	Caught under car	Foot bruised	Hocking Coal Co., Monroe
Jan. 23, 11:30 A. M.	Wm. Scritchfield, miner	Fall of roof	Leg broken	Armstrong Coal Co., Appanoose
Feb. 26, 12:30 A. M.	Virgil Martin, cager	Slate falling down shaft	Scalp wound	Armstrong Coal Co., Appanoose
Feb. 5, 10:00 A. M.	John Duffy, miner	Fall of roof	Right arm cut & bruised	Armstrong Coal Co., Appanoose
Feb. 16, 9:00 A. M.	Ross French, miner	Coal fell from car	Finger mashed	Armstrong Coal Co., Appanoose
Feb. 16, 7:30 A. M.	Bert King, miner	Riding in on man trip	Leg injured	Armstrong Coal Co., Appanoose
Feb. 20, 10:00 A. M.	John Morrow, miner	Fall of roof at face	Sprained shoulder	Armstrong Coal Co., Appanoose
Mar. 15, 1:30 P. M.	Donald Stevens, miner	Lamp fell in powd. can	Burned by explosion	Hocking Coal Co., Monroe
Mar. 26, 7:30 A. M.	E. Richardson, trailer	Caught bet. emp. cars	Leg broken	Hocking Coal Co., Monroe
Mar. 23, 1:20 P. M.	John Downs, miner	Coupling cars	Broken ribs, injur. should'r	Central Iowa Fuel Co., Lucas
Mar. 19, 10:00 A. M.	Chas. Oswald, miner	Kicked by mule	Five ribs broken	Central Iowa Fuel Co., Lucas
Mar. 23, 11:05 A. M.	John Oswald, driver	Caught bet. car & rib	Squeezed through hips	Central Iowa Fuel Co., Lucas
Mar. 1, 10:00 A. M.	Roscoe Bennett, miner	Loading car of coal	Little finger mashed	Armstrong Coal Co., Appanoose
Mar. 27, 11:00 A. M.	C. H. Mehrhoff, miner	Fall of coal at face	Right leg broken	Armstrong Coal Co., Appanoose
Mar. 27, 2:30 P. M.	Orrie Doelchback, miner	Pushing on car	Hurt back	Central Iowa Fuel Co., Lucas
Apr. 9, 9:00 A. M.	Amer Veatch, miner	Pushing loaded car	Sprained shoulder	Armstrong Coal Co., Appanoose
Apr. 9, 2:00 P. M.	Steve Krugic, miner	Break slate with sledge	Mashed finger	Central Iowa Fuel Co., Lucas
Apr. 16, 10:00 A. M.	Fern Dooms, miner	Mining coal	Struck in eye with pick	Central Iowa Fuel Co., Lucas
Apr. 16, 10:00 A. M.	B. Watkins, miner	Lifting coal	Sprained back	Central Iowa Fuel Co., Lucas
Apr. 16, 10:00 A. M.	E. E. Duskin, miner	Fall of slate	Right foot injured	Central Iowa Fuel Co., Lucas
Apr. 16, 10:00 A. M.	Wm. Cainer, miner	Fall of slate	Back injured	Central Iowa Fuel Co., Lucas
Apr. 17, 9:00 A. M.	Chas. Conkay, miner	Kicked by mule	Left side injured	Central Iowa Fuel Co., Lucas
Apr. 19, 9:00 A. M.	Alfred Clarke, miner	Handling slate, slipped	Causing hernia	Central Iowa Fuel Co., Lucas
Apr. 17, 9:00 A. M.	Joe Kausalrich, miner	Fall of coal from car	Finger mashed	Central Iowa Fuel Co., Lucas
Apr. 19, 9:00 A. M.	A. Clark, timberman	Lifting slate	Rupture	Central Iowa Fuel Co., Lucas
Apr. 20, 9:00 A. M.	John DeWitt, miner	Pushing coal	Forehead, face nose cut	Central Iowa Fuel Co., Lucas
Apr. 23, 9:00 A. M.	Wm. Atkins, driver	Fall of slate	Finger mashed	Central Iowa Fuel Co., Lucas
Apr. 9, 9:00 A. M.	Pete Kozak, miner	Fall of slate	Head cut	Central Iowa Fuel Co., Lucas
Apr. 4, 9:00 A. M.	Alex. Claria, miner	Handling slate	Rupture	Central Iowa Fuel Co., Lucas
Apr. 24, 3:30 P. M.	Tom Coffey, driver	Kicked by mule	Shoulder injured	Central Iowa Fuel Co., Lucas
Apr. 24, 3:30 P. M.	Tom Toder, driver	Collision of trips	Badly bruised	Central Iowa Fuel Co., Lucas
Apr. 30, 11:00 A. M.	Corwin Storm, weigh master	Caught hand in car	Left hand broken	Central Iowa Fuel Co., Lucas
Apr. 23, 9:00 A. M.	Joe Brattl, miner	Spragging car	Bruised hips	Winifred Coal Co., Appanoose
May 22, 3:30 P. M.	Jesse Stiles, trackman	Falling timber	Left thigh bruised	Central Iowa Fuel Co., Lucas
May 4, 10:00 A. M.	Tom Deskin, miner	Mining coal	Piece of coal in eye	Central Iowa Fuel Co., Lucas
May 7, 11:00 A. M.	J. R. Owens, miner	Fall of slate on bar	Hand cut, wrist injured	Central Iowa Fuel Co., Lucas
May 8, 2:00 P. M.	E. Schram, day man	Fall of slate	Right hand cut	Central Iowa Fuel Co., Lucas
May 16, 2:00 P. M.	D. W. Jones, trip driver	Blocking car on track	Left hand badly cut	Central Iowa Fuel Co., Lucas

NON-FATAL ACCIDENTS IN DISTRICT NO. 1, 1923—Continued.

Date and Hour of Accident	Name and Occupation	Cause of Accident	Nature of Injury	Employing Company and County
May 18, 9:30 A. M.	Harold Lowrie, miner	Breaking slate	Finger mashed	Central Iowa Fuel Co., Lucas
May 22, 1:00 P. M.	Gerald Stevenson, coupler	Coupling cars	Little finger mashed	Central Iowa Fuel Co., Lucas
May 28, 3:30 P. M.	Ira Gilham, miner	Fall of coal	Scalp broken	Central Iowa Fuel Co., Lucas
May 31, 1:00 P. M.	John Moballe, miner	Fall of slate	Severely bruised	Central Iowa Fuel Co., Lucas
June 8, 1:30 P. M.	Elvin Fousch, driver	Car jumped track	Back bruised	Central Iowa Fuel Co., Lucas
June 19, 1:30 P. M.	E. Martin, driver	Caught foot under car	Foot bruised	Central Iowa Fuel Co., Lucas
June 19, 10:00 A. M.	Tom Duffey, driver	Kicked by mule	Mashed foot	Hocking Coal Co., Monroe
June 25, 9:00 A. M.	Stanley Kosak, miner	Kicked by mule	Arm, shoulder, mouth inj.	Central Iowa Fuel Co., Lucas
June 28, 11:00 A. M.	H. B. Spencer, miner	Pushing cars	Back injured	Central Iowa Fuel Co., Lucas
June 13, 11:30 A. M.	Robt. Menezy, miner	Fall of slate	Severely bruised	Central Iowa Fuel Co., Lucas
June 4, 1:00 P. M.	Joe Whaley, miner	Kicked by mule	Left hip bruised	Central Iowa Fuel Co., Lucas
June 7, 2:00 P. M.	John Wickrey, driver	Loose trip of coal	Finger masha'd, face scrap'd	Central Iowa Fuel Co., Lucas
June 1, 1:00 P. M.	Tom Watts, miner	Fall of slate	Left foot bruised	Central Iowa Fuel Co., Lucas
June 8, 1:00 P. M.	Enielon Tostak, driver	Caught foot bet. car & coal	Foot bruised	Central Iowa Fuel Co., Lucas
July 13, 10:00 A. M.	Jas. Batten, miner	Flying coal	Eye injured	Central Iowa Fuel Co., Lucas
July 16, 10:00 A. M.	R. Henry, miner	Steel from wedge	Right eye sore	Central Iowa Fuel Co., Lucas
July 25, 2:00 P. M.	John E. Thomas, miner	Chunk of coal	Left foot bruised	Central Iowa Fuel Co., Lucas
July 17, 8:00 A. M.	Willard Laurie, miner	Piece of sulphur	Eye injured	Central Iowa Fuel Co., Lucas
July 25, 3:00 P. M.	Carl Gran, driver	Kicked by mule	Forehead cut	Central Iowa Fuel Co., Lucas
July 24, 9:00 P. M.	John McCann, driver	Lifting car	Sprained back	Central Iowa Fuel Co., Lucas
July 19, 3:40 P. M.	Allie McLean, driver	Caught bet. car & door	Body bruised	Central Iowa Fuel Co., Lucas
July 10, 3:40 P. M.	Roy Richards, miner	Mining, flying coal	Right eye injured	Central Iowa Fuel Co., Lucas
July 16, 10:00 A. M.	Jas. O'Donnell, miner	Machine crank	Struck in eye	Central Iowa Fuel Co., Lucas
July 23, 2:00 P. M.	R. Langford, coupler	Coupling car	Wrist cut	Central Iowa Fuel Co., Lucas
July 19, 11:00 A. M.	Jas. Sawtelle, machine runner	Flying slate	Bruised arm and legs	Central Iowa Fuel Co., Lucas
July 18, 3:00 P. M.	H. L. Brown, miner	Fall of coal	Struck in both eyes	Central Iowa Fuel Co., Lucas
July 17, 2:00 P. M.	Jas. Batten, miner	Chunk of coal	Bruised foot	Central Iowa Fuel Co., Lucas
July 18, 3:00 P. M.	Jas. Lingren, miner	Flying coal	Struck in eye	Central Iowa Fuel Co., Lucas
July 18, 3:00 P. M.	Arch McRoberts, miner	Cutting coal	Struck by sulphur	Central Iowa Fuel Co., Lucas
July 30, 8:00 A. M.	O. C. Cowan, miner	Chung of coal	Struck in eye	Central Iowa Fuel Co., Lucas
July 17, 3:00 P. M.	Dave Paton, miner	Flying coal	Struck in eye	Central Iowa Fuel Co., Lucas
July 20, 2:00 P. M.	Len Coffey, driver	Coal from load	Foot bruised	Central Iowa Fuel Co., Lucas
July 17, 3:00 P. M.	Stanley Pascever, blacksmith	Struck by emery	Struck in eye	Central Iowa Fuel Co., Lucas
July 28, 3:00 P. M.	Tony Gurgic, miner	Flying sulphur	Struck in eye	Central Iowa Fuel Co., Lucas
July 20, 3:00 P. M.	Chas. Teas, mine foreman	Flying emery	Struck in eye	Central Iowa Fuel Co., Lucas
July 10, 3:00 P. M.	Paul Strack, miner	Lifting coal	Hurt back	Central Iowa Fuel Co., Lucas
July 25, 3:00 P. M.	Phillip Delping, miner	Hand crushing coal	Hurt back	Central Iowa Fuel Co., Lucas
July 10, 3:00 P. M.	John Kameznic, miner	Fall of slate	Right ankle hurt	Central Iowa Fuel Co., Lucas

NON-FATAL ACCIDENTS IN DISTRICT NO. 1, 1923—Continued.

Date and Hour of Accident	Name and Occupation	Cause of Accident	Nature of Injury	Employing Company and County
July 11,	Homer McDowell, driver.	Fall of slate.	Right leg injured.	Central Iowa Fuel Co., Lucas
July 30,	Bird Conder, miner.	Fall of coal.	Three ribs broken, cut over eye, injured hurt.	Central Iowa Fuel Co., Lucas
July 16, 3:30 P. M.	J. M. Brown, miner.	Loading coal.	Ribs broken, body bruised	Hooking Coal Co., Monroe
July 26, 1:00 P. M.	F. Oliver, miner.	Ran over by car.	Wrist bruised.	Hooking Coal Co., Monroe
July 30, 9:00 A. M.	Robt. Clark, miner.	Fall of slate.	Wrist bruised.	Central Iowa Fuel Co., Lucas
July 16, 9:00 A. M.	Dominic Cuffins, miner.	Fall of slate.	Back and leg bruised.	Central Iowa Fuel Co., Lucas
July 11, 3:30 P. M.	John Komasky, miner.	Fall of slate.	Wrist bruised.	Central Iowa Fuel Co., Lucas
July 11, 3:30 P. M.	Harve McDowell, driver.	Fall of slate from sub.	Wrist bruised.	Central Iowa Fuel Co., Lucas
Aug. 23, 2:30 P. M.	M. A. Right, miner.	Fall of coal.	Body bruised.	Liberty Coal Co., Appanoose
Aug. 27, 10:00 A. M.	W. J. Reese, driver.	Foot caught and car.	Right hand and hip hurt.	Hooking Coal Co., Monroe
Aug. 3, 10:00 A. M.	P. W. Jones, trip rider.	Fall of slate.	Left hand bruised.	Central Iowa Fuel Co., Lucas
Aug. 4,	Don Vermont, miner.	Fall of slate.	Left hand bruised.	Central Iowa Fuel Co., Lucas
Aug. 21, 9:30 A. M.	John Harr, miner.	Loading coal.	Third finger broken.	National Coal Mining Co., Appanoose
Aug. 21, 9:30 A. M.	John Harr, miner.	Loading coal.	Third finger broken.	National Coal Mining Co., Appanoose
Sept. 10, 10:00 A. M.	Edwin Ains, miner.	Fall of coal.	Back broken, chest injured.	Armstrong Coal Co., Appanoose
Sept. 24, 9:00 A. M.	Felix Bowen, timberman.	Fall of coal from car.	Back bruised.	Armstrong Coal Co., Appanoose
Sept. 28, 10:00 A. M.	Glenn Houdeshell, miner.	Lifting coal.	Strained back.	Armstrong Coal Co., Appanoose
Oct. 1, 10:00 A. M.	W. C. Hays, timberman.	Wrecking timbers, also shipped.	Hand cut.	Armstrong Coal Co., Appanoose
Oct. 11, 2:30 P. M.	H. Richardson, timberman.	Wrecking timbers, also shipped.	Hand cut.	Armstrong Coal Co., Appanoose
Oct. 4, 3:00 P. M.	Tom Hookridge, entry man.	Mining coal with bit.	Cut on left arm.	Hooking Coal Co., Monroe
Oct. 14, 10:00 P. M.	John B. Clemmons, miner.	Fall of roof.	Cut on eye.	Hooking Coal Co., Monroe
Nov. 5, 10:30 A. M.	E. E. Alkhamon, machine runner.	Fall of black bat.	Left foot & ankle injured.	Armstrong Coal Co., Appanoose
Nov. 27, 4:25 A. M.	John Peterson, night man.	Mer jumped track.	Fractured leg.	Hooking Coal Co., Monroe
Nov. 13, 9:00 A. M.	Ernest F. Jackson, miner.	Fall of slate.	Right arm bruised.	Hooking Coal Co., Monroe
Nov. 15, 9:00 A. M.	C. H. Mehrhoff, miner.	Fall of coal at face.	Right leg bruised.	Uticon Coal Co., Appanoose
Dec. 11, 9:30 A. M.	Walter McFarland, driver.	Straggling under car.	Back and leg hurt.	Hooking Coal Co., Monroe
Dec. 11, 9:30 A. M.	Walter McFarland, driver.	Straggling under car.	Back and leg hurt.	Hooking Coal Co., Monroe
Dec. 23, 9:30 P. M.	Geo. Gray, miner.	Lifting timber.	Little finger bruised.	Hooking Coal Co., Monroe
Dec. 23, 9:30 P. M.	Jim Bagdikian, top man.	Riding timber.	Head bruised.	Hooking Coal Co., Monroe
Dec. 27, 1:00 P. M.	John Robinson, miner.	Lifting timber.	Strained back.	Hooking Coal Co., Monroe
Dec. 27, 1:00 P. M.	Earl Wittkepp, miner.	Fall of coal.	Shank broken with coal.	Armstrong Coal Co., Appanoose

FATAL AND SERIOUS ACCIDENTS IN DISTRICT NO. 1.

Classified by Cause of Accident and Occupation of Injured, 1922.

Causes (U. S. Bureau of Mine Classification)	Fatal				Serious				Total	
	Miners	Machine Runners	Loaders	Shot Friers	Total	Miners	Drivers	Sprayers		Track Layers	Mine Foremen
1 Falls of roof (rock, slate, etc.)	1	1	1	1	4	1	1	1	1	1
2 Falls of roof (rock, slate, etc.)	1	1	1	1	4	1	1	1	1	1
3 Mine cars and locomotives	1	1	1	1	4	1	1	1	1	1
(a) Coupling cars	1	1	1	1	4	1	1	1	1	1
(b) Coupling cars and springing	1	1	1	1	4	1	1	1	1	1
(c) Falling from trips	1	1	1	1	4	1	1	1	1	1
(d) Run over by car or motor	1	1	1	1	4	1	1	1	1	1
(e) Caught between car and roof	1	1	1	1	4	1	1	1	1	1
(f) Caught between car and roof	1	1	1	1	4	1	1	1	1	1
(g) Runaway car or trip.	1	1	1	1	4	1	1	1	1	1
(h) Miscellaneous	1	1	1	1	4	1	1	1	1	1
6 Explosives	1	1	1	1	4	1	1	1	1	1
(a) Blownout shot	1	1	1	1	4	1	1	1	1	1
8 Electricity	1	1	1	1	4	1	1	1	1	1
9 Animals	1	1	1	1	4	1	1	1	1	1
Kicked by mule, etc.	1	1	1	1	4	1	1	1	1	1
Totals	3	3	3	3	12	3	3	3	3	3

FATAL AND SERIOUS ACCIDENTS IN DISTRICT NO. 1.
Classified by Cause of Accident and Occupation of Injured, 1923.

Causes (U. S. Bureau of Mines Classification)	Fatal				Serious										Totals						
	Miners	Machine runners	Daymen	Total	Miners	Drivers	Couplers	Timbermen	Entrymen	Casers	Trailers	Weightmasters	Trackmen	Daymen		Tripplers	Machine runners	Blacksmiths	Mine foremen	Nightmen	
Falls of roof (rock, slate, etc.)				1	13																13
At working face.....				1	13																13
1 Falls of roof (rock, slate, etc.)				2	19																22
In room or chamber.....				2	19																22
Falls of roof (rock, slate, etc.)				1	1																5
On road or entry.....				1	1																5
2 Lifting flying sulphur, fall of coal from cars, pushing cars, etc.				1	29																32
3 Mine cars and Locomotives				1	2																5
(a) Switching and apragging.....				1	2																5
(b) Coupling cars.....				1	2																5
(c) Falling from trip.....				1	2																5
(d) Run over by car.....				1	6																1
(e) Caught between car and rib.....				1	2																2
(f) Caught between car and roof.....				1	2																2
(g) Runaway car or trip.....				1	1																2
(h) Miscellaneous.....				2	1																3
6 Explosives.....																					
8 Electricity.....																					
Electrocuted.....				1																	
9 Animals.....																					
Kicked by mule.....					2	4															6
12 Falling timbers.....																					6
14 Objects falling down shaft.....																					6
Fall of coal down shaft.....																					6
22 Hand tools, bars, axes, etc.....				1	8																1
Totals.....				7	77	20	3	4	1	1	1	1	1	1	2	2	1	1	1	1	118

FATAL ACCIDENTS, DISTRICT NO. 2.

1922 and 1923.

Date and hour of Accident	Name, Age, Nativity and Occupation	Married or single	Number of children	Cause of Accident	Employing Company and County
1922					
Feb. 13, 4:00 p. m.	L. T. Swanson, 51, Amer., mine P.	Married	3	Fall of slate.....	Capital City Coal Co., Marion
Feb. 24, 2:30 p. m.	Andy Dinyis, 27, Slav, Driver.....	Single		Caught between cars.....	Maple Coal Co., Monroe
Mar. 29, 4:40 p. m.	W. H. Cook, 50, negro, miner.....	Widower		Fell from cage in shaft.....	Consolidation Coal Co., Monroe
Sept. 5, 12:30 p. m.	Frank Gelles, 47, Slav, miner.....	Married	5	Fall of slate.....	Bex Fuel Co., Monroe
Sept. 10, 8:00 a. m.	George McCain, 44, Irish, miner.....	Single		Fall of slate.....	Edwards Bros. Coal Co., Mahaska
Nov. 29, 9:00 a. m.	Robt. Wright, 45, Amer., mine P.....	Married	4	Struck by cage.....	Dunreath C. & M. Co., Marion
Dec. 6, 3:30 p. m.	Fred Holsworth, 53, Amer., miner.....	Married	5	Fall of slate.....	Pershing Coal Co., Marion
1923					
Feb. 1, 10:30 a. m.	Ike Thompson, 66, American miner.....	Married	1	Fall of slate.....	Smoky Hollow Coal Co., Monroe
Feb. 17, 7:50 a. m.	David Goring, Sr., 61, Amer., timber.....	Married		Fall of slate.....	Pershing Coal Co., Marion
April 29, 1:00 p. m.	Dominick Higgins, Italian, Driver.....	Single		Run over by cars.....	Consolidation Coal Co., Monroe
Sept. 11, 11:45 a. m.	T. M. Neighbor, 40, Amer., miner.....	Married	3	Fall of slate.....	Smoky Hollow Coal Co., Monroe
Sept. 12, 8:30 a. m.	James R. Smith, 25, Amer., driver.....	Single		Run over by car.....	Sheriff Coal Co., Monroe
Oct. 10, 9:45 a. m.	Frank Hartsborn, 29, Amer., miner.....	Married	5	Fall of slate.....	Bex Fuel Co., Monroe
Oct. 15, 12:00 a. m.	James Rogers, 40, Amer., machine R.....	Married	1	Fall of slate.....	McCagg Coal & Mining Co., Marion
Dec. 10, 10:50 a. m.	Willie Clarke, Jr., 19, Am., Timber.....	Single		Fall of slate.....	Consolidation Coal Co., Monroe

NON-FATAL ACCIDENTS, DISTRICT NO. 2, 1922.

Date and Hour of Accident	Name and Occupation	Cause of Accident	Nature of Injury	Employing Company and County
Jan. 2, 2:00 P. M.	Wm. Pierce, stableman	Driving nail	Hand smashed	Rex Fuel Co., Monroe
Jan. 6, 9:00 A. M.	E. Sullivan, miner	Lifting coal	Sprained back	Rex Fuel Co., Monroe
Jan. 6, 2:00 P. M.	Walter Brisse, driver	Coupling cars	Finger crushed	Smoky Hollow Coal Co., No. 10, Monroe
Jan. 6,	Ernest Allison, miner	Lifting coal	Back strained	Smoky Hollow Coal Co., No. 10, Monroe
Jan. 6,	Frank White, miner	Moving coal	Finger broken	Smoky Hollow Coal Co., Monroe
Jan. 19,	John Thomas, driver	Squeezed off car	Body bruised	Smoky Hollow Coal Co., Monroe
Jan. 10, 2:00 P. M.	Oscar Nordburg, miner	Slipped and fell down	Hip bruised	Smoky Hollow Coal Co., No. 11, Monroe
Jan. 10, 10:30 A. M.	E. P. Swarthout, driver	Ran over by car	Foot bruised	Rex Fuel Co., No. 4, Monroe
Jan. 12, 9:00 A. M.	Tom Jamieson, driver	Coupling cars	Finger bruised	Smoky Hollow Coal Co., No. 11, Monroe
Jan. 11, in P. M.	J. D. Robertson, driver	Handling mine props	Elbow bruised	Rex Fuel Co., No. 4, Monroe
Jan. 16, 11:00 A. M.	Amos Peterson, boss driver	Mule clipper	Finger mashed	Rex Fuel Co., No. 4, Monroe
Jan. 17, 2:00 P. M.	Carl Gardner, miner	Handling mine props	Injured left elbow	Rex Fuel Co., Monroe
Jan. 17, 3:00 P. M.	A. O'Brick, miner	Empty pit car	Fracture of left arm	Rex Fuel Co., Monroe
Jan. 18, in P. M.	Jas. Corsa, miner	Falling coal	Fingers mashed	Rex Fuel Co., Monroe
Jan. 26, 1:00 P. M.	D. R. Davis, timberman	Axe glanced	Thumb cut	Smoky Hollow Coal Co., Monroe
Jan. 27, 10:00 A. M.	John Bennett, timberman	Fall of slate	Left hand bruised	McCagg Coal Co., Marion
Jan. 30, 9:00 P. M.	John Capinas, dayman	Struck by axe handle	Testicles injured	Hoover Fuel Co., Monroe
Feb. 17, 10:00 A. M.	Geo. Henry, miner	Fall of slate	Ankle bone broken	Smoky Hollow Coal Co., No. 11, Monroe
Feb. 17, 11:00 A. M.	Coil Johnson, driver	Lifting car on track	Back sprained	Smoky Hollow Coal Co., No. 11, Monroe
Feb. 17, 11:00 A. M.	Chas. Davidson, miner	Fall of coal	Pelvis bone dislocated	Frees Mine, Wapello
Feb. 20, 10:00 A. M.	Lowell Sparcks, coupler	Blocking wheels	Mashed finger	Pershing Coal Co., Marion
Feb. 20, 2:00 P. M.	J. W. Barnkill, miner	Breaking slate	Eye injured	Pershing Coal Co., Marion
Feb. 21, 3:00 P. M.	Wm. Harvey, miner	Moving rock	Foot bruised	Hoover Fuel Co., Monroe
Feb. 21, 10:00 A. M.	Harley Burton, driver	Kicked by mule	Arm cut by shoe	Gold Goose Coal Co., Marion
Feb. 21, 9:00 A. M.	Andy Johnson, miner	Fall of slate	Back injured	Pershing Coal Co., Marion
Feb. 23, 3:00 P. M.	W. L. Garrington, miner	Lifting slate	Hand cut	Pershing Coal Co., Marion
Feb. 24, 9:30 A. M.	Alfred Gatten, miner	Fall of slate	Hand bruised	Pershing Coal Co., Marion
Feb. 24, 2:00 P. M.	John Rock, spragger	Slipped	Right knee sprained	Rex Fuel Co., No. 4, Monroe
Feb. 24,	Earl Phipps, timberman	Stepped on pick	Foot injured with pick	Maple Coal Co., Monroe
Feb. 25, 10:00 A. M.	John A. Wilson, miner	Mining shot	Eye injured by sulphur	Rex Fuel Co., No. 4, Monroe
Feb. 25, 9:00 A. M.	C. E. James, miner	Struck by sulphur	Eye injured	Smoky Hollow Coal Co., No. 11, Monroe
Feb. 27,	James Taylor, driver	Caught by car	Hand crushed	Smoky Hollow Coal Co., No. 11, Monroe
Feb. 28, in P. M.	Howard Merrill, driver	Caught bet. car and rib	Left hand bruised	Equality Coal Co., Mahaska
Feb. 28,	Frank Words, miner	Pushing empty car	Foot strained	Maple Coal Co., No. 2, Monroe
Feb. 1, in A. M.	John Archibald, miner	Bad air	Taken sick	Smoky Hollow Coal Co., Monroe
Feb. 2, 1:00 P. M.	Mike Klobnak, miner	Struck by sulphur	Eye injured	Gold Goose Coal Co., Marion
Feb. 2, 2:00 P. M.	Oscar Johnson, cager	Caught by sprag	Finger crushed	Smoky Hollow Coal Co., No. 10, Monroe
Feb. 3,	Joe Anderson, miner	Wedging coal	Finger bruised	Smoky Hollow Coal Co., No. 10, Monroe
Feb. 2, 10:00 A. M.	John Gruttin, miner	Fall of slate	Bruised hand	Pershing Coal Co., Marion
Feb. 3, 4:00 A. M.	J. H. Wolf, night timberman	Jumping car	Fingers mashed	Pershing Coal Co., Marion
Feb. 4, 9:00 A. M.	James Love, trip rider	Lifting car on track	Ruptured	Pershing Coal Co., Marion

Feb. 8, 9:00 A. M.	Jas. Montgomery, driver	Fall of coal	Foot bruised	Pershing Coal Co., Marion
Feb. 8, 2:30 P. M.	C. Remmark, driver	Ran over by car	Right foot bruised	Rex Fuel Co., Monroe
Feb. 8,	J. J. Smith, miner	Mining machine	Toe bruised	Smoky Hollow Coal Co., No. 11, Monroe
Feb. 9, 3:30 A. M.	John Smead, tracklayer	Caught bet. cars	Body bruised	Pershing Coal Co., Marion
Feb. 10, 9:30 A. M.	C. W. Cothran, miner	Fall of coal	Back and leg bruised	Smoky Hollow Coal Co., No. 11, Monroe
Feb. 10, 2:30 P. M.	Elmer McFall, miner	Lifting coal	Left side ruptured	Pershing Coal Co., Marion
Feb. 11, 8:00 A. M.	Jas. Tucker, miner	Between prop & rock	Bruised hand	Rex Fuel Co., No. 4, Monroe
Feb. 13, 9:00 A. M.	Dave Wilson, driver	Mule stepped on foot	Toe broken	Gold Goose Coal Co., Marion
Feb. 14, 11:00 A. M.	Grover Taylor, driver	Caught bet. cars	Finger crushed	Rex Fuel Co., No. 5, Monroe
Feb. 14,	O. Biggins, miner	Loading coal	Finger bruised	Smoky Hollow Coal Co., No. 11, Monroe
Feb. 14, 10:00 A. M.	John King, miner	Fall of slate	Badly bruised	Pershing Coal Co., Marion
Feb. 15, 4:30 P. M.	Lawrence Slack, shot firer	Fall of slate	Back injured	McCagg Coal Co., Marion
Feb. 16, 9:00 A. M.	John Zupan, miner	Fall of slate	Head and back injured	McCagg Coal Co., Marion
Feb. 16, 1:00 P. M.	Frank Coulson, miner	Fall of slate	Left hand cut and bruised	Black Diamond Coal Co., Marion
Feb. 16,	Wm. Nance, miner	Ran into car	Eye bruised	Smoky Hollow Coal Co., No. 10, Monroe
Feb. 16,	Frank Norman, timberman	Splitting caps	Thumb cut	Smoky Hollow Coal Co., No. 10, Monroe
Feb. 17,	Lloyd Green, driver	Coupling cars	Finger mashed	Maple Coal Co., No. 2, Monroe
Mar. 21, 3:05 P. M.	Geo. Katho, driver	Kicked by mule	Face cut	Des Moines Coal & Coke Co., Marion
Mar. 22, 11:00 A. M.	Thos. Reese, miner	Fall of rock	Bruised hand	Rex Fuel Co., No. 4, Monroe
Mar. 25, 2:00 P. M.	Thos. Oakley, timberman	Loading coal	Hand bruised	Pershing Coal Co., Marion
Mar. 25,	John Farsen, miner	Piece of sulphur	Eye injured	Smoky Hollow Coal Co., No. 10, Monroe
Mar. 27, 7:45 A. M.	Monroe Howard, miner	Fall of slate	Body bruised, leg fractured	Des Moines Coal & Coke Co., Marion
Mar. 27, 7:45 A. M.	P. H. Howard, miner	Fall of slate	Bruised body	Des Moines Coal & Coke Co., Marion
Mar. 28, 3:15 P. M.	Dominic Augustino, miner	Fall of slate	Body bruised	Des Moines Coal & Coke Co., Marion
Mar. 28, 11:00 A. M.	Tony Cambrozi, miner	Fall of slate	Nose and mouth cut	Pershing Coal Co., Marion
Mar. 30, 10:30 A. M.	John Deskin, miner	Struck by bar	Leg bruised	Equality Coal Co., Mahaska
Aug. 28, 2:00 P. M.	Gus Milds, miner	Fall of slate	Left foot crushed	Smoky Hollow Coal Co., No. 11, Monroe
Aug. 29, 11:00 A. M.	W. G. Osborn, miner	Mining coal	Left hand bruised	Rex Fuel Co., No. 5, Monroe
Aug. 31, 3:30 P. M.	Thos. Reece, miner	Moving rock	Bruised hand	Rex Coal Co., No. 4, Monroe
Aug. 26, 2:30 P. M.	E. P. Moyl, miner	Digging ditch	Bruised hand	Pershing Coal Co., Marion
Sept. 1,	O. W. Long, miner	Cutting coal	Bruised hand	Pershing Coal Co., Marion
Sept. 4, 11:00 A. M.	Fred Christfull, miner	Cutting coal	Mashed thumb	Geo. L. Burt, Marion
Sept. 5, 1:00 P. M.	Geo. Holsworth, miner	Coal fell on foot	Left foot mashed	Pershing Coal Co., Marion
Sept. 7,	P. Kusma, driver	Run over by car	Leg bruised	Maple Coal Co., No. 2, Monroe
Sept. 9, 9:00 A. M.	Chas. Dooley, miner	Shovelling coal	Back sprained	Pershing Coal Co., Marion
Sept. 8, 12:20 P. M.	John Hixon, miner	Fall of slate	Fracture of right leg	Rex Fuel Co., No. 5, Monroe
Sept. 12, 9:00 A. M.	Albert Smith, miner	Fall of slate	Foot bruised	Honey Creek Coal Co., Marion
Sept. 12,	Walter McCauley, dumper	Dumping coal	Finger mashed	Gold Goose Coal Co., Marion
Sept. 12,	Earl Chambers, nightman	Putting down rails	Hand injured	Pershing Coal Co., Marion
Sept. 15, 12:00 M.	Lon Fisk, miner	Fall of slate	Left foot and ankle injured	Pershing Coal Co., Marion
Sept. 14, 1:30 P. M.	Peter Burle, miner	Fall of coal	Cut about face and breast	Red Rock Coal Co., Marion
Sept. 14, 9:30 A. M.	W. E. Owens, miner	Wedging bottom coal	Right hand injured	Pershing Coal Co., Marion
Sept. 17,	Frank Jaurez, driver	Kicked by mule	Arm fractured	Maple Coal Co., No. 2, Monroe
Sept. 18, 9:00 A. M.	Albert Mathovitch, miner	Fell on pick	Right arm injured	Pershing Coal Co., Marion
Sept. 19,	Sam Williams, miner	Loading coal	Broken finger	Gold Goose Coal Co., Marion
Sept. 20, 3:20 P. M.	John Brace, Sr., miner	Fall of slate	Head cut	Pershing Coal Co., Marion
Sept. 20, 2:30 P. M.	Melvin Huffstutter, miner	Fall of slate	Internal injuries	W. J. Box Coal Co., Wapello
Sept. 21,	Clarence Kirkendall, miner	Fall of coal	Fingers mashed	Gold Goose Coal Co., Marion
Sept. 21,	John Lewis, driver	Pulling rails with mule	Ankle bruised	Maple Coal Co., No. 1, Monroe
Sept. 24, in A. M.	John Maloyter, timberman	Cut himself with axe	Leg cut	Gold Goose Coal Co., Marion

NON-FATAL ACCIDENTS, DISTRICT NO. 2, 1922—Continued.

Date and Hour of Accident	Name and Occupation	Cause of Accident	Nature of Injury	Employing Company and County
Sept. 28, 12:15 P. M.	J. L. Campbell, driver	Fall of coal from car	Left ankle bruised	Pershing Coal Co., Marion
Sept. 28, 10:00 A. M.	Arthur Ryerson, driver	Kicked by mule	Left thigh injured	Pershing Coal Co., Marion
Sept. 28, 8:00 A. M.	Sam Goring, driver	Car jumped track	Left leg broken	Pershing Coal Co., Marion
Sept. 29, 9:00 A. M.	Ed Wilson, miner	Fall of slate	Head badly cut	Sheriff Coal Co., Monroe
Sept. 30, 10:00 A. M.	Tony Rehiminniza, miner	Fall of slate	Leg broken	Pershing Coal Co., Marion
*Sept. 22,	Chas. Edwards, miner	Fall of slate	Ribs torn from vertebrae	Maple Coal Co., No. 2, Monroe
Sept. 27,	Joe Catrench, driver	Caught bet. car and rib	Foot bruised	Maple Coal Co., No. 2, Monroe
Oct. 5, 2:00 P. M.	J. B. James, miner	Mining coal	Hand bruised	Smoky Hollow Coal Co., No. 11, Monroe
Oct. 6,	Chas. Bryant, miner	Fall of coal	Crushed finger	Maple Coal Co., No. 2, Monroe
Oct. 8,	Pete Janney, driver	Mule stepped on foot	Foot bruised	Maple Coal Co., No. 2, Monroe
Oct. 9, 12:30 P. M.	G. E. James, miner	Fall of slate	Head bruised	Smoky Hollow Coal Co., No. 11, Monroe
Oct. 9, 11:00 A. M.	Marsh Erb, topman	Bar slipped	Leg broken	Pershing Coal Co., Marion
Oct. 10, 2:55 P. M.	Lloyd Guy, trapper	Ran over by car	Foot injured	Pershing Coal Co., Marion
Oct. 10, 5:00 P. M.	Arthur Pike, shot firer	Fell down	Arm out of place	Pershing Coal Co., Marion
Oct. 11, 3:00 P. M.	C. F. Bradly, miner	Drilling hole	Sprained wrist	Pershing Coal Co., Marion
Oct. 13, 8:50 P. M.	Frank Prigan, miner	Lifting coal	Fingers bruised	Pershing Coal Co., Marion
Oct. 16,	C. P. Hamm, dirtman	Fall of slate	Back bruised	Smoky Hollow Coal Co., No. 11, Monroe
Oct. 17,	H. A. Hope, miner	Flying prop.	Leg bruised	Smoky Hollow Coal Co., No. 10, Monroe
Oct. 21, 8:00 A. M.	Geo. Fear, miner	Loading coal	Side bruised	Pershing Coal Co., Marion
Oct. 21, 10:00 A. M.	Hal Moore, miner	Flying coal	Right eye injured	Pershing Coal Co., Marion
Oct. 27,	Matt Bank, Jr., driver	Kicked by mule	Hip bruised	Smoky Hollow Coal Co., No. 11, Monroe
*Oct. 13, 11:00 A. M.	G. Jones, driver	Caught bet. car and rib	Bruised through hips	Red Rock Coal Co., Marion
Oct. 23, 1:00 P. M.	H. Teague, machine runner	Machine and jack	Hand injured	Red Rock Coal Co., Marion
Nov. 1, 7:30 A. M.	Fred Christoffel, miner	Water in carbide can	Face and hands burned	Geo. L. Bart Coal Co., Marion
Nov. 2,	Tom Price, miner	Fall of slate	Collar bone broken	Smoky Hollow Coal Co., No. 11, Monroe
Nov. 3, 12:15 P. M.	Wm. Bricker, miner	Falling cage	Left hip injured	Gold Goose Coal Co., Monroe
Nov. 3, 12:15 P. M.	Jim Weiss, miner	Falling cage	Back injured	Gold Goose Coal Co., Monroe
Nov. 11, 10:00 A. M.	Geo. Romance, miner	Flying coal	Eye injured	Smoky Hollow Coal Co., No. 10, Monroe
Nov. 10, 9:00 A. M.	Pete Prosis, miner	Fall of slate	Hip dislocated, foot broken	Maple Coal Co., No. 1, Monroe
Nov. 14,	Herbert Ryerson, driver	Ran into a car	Hand and leg bruised	Maple Coal Co., No. 2, Monroe
Nov. 15,	Ike Thompson, miner	Lifting rock	Caused hernia	Smoky Hollow Coal Co., No. 10, Monroe
Nov. 14,	W. I. Evans, miner	Flying sulphur	Eye injured	Smoky Hollow Coal Co., No. 10, Monroe
*Nov. 21,	Thos. Urban, driver	Car jumped track	Hand and foot bruised	Maple Coal Co., No. 2, Monroe
Nov. 19,	Frank Janney, driver	Caught by car	Head & shoulders bruised	Maple Coal Co., No. 2, Monroe
Nov. 27,	Low Powell, timberman	Breaking slate	Sulphur in eye	Smoky Hollow Coal Co., No. 11, Monroe
Nov. 27,	Ass Ryan, topman	Lifting timbers	Strained side	Smoky Hollow Coal Co., No. 10, Monroe
Nov. 28, 10:35 A. M.	Harry Gibson, miner	Fall of boulder	Back injured	Maple Coal Co., No. 1, Monroe
Nov. 4,	John W. Ladd, cager	Lifting car	Body strained	Pershing Coal Co., Marion
Nov. 18,	James Campbell, miner	Fall of slate	Body bruised	Pershing Coal Co., Marion
Nov. 22, 8:00 P. M.	T. D. Rowland, mine foreman	Struck by trip	Body bruised	Pershing Coal Co., Marion
Nov. 23, 10:30 A. M.	Lloyd Ricker, driver	Caught bet. cars	Body bruised	Pershing Coal Co., Marion
Nov. 27,	Wm. Owens, miner	Pushing car, slipped	Bursted kneecap	Pershing Coal Co., Monroe
Dec. 2, 10:30 A. M.	James Smeed, miner	Fall of slate	Pelvic bone broken	Smoky Hollow Coal Co., No. 10, Monroe
Dec. 3,	Dan Fish, dirtman	Fall of slate	Leg broken	Smoky Hollow Coal Co., No. 10, Monroe
Dec. 4,	Earl Phipps, timberman	Fall of slate	Head bruised	Maple Coal Co., No. 2, Monroe
Dec. 4,	Worth McGrunder, miner	Fall of slate	Body bruised	Maple Coal Co., No. 2, Monroe
Dec. 6, 9:00 A. M.	Martin Pavotic	Fall of slate	Left leg broken	Pershing Coal Co., Monroe
Dec. 6,	J. A. McCauley, miner	Fell on way to train	Hand sprained	Melcher Coal Co., Marion
Dec. 7, 10:00 A. M.	C. P. Hamm, miner	Loading a car	Finger bruised	Smoky Hollow Coal Co., No. 10, Monroe
*Dec. 15, 3:00 P. M.	Fred Polish, dayman	Loading dirt	Eye bruised	Smoky Hollow Coal Co., No. 11, Monroe
Dec. 16,	Geo. Kurtz, miner	Fall of slate	Left arm & face bruised	Maple Coal Co., No. 2, Monroe
Dec. 19, 2:00 P. M.	Andrew Morgan, driver	Car bumped him	Knee injured	Black Diamond Coal Co., Marion
Dec. 21,	Joe Durosky, miner	Unloading slate	Knee injured	Gold Goose C. & M., Marion
Dec. 22, 2:00 P. M.	Chas. Godfrey, cager	Putting car on track	Breast bruised	Smoky Hollow Coal Co., No. 10, Monroe
Dec. 22, 1:00 P. M.	Gus Swyndor, miner	Falling slate	Hand injured	Pershing Coal Co., Monroe
Dec. 22, 11:30 A. M.	Alonso Swinsore, driver	Fall of slate	Left ankle dislocated	Pershing Coal Co., Monroe
Dec. 30, 10:00 A. M.	Lloyd Girin, driver	Caught by car	Left leg bruised	Melcher Coal Co., Marion
			Right foot bruised	Maple Coal Co., No. 2, Monroe

FATAL AND SERIOUS ACCIDENTS IN DISTRICT NO. 2.

Classified by Cause of Accident and Occupation of Injured, 1922.

Causes (U. S. Bureau of Mine Classification)	Fatal			Serious														
	Miners	Drivers	Mine foremen	Miners	Drivers	Timbermen	Night men	Dumppers	Topmen	Trappers	Shot Fiers	Machine runners	Cagers	Mine foremen	Dirtnen	Stablenen	Couplers	Spraggers
Falls of roof (rock, slate, etc.) At working face.....	3			12														
1 Falls of roof (rock, slate, etc.) In rooms or chamber.....				22							1							
Falls of roof (rock, slate, etc.) On road or entry.....			1	1	1	3	2											
2 Miscellaneous Lifting, flying sulphur, fall of coal from cars, pushing cars, etc.				29	3	12		1					3		1			
3 Mine cars and locomotives (a) Switching and spragging.....		1																1
(b) Coupling cars.....																		
(c) Falling from trip.....																		
(d) Run over by car.....				1	2	2				1					1			
(e) Caught between car and rib.....				1	2													
(f) Caught between car and roof.....				1	1										1			
(g) Runaway car or trip.....					1													
6 Explosives Explosion of carbide.....				1														
8 Electricity Mixing machine and jack.....												1						
9 Animals Kicked by mule.....							5											
Pulling rails with mule.....							19											
Mule stepped on foot.....							1											
12 Falling timbers, persons, etc. Fell down.....				4	1						1							

FATAL AND SERIOUS ACCIDENTS IN DISTRICT NO. 2.

Classified by Cause of Accident and Occupation of Injured, 1922—Continued.

Causes (U. S. Bureau of Mines Classification)	Fatal			Serious														
	Miners	Drivers	Mine foremen	Miners	Drivers	Timbermen	Night men	Dumppers	Topmen	Trappers	Shot Fiers	Machine runners	Cagers	Mine foremen	Dirtnen	Stablenen	Couplers	Spraggers
14 Objects falling down shaft Fell from cage in shaft.....	1																	
Struck by cage.....			1															
Falling cage.....																		
22 Hand tools, bars, axes, etc. Falling cage.....				2														
Totals.....				85	26	15	9	1	1	1	2	1	3	1	4	1	1	1

NON-FATAL ACCIDENTS, DISTRICT NO. 2, 1923.

Date and Hour of Accident	Name and Occupation	Cause of Accident	Nature of Injury	Employing Company and County
Jan. 3, 4:00 P. M.	Clyde James, stable boss	Hit by pit car	Back bruised	Smoky Hollow, Monroe
Jan. 5,	Louis Bergin, miner	Lifting slate	Wrenched back	McCagg Coal Co., Marion
Jan. 5, 10:00 A. M.	Ralph Crook, miner	Fall of coal	Bruised ankle	McKenzie & Geery Coal Co., Marion
Jan. 5,	A. L. Turner, driver	Squeezed by mule	Chest injured	Equality Coal Co., Mahaska
Jan. 9, 9:30 A. M.	Jas. Stonehouse, miner	Run into by car	Bruised foot	D. M. Coal & Coke Co., Marion
Jan. 10, 2:00 P. M.	John Hanley, miner	Mining coal	Piece of coal in eye	Smoky Hollow Coal Co., Monroe
Jan. 15,	Jules Conti, miner	Fall of slate	Back injured	Maple Coal Co., Monroe
Jan. 19, 3:00 P. M.	Paul Evans, miner	Fall of slate	Face bruised	Rex Fuel Co., Monroe
Jan. 20, 8:30 A. M.	W. S. Skidmore, timberman	Fall of slate	Bruised foot, broken toe	Rex Fuel Co., Monroe
Jan. 25,	Walter Frazier, driver	Coupling cars	Fingers lacerated	Maple Coal Co., Monroe
Jan. 25,	Melvin Scott, miner	Fall of slate	Jaw cut, teeth loosened	Equality Coal Co., Mahaska
Jan. 26,	Lloyd Morgan, timberman	Cutting leg hole	Sulphur in eye	Smoky Hollow Coal Co., Monroe
Jan. 4, 9:00 A. M.	W. H. Reeser, miner	Fall of slate	Right leg injured	Rex Fuel Co., Monroe
Jan. 5, 8:00 A. M.	Chas. Gott, driver	Car jumped track	Foot injured	Pershing Coal Co., Marion
Feb. 5, 11:00 A. M.	Joe Perzol, driver	Caught by car	Legs sprained	Equality Coal Co., Mahaska
Feb. 2, 4:30 P. M.	Dick Bishop, topman	Fell against belt	Arm broken	Kellar Coal Co., Wapello
Feb. 15,	John Hofsley, miner	Moving rock	Cut finger, became infected	Smoky Hollow Coal Co., Monroe
Feb. 24, 2:00 P. M.	Rube Walker, miner	Mining coal	Coal in eye	Gold Goose Coal Co., Marion
Feb. 26, 10:00 A. M.	Jas. Light, driver	Spragging cars	Broken finger	Gold Goose Coal Co., Marion
Mar. 31, 10:00 A. M.	Chas. McAllister, trackman	Driving spikes	Mashed finger, blood poison	Red Rock Coal Co., Marion
Mar. 12, 12 M.	G. E. Hughes, timberman	Cutting timber leg hole	Piece of dirt in eye	Consolidated Coal Co., Monroe
Mar. 2, 7:30 A. M.	Geo. Bright, driver	Kicked by mule	Body bruised	Pershing Coal Co., Marion
Mar. 3, 7:30 A. M.	E. H. Wolf, miner	Prop fell on hand	Bruised hand	Pershing Coal Co., Marion
Mar. 3, 9:00 A. M.	Geo. Lear, miner	Fall of slate	Body bruised	Pershing Coal Co., Marion
Mar. 6, 3:30 P. M.	Wm. Airy, miner	Cutting coal	Piece of coal in eye	Pershing Coal Co., Marion
Mar. 6,	Adolph Williams, driver	Run over by car	Ribs broken	Maple Coal Co., Monroe
Mar. 6, 9:30 A. M.	Robt. Gordon, miner	Fall of slate	Body bruised some	Pershing Coal Co., Marion
Mar. 9, 2:30 P. M.	C. J. Johnson, miner	Fall of slate	Body bruised	Pershing Coal Co., Marion
Mar. 8,	Gus Havelock, driver	Caught by car	Leg cut	Smoky Hollow Coal Co., Monroe
Mar. 10,	John Thomas, dirtman	Hit hand against rib	Hand infected	Smoky Hollow Coal Co., Monroe
Mar. 15,	Jas. Buckley, miner	Fall of slate	Ankle bruised	Smoky Hollow Coal Co., Monroe
Mar. 14, 3:00 P. M.	Earl Vance, miner	Mining coal	Injury to eye	Equality Coal Co., Mahaska
Mar. 17, 2:30 P. M.	Patsy Recco, miner	Lifting rock	Strained back	Pershing Coal Co., Marion
Mar. 22, 10:15 A. M.	John Turnipseed, driver	Blocking car	Leg injured	Pershing Coal Co., Marion
Mar. 24,	Wm. Chivers, miner	Pulling slate, fell down	Ribs cracked	McCagg Coal Co., Marion
Mar. 26, 1:30 P. M.	Sam Robinson, miner	Mining coal	Sulphur in eye	Des Moines Coal & Coke Co., Marion
Mar. 26, 2:00 P. M.	Jas. Gladson, miner	Cleaning slate	Finger mashed	Smoky Hollow Coal Co., Monroe
Mar. 29,	Essel Phipp, timberman	Fall of slate	Leg bruised	Maple Coal Co., Monroe
Mar. 1, 2:00 P. M.	Andy Pohlad, miner	Lifting coal	Ruptured	Rex Fuel Co., No. 4, Monroe
Mar. 2,	Dan Fish, driver	Caught bet. car & rib	Leg bruised	Smoky Hollow Coal Co., No. 10, Monroe
Mar. 7, A. M.	H. W. Evans, miner	Fall of slate	Back bruised	Smoky Hollow Coal Co., No. 10, Monroe

Mar. 4,	Elmer Bergstrom, miner	Fall of slate	Shoulder broken	Smoky Hollow Coal Co., No. 10, Monroe
Mar. 6,	Tom Haley, miner	Cutting coal	Hand bruised, infected	Smoky Hollow Coal Co., No. 11, Monroe
Mar. 8, 10:00 A. M.	H. O. Bacon, timberman	Loading car	Back sprained	Smoky Hollow Coal Co., No. 11, Monroe
Mar. 8,	Dave Martin, miner	Mining coal	Sulphur in eye	Smoky Hollow Coal Co., No. 11, Monroe
Mar. 6, 9:00 A. M.	Joe Frenshock, driver	Coupling cars	Fingers lacerated	Maple Coal Co., No. 2, Monroe
Mar. 11, 2:00 P. M.	Henry Lesthurs, miner	Fall of coal	Arm bruised	Pershing Coal Co., Marion
Mar. 11, 2:00 P. M.	James Wignal, miner	Coal fell from car	Thumb mashed	Pershing Coal Co., Marion
Mar. 14, 4:30 P. M.	J. R. Price, shot firer	Slipped on rail	Ankle sprained	Smoky Hollow Coal Co., No. 11, Monroe
Mar. 15, 1:30 P. M.	John Dack,	Fingers bet. rocks	Fingers bruised	Rex Fuel Co., No. 4, Monroe
Mar. 15, 10:00 A. M.	Sam Jamieson, driver	Caught by car	Arm bruised	Smoky Hollow Coal Co., No. 11, Monroe
Mar. 16, 2:20 P. M.	John H. Ladd, cager	Coal fell from car	Foot bruised	Pershing Coal Co., Marion
Mar. 16, 11:00 A. M.	J. H. Ellis, driver	Fall of slate	Left foot bruised	D. M. Coal & Coke Co., Marion
Mar. 21, 8:30 A. M.	John Barbon, miner	Mining off shot	Hand bruised	Pershing Coal Co., Marion
Mar. 22, 3:20 P. M.	Chas. Harris, Jr., coupler	Caught by door	Arm dislocated	D. M. Coal & Coke Co., Marion
Mar. 22, 2:00 P. M.	Chas. Hoard, miner	Breaking coal	Eye injured	Pershing Coal Co., Marion
Apr. 5,	S. A. Shelton, miner	Moving rock	Foot bruised	Equality Coal Co., Mahaska
Apr. 4, 12:40 P. M.	Chas. Gott, driver	Car ran on foot	Injured foot	Pershing Coal Co., Marion
Apr. 14, 1:30 P. M.	R. H. McDowell, miner	Wedging coal	One finger broken	Pershing Coal Co., Marion
Apr. 15, 2:00 P. M.	Sam Wilbein, shot firer	Fell out of car	Foot bruised	Gold Goose Coal Co., Marion
(See Letter)	John Williams, dirtman	Going down in cage	Wrist broken	Black Diamond Coal Co., Marion
Apr. 18, 10:30 A. M.	John Hollosky, driver	Run over by car	Leg broken	Rex Fuel Co., Monroe
Apr. 19, 8:00 A. M.	Ben Benardi, timberman	Fall of slate	Head cut and bruised	Consolidation Coal Co., Monroe
Apr. 19, 10:30 A. M.	Theodore Allen, driver	Kicked by mule	Left side injured	Consolidation Coal Co., Monroe
Apr. 19, 2:30 P. M.	Ed Gardner, miner	Mining shot	Coal in eye	Consolidation Coal Co., Monroe
Apr. 19, 2:00 P. M.	Ed Johnson, miner	Fall of slate	Bruised left ankle	Consolidation Coal Co., Monroe
Apr. 26, 2:00 P. M.	Miles Carey, miner	Fall of slate	Bruised right ankle	Consolidation Coal Co., Monroe
Apr. 26, 3:20 P. M.	W. H. McCutcheon, driver	Tail chain caught wrist	Wrist sprained	Consolidation Coal Co., Monroe
Apr. 27, 11:00 A. M.	Adolph Jones, driver	Kicked by mule	Left side head bruised	Consolidation Coal Co., Monroe
Apr. 5, 10:30 A. M.	Dan Stokes, trackman	Fall of slate	Back and head bruised	Smoky Hollow Coal Co., Monroe
Apr. 17,	Bert Marinelli, miner	Mining coal	Sulphur in eye	Smoky Hollow Coal Co., Monroe
Apr. 19,	Frank Urban, miner	Loading coal	Finger mashed	Smoky Hollow Coal Co., Monroe
Apr. 13,	Matt Karpan, miner	Lifting coal	Finger broken	McCagg Coal Co., Marion
May 16, 10:00 A. M.	Tom Parish, driver	Fell from car	Both ankles sprained	Consolidation Coal Co., Monroe
May 16, 8:00 A. M.	Tom Mitchell, driver	Kicked by mule	Left side bruised	Consolidation Coal Co., Monroe
May 21, 9:00 A. M.	Andy Erickson, miner	Fall of rock	Middle finger fractured	Consolidation Coal Co., Monroe
May 22, 1:30 P. M.	Ed Carter, driver	Car jumped track	Nail mashed off thumb	Consolidation Coal Co., Monroe
May 25, 3:00 A. M.	Ferris Harris, miner	Kicked by mule	Right foot bruised	Consolidation Coal Co., Monroe
May 23, 8:00 A. M.	Chas. Morrill, miner	Fall of slate	Neck and shoulder bruised	Consolidation Coal Co., Monroe
May 23, 12:00 M.	Mike Slavocovsky, miner	Fall of slate	Right ankle bruised	Consolidation Coal Co., Monroe
May 28, 1:30 P. M.	J. W. Watkins, miner	Fall of slate	Left foot broken	Consolidation Coal Co., Monroe
May 1,	J. T. Thomas, miner	Fall of slate	Left cheek cut	Consolidation Coal Co., Monroe
May 2,	J. E. Burke, miner	Fall of slate	Left foot mashed	Consolidation Coal Co., Monroe
May 2, 9:00 A. M.	T. T. Lewis, miner	Cutting sulphur	Piece bruised knee	Consolidation Coal Co., Monroe
May 3, 1:00 P. M.	Joe Olson, timberman	Fall of slate	Right knee bruised	Consolidation Coal Co., Monroe
May 10, 10:00 A. M.	Angelo Sebbin, miner	Cutting coal	Bruised hand	Consolidation Coal Co., Monroe
May 11, 10:30 A. M.	Hugh Lewis, timberman	Prop fell and hit him	Back bruised	Consolidation Coal Co., Monroe
May 12, 2:00 P. M.	Wm. Gibbons, driver	Squeezed bet. car & rib	Sprained ankle	Consolidation Coal Co., Monroe
May 15, 9:30 A. M.	John Hook, crusher	Coal from chute	Wound on head	Consolidation Coal Co., Monroe
May 15, 10:00 A. M.	Dennis Goggins, dayman	Coupling cars	Fractured finger	Consolidation Coal Co., Monroe
May 16, 10:55 A. M.	Henry Brown, miner	Fall of slate	Shoulder and leg bruised	Consolidation Coal Co., Monroe

NON-FATAL ACCIDENTS IN DISTRICT NO. 2, 1923—Continued.

Date and Hour of Accident	Name and Occupation	Cause of Accident	Nature of Injury	Employing Company and County
May 15, 12:00 P.M.	Ocie Oliver, driver.	Car jumped track.	Leg broken.	Consolidation Coal Co., Monroe
May 19, 2:00 A.M.	August Saine, night man.	Caught foot in switch.	Toe broken.	Consolidation Coal Co., Monroe
May 21, 10:30 A.M.	Cliff Miles, driver.	Car jumped track.	Sprained left wrist.	Consolidation Coal Co., Monroe
May 5, 3:00 P.M.	Thos. P. Cowan, electrician.	Fixing elec. cable.	Left thumb maced by hammer.	Consolidation Coal Co., Monroe
May 11, 3:40 P.M.	Yee Eddy, machine helper.	Machine jack slipped.	Leg broken.	Red Rock Coal Co., Marion
May 14,	Tom Perry, driver.	Fall of rock.	Finger mashed.	Red Rock Coal Co., Marion
May 15, 10:00 A.M.	Tony Gasparovich, miner.	Fall of slate.	Left eye cut.	Red Rock Coal Co., Marion
May 16, 2:00 P.M.	Joe Carrelli, timberman.	Fall of slate.	Third finger mashed.	Red Rock Coal Co., Marion
May 24, 1:00 P.M.	Tom Coulson, miner.	Fall of slate.	Head and back bruised.	Red Rock Coal Co., Marion
May 28,	Ben Henry, miner.	Fall of slate.	Right knee injured.	Red Rock Coal Co., Marion
May 31, 11:30 A.M.	Robt. Willis, miner.	Fall of coal.	Left leg sprained.	Red Rock Coal Co., Marion
May 2,	John Chesney, miner.	Fall of props.	Foot bruised.	Maple Coal Co., Monroe
May 16,	Thos. Hurst, driver.	Kicked by mule.	Head and back bruised.	Maple Coal Co., Monroe
May 1,	James Penson, driver.	Car jumped track.	Head and shoulders bruised.	Maple Coal Co., Monroe
May 10, 4:00 P.M.	Joseph Chambers, miner.	Mining coal.	Sulphur in eye.	Maple Coal Co., Monroe
May 25,	Pete Loch, miner.	Fall of rock.	Back and foot injured.	Red Rock Coal Co., Marion
June 8, 10:00 A.M.	Walter Ward, miner.	Fall of slate.	Right leg bruised.	Consolidation Coal Co., Monroe
June 4, 8:30 A.M.	Wm. Washington, miner.	Fall of slate.	Right arm bruised.	Consolidation Coal Co., Monroe
June 5, 9:00 A.M.	Ray Wilcox, motorman.	Caught bet. motor & car.	Left arm broken.	Consolidation Coal Co., Monroe
June 5, 10:35 A.M.	Booker Jones, driver.	Mule fell on him.	Bruised leg and hand.	Consolidation Coal Co., Monroe
June 7, 10:00 A.M.	Wallace Miller, miner.	Fall of slate.	Probably back broken.	Consolidation Coal Co., Monroe
June 8, 8:30 A.M.	Wm. Humbles, miner.	Fall of slate.	Right knee bruised.	Consolidation Coal Co., Monroe
July 2, 9:00 A.M.	Angelo Seario, miner.	Fall of slate.	Arm and head bruised.	Equality Coal Co., Mahaska
July 28, 9:00 A.M.	Chas. Barber, miner.	Moving rock.	Back sprained.	Equality Coal Co., Mahaska
July 23,	Louisa Swinson, driver.	Kicked by mule.	Knee bruised.	Maple Coal Co., Monroe
July 27,	Deece Thomas, miner.	Fell off loaded truck.	Leg bruised.	Maple Coal Co., Monroe
July 19, 2:50 P.M.	R. O. Campbell, pumper.	Falling rock.	Two fingers mashed.	Red Rock Coal Co., Marion
July 9, 10:30 A.M.	Frank Deshabiles, timberman.	Fall of slate.	Left leg injured.	Pershing Coal Co., Marion
July 20, 9:30 A.M.	Neal Wilson, timberman.	Driving splices.	Finger injured.	Pershing Coal Co., Marion
July 19, 10:00 A.M.	A. D. Lapp, timberman.	Flying coal.	Struck in eye.	Pershing Coal Co., Marion
July 3, 9:00 A.M.	Hy King, miner.	Lifting coal.	Sprained back.	Pershing Coal Co., Marion
July 3, 10:45 A.M.	Albert Leair, miner.	Fall of slate.	Hurt left hip.	Pershing Coal Co., Marion
July 17, 7:30 A.M.	C. Lapp, miner.	Fall of slate.	Minor injury.	Pershing Coal Co., Marion
July 11, 10:00 A.M.	Hy Hunt, miner.	Mining shot.	Back of hand scratched.	Pershing Coal Co., Marion
July 9, 9:00 A.M.	Chas. Mansell, miner.	Fall of slate.	Bruised head & shoulders.	Pershing Coal Co., Marion
July 11, 10:15 A.M.	A. Fregentini, miner.	Fall of slate.	Hurt shoulders & chest.	Pershing Coal Co., Marion
July 11, 10:00 A.M.	Jas. C. Lapp, miner.	Fall of slate.	Mashed fingers rail off.	Pershing Coal Co., Marion
July 10, 1:00 P.M.	Cheese Travelli, miner.	Chopping caps.	Cut fingers.	Pershing Coal Co., Marion
July 11, 8:00 A.M.	J. E. Moffett, miner.	Gibbing slate.	Right foot injured.	Pershing Coal Co., Marion
July 11, 11:00 A.M.	Elore Right, miner.	Fall of slate.	Arm and eye cut.	Pershing Coal Co., Marion
July 9, 12:30 P.M.	M. W. Miller, driver.	Fall of slate.	Hand bruised and cut.	Pershing Coal Co., Marion
July 9, 12:00 P.M.	Burdette Jones, trapper.	Carbide exploded.	Face and eye burned.	Pershing Coal Co., Marion
July 9, 11:00 A.M.	Frank Provenzano, miner.	Fall of slate.	Head injured.	Pershing Coal Co., Marion
July 10, 9:30 A.M.	W. W. Laws, driver.	Car jumped track.	Finger smashed.	Red Rock Coal Co., Marion
July 23, 3:30 P.M.	Julie Maitre, driver.	Car jumped track.	Leg injured.	Red Rock Coal Co., Marion
July 13,	R. E. Cowan,	Short circuit in wire.	Eye injured.	Red Rock Coal Co., Marion
July 23, 3:00 P.M.	Roster Kissinger, miner.	Fall of rock.	Foot injured.	Red Rock Coal Co., Marion
July 15, 2:00 A.M.	Len Whimprey, night man.	Caught bet. tank and roof.	Arm broken.	Maple Coal Co., Monroe
July 14, 2:00 P.M.	Fred Grinstead, miner.	Mining coal.	Struck in eye by coal.	Hartwig Bros. Coal Co., Davis
July 9, 9:00 A.M.	Robt. Jackson, Jr., cager.	Lifting car.	Sprained hip.	Consolidation Coal Co., Monroe
Aug. 18, 10:30 A.M.	Robert Allen, motorman.	Caught hand bet. cars.	Mashed middle finger.	Consolidation Coal Co., Monroe
Aug. 15, 2:40 P.M.	Claude Thomas, miner.	Fall of slate.	Right arm broken.	Consolidation Coal Co., Monroe
Aug. 1, 3:00 P.M.	Robt. Cowan, machine runner.	Prop pulley.	First finger injured.	Consolidation Coal Co., Monroe
Aug. 8, 1:00 P.M.	D. P. Wheeler, timberman.	Fall of coal.	Eye half cut.	Red Rock Coal Co., Marion
Aug. 13, 2:30 P.M.	Otto Pierce, driver.	Mining coal.	Struck in eye by coal.	McCarg Coal & M. Co., Marion
Aug. 8, 12:00 P.M.	Jas. E. Huff, miner.	Unloading slate.	Sprained back.	Pershing Coal Co., Marion
Aug. 14, 7:30 A.M.	Joe Fathergill, trip rider.	Unloading dirt.	Knee and hip injured.	Pershing Coal Co., Marion
Aug. 1, 10:30 A.M.	Patsy Rocco, miner.	Coupling cars.	Small finger injured.	Pershing Coal Co., Marion
Aug. 14, 2:30 P.M.	Victor Mahy, miner.	Mining shot.	Back and ribs injured.	Pershing Coal Co., Marion
Aug. 16, 12:00 P.M.	Lewis Leiby, miner.	Cutting sulphur.	Left eye injured.	Pershing Coal Co., Marion
Aug. 23, 12:20 P.M.	Zack Slocum, miner.	Loading slate.	Finger broken.	Pershing Coal Co., Marion
Aug. 31, 2:00 P.M.	Ed. Seaman, Sr., miner.	Caught bet. car & rib.	Right arm injured.	Pershing Coal Co., Marion
Aug. 29, 5:30 P.M.	Miles Allen, shot frer.	Using sledge.	Hurt finger mashed.	Pershing Coal Co., Marion
Aug. 23, 3:00 P.M.	Vance Susin, miner.	Blown through shot.	Right hand, should. & arm.	Pershing Coal Co., Marion
Aug. 21, 10:00 A.M.	A. Zagroli, miner.	Wedging coal.	Finger mashed.	Pershing Coal Co., Marion
Aug. 30, 12:30 P.M.	Paul McCormick, miner.	Cutting coal.	Piece in eye.	Pershing Coal Co., Marion
Aug. 16, 10:00 A.M.	Don Agostino, miner.	Fall of slate.	Back hurt.	Pershing Coal Co., Marion
Aug. 12, 10:30 A.M.	Wm. Pyle, miner.	Fall of slate.	Right hand injured.	Pershing Coal Co., Marion
Aug. 19, 11:00 P.M.	Bam Mowe, dayman.	Kicked by mule.	Right arm broken.	Pershing Coal Co., Marion
Aug. 22, 11:50 P.M.	Earl Williams, miner.	Lifting coal.	Wrenched back.	Consolidation Coal Co., Monroe
Aug. 27, 10:00 A.M.	Andy Erickson, miner.	Bruised finger.	Bruised finger.	Consolidation Coal Co., Monroe
Aug. 10, 10:00 A.M.	John Smith, timberman.	Rolling cars.	Right hand injured.	Consolidation Coal Co., Monroe
Aug. 15,	Ora Rogers, miner.	Fall of slate.	Right foot injured.	Consolidation Coal Co., Monroe
Aug. 9, 12:00 M.	Wm. Hurley, miner.	Fall of slate.	Head & shoulders bruised.	Red Rock Coal Co., Marion
Aug. 8,	David Thomas, miner.	Bumped against coal.	Head cut.	Smoky Hollow Coal Co., Monroe
Aug. 21, 2:00 P.M.	Wm. Gasprosvich, miner.	Fall of slate.	Head bruised.	Smoky Hollow Coal Co., Monroe
Aug. 9, 2:00 P.M.	J. A. Hart, miner.	Moving rock.	Four fingers mashed.	Red Rock Coal Co., Marion
Aug. 16,	Pete Kuzna, miner.	Brad Geary, driver.	Ribs fractured.	Maple Coal Co., Monroe
Aug. 18, 9:30 A.M.	Geo. Trenschok, miner.	One finger mashed.	One finger mashed.	McKenzie & Geeray, Marion
Sept. 4, 2:00 P.M.	Elmer Armstrong, miner.	Fall of coal.	Leg and shoulder bruised.	Maple Coal Co., Monroe
Sept. 25, 1:30 P.M.	Tom Ryan, driver.	Bar slipped.	End of finger cut off.	Smoky Hollow Coal Co., Monroe
Sept. 25,	Lloyd Gray, miner.	Rock flew in eye.	Bruised foot.	Smoky Hollow Coal Co., Monroe
Sept. 5, 3:00 P.M.	E. R. Moyle, miner.	Cutting coal.	Bruised hand.	Smoky Hollow Coal Co., Monroe
Sept. 19, 2:00 P.M.	C. M. Warner, miner.	Rolling coal on dirt dump.	Struck in eye by sulphur.	Consolidation Coal Co., Monroe
Sept. 23, 9:00 A.M.	John Coleman, yardman.	Tamping hole.	Struck in eye by sulphur.	Consolidation Coal Co., Monroe
Sept. 26, 9:00 A.M.	John Banvaugan, miner.	Cutting entry.	Fell, bruised side.	Consolidation Coal Co., Monroe
Sept. 26, 8:00 A.M.	Joe Garrett, miner.	Fall of slate.	Struck in eye by coal.	Consolidation Coal Co., Monroe
Sept. 26, 8:00 A.M.	Joe Garrett, miner.	Fall of slate.	Forehead cut.	Consolidation Coal Co., Monroe

NON-FATAL ACCIDENTS IN DISTRICT NO. 2, 1923—Continued.

Date and Hour of Accident	Name and Occupation	Cause of Accident	Nature of Injury	Employing Company and County
Sept. 26, 8:00 A. M.	Tom Mowe, miner.	Lifting coal.	Strained right side.	Consolidation Coal Co., Monroe
Sept. 9, 8:00 A. M.	Ray Norfleet, driver.	Kicked by mule.	Bruised left knee.	Consolidation Coal Co., Monroe
Sept. 5, 12:30 P. M.	Thos. Reeves, miner.	Fall of slate.	Bruised hip and back.	Consolidation Coal Co., Monroe
Sept. 13, 9:00 A. M.	Henry Boies, Jr., motorman.	Walden Baskerville, miner.	Legs bruised.	Consolidation Coal Co., Monroe
Sept. 19, 1:30 P. M.	Walter Baskerville, miner.	Cutting coal.	Struck pick in foot.	Consolidation Coal Co., Monroe
Sept. 29, 3:30 P. M.	Ferris Harris, miner.	Lifting coal.	Strained muscles, side.	Consolidation Coal Co., Monroe
Sept. 8, 10:30 A. M.	Mike Moseley, miner.	Fall of slate.	Foot hurt, toes mashed.	Pershing Coal Co., Marion
Sept. 14, 9:00 A. M.	Frank Gabess, miner.	Cutting coal.	Back hurt.	Pershing Coal Co., Marion
Sept. 14, 11:00 A. M.	Walker Hall, miner.	Cutting coal.	Sulphur in eye.	Pershing Coal Co., Marion
Sept. 15, 8:00 A. M.	Ed Allen, miner.	Cutting coal.	Struck in eye by pick.	Pershing Coal Co., Marion
Sept. 15, 1:00 P. M.	Earl Kline, miner.	Taking down slate.	Left eye injured.	Pershing Coal Co., Marion
Sept. 22, 8:00 A. M.	Lewis Garrington, miner.	Fall of slate.	Hand injured.	Pershing Coal Co., Marion
Sept. 22, 9:00 A. M.	D. Williams, miner.	Mining shot.	Sulphur in eye.	Pershing Coal Co., Marion
Sept. 25, 10:30 A. M.	Elmer McFall, miner.	Fall of slate.	Right side injured.	Pershing Coal Co., Marion
Sept. 25, 7:30 P. M.	Emery Hill, miner.	Mining coal.	Sulphur in eye.	Pershing Coal Co., Marion
Sept. 25, 10:00 A. M.	E. C. Swartz, miner.	Mining shot.	Sulphur in eye.	Pershing Coal Co., Marion
Sept. 25, 8:45 A. M.	Arthur Pike, Jr., driver.	Squeezed by mule.	Hurt through chest & hip.	Pershing Coal Co., Marion
Sept. 29, 1:00 P. M.	Joe Polito, miner.	Fall of slate.	Scalp cut, arm injured.	Pershing Coal Co., Marion
Oct. 3, 12:00 M.	H. W. Miller, driver.	Car jumped track.	Back injured.	Pershing Coal Co., Marion
Oct. 3, 8:30 A. M.	H. Martin, topman.	Digging scale pit.	One finger cut.	Pershing Coal Co., Marion
Oct. 3, 11:00 A. M.	Jules Minolet, miner.	Digging scale pit.	Head cut.	Pershing Coal Co., Marion
Oct. 12, 10:00 A. M.	Jas. Kennedy, miner.	Laying rails.	Forehead cut.	Pershing Coal Co., Marion
Oct. 12, 1:00 P. M.	Victor Delazer, miner.	Flying rock.	Eye injured.	Pershing Coal Co., Marion
Oct. 19, 8:00 A. M.	Mike Carbone, miner.	Mining coal.	Sulphur in eye.	Pershing Coal Co., Marion
Oct. 19, 1:30 P. M.	Wm. Hargraves, coupler.	Moving rock.	Sprained back.	Pershing Coal Co., Marion
Oct. 20, 1:30 P. M.	H. C. Freeman, miner.	Slipped on rail.	One rib broken.	Pershing Coal Co., Marion
Oct. 24, 8:30 A. M.	Jas. Wignall, miner.	Breaking slate.	Blow in eye.	Pershing Coal Co., Marion
Oct. 26, 10:30 A. M.	H. E. Anstae, top foreman.	Lifting wedge.	Piece of steel in eye.	Pershing Coal Co., Marion
Oct. 27, 1:15 P. M.	Victor Delazer, miner.	Pinching cars.	Sprained instep.	Pershing Coal Co., Marion
Oct. 28, 1:30 P. M.	Archie Harris, driver.	Mining coal.	Sulphur in eye.	Pershing Coal Co., Marion
Oct. 22, 1:00 P. M.	Roy Norfleet, driver.	Caught bet. car & rail.	Bruised chest.	Consolidation Coal Co., Monroe
Oct. 22, 1:00 P. M.	W. A. Lett, motorman.	Motor jumped track.	Side and head bruised.	Consolidation Coal Co., Monroe
Oct. 2, 2:00 P. M.	Ray Merrill, miner.	Mining shot.	Left leg bruised.	Consolidation Coal Co., Monroe
Oct. 4, 2:00 P. M.	Sam Rhodes, Sr., miner.	Fall of slate.	Sulphur in eye.	Consolidation Coal Co., Monroe
Oct. 11, 3:00 P. M.	Wm. Brown, miner.	Caught by car.	Mashed left foot.	Consolidation Coal Co., Monroe
Oct. 15, 11:25 P. M.	Walter Engstrom, miner.	Jumped from car.	Bruised hand.	Consolidation Coal Co., Monroe
Oct. 16, 1:00 P. M.	W. T. Evans, miner.	Slipped and fell.	Knock bruised.	Consolidation Coal Co., Monroe
Oct. 1, 1:30 P. M.	Ivan Holmes, miner.	Lifting coal.	Structure self.	Pershing Coal Co., Marion
Oct. 8, 3:30 P. M.	Sam Cassidy, miner.	Caught bet. mule & car.	Tight wrist cut.	Rex Fuel Co., Monroe
Oct. 17, 1:00 P. M.	Chas. Scales, miner.	Fall of slate.	Back and leg injured.	Sheriff Coal Co., Monroe
Oct. 24, 11:00 A. M.	Robt. Zaitley, miner.	Fall of rock.	Foot injured.	Sheriff Coal Co., Monroe
Oct. 18, 10:00 A. M.	Chas. Hill, miner.	Lifting slate.	Back sprained.	Equality Coal Co., Nebraska
Oct. 26, 1:00 P. M.	A. Peterson, miner.	Fall of slate.	Foot and heel injured.	Pershing Coal Co., Marion
Oct. 29, 2:00 P. M.	Wm. Carter, miner.	Chunk of coal fell.	Mashed first finger.	Consolidation Coal Co., Monroe
Oct. 29, 10:00 A. M.	Walker Engstrom, miner.	Fell from car.	Right arm bruised.	Consolidation Coal Co., Monroe
Nov. 10, 9:00 A. M.	Pete Prodic, miner.	Fall of slate.	Dislocated hip.	Maple Coal Co., Monroe
Nov. 1, 9:00 A. M.	Chas. Grossin, driver.	Kicked by mule.	Right arm bruised.	Consolidation Coal Co., Monroe
Nov. 1, 10:00 A. M.	Ben Crank, miner.	Fall of slate.	Chest bruised.	Consolidation Coal Co., Monroe
Nov. 5, 2:30 P. M.	Frank Keifer, miner.	Caught bet. car & rib.	Ankle injured.	Pershing Coal Co., Marion
Nov. 5, 9:00 A. M.	Elmer Pryor, track helper.	Hand bet. bumpers.	Right hand bruised.	Consolidation Coal Co., Monroe
Nov. 5, 9:00 A. M.	Josh Miller, Jr., trailer.	Coupling cars.	Mashed little finger.	Consolidation Coal Co., Monroe
Nov. 8, 10:30 A. M.	Harry Sides, timberman.	Lifting timbers.	Arm sprained.	Pershing Coal Co., Marion
Nov. 9, 9:00 A. M.	Jas. Harshill, driver.	Spragging cars.	Fordingers injured.	Pershing Coal Co., Marion
Nov. 13, 2:30 P. M.	Ray Hughes, timberman.	Fall of slate.	Bruised arm.	Consolidation Coal Co., Monroe
Nov. 14, 10:00 A. M.	E. L. Paterson, miner.	Fall of slate.	Shoulder fractured, one finger amputated.	Pershing Coal Co., Marion
Nov. 14, 3:30 P. M.	Dan Graves, driver.	Fall of coal.	One finger.	Consolidation Coal Co., Monroe
Nov. 16, 3:00 P. M.	O. T. Tansil, miner.	Pushing car.	Strained back.	Consolidation Coal Co., Monroe
Nov. 20, 11:30 A. M.	Frank Mitchell, driver.	Knocked down by mule.	Leg bruised.	Consolidation Coal Co., Monroe
Nov. 21, 4:00 P. M.	Leo Kelly, dayman.	Lifting motor car.	Side injured.	Pershing Coal Co., Marion
Nov. 22, 10:00 A. M.	Evan Gott, miner.	Laying rails.	Leg injured.	Pershing Coal Co., Marion
Nov. 26, 1:30 A. M.	Jas. Reid, nightman.	Kicked by mule.	Leg injured.	Pershing Coal Co., Marion
Nov. 26, 11:00 A. M.	Jas. Johnson, miner.	Fall of slate.	Foot injured.	Pershing Coal Co., Marion
Nov. 22, 2:00 P. M.	Angelo Sebhin, miner.	Fall of slate.	Bruised foot.	Consolidation Coal Co., Monroe
Nov. 27, 8:30 A. M.	Theodore Allen, driver.	Mule fell on him.	Bruised leg.	Consolidation Coal Co., Monroe
Nov. 20, 8:00 A. M.	Earl Phipps, timberman.	Splitting lagging.	Foot cut with axe.	Maple Coal Co., Monroe
Nov. 20, 2:30 P. M.	M. R. Schneck, entryman.	Mining coal.	Sulphur in eye.	Gold Goose Coal Co., Marion
Nov. 14, 3:00 P. M.	Judy Paulding, miner.	Fall of slate.	Left thumb mashed.	Gold Goose Coal Co., Marion
Nov. 17, 10:00 A. M.	R. Lundstrom, trip rider.	Landing car on track.	Side ruptured.	Consolidation Coal Co., Monroe
Nov. 19, 10:00 A. M.	R. H. Gray, miner.	Fall of slate.	Back badly bruised.	Smoky Hollow Coal Co., Monroe
Nov. 3, 12:00 M.	Pete Vanrace, miner.	Fall of slate.	Leg bruised.	Holland Coal Co., Marion
Dec. 6, 3:10 P. M.	S. Davis, timberman.	Fall of slate.	Head & shoulders bruised.	Pershing Coal Co., Marion
Dec. 6, 11:00 A. M.	Jas. B. Stafford, miner.	Fall of slate.	Head & shoulders injured.	Pershing Coal Co., Marion
Dec. 8, 8:30 A. M.	Jas. Stevenson, miner.	Fall of slate.	Back and face injured.	Pershing Coal Co., Marion
Dec. 13, 3:00 P. M.	Wm. Marshall, miner.	Fall of slate.	Right hand cut.	Pershing Coal Co., Marion
Dec. 18, 2:00 P. M.	L. Peterson, miner.	Slate rolled over.	Mid. knee injured.	Pershing Coal Co., Marion
Dec. 17, 10:00 A. M.	A. Bulgartski, miner.	Sliding on coal.	Mid. finger hand mashed.	Consolidation Coal Co., Monroe
Dec. 28, 8:00 A. M.	G. Fallstrom, timberman.	Fall of slate.	Scalp wound.	Pershing Coal Co., Marion
Dec. 31, 8:30 A. M.	Harry Cochran, miner.	Lifting coal.	Strained back.	Pershing Coal Co., Marion
Dec. 15, 3:00 P. M.	Geo. Havelsok, driver.	Caught bet. car & rib.	Finger bruised.	Smoky Hollow Coal Co., Monroe
Dec. 21, 3:30 P. M.	Ed Broock, coupler.	Jumping from car.	Back and leg bruised.	Smoky Hollow Coal Co., Monroe
Dec. 20, 10:00 A. M.	John Jenkins, Jr., pumpman.	Starting pump.	Face bruised.	Smoky Hollow Coal Co., Monroe
Dec. 31, 1:00 P. M.	Rube Walker, miner.	Cutting at face.	Sulphur in eye.	Smoky Hollow Coal Co., Monroe
Dec. 3, 10:30 A. M.	Evans Thomas, miner.	Fall of slate.	Head and leg bruised.	Smoky Hollow Coal Co., Monroe
Dec. 1, 1:20 P. M.	Sam Harrington, timberman.	Fall of slate.	Head bruised.	Consolidation Coal Co., Monroe
Dec. 10, 9:30 A. M.	Ed Toran, timberman.	Fall of slate.	Mashed hand.	Consolidation Coal Co., Monroe
Dec. 13, 1:00 P. M.	Jas. Brooks, miner.	Fall of slate.	Left foot bruised.	Consolidation Coal Co., Monroe
Dec. 17, 3:15 P. M.	Angelo Dambrose, entryman.	Fall of slate.	Bruised leg.	Consolidation Coal Co., Monroe
Dec. 18, 8:00 A. M.	Jeff Bryson, miner.	Fall of timber.	Bruised right foot.	Consolidation Coal Co., Monroe

FATAL AND SERIOUS ACCIDENTS IN DISTRICT NO. 2.
Classified by Cause of Accident and Occupation of Injured, 1923.

Causes (U. S. Bureau of Mines Classification)	Fatal			Serious																				
	Miners	Drivers	Machine runners	Timbermen	Miners	Drivers	Timbermen	Couplers	Trip riders	Motormen	Entrymen	Trappers	Shot-Finers	Nightmen	Pumpmen	Cagers	Drymen	Machine runners	Wetmen	Topmen	Trailers	Stable boys	Electricians	
Falls of roof (rock, slate, etc.)					10																			
1 Falls of roof (rock, slate, etc.)																								
At working face.....					10																			
In room or chamber.....	4	1		61																				
Falls of roof (rock, slate, etc.)																								
2 Miscellaneous																								
On road or entry.....			1	4	14					1					1									
Lifting, flying sulphur, fall of coal from cars, pushing cars, etc.....				71	1	5				1					1	1		1	1					
3 Mine cars and locomotives																								
(a) Switching and spragging.....					3									1										
(b) Coupling cars.....					1	2		2	1	2						1						1		
(c) Falling from trip.....					5																			
(d) Run over by car.....			2		1	10				1													1	
(e) Caught between car and rib.....					2	10																		
(f) Caught between car and roof.....																								
(g) Runaway car or trip.....																								
(h) Miscellaneous.....					1		1	1						1		1								
4 Machinery																								
6 Explosives																								
Carbide exploded.....												1												
Blown through shot.....													1											
8 Electricity																								
9 Animals																								
Kicked by mule.....					1	5																		
Mule fell on him.....						3								1				1						
Squeezed by mule.....						1																		
12 Falling timbers, persons, etc.....					5	1	2															1	1	
14 Objects falling down shaft, etc.														1										
Going down cage.....																								
22 Hand tools, bars, axes, etc.....					4	2																		
					157	48	24	4	2	4	2	1	3	2	2	2	5	2	3	5	1	1	1	1

FATAL ACCIDENTS, DISTRICT NO. 3, 1922 and 1923.

Date and hour of Accident	Name, Age, Nativity and Occupation	Married or single	No. of children	Cause of Death	Employing Company and County
1922					
Mar. 30, 10:00 a. m.	Louis O. Parris, 60, American, miner.....	Married	3	Fall of slate.....	Acme Coal Mining Co., Polk
May 7, 9:00 a. m.	Bert Bowers, 37, American, miner.....	Married	7	Fall of slate.....	Oakdale Coal Co., Warren
Aug. 28, 12:30 p. m.	Raffaelli Saelli, 50, Italian, miner.....	Married	5	Fall of slate.....	Des Moines Coal Co., Polk
Sept. 27, 3:15 p. m.	H. A. Cole, 50, American, miner.....	Married	7	Fall of slate.....	Norwood White Coal Co., No. 6, Polk
Dec. 23, 11:00 a. m.	John Grablin, 39, Russian, loader.....	Single	7	Fall of slate.....	Norwood White Coal Co., No. 6, Polk
1923					
Jan. 24, 7:40 a. m.	David Savage, 59, Welsh, track layer.....	Married	2	Fall of slate.....	Wright Coal Co., Polk
May 15, 9:30 a. m.	Wm. Waznick, Lithuanian, driver.....	Single		Caught by car at cage landing. Foot injured. Died of lockjaw May 25th.	
Aug. 28, 9:30 a. m.	Tony Biondi, 38, Italian, driver.....	Married	3	Run over by car.....	Shuler Coal Co., Dallas
Nov. 12, 4:30 p. m.	Joseph Cherrington, 45, Am., shot firer.....	Married		Asphyxiation.....	Shuler Coal Co., Dallas
Nov. 27, 10:50 p. m.	Adolph Dhalnin, 31, Amer., night man.....	Married	1	Caught by cage.....	Des Moines Ice & Fuel Co., Polk

NON-FATAL ACCIDENTS, DISTRICT NO. 3, 1922.

Date and Hour of Accident	Name and Occupation	Cause of Accident	Nature of Injury	Employing Company and County
Jan. 2, 2:00 P. M.	Zena Masellini, miner.	Flying sulphur.	Eye slightly injured.	Wright Coal Co., Polk
Jan. 2, 2:00 P. M.	John M. Mat, miner.	Struck by coal.	Right eye hurt.	Saylor Coal Co., Polk
Jan. 2, 2:00 P. M.	Jake Jackson, driver.	Car ran on his foot.	Eye injured.	Des Moines Coal Co., Polk
Jan. 3, 5:00 P. M.	Bartolotta, Andrews, miner.	Flying sulphur.	Finger mashed.	Spring Hill Coal Co., Warren
Jan. 4, 2:00 P. M.	Boy Mastip, driver.	Car jumped track.	Mashed finger.	Spring Hill Coal Co., Polk
Jan. 9, 7:30 A. M.	Frank Uhlman, driver.	Lifted by chain on coal.	Forehead bruised.	West Side Coal Co., Polk
Jan. 10, 7:00 A. M.	Louis Kesto, miner.	Struck by coal.	Left eye injured.	West Side Coal Co., Polk
Jan. 11, 7:00 A. M.	George Baker, machine hooper.	Rolling coal.	Back injured.	Wright Coal Co., Polk
Jan. 17, 1:00 P. M.	John Blazynich, loader.	Rolling coal.	Finger lacerated.	Economy Coal Co., Polk
Jan. 18, 10:00 A. M.	Wm. Keating, miner.	Slipped.	Wrenched back.	Wright Coal Co., Polk
Jan. 20, 2:00 P. M.	Premo Gavani, miner.	Fall of coal out.	Little finger mashed.	West Side Coal Co., Polk
Jan. 24, 10:15 A. M.	A. Bedini, miner.	Flying sulphur.	Left arm cut.	Economy Coal Co., No. 2, Dallas
Jan. 24, 8:00 A. M.	Walker Baylin, top man	Hit thumb with sledge.	Right eye injured.	Spring Hill Coal Co., Warren
Jan. 26, 9:00 A. M.	W. Pierce, miner.	Fall of dirt from gob.	Left thumb mashed.	Scandia Coal Co., No. 2, Dallas
Jan. 27, 8:00 A. M.	Louis Peretta, miner.	Coal fell from car.	Left hand bruised.	Scandia Hill Coal Co., Warren
Jan. 28, 3:00 P. M.	Joe Pollin, miner.	Flying coal.	Eye injured, right leg.	Scandia Hill Coal Co., Warren
Jan. 31, 3:45 A. M.	Nics Orlich, timberman.	Stripped and fell.	Brained arm and elbow.	Scandia Hill Coal Co., No. 3, Polk
Feb. 2, 3:45 A. M.	Ben Contri, loader.	Falling mine door.	Finger injured.	Scandia Hill Coal Co., No. 3, Polk
Feb. 2, 9:00 A. M.	Dominick Capetis, miner.	Handling props.	Splinter in hand.	Scandia Hill Coal Co., No. 3, Polk
Feb. 2, 9:00 A. M.	Wm. Morris, laborer.	Avail fell off block.	Foot mashed.	Scandia Hill Coal Co., Polk
Feb. 7, 7:00 A. M.	Jim Lamb, miner.	Fall of coal.	Left hand bruised.	Des Moines Coal Co., Polk
Feb. 7, 7:00 A. M.	Fat Lee, miner.	Flying sulphur.	Right eye injured.	Des Moines Coal Co., Polk
Feb. 7, 7:00 A. M.	Geo. Reese, miner.	Caught bet. machine and gob.	Eye injured.	Des Moines Coal Co., Polk
Feb. 10, 3:30 P. M.	Albert Palmari, miner.	Eye and gob.	Slight injury to eye.	Wright Coal Co., Polk
Feb. 11, 8:00 A. M.	John Quist, tripper door.	Flying dust.	Eye injured.	Wright Coal Co., Polk
Feb. 11, 8:00 A. M.	John Quist, tripper door.	Lifting coal.	Strained back.	Saylor Coal Co., Polk
Feb. 16, 1:00 P. M.	Wm. Blazynich, miner.	Fall of slate.	Shoulder & back bruised.	Scandia Hill Coal Co., No. 7, Polk
Feb. 17, 1:00 P. M.	R. J. Pratt, miner.	Falling coal.	Arm wrenched.	Des Moines Coal Co., Polk
Feb. 17, 11:30 A. M.	Clarence Williams, loader.	Piece of rock.	Eye injured.	Wright Coal Co., Polk
Feb. 17, 11:30 A. M.	Clarence Williams, loader.	Piece of rock.	Eye injured.	Economy Coal Co., Polk
Feb. 21, 2:00 P. M.	Tom Blanski, miner.	Fall of slate.	Left leg broken.	Scandia Coal Co., No. 2, Dallas
Feb. 23, 1:00 P. M.	Martin Johnson, miner.	Foot fell on gob.	Foot fractured.	Des Moines Coal Co., Polk
Feb. 23, 11:00 A. M.	Ed. Johnson, miner.	Fall of slate.	Arm fractured.	Saylor Coal Co., Polk
Feb. 24, 1:00 P. M.	Chas. Garanti, slate picker.	Fall of slate from car.	Bruised face and nose.	Saylor Coal Co., Polk
Feb. 24, 1:00 P. M.	A. M. A. Romanak, miner.	Struck by flying coal.	Fingers lacerated.	Wright Coal Co., No. 2, Dallas
Mar. 1, 3:30 P. M.	Joe Costello, miner.	Fall of slate.	Eye injured.	Bennett Bros., Polk
Mar. 4, 11:00 A. M.	Henry Lawrence, miner.	Rolling car.	Left side bruised.	Norwood-White Coal Co., No. 7, Polk
Mar. 6, 11:00 A. M.	Thos. White, miner.	Loading car.	Wrenched back.	Wright Coal Co., Polk
Mar. 6, 11:00 A. M.	Thos. White, miner.	Left knee sprained.	Wrenched back.	Wright Coal Co., Polk
Mar. 8, 10:30 A. M.	John Atwood, miner.	Fall of coal from car.	Finger mashed.	Des Moines Coal Co., Polk
Mar. 14, 5:00 A. M.	Tom Keen, miner.	Wedding coal.	Eye injured.	Des Moines Coal Co., Polk
Mar. 15, 8:00 A. M.	Tom Keen, miner.	Firing engine.	Left eye hurt.	Des Moines Coal Co., Polk
Mar. 17, 8:00 A. M.	T. Daniels, miner.	Handling props.	Left eye hurt.	Saylor Coal Co., Polk
Mar. 19, 10:20 A. M.	G. Graham, timberman.	Phone wire.	Thumb mashed.	Scandia Coal Co., No. 2, Dallas
Mar. 19, 10:20 A. M.	G. Graham, timberman.	Phone wire.	Thumb mashed.	Scandia Coal Co., No. 2, Dallas
Mar. 20, 10:00 A. M.	Pete Merfedia, driver.	Fall of slate.	Nose injured.	Scandia Coal Co., No. 2, Dallas
Mar. 20, 10:00 A. M.	Pete Merfedia, driver.	Car jumped track.	Left arm bruised.	Des Moines Coal Co., Polk
Mar. 24, 1:00 P. M.	Joe See, driver.	Run over by car.	Mashed finger.	Spring Hill Coal Co., Warren
Mar. 24, 1:40 P. M.	Wm. M. Hamilton, driver.	Run over by car.	Two ribs broken.	Spring Hill Coal Co., Warren
Mar. 25, 3:30 P. M.	Dionny Yarnum, trapper.	Car ran off track.	Back injured.	Bennett Bros., Polk
Mar. 25, 3:30 P. M.	Dionny Yarnum, trapper.	Fractured ribs, car.	Left ankle bruised.	Bennett Bros., Polk
Mar. 25, 10:45 A. M.	Geo. Vickers, driver.	Male fell on car.	Shoulder bruised.	Wright Coal Co., Polk
Mar. 27, 10:00 A. M.	Camello Gronosse, miner.	Shovelling dirt in gob.	Broken collar bone.	Norwood-White Coal Co., No. 7, Polk
Mar. 27, 10:00 A. M.	Camello Gronosse, miner.	Shovelling dirt in gob.	Right inguinal hernia.	Norwood-White Coal Co., No. 7, Polk
Mar. 27, 10:00 A. M.	John Repolista, miner.	Male fell on car.	Two fingers mashed.	Saylor Coal Co., Polk
Mar. 27, 10:00 A. M.	John Repolista, miner.	Male fell on car.	Two fingers mashed.	Saylor Coal Co., Polk
Aug. 23, 10:00 P. M.	Pete Orlandi, miner.	Firing sulphur.	Eye injured, right eye.	Wright Coal Co., Polk
Aug. 23, 10:00 P. M.	Alfred Gasford, miner.	Firing sulphur.	Eye injured, right eye.	Wright Coal Co., Polk
Sept. 1, 11:00 A. M.	O. P. Patten, timberman.	Falling timber.	Broken ankle.	Wright Coal Co., Polk
Sept. 6, 12:25 P. M.	Bozo Radovitch, miner.	Run over by motor.	Broken ankle.	Wright Coal Co., Polk
Sept. 6, 2:00 P. M.	John Polk, miner.	Run over by car.	Both legs broken.	Des Moines Coal Co., No. 4, Polk
Sept. 6, 2:00 P. M.	John Polk, miner.	Run over by car.	Both legs broken.	Des Moines Coal Co., No. 4, Polk
Sept. 12, 12:30 P. M.	Frank Tronick, timberman.	Cutting coal.	Strained fingers.	Scandia Coal Co., No. 5, Dallas
Sept. 12, 11:00 A. M.	Cira Polak, miner.	Loading coal.	Right hand and mashed.	Shuler Coal Co., Dallas
Sept. 14, 2:00 P. M.	John Hasting, night driver.	Straggling car.	Right hand and foot.	Scandia Coal Co., Dallas
Sept. 14, 2:00 P. M.	John Hasting, night driver.	Straggling car.	Right hand and foot.	Scandia Coal Co., Dallas
Sept. 18, 8:00 A. M.	John Lathan, miner.	Loading coal.	Mashed finger.	Scandia Coal Co., No. 5, Dallas
Sept. 18, 11:00 A. M.	J. W. Jopling, track layer.	Loading coal.	Strained hip.	Scandia Coal Co., No. 5, Dallas
Sept. 19, 11:40 A. M.	John Swando, miner.	Loading coal.	Strained hip.	Scandia Coal Co., No. 5, Dallas
Sept. 21, 1:00 P. M.	Edward Davis, driver.	Falling timbers.	Broken toe.	Woodford Coal Co., Polk
Sept. 21, 1:00 P. M.	Edward Davis, driver.	Falling timbers.	Broken toe.	Woodford Coal Co., Polk
Sept. 26, 1:30 P. M.	Ed. Lawson, miner.	Fall of over coal.	Side bruised, rib broken.	Norwood-White Coal Co., No. 7, Polk
Sept. 28, 10:00 A. M.	Robt. Day, miner.	Struck by coal.	Left arm and foot bruised.	Saylor Coal Co., Polk
Sept. 29, 3:45 P. M.	Frank Dabick, miner.	Run over by car.	Badly bruised foot.	Norwood-White Coal Co., No. 6, Polk

NON-FATAL ACCIDENTS, DISTRICT NO. 3, 1922—Continued.

Date and Hour of Accident	Name and Occupation	Cause of Accident	Nature of Injury	Employing Company and County
Sept. 29, 9:30 P. M.	P. W. Bask, miner	Fall of slate	Left side bruised	Scandia Coal Co., No. 5, Dallas
Oct. 3, 9:30 P. M.	Joe Peiser, trackman	Laying rails	Fingers mashed	Scandia Coal Co., No. 4, Boone
Oct. 4, 1:00 P. M.	Carl Sullivan, motorman	Coupling cars	Eye injured	Scandia Coal Co., No. 4, Boone
Oct. 6, 9:30 A. M.	Wm. Jarvis, miner	Cutting off foot	Wounded foot	Des Moines Coal Co., No. 4, Polk
Oct. 10, 10:30 A. M.	M. A. Geofredi, miner	Fall of coal	Right eye injured	Scandia Coal Co., No. 5, Dallas
Oct. 10, 2:00 P. M.	Louis Strom, blacksmith	Grinding tools	Hands bruised	Scandia Coal Co., No. 5, Dallas
Oct. 12, 1:00 P. M.	Chas. Allen, carpenter	Repairing mine door	Back injured	Scandia Coal Co., No. 5, Dallas
Oct. 13, 12:30 P. M.	Carl Jones, miner	Fall of slate	Bruised hand	Scandia Coal Co., No. 5, Dallas
Oct. 14, 9:00 A. M.	John Latham, St., miner	Fall of slate	Arm bruised	Scandia Coal Co., No. 5, Dallas
Oct. 16, 2:30 P. M.	Lea Howland, St., miner	Fall of slate	Dislocation of vertebrae	Summit Coal Co., Story
Oct. 19, 2:30 P. M.	Vance Maszarink, timberman	Struck by shovel	Infected hand	Saylor Coal Co., Polk
Oct. 21, 3:20 A. M.	Nate Sasostell, timberman	Gripping pick handle	Eye slightly injured	Wright Coal Co., Polk
Oct. 22, 10:00 A. M.	Arthur B. Watson, driver	Caught between pulley and car	One rib fractured	Scandia Coal Co., No. 5, Dallas
Oct. 26, 2:00 P. M.	C. J. Rook, miner	Falling dirt wall	Left leg broken	Bennett Bros., Polk
Nov. 3, 2:15 P. M.	L. B. Anderson, miner	Fall of slate	Badly bruised	Norwood-White Coal Co., No. 7, Polk
Nov. 6, 2:30 P. M.	J. L. Davis, miner	Piece of coal	Fractured hip bone	Saylor Coal Co., Polk
Nov. 13, 11:00 A. M.	Dave Ross, driver	Fall of slate	Face cut	Scandia Coal Co., No. 5, Dallas
Nov. 18, 2:00 P. M.	John Wade, miner	Pushing car	Clotter in left eye	Scandia Coal Co., No. 5, Dallas
Nov. 20, 10:30 A. M.	Joe Stephens, miner	Run over by car	Left foot bruised	Back C. & M. Co., Polk
Nov. 21, 9:00 P. M.	Chas. Ojevich, boiler engineer	Cleaning fire	Bruised left foot	Sprague Coal Co., Polk
Nov. 22, 1:00 P. M.	Joe Hodasch, miner	Flying coal	Loose arm cut & bruised	Norwood-White Coal Co., No. 7, Polk
Nov. 24, 10:00 P. M.	Joe Eugene Barber, driver	Caught bet. male & car	Back wrenched	Norwood-White Coal Co., No. 7, Polk
Nov. 25, 2:00 P. M.	John Wade, miner	Pushing empty car	Cut on leg	Wright Coal Co., Polk
Nov. 26, 10:45 A. M.	Joe Bertrigg, timberman	Falling dirt wall	Hand bruised	Wright Coal Co., Polk
Nov. 27, 1:00 P. M.	Tommy Boncz, miner	Fall of slate	Hand bruised	Saylor Coal Co., Polk
Nov. 27, 12:00 M.	Howard Gardner, laborer	Digging air shaft	Run pick in right foot	Sprague Coal Co., Polk
Dec. 6, 12:30 P. M.	Alvin McCarty, laborer	Moving air shaft	Strained wrist	Scandia Coal Co., No. 5, Dallas
Dec. 12, 2:00 P. M.	M. O. Scott, carpenter	Missing planks	Bruised foot	Scandia Coal Co., No. 5, Dallas
Dec. 15, 2:00 P. M.	Emil Fontani, miner	Flying coal	Eye injured	Norwood-White Coal Co., No. 7, Dallas
Dec. 19, 2:00 P. M.	George Hart, top hand	Car ran on foot	Foot bruised	Scandia Coal Co., No. 5, Dallas
Dec. 22, 2:00 P. M.	Geo. Minorovich, miner	Piece of sulphur	Eye injured	Scandia Coal Co., Dallas
Dec. 29, 10:30 A. M.	Alfred Precentine, miner	Fall of rock	Cut on hand	Wright Coal Co., Polk
Dec. 29, 10:30 A. M.	Pablo Fragione, miner	Fall of slate	Left leg bruised	Saylor Coal Co., Polk

FATAL AND SERIOUS ACCIDENTS IN DISTRICT NO. 3.

Classified by Cause of Accident and Occupation of Injured, 1922.

Cause of Accident and Occupation of Injured, 1922.	Serious												
	Fatal	Minors	Losers	Minors	Drivers	Timbermen	Timbermen	Timbermen	Timbermen	Timbermen	Timbermen	Timbermen	Timbermen
Fall of roof (rock, slate, etc.)	1	6											
At work													
Fall of roof (rock, slate, etc.)	2	1	22										
In room or chamber													
Fall of roof (rock, slate, etc.)													
On road or entry													
Miscellaneous													
Mine lifting, tying sulphur, fall of coal from car, pushing car, etc.													
(a) Switching sulphur													
(b) Coupling cars													
(c) Falling from trip													
(d) Caught bet. car and rib													
(e) Caught between car and roof													
(f) Runway car or trip													
(g) Miscellaneous													
4 Machinery													
6 Explosives													
8 Electricity													
9 Animals													
12 Falling timbers, persons, etc.													
14 Objects falling down shaft													
22 Hand tools, bars, axes, etc.													
Totals	88	32	4	1	50	5	1	1	1	1	1	1	1

Date and Hour of Accident	Name and Occupation	Cause of Accident	Nature of Injury	Employing Company and County
Jan. 1, 9:20 A. M.	Joe Leathner, dirt man	Fall of slate	Leg fractured	Norwood-White Coal Co., Polk
Jan. 1, 11:00 A. M.	John Mezafals, miner	Coal fell from car	Brained foot	Scandia White Coal Co., Polk
Jan. 2, 9:30 A. M.	A. M. Billings, miner	Fall of slate	Leg broken, head cut	Wright Coal Co., Polk
Jan. 3, 8:40 A. M.	S. A. Mangani, miner	Fall of slate at face	Eye slightly injured	Wright Coal Co., Polk
Jan. 4, 8:30 A. M.	Chas. Blunker, driver	Caught bet. car & bar	Head cut, side bruised	Liberty Coal Co., Polk
Jan. 10, 8:30 A. M.	Frank Klidick, motor man	Caught bet. car & bar	3 ribs broken	Skaylor Coal Co., Polk
Jan. 15, 4:00 P. M.	W. W. Sostky, track layer	Fall of slate	Leg bruised, finger	Des Moines Coal Co., Dallas
Jan. 16, 9:30 P. M.	W. W. Sostky, track layer	Falling coal	Mashed toe	Wright Coal Co., Polk
Jan. 19, 3:00 P. M.	John Warn, machine runner	Fall of slate	Arm bruised	Norwood-White Coal Co., No. 7, Dallas
Jan. 20, 9:40 A. M.	S. McNichols, machine hooper	Machine ran over foot	Leg fractured, back injured	Munson & Hiram Coal Co., No. 7, Dallas
Feb. 1, 2:00 P. M.	M. Marvin, miner	Mining shot, fall of coal	Right hand bruised & cut	Norwood-White Coal Co., Dallas
Feb. 1, 10:30 A. M.	C. Flanagan, timberman	Scooping down coal	Hand bruised	Scandia Coal Co., No. 5, Dallas
Feb. 2, 9:30 A. M.	W. M. Gorman, miner	Fall of slate	Slate injured finger	Scandia Coal Co., No. 4, Dallas
Feb. 12, 10:30 A. M.	W. M. Gorman, miner	Car ran over foot	Leg sprained	Wright Coal Co., Polk
Feb. 12, 9:30 A. M.	B. Hudson, miner	Caging timbers	Foot badly bruised	Wright Coal Co., Polk
Feb. 12, 2:00 P. M.	John C. Walker, top man	Stowing timbers	Prised coal in eye	Scandia Coal Co., No. 5, Dallas
Feb. 16, 2:30 P. M.	John C. Walker, miner	Falling coal	Brained hand	Saylor Coal Co., Polk
Feb. 17, 1:30 P. M.	John Fogwood, miner	Fall of coal from car	Brained hand	Saylor Coal Co., Polk
Feb. 17, 1:30 P. M.	John Fogwood, miner	Carbide lamp exploded	Face burned	Saylor Coal Co., Polk
Feb. 17, 1:30 P. M.	John Morgan, trapper	Paint on sulphur	Head cut, side hurt	Scandia Coal Co., Polk
Feb. 18, 2:00 P. M.	Steve Price, miner	Lifting car on track	Back strained	Des Moines Coal Co., Dallas
Feb. 20, 2:00 P. M.	Wm. Robinson, miner	Struck head, cross bars	Slight scalp wound	Norwood-White Coal Co., No. 7, Dallas
Feb. 20, 2:00 P. M.	A. Lack, miner	Fall of slate	Left knee sprained	Norwood-White Coal Co., No. 7, Dallas
Feb. 25, 2:00 P. M.	Ernest Dwyer, miner	Cleaning coal	Sulphur in eye	Norwood-White Coal Co., No. 7, Dallas
Feb. 25, 2:00 P. M.	Thos. Phoenix, entryman	Subbar struck eye	Will probably lose eye	Scandia Coal Co., No. 5, Dallas
Feb. 27, 2:00 P. M.	G. L. Chevinger, miner	Struck neck in eye	Eye badly injured	Shuler Coal Co., Dallas
Mar. 1, 2:20 P. M.	G. L. Chevinger, miner	Struck neck in eye	Piece of coal struck eyeball	Shuler Coal Co., Dallas
Mar. 5, 11:00 A. M.	M. M. Maseman, timberman	Cutting log hole	Badly bruised foot	Norwood-White Coal Co., No. 5, Dallas
Mar. 12, 11:30 A. M.	John E. Chaco, miner	Dropped rail on foot	Hand badly bruised	Scandia Coal Co., No. 5, Dallas
Mar. 17, 3:00 P. M.	John E. Lewis, mule driver	Unhooked chain, fell	Forefinger mangled	Scandia Coal Co., No. 5, Dallas
Mar. 17, 10:40 A. M.	John Jannovich, miner	Coal fell from car	Foot about face and hand	Wright Coal Co., Polk
Mar. 20, 10:00 A. M.	Tom McKinley, miner	Fall of slate	Back bruised	Norwood-White Coal Co., No. 7, Dallas
Mar. 20, 8:30 A. M.	John Koehnlezer, miner	Fall of slate	Brained hand	Shuler Coal Co., Dallas
Mar. 28, 3:30 P. M.	Duoselin Vannila, driver	Caught foot under car	Sprained foot	Wright Coal Co., Polk
Mar. 28, 3:30 P. M.	Cheren Benamini, miner	Fall of slate	Back strained, hand cut	Norwood-White Coal Co., No. 7, Dallas
Mar. 31, 1:00 P. M.	Bozo Bodogovich, timberman	Timbering hole for timber	Cut on foot with axe	Wright Coal Co., Polk
Apr. 1, 9:00 A. M.	Alton Rulik, mule driver	Fall of slate	Subbar badly injured	Scandia Coal Co., No. 5, Dallas
Apr. 1, 9:00 A. M.	Tom Williams, pumpman	Falling car in air shaft	3 ribs broken, kidneys in	Middle River Coal Co., Warren
Apr. 9, 2:00 P. M.	Fred Campo, miner	Car on track	Back sprained	Norwood-White Coal Co., No. 6, Polk
Apr. 11, 10:30 A. M.	C. Anderson, motorman	Cutting coal	Right eye injured	Scandia Coal Co., No. 5, Dallas
Apr. 11, 10:30 A. M.	L. W. Martin, miner	Cutting log hole	Sprained back eye	Saylor Coal Co., Polk
Apr. 14, 8:30 A. M.	Chas. Lombardi, timberman	Fought bet. bumper	Piece of coal in eye	Shuler Coal Co., Dallas
Apr. 17, 1:30 A. M.	Wm. Powell, driver	Car on track	Leg fractured, forearm	Shuler Coal Co., Dallas
Apr. 25, 10:30 A. M.	Tom Hurt, miner	Fall of slate	Leg fractured, forearm	Mary Coal Co., Webster
May 12, 9:00 A. M.	Chas. Batton, timberman	Caught in roller	Two fingers mangled	Norwood-White Coal Co., No. 7, Dallas
May 20, 1:00 P. M.	James King, miner	Caught in roller	Thumb mangled	Norwood-White Coal Co., No. 3, Polk
May 29, 2:00 P. M.	Daveo Mathis, miner	Fall of slate	Arm & leg bruised	Norwood-White Coal Co., No. 7, Dallas
June 4, 1:00 P. M.	Carl Quilt, top man	Caught bet. R. R. cars	Hand dislocated	Wright Coal Co., Polk
June 6, 9:15 P. M.	Angelo Polpetti, miner	Struck head on bump	Head bruised	Scandia Coal Co., No. 5, Dallas
June 6, 9:15 P. M.	F. Gregorovich, miner	Fall of slate	Chest bruised	Scandia Coal Co., No. 5, Dallas
June 6, 3:40 P. M.	Joe Blackweck, timberman	Repur tie over bar	Finger badly hurt	Wright Coal Co., Polk
June 9, 3:30 P. M.	Joe Olson, driver	Axe handle hit timber	Finger foot injured	Wright Coal Co., Polk
June 11, 4:30 A. M.	Thad Stevens, miner	Fall of slate	Right foot fractured	Wright Coal Co., Polk
June 11, 4:30 A. M.	Thad Stevens, miner	Fall of slate	Elbow sprained, wrist wd.	Wright Coal Co., Polk
June 22, 3:45 P. M.	Wm. Phonic, driver	Combining cars	Left knee & ankle sprained	Radiant Coal Co., Dallas
June 25, 3:45 P. M.	Wm. Phonic, driver	Struck by runaway tripper	Legs road in shaft	Scandia Coal Co., No. 5, Dallas
July 1, 7:30 P. M.	Alphon Bonatti, miner	Struck hand with pick	Ribs broken, increased fever	Wright Coal Co., Polk
July 5, 4:15 P. M.	D. Ward, top man	Brake slipped on R. R.	Collar badly bruised	Wright Coal Co., Polk
July 5, 4:15 P. M.	Tom Turk, timberman	Iron bar falling	Brained head	Wright Coal Co., Polk
July 7, 12:45 P. M.	Wm. Crank, top man	Falling timber	Brained head	Wright Coal Co., Polk
July 7, 12:45 P. M.	Wm. Crank, top man	Falling timber	Brained head	Wright Coal Co., Polk
July 17, 10:00 A. M.	A. Lazarek, miner	Fall of slate	Brained head	Des Moines Coal Co., Dallas
Aug. 6, 11:30 A. M.	Wm. Sullivan, timberman	Fall of slate	Brained head	Scandia Coal Co., No. 2, Dallas
Aug. 10, 1:00 P. M.	T. Richards, miner	Fall of slate	Hand bruised	Scandia Coal Co., No. 4, Dallas
Aug. 13, 11:00 A. M.	Joe Baggett, timberman	Fall of slate, foot	Right foot mangled	Radiant Coal Co., Dallas
Aug. 13, 1:00 P. M.	Tom Savage, miner	Lifting 2 1/2 ft. foot	Badly bruised foot	Wright Coal Co., Polk
Aug. 15, 8:00 A. M.	M. A. Spence, miner	Mining of shot	Piece of coal in eye	Wright Coal Co., No. 2, Dallas
Aug. 15, 8:00 A. M.	M. A. Spence, miner	Mining of shot	Finger mangled, hip bruised	Scandia Coal Co., No. 2, Dallas
Aug. 17, 1:00 P. M.	G. Borgeh, carpenter	Blammed hand on bar	Hand, thumb and pulv.	Wright Coal Co., Polk

NON-FATAL ACCIDENTS, DISTRICT NO. 3, 1923—Continued.

Date and Hour of Accident	Name and Occupation	Cause of Accident	Nature of Injury	Employing Company and County
Aug. 18, 1:30 P. M.	S. Gabassi, dirt man	Unloading dirt	Right leg sprained	Scandia Coal Co., No. 2, Dallas
Aug. 22, 4:25 A. M.	B. Vignovich, miner	Fall of slate	Leg fractured	Norwood-White Coal Co., No. 1, Dallas
Aug. 24, 9:00 A. M.	Ray Erickson, driver	Mule ran away	Left finger split open	Scandia Coal Co., No. 2, Dallas
Aug. 29, 2:00 P. M.	Mike Weeks, miner	Fall of slate	Back bruised, back hurt	Scandia Coal Co., No. 2, Dallas
Sept. 1, 1:30 P. M.	Wm. Chambers, timberman	Carriage overturned	Arm bruised, hand cut	Scandia Coal Co., No. 1, Dallas
Sept. 4, 1:50 P. M.	John Timmons, timberman	Cutting coal	Bruised knee	Scandia Coal Co., No. 2, Dallas
Sept. 6, 1:30 P. M.	W. Hillant, miner	Fall of slate	Bruised ribs, side bruised	Scandia Coal Co., No. 5, Dallas
Sept. 15, 2:00 P. M.	B. Denti, miner	Mining coal	Scalp hurt, finger	Wright Coal Co., Polk
Sept. 17, 11:00 A. M.	John Leveton, timberman	Fall of slate	Sulphur in eye	Scandia Coal Co., No. 5, Dallas
Sept. 18, 10:00 A. M.	Hy Deinger, miner	Fall of slate	Bruised knee	Scandia Coal Co., No. 5, Dallas
Sept. 20, 9:00 A. M.	Martin Johnson, miner	Cutting coal	Broken finger	Saylor Coal Co., Polk
Sept. 21, 10:30 A. M.	Tommy Anderson, timberman	Driving wedge	Piece of coal in eye	Saylor Coal Co., Polk
Sept. 21, 2:00 P. M.	C. C. Anderson, miner	Lifting coal	Mashed thumb	Scandia Coal Co., No. 5, Dallas
Sept. 24, 3:30 P. M.	E. Miller, timberman	Fall of slate	Burnt back, back eyes	Scandia Coal Co., No. 5, Dallas
Sept. 24, 3:00 P. M.	Joe Galiano, miner	Pulling track	Ankle grazed & bruised	Radiant Coal Co., Dallas
Sept. 25, 1:00 A. M.	John Pottani, miner	Fall of slate	Left leg bruised	Norwood-White Coal Co., No. 7, Dallas
Sept. 26, 1:00 A. M.	John Pottani, miner	Fall of slate	Left leg bruised	Norwood-White Coal Co., No. 7, Dallas
Sept. 27, 2:00 P. M.	Joe Mastie, miner	Setting mining machine	Sulphur in eye	Saylor Coal Co., Polk
Sept. 30, 2:30 P. M.	Fred Rudisold, timberman	Using axe, glanced	Left thumb cut	Norwood-White Coal Co., Dallas
Oct. 1, 5:30 P. M.	W. Corson, miner	Falling after hot water	Burnt side	Scandia Coal Co., No. 5, Dallas
Oct. 1, 5:30 P. M.	W. Corson, miner	Falling after hot water	Burnt side	Scandia Coal Co., No. 5, Dallas
Oct. 4, 1:00 P. M.	John Cerverdi, timberman	Fall of slate	Bruised back	Scandia Coal Co., No. 5, Dallas
Oct. 5, 3:00 P. M.	Ray Carroll, miner	Setting drilling mach.	Dirt in eyes	Saylor Coal Co., Polk
Oct. 9, 3:00 P. M.	A. M. Praonenti, track layer	Laying track	Spore of steel in eye	Wright Coal Co., Polk
Oct. 10, 3:00 P. M.	A. M. Praonenti, track layer	Laying track	Spore of steel in eye	Wright Coal Co., Polk
Oct. 16, 9:00 A. M.	John Recki, miner	Lifting coal	Sprained back	Scandia Coal Co., No. 5, Dallas
Oct. 17, 3:30 P. M.	Carl Brown, miner	Fall of slate	Injured hips	Scandia Coal Co., Dallas
Oct. 19, 10:30 A. M.	Thos. Gault, miner	Loading coal	Dropped coal on foot	Radiant Coal Co., Dallas
Oct. 20, 10:30 A. M.	Thos. Gault, miner	Loading coal	Dropped coal on foot	Radiant Coal Co., Dallas
Oct. 24, 10:00 A. M.	Louis Kemp, miner	Moving rock	Left thumb mashed	Saylor Coal Co., Polk
Oct. 24, 12:15 P. M.	H. J. Clayton, driver	Kicked by mule	Four teeth broken off	Norwood-White Coal Co., No. 6, Polk
Oct. 25, 2:00 P. M.	W. M. Sullivan, miner	Moving coal on track	Finger crushed	Saylor Coal Co., Polk
Oct. 25, 2:00 P. M.	W. M. Sullivan, miner	Moving coal on track	Finger crushed	Saylor Coal Co., Polk
Nov. 5, 1:00 P. M.	M. A. Geofredi, miner	Loading coal, chunk fell	Right foot bruised	Scandia Coal Co., No. 5, Dallas
Nov. 6, 10:30 A. M.	M. G. R. Jenkins, miner	Setting prop, slate fell	Sprained knee	Saylor Coal Co., Polk
Nov. 8, 10:00 A. M.	John Nohs, track layer	Setting prop, slate fell	Sprained knee	Scandia Coal Co., No. 5, Dallas
Nov. 12, 3:30 P. M.	Luiga Timmons, driver	Coal from trip	Side bruised	Scandia Coal Co., No. 5, Dallas
Nov. 12, 9:30 A. M.	Chas. Grant, driver	Car jumped track	Neck injured, bruised back	Scandia Coal Co., No. 5, Dallas
Nov. 17, 2:30 P. M.	Frank Squires, driver	Caught bet. prop & car	Feet & some broken	Scandia Coal Co., No. 5, Dallas
Nov. 19, 10:00 A. M.	Ben Fornati, miner	Unloading car, coal fell	Back of hand cut	Diamond Black Coal Co., Polk
Nov. 19, 11:00 A. M.	Paulo Virasoli, miner	Bad cut on arm	Wright Coal Co., Polk	
Nov. 21, 1:00 P. M.	Paulo Virasoli, miner	Fall of slate	Bruised hand and back	Wright Coal Co., Polk
Nov. 24, 5:15 A. M.	C. Vanhala, miner	Brained back	Bruised back	Wright Coal Co., Polk
Nov. 24, 5:15 A. M.	C. Vanhala, miner	Brained back	Bruised back	Wright Coal Co., Polk
Nov. 28, 5:15 A. M.	C. Grossing, barn man	Using axe, mine	Car broken, hand	Wright Coal Co., Polk
Nov. 31, 11:40 A. M.	Tom Popolo, timberman	Using axe, mine	Fracture of pelvis & ribs	Shawnee Coal Co., Polk
Dec. 10, 10:00 A. M.	Denny Sullivan, miner	Fall of slate	Fracture of pelvis & ribs	Shawnee Coal Co., Polk
Dec. 13, 11:25 A. M.	John Malstrom, helper	Car ran over foot	Instep bruised	Great Western Coal Co., Dallas
Dec. 15, 9:00 A. M.	Howard Rice, trip rider	Caught bet. motor & car	Mashed finger	Scandia Coal Co., No. 2, Dallas
Dec. 17, 1:45 P. M.	Ed. Bandra, miner	Finger dislocated	Finger dislocated	Saylor Coal Co., Polk
Dec. 20, 3:15 P. M.	F. Nicoletti, miner	Fall of slate	Foot mashed	Scandia Coal Co., Dallas
Dec. 19, 2:00 P. M.	Ben Fornati, miner	Cutting slate	Foot mashed	Radiant Coal Co., Dallas
Dec. 27, 9:00 A. M.	Ben Fornati, driver	Fall of slate	Head & left eye bruised	Scandia Coal Co., No. 2, Dallas
Dec. 28, 8:30 A. M.	R. H. Mathews, driver	Caught bet. car & rib	Left leg fractured	Saylor Coal Co., Polk
Dec. 28, 8:30 A. M.	R. H. Mathews, driver	Caught bet. car & rib	Arm cut, scalp wound	Shawnee Coal Co., Polk
Dec. 28, 2:00 P. M.	John Bentley, driver	Car ran on foot	Foot bruised	Radiant Coal Co., Dallas
Dec. 28, 2:00 P. M.	John Bentley, driver	Car ran on foot	Foot bruised	Great Western Coal Co., Polk

FATAL AND SERIOUS ACCIDENTS IN DISTRICT NO. 3.

Classified by Cause of Accident and Occupation of Injured, 1923.

Causes (U. S. Bureau of Mines Classification)	Fatal				Serious																					
	Drivers	Tracklayers	Shot firers	Nightmen	Miners																					
					Drivers	Timbermen	Machine runners	Motormen	Tracklayers	Trappers	Loaders	Entrymen	Topmen	Dirtmen	Engineers	Pumpmen	Chumbers	Barrenen	Laborers	Carpenters	Tripleiders					
Falls of roof (rock, slate, etc.) At working face.....					7																					
1 Falls of roof (rock, slate, etc.) In room or chamber.....					40																					
Falls of roof (rock, slate, etc.) On road or entry.....		1				1	5				1			2	1											
2 Miscellaneous Lifting, flying sulphur, fall of coal from car, pushing car, etc.....					35		2	1	1	1													1			
3 Mine cars and locomotives (a) Switching and spragging.....					1																					
(b) Coupling cars.....					1																				1	
(c) Falling from trip.....					1																					
(d) Run over by car.....	1				1		1	1																		
(e) Caught between car and rib.....					1		1	1																		
(f) Caught between car and roof.....					1		2	2																	1	
(g) Runaway car or trip.....					1		1	1																		
(h) Miscellaneous.....					2									1												
4 Machinery Machine ran over foot.....										1																
Caging.....																										
Caught in roller of tallrope.....										1																
Brake on engine.....																									1	
6 Explosives Asphyxiation.....																										
Carbide lamp exploded.....																										
7 Cage accidents Caught by car at cage landing.....	1																									
Caught by descending cage.....																										

FATAL AND SERIOUS ACCIDENTS IN DISTRICT NO. 3.

Classified by Cause of Accident and Occupation of Injured, 1923—Continued.

Causes (U. S. Bureau of Mines Classification)	Fatal				Serious																					
	Drivers	Tracklayers	Shot firers	Nightmen	Miners																					
					Drivers	Timbermen	Machine runners	Motormen	Tracklayers	Trappers	Loaders	Entrymen	Topmen	Dirtmen	Engineers	Pumpmen	Chumbers	Barrenen	Laborers	Carpenters	Tripleiders					
8 Electricity																										
9 Animals Kicked by mule.....																										1
12 Falling timbers, persons, etc. Cutting hole for timber.....						3																				
14 Objects falling down shaft Falling lee in airshaft.....						1																				
22 Hand tools, bars, axes, etc.						3																				
Totals.....					91	18	18	3	12	3	1	1	2	5	3	1	1	1	1	1	1	1	1	1	1	1

ACCIDENTS RELATED TO TONNAGE.

Showing Tonnage in Iowa, Accidents and Employes for Period of Twenty-eight Years.

Year	Number of Fatal Accidents	Tons of Coal Produced	Tons of Coal Per Accident	Number of Employes	Fatality Rate Per 1,000 Employes
1896	22	3,525,490	160,254	11,451	1.9
1897	21	3,790,734	179,494	11,674	1.8
1898	26	4,397,722	190,143	10,559	2.5
1899	29	4,949,210	247,165	11,029	3.8
1900	29	5,117,285	176,454	13,941	2.3
1901	27	5,441,893	201,560	13,173	2.
1902	35	5,514,296	190,258	13,992	4.2
1903	31	6,185,734	299,159	18,192	1.6
1904	31	6,214,379	200,494	16,315	1.9
1905	24	6,806,011	283,684	17,024	1.4
1906	37	7,017,485	189,661	16,825	2.2
1907	33	7,568,425	210,341	17,045	2.05
1908	38	7,155,434	188,301	17,312	2.2
1909	28	7,346,253	262,369	18,002	1.5
1910	29	7,222,489	185,122	18,005	2.1
1911	36	7,739,474	214,712	16,899	2.1
1912	30	6,826,828	227,361	16,215	1.8
1913	24	7,415,737	306,989	15,685	1.5
1914	34	7,315,734	213,689	15,749	2.1
1915	34	7,530,688	221,473	16,360	2.07
1916	31	7,217,979	232,838	15,195	2.04
1917	36	9,049,876	251,383	15,464	2.32
1918	32	8,219,315	256,853	14,563	2.1
1919	17	5,571,639	327,743	12,886	1.3
1920	27	7,809,365	292,569	12,787	2.11
1921	22	5,173,496	235,159	12,151	1.67
1922	18	4,679,687	259,987	13,790	1.31
1923	19	6,139,327	323,123	13,129	1.4

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

Name of Company	Superintendent	Post Office	Shaft or Slope	Plan of Working	How Ventilated	Power Used	Shipping or Local
Acken Coal Company	George Porter	Mystic	Slope	Longwall	Fan	Steam	Local
Appanoose Coal & Fuel Co., No. 25	G. S. Lodwick	Mystic	Shaft	Longwall	Fan	Steam	Local & St. P. Ry.
Armstrong Coal Company	W. D. Kettner	Mystic, Mo.	Shaft	Longwall	Fan	Steam	C. B. & Q. Ry.
Anderson Coal Co.	Ledgo Anderson	Centerville	Shaft	Longwall	Fan	Steam	C. B. & Q. Ry.
Barrett Coal Company	P. Bradshaw	Dean	Slope	Room and Pillar	Furnace	Horse	Local
Beggs Coal Company	Wm. M. Brett	Mystic	Slope	Longwall	Furnace	Electricity	Local
Brand Coal Company	Frank Brand	Plant	Shaft	Longwall	Furnace	Horse	M. & St. R. Ry.
Brand Coal Company	Marcel Grand	Plant	Slope	Longwall	Furnace	Horse	M. & St. R. Ry.
Carbon Fuel Company, No. 30	Anderson	Centerville	Shaft	Longwall	Fan	Steam	Local
Centerville Block Coal Co., No. 1	Alex Dargavell	Centerville	Shaft	Longwall	Fan	Steam	C. B. I. & P. Ry.
Centerville Block Coal Co., No. 2	Alex Dargavell	123 N. Main St.	Shaft	Longwall	Fan	Steam	C. B. I. & P. Ry.
Centerville Block Coal Co., No. 3	Alex Dargavell	123 N. Main St.	Shaft	Longwall	Fan	Steam	C. B. I. & P. Ry.
Centerville Block Coal Co., No. 4	Alex Dargavell	Centerville	Slope	Longwall	Fan	Steam	C. B. & Q. Ry.
Centerville Block Coal Co., No. 5	Alex Dargavell	Centerville	Slope	Longwall	Fan	Steam	C. B. & Q. Ry.
Centerville Block Coal Co., No. 10	Alex Dargavell	Centerville	Shaft	Longwall	Fan	Steam	C. B. & Q. Ry.
Citizens Coal Company	Graham & Parker	Centerville	Shaft	Longwall	Fan	Steam	C. B. I. & P. Ry.
Caldwell Coal Company	Daniel Clarke	Elgin	Shaft	Longwall	Fan	Electricity	C. B. I. & P. Ry.
Center Coal Company	Louis Anderson	Centerville	Shaft	Longwall	Furnace	Gasoline	C. B. & Q. Ry.
Center Coal Company	Dewey Clark	Centerville, R. 4	Shaft	Longwall	Fan	Steam	Local
Concession Coal Company	July	Centerville	Shaft	Longwall	Furnace	Steam	C. B. I. & P. Ry.
Diamond Block Coal Co., No. 12	David Lodwick	Mystic	Shaft	Longwall	Furnace	Electricity	Local
Diamond Block Coal Co., No. 29	G. E. Clume	Mystic	Shaft	Longwall	Furnace	Steam	Interurban
Duff Coal Company	G. E. Duff	Centerville	Shaft	Longwall	Fan	Steam	Shipping
Economic Coal Company	Wm. R. Duff	Centerville	Shaft	Room and Pillar	Fan	Horse	Shipping
Elgin Coal Company	J. D. Rowan	Centerville	Shaft	Longwall	Fan	Steam	Shipping
Egert Coal Company, No. 1	Th. Lundgren	Centerville	Shaft	Longwall	Fan	Steam	Local
Fowler & Wilson Coal Co., No. 1	D. P. Dudley	Mystic	Shaft	Longwall	Fan	Electricity	Local
Fowler & Wilson Coal Co., No. 2	D. P. Cushing	Hubbun	Shaft	Longwall	Fan	Steam	C. M. & St. P. Ry.
Fulton Coal Company	J. Bennett	Mystic	Shaft	Longwall	Fan	Steam	C. M. & St. P. Ry.
Fulton Coal Company	J. Fenton	Plant, R. 1	Shaft	Longwall	Furnace	Horse	C. M. & St. P. Ry.
Hooten Bros. Coal Company	Mystic	Mystic	Slope	Longwall	Natural	Horse	C. M. & St. P. Ry.

REPORT IOWA MINE INSPECTORS

AFFANOOSE COUNTY—Continued

Name of Company	Superintendent	Post Office	Shaft or Slope	Plan of Working	How Ventiled	Power Used	Shipping or Local
Harken Coal Company	Robert Baxter	Jerome	Shaft	Longwall	Fan	Steam	C. M. & St. P. Ry.
High Hill Coal Company	P. P. Frie	Centerville, E. 3	Shaft	Longwall	Fan	Electricity	C. R. I. & P. Ry.
Hitchman Bros. Coal Company	Charles Helman	Seymour	Shaft	Longwall	Fan	Electricity	Local
Iowa Hutchinson Coal Company	John Helman	Cincinnati, R. 2	Shaft	Longwall	Furnace	Horse	C. B. & Q. Ry.
Iowa Hutchinson Coal Company	John Frost	Myrtle, R. 1	Slope	Longwall	Fan	Gasoline	Inter Urban
Iowa Hutchinson Coal Company	G. W. Tanker	Myrtle, R. 1	Slope	Longwall	Furnace	Horse	Local
Johnson Coal Company	Ernest Kirchke	Centerville, R. 2	Slope	Longwall	Furnace	Horse	Local
Kennett Coal Company	J. A. Keatts	302 E. Franklin	Shaft	Longwall	Fan	Electricity	Shipping
Liberty Coal Company, No. 5	O. E. Moss	Myrtle, E. 3	Shaft	Longwall	Fan	Horse	Shipping
Liberty Coal Company, No. 6	O. E. Moss	Myrtle	Shaft	Longwall	Furnace	Horse	Shipping
Liberty Coal Company, No. 23	John Chigrove	Myrtle	Shaft	Longwall	Fan	Electricity	C. M. & St. P. Ry.
Lowes Coal Company	John Helman	Brazil	Slope	Longwall	Furnace	Electricity	C. B. & Q. Ry.
Madison Coal Company	John Helman	Centerville	Shaft	Longwall	Fan	Electricity	Inter Urban
McVane Coal Company	Tony Trevisoli	Centerville	Shaft	Longwall	Fan	Electricity	Local
Maldonado Coal Company	U. W. Maddison	Myrtle, R. 1	Slope	Longwall	Furnace	Horse	C. M. & St. L. Ry., et al
Morse Coal Company	C. C. Moore	Dean	Shaft	Longwall	Furnace	Horse	Local
Mystic Coal Company	J. W. Torridge	Centerville	Shaft	Longwall	Furnace	Steam	C. B. & St. P. Ry.
New Oriental Coal Mining Co.	William Weir	Brazil	Slope	Longwall	Fan	Electricity	Local
North Hill Coal Company	Charles Fortner	Centerville	Slope	Longwall	Fan	Steam	C. B. & St. P. Ry.
National Coal Company	John Arbogast	St. Michaels	Shaft	Longwall	Fan	Horse	C. B. & Q. Ry.
Sims Coal Company	D. F. Lawson	Brazil	Slope	Longwall	Fan	Steam	C. B. & Q. Ry.
Francis Coal Company, No. 1	D. F. Cushing	Centerville	Slope	Longwall	Fan	Steam	C. B. & Q. Ry.
Francis Coal Company, No. 5	Paul Bernier	Mystic	Slope	Longwall	Fan	Steam	C. B. & Q. Ry.
Perrier Coal Company	John Armstrong	Plano	Slope	Longwall	Furnace	Steam	Local
Raney Coal Company	G. H. Raney	Centerville, R. 2	Shaft	Longwall	Fan	Gasoline	C. B. & Q. Ry.
Rensbrook Coal Company	D. H. Richardson	Centerville	Shaft	Longwall	Furnace	Electricity	Local
Red Oak Coal Company	Sam Elyas	Coal City	Slope	Room and Pillar	Fan	Horse	Local
Rock Valley Coal Company	S. A. Goughner	Centerville	Shaft	Room and Pillar	Fan	Horse	Local
Sterling Coal Company	O. Billberg	Centerville	Shaft	Longwall	Fan	Horse	Inter Urban

LIST OF IOWA COAL COMPANIES

Sheehy Coal Company	Inaac Seeth	Coal City	Slope	Room and Pillar	Furnace	Horse	Local
Stars Coal Company	Rolli Whalen	Mystic	Slope	Longwall	Fan	Horse	C. B. & Q. Ry.
South Side Coal Company	A. W. Judy	Centerville	Shaft	Longwall	Fan	Electricity	C. B. & Q. Ry.
Swenson Coal Company	S. F. Swenson	Centerville, R. 2	Slope	Longwall	Furnace	Horse	Local
Thistle Coal Company, No. 4	Geo. E. Dinning	Centerville	Shaft	Longwall	Fan	Steam	C. B. & Q. Ry.
Thistle Coal Company, No. 5	J. E. McWilliams	Centerville	Shaft	Longwall	Fan	Steam	C. B. & Q. Ry.
U. S. Coal Company	J. E. McWilliams	Centerville	Shaft	Longwall	Natural	Horse	Local
Winifred Coal Company	L. E. Ledberg	Mystic	Slope	Longwall	Fan	Steam	Local
Woodland Coal Company	E. E. Hedberg	733 Park Ave.	Slope	Longwall	Furnace	Horse	Local
Wakefield Coal Company	Earl Wakefield	Brazil	Slope	Longwall	Furnace	Horse	Local

MOSROE COUNTY

Abbia Coal Company	Ed Stavin	Abbia	Shaft	Room and Pillar	Fan	Steam	M. & St. L. Ry.
Graham Coal Company	J. W. Moss	Avery	Shaft	Room and Pillar	Fan	Steam	C. B. & St. P. Ry.
Hocking Coal Company, No. 4	W. G. Hodge	Hocking	Shaft	Room and Pillar	Fan	Steam	M. & St. L. Ry.
Hocking Coal Company, No. 5	W. G. Hodge	Hocking	Shaft	Room and Pillar	Fan	Electricity	M. & St. L. Ry.
Hocking Coal Company, No. 8	W. G. Hodge	Hocking	Shaft	Room and Pillar	Natural	Horse	Local
Irish Coal Company	Guert Larson	Abbia	Slope	Room and Pillar	Furnace	Horse	Local
Valley Coal Company	Fred Robinson	Abbia	Shaft	Room and Pillar	Fan	Steam	Local

LUCAS COUNTY

Central Iowa Fuel Company, No. 2	W. M. Malone	Chariton	Shaft	Room and Pillar	Fan	Steam	C. R. I. & P. Ry.
Central Iowa Fuel Company, No. 3	W. M. Malone	Chariton	Shaft	Room and Pillar	Fan	Steam	C. R. I. & P. Ry.
Central Iowa Fuel Company, No. 4	W. M. Malone	Chariton	Shaft	Room and Pillar	Fan	Steam	C. R. I. & P. Ry.
Lucas Coal Company	Evans Danesh	Lucas	Shaft	Longwall	Fan	Electricity	Local

WAYNE COUNTY

Hickel Bros. Coal Company	J. W. Hickel	Promise City	Shaft	Longwall	Furnace	Horse	Local
Hayhurst Coal Company	A. H. Hayhurst	Promise City	Shaft	Longwall	Furnace	Horse	Local
Seymour Coal Company	George Voyce	Seymour	Shaft	Longwall	Furnace	Steam	C. R. I. & P. Ry.
Village Coal Company	W. E. Bennett	Promise City, R. 2	Shaft	Longwall	Furnace	Steam	C. R. I. & P. Ry.
Woodland Valley Coal Company	Wm. Reddy	Seymour	Shaft	Longwall	Fan	Electricity	Local

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

ADAMS COUNTY

Name of Company	Superintendent	Post Office	Shaft or Slope	Plan of Working	How Ventil'd	Power Used	Shipping or Local
Bixler Coal Company	Glenn R. Bixler	Corning	Shaft	Longwall	Furnace	Horse	Local
Lockwood Coal Company	D. W. Lockwood	Corning	Shaft	Longwall	Furnace	Horse	Local
Ankeny Coal Company	Joe Ankeny	Villica	Shaft	Longwall	Furnace	Horse	Local
Drake Coal Company	Wm. Drake	Carbon	Shaft	Longwall	Furnace	Horse	Local
Hathaway Coal Company	Robt. Hathaway	Nodaway, R. 1	Shaft	Longwall	Furnace	Horse	Local
Leipert Coal Company	Geo. Leipert	Carbon, R. 1	Shaft	Longwall	Furnace	Horse	Local
Jones Coal Company	Martin Jones	Carbon	Shaft	Longwall	Furnace	Horse	Local
Pendleton Coal Company	C. E. Pendleton	Corning, R. 3	Shaft	Longwall	Fan	Horse	Local
Right Way Coal Company	R. W. Hathaway	Nodaway, R. 1	Shaft	Longwall	Furnace	Horse	Local
Wild Coal Company	J. F. Wild	Carbon	Shaft	Longwall	Furnace	Horse	Local

PAGE COUNTY

Evans Coal Company	Geo. Evans	Clarinda	Shaft	Longwall	Fan	Electricity	Local
Pearson Coal Company, No. 2	Charles Pearson	Clarinda	Shaft	Longwall	Fan	Electricity	Local
Pearson Coal Company, No. 3	Charles Pearson	Clarinda	Shaft	Longwall	Fan	Electricity	C, B. & Q. Ry.

TAYLOR COUNTY

Bean Coal Company	J. Bean	New Market	Shaft	Longwall	Furnace	Horse	Local
New Market Coal Company	John Pullan	New Market	Shaft	Longwall	Fan	Electricity	C, B. & Q. Ry.

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

MAHASKA COUNTY

Name of Company	Superintendent	Postoffice Address	Shaft or Slope	Plan of Working	How Ventil'd	Power Used	Shipping or Local
Equality Coal Company	W. C. Flynn	Albia	Slope	Room and Pillar	Fan	Steam	C. & N. W. Ry.
Beaver & Toy Coal Company	Doad Toy	Beacon	Slope	Room and Pillar	Natural	Horse	Local
Larson Coal Company	A. G. Larson	Beacon	Slope	Room and Pillar	Natural	Horse and Gin	Local
Rosser Davis Coal Company	Rosser Davis	Beacon	Slope	Room and Pillar	Natural	Horse and Gin	Local
Jay Beadle Coal Company	Jay Beadle	Beacon	Slope	Room and Pillar	Natural	Horse	Local
O'Brien Coal Company	P. O'Brien	Beacon	Slope	Room and Pillar	Natural	Horse	Local
Fisher Coal Company	H. Fisher	Beacon	Slope	Room and Pillar	Natural	Horse	Local
Edwards & Sons Coal Company	T. G. Edwards	Beacon	Slope	Room and Pillar	Natural	Horse	Local
Fedro Coal Company	Mike Fedro	Given, R. F. D.	Slope	Room and Pillar	Natural	Horse and Gin	Local
Hynick Coal Company	John Hynick	Given, R. F. D.	Shaft	Room and Pillar	Fan	Horse and Gin	Local
Williams Coal Company	E. F. Williams	New Sharon	Slope	Room and Pillar	Furnace	Gasoline	Local
Lee & Kuntz Coal Company	James Lee	What Cheer	Slope	Room and Pillar	Natural	Horse	Local
Roberts Bros. Coal Company	R. Roberts	Oskaloosa	Shaft	Room and Pillar	Fan	Horse and Gin	Local
Herbig Coal Company	Roy R. Herbig	Oskaloosa	Slope	Room and Pillar	Jet	Steam	Local
Wilford Reese Coal Company	W. Reese	Oskaloosa	Slope	Room and Pillar	Natural	Horse and Gin	Local
Snook & Sons Coal Company	J. Snook	Oskaloosa	Slope	Room and Pillar	Natural	Horse and Gin	Local
Frehn & Coons Coal Company	Charles M. Coons	Oskaloosa	Slope	Room and Pillar	Natural	Horse and Gin	Local
Nelson Bros. Coal Company	W. T. Nelson	Oskaloosa	Slope	Room and Pillar	Natural	Horse	Local
William Kramer Coal Company	William Kramer	Beacon	Slope	Room and Pillar	Natural	Horse	Local
Mick Scott & Fall Coal Company	M. Scott	Oskaloosa	Slope	Room and Pillar	Natural	Horse	Local
Leo Whitel Coal Company	Leo Whitel	Oskaloosa	Slope	Room and Pillar	Natural	Horse	Local
Jones & Mathes Coal Company	Tom Jones	Given	Slope	Room and Pillar	Natural	Horse	Local
Swanson & Hohn Coal Company	Jno. Swanson	Oskaloosa	Slope	Room and Pillar	Natural	Horse	Local
O. R. Thompson Coal Company	O. R. Thompson	Given, R. F. D.	Slope	Room and Pillar	Natural	Horse	Local
Sweitzer Coal Company	C. Sweitzer	Eddyville	Shaft	Room and Pillar	Natural	Steam	Local
Lanning Coal Company	Wm. Hodges	Oskaloosa	Slope	Room and Pillar	Fan	Electricity	Local
Jno. Williams & Bros.	John Williams	Oskaloosa	Slope	Room and Pillar	Natural	Horse	Local
Geo. Matrisson Coal Company	Geo. Matrisson	Oskaloosa	Slope	Room and Pillar	Natural	Horse	Local
Matrisson & Morris Coal Company	J. M. Matrisson	Oskaloosa	Slope	Room and Pillar	Fan	Horse and Gin	Local
Osborn-DeWeese Coal Company	A. A. Osborn	What Cheer	Slope	Room and Pillar	Natural	Horse	Local
R. H. Farnald Coal Company	R. H. Farnald	Oskaloosa	Slope	Room and Pillar	Natural	Horse	Local

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

MAHASKA COUNTY—Continued

Name of Company	Superintendent	Postoffice Address	Shaft or Slope	Plan of Working	How Ventil'd	Power used	Shipping or Local
David Evans Coal Company	David Evans	Eddyville	Slope	Room and Pillar	Natural	Horse and Gin	Local
Adams Coal Company	I. C. Adams	Oskaloosa	Shaft	Room and Pillar	Fan	Horse and Gin	Local
Talmage & Cascade Coal Company	L. Talmage	Oskaloosa	Shaft	Room and Pillar	Natural	Horse and Gin	Local
A. M. Ellis Coal Company	A. M. Ellis	Given	Slope	Room and Pillar	Natural	Horse and Gin	Local
Levi Coal Company	L. Wassencove	Oskaloosa	Slope	Room and Pillar	Fan	Horse and Gin	Local
Steve Gasper Coal Company	Steve Gasper	Lakonta	Slope	Room and Pillar	Fan	Horse and Gin	Local
Woodward & Boggs Coal Company	Albert Woodward	Oskaloosa	Slope	Room and Pillar	Fan	Horse and Gin	Local
Tohrine Coal Company	Charles Tohrine	Oskaloosa	Shaft	Room and Pillar	Fan	Horse and Gin	Local
Given Coal Company	Roy C. Ellis	Given	Slope	Room and Pillar	Natural	Horse and Gin	Local
Liebris Coal Company	C. Liebris	Given	Slope	Room and Pillar	Natural	Horse and Gin	Local

MONROE COUNTY

Consolidation Coal Co., No. 18	John Day	Buxton	Shaft	Room and Pillar	Fan	Steam	C. & N. W. Ry.
Consolidation Coal Co., No. 19	John Day	Buxton	Shaft	Room and Pillar	Fan	Electricity	C. & N. W. Ry.
Maple Coal Company, No. 1	F. C. Chapman	Eddyville, R. F. D.	Shaft	Room and Pillar	Fan	Steam	C. & N. W. Ry.
Maple Coal Company, No. 2	Joseph Thomas	Lovilia, R. F. D.	Shaft	Room and Pillar	Fan	Electricity	C. & N. W. Ry.
Rex Fuel Company, No. 4	James Horton	Lovilia	Shaft	Room and Pillar	Fan	Steam	C. & N. W. Ry.
Rex Fuel Company, No. 5	John Canty	Hiteman, R. F. D.	Shaft	Room and Pillar	Fan	Electricity	C. & N. W. Ry.
Sheffield Coal Company	Wm. Sullivan	Lovilia	Shaft	Room and Pillar	Fan	Steam	C. & N. W. Ry.
Hoover Fuel Company	E. M. Baysoar	Albia	Shaft	Room and Pillar	Fan	Steam	C. & N. W. Ry.
Crecent Coal Company	Wm. Ross	Whiteburh	Shaft	Room and Pillar	Fan	Steam	C. & N. W. Ry.
Central Coal Company, No. 3	Ray Harris	Lockman	Slope	Room and Pillar	Fan	Steam	M. & St. L. Ry.
Central Coal Company, No. 6	Ray Harris	Lockman	Shaft	Room and Pillar	Fan	Steam	M. & St. L. Ry.
Smoky Hollow Coal Co., No. 10	William Jones	Hiteman	Shaft	Room and Pillar	Fan	Steam	C. B. & Q. Ry.
Smoky Hollow Coal Co., No. 11	William Jones	Hiteman	Shaft	Room and Pillar	Fan	Steam	C. B. & Q. Ry.
Mashak & Willard Coal Co.	John Mashak	Lovilia	Shaft	Room and Pillar	Fan	Horse and Gin	Local
DeWild & Swim Coal Company	Albert DeWild	Lakonta	Slope	Room and Pillar	Fan	Horse and Gin	Local

WAPELLO COUNTY

Simpson Bros. Coal Company	W. Simpson	Ottumwa	Shaft	Room and Pillar	Fan	Horse and Gin	Local
Union Coal Company	John Genochio	Ottumwa	Shaft	Room and Pillar	Fan	Steam	Local
Rutledge Coal Company	John Howard	Ottumwa	Shaft	Room and Pillar	Fan	Steam	Local
Howell Price Coal Company	Howell Price	Ottumwa	Shaft	Room and Pillar	Fan	Horse and Gin	Local
Glendale Coal Company	John Whitten	Ottumwa	Shaft	Room and Pillar	Fan	Horse and Gin	Local
Matt Miers Coal Company	Matt Miers	Ottumwa	Shaft	Room and Pillar	Fan	Steam	Local
Charles Akers Coal Co., No. 2	Charles Akers	Ottumwa	Shaft	Longwall	Natural	Horse and Gin	Local
Charles Akers Coal Co., No. 1	Charles Akers	Ottumwa	Slope	Longwall	Natural	Horse and Gin	Local
Haseltine Coal Company	William Haseltine	Ottumwa	Shaft	Room and Pillar	Fan	Horse and Gin	Local
Richard Reese Coal Company	Richard Reese	Ottumwa	Shaft	Room and Pillar	Fan	Horse and Gin	Local
Griffiths Bros. Coal Company	R. Griffiths	Ottumwa	Shaft	Room and Pillar	Fan	Horse and Gin	Local
Gibbs Bros. Coal Company	Thos. Gibbs	Ottumwa, R. F. D.	Shaft	Room and Pillar	Fan	Horse and Gin	Local
William Miers Coal Company	William Miers	Ottumwa, R. F. D.	Slope	Room and Pillar	Fan	Horse and Gin	Local
Glenn Bros. Coal Company	Elmer Glenn	Ottumwa, R. F. D.	Shaft	Room and Pillar	Natural	Horse and Gin	Local
Genochio & Peterson Coal Co.	Norman Peterson	Ottumwa	Slope	Room and Pillar	Natural	Horse and Gin	Local
R. E. Cooper Coal Company	R. E. Cooper	Ottumwa	Slope	Room and Pillar	Natural	Horse and Gin	Local
Wapello Coal Company	W. P. Jamieson	Eddyville	Slope	Longwall	Natural	Horse and Gin	Local
Louis Kellar Coal Company	Louis Kellar	Eldon	Shaft	Room and Pillar	Fan	Horse and Gin	Local
Herb Orr Coal Company	Herb Orr	Eldon	Shaft	Room and Pillar	Natural	Horse and Gin	Local
Homer Weist Coal Company	Homer Weist	Eldon	Shaft	Room and Pillar	Natural	Horse and Gin	Local
Hartwig Bros. Coal Co., No. 2	C. Hartwig	Floris	Slope	Room and Pillar	Natural	Horse and Gin	Local
Hartwig Bros. Coal Co., No. 3	C. Hartwig	Floris	Slope	Room and Pillar	Natural	Horse and Gin	Local
Towbridge & Huffstater Coal Co.	C. Towbridge	Eldon	Shaft	Room and Pillar	Natural	Horse and Gin	Local
Monahan Coal Company	Wm. Monahan	Ottumwa	Shaft	Longwall	Natural	Horse and Gin	Local
The Best Coal Company	Wm. Rogers	Ottumwa, R. F. D.	Shaft	Room and Pillar	Natural	Horse and Gin	Local
The High Test Coal Company	W. Young	Ottumwa, R. F. D.	Shaft	Room and Pillar	Natural	Horse and Gin	Local
Dawson Coal Company	J. W. Dawson	Ottumwa, R. F. D.	Shaft	Room and Pillar	Fan	Gasoline	Local
Schafer & Moore Coal Company	C. Moore	Ottumwa, R. F. D.	Shaft	Room and Pillar	Fan	Horse and Gin	Local
Arthur Gardener Coal Company	A. Gardener	Eldon	Shaft	Room and Pillar	Natural	Horse and Gin	Local
Sinky Bros. Coal Company	Jno. Sinky	Blakesburg	Shaft	Longwall	Natural	Horse and Gin	Local
Brooks Coal Company	W. E. Brooks	Ottumwa, R. F. D.	Shaft	Room and Pillar	Fan	Horse and Gin	Local
Abernathy Bros. Coal Company	J. Abernathy	Ottumwa, R. F. D.	Shaft	Room and Pillar	Fan	Horse and Gin	Local
Moses & Melnerney Coal Company	Wm. Moses	Ottumwa, R. F. D.	Slope	Room and Pillar	Natural	Horse and Gin	Local
Creek Coal Company	R. W. Creech	Eldon	Shaft	Room and Pillar	Fan	Horse and Gin	Local

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

WAPELLO COUNTY—Continued

Name of Company	Superintendent	Postoffice Address	Shaft or Slope	Plan of Working	How Ventil'd	Power Used	Shipping or Local
Eisensohn Coal Company	J. L. Eisensohn	Ottumwa	Slope	Longwall	Natural	Horse	Local
Burt Coal Company	Jas. Burt	Ottumwa	Shaft	Room and Pillar	Natural	Horse	Local
Loan Star Coal Company	Wm. McIntosh	Eldon	Shaft	Room and Pillar	Natural	Horse	Local

MARION COUNTY.

Pershing Coal Company	James Duffy	Knoxville	Shaft	Room and Pillar	Fan	Steam	Wabash Ry.
Red Rock Coal Company	Charles Anderson	Melcher	Shaft	Room and Pillar	Fan	Steam	C. & R. I. Ry.
Cons. Indiana Coal Co., No. 2	John Hall	Dallas	Shaft	Room and Pillar	Fan	Electricity	C. & R. I. Ry.
Black Diamond Coal Company	T. Jones	Dallas	Shaft	Room and Pillar	Fan	Steam	C. & R. I. Ry.
Melcher Coal Company	James Smith	Melcher	Shaft	Room and Pillar	Fan	Steam	C. & R. I. Ry.
McCagg Coal Company	William Abram	Knoxville	Shaft	Room and Pillar	Fan	Steam	C. & R. I. Ry.
Des Moines Coal & Coke Company	William Abram	Albia	Shaft	Room and Pillar	Fan	Steam	C. B. & Q. Ry.
Gold Goose Coal & Mining Co.	W. C. Flynn	Knoxville, R. F. D.	Slope	Room and Pillar	Natural	Horse	Local
Honey Creek Coal Company	Phil Bishop	Harvey	Slope	Room and Pillar	Natural	Horse	Local
McKenzie & Geery Coal Co.	Jas. A. McKenzie	Knoxville	Shaft	Room and Pillar	Fan	Steam	Local
Alex Knox Coal Company	Alex Knox	Knoxville, R. F. D.	Shaft	Room and Pillar	Fan	Horse and Gin	Local
Stewart Mulky Coal Company	Stewart Mulky	Knoxville	Shaft	Room and Pillar	Fan	Horse and Gin	Local
Geo. L. Burt Coal Company	George L. Burt	Knoxville	Slope	Room and Pillar	Furnace	Horse and Gin	Local
Miller Coal Company	R. Miller	Knoxville	Slope	Room and Pillar	Furnace	Horse and Gin	Local
Hays Bros. Coal Company	C. H. Hays	Knoxville, R. F. D.	Shaft	Room and Pillar	Natural	Horse	Local
Perry Brown Coal Company	Perry Brown	Knoxville	Slope	Room and Pillar	Furnace	Horse	Local
Dunreath Coal Company	Geo. E. Whitney	Cardova, R. F. D.	Shaft	Room and Pillar	Fan	Steam	Wabash Ry.
Stillwell & Dixon Coal Co.	Alva Stillwell	Maitton	Slope	Room and Pillar	Natural	Horse	Local
Pershing Coal Company, No. 14	J. E. Williams	Bussey	Shaft	Room and Pillar	Fan	Steam	Wabash Ry.
Horn Shoe Coal Company	O. Vilont	Marysville	Slope	Room and Pillar	Natural	Horse	Local
Ahn & Wallace Coal Co.	Ed. Ahn	Marysville	Shaft	Room and Pillar	Natural	Horse	Local
Snow & Daniels Coal Company	Judd Daniels	Marysville	Shaft	Room and Pillar	Natural	Horse	Local
Marysville Coal Company	C. C. Kendall	Marysville	Slope	Room and Pillar	Natural	Horse	Local
Charles Fortner Coal Company	Chas. Fortner	Fragler	Slope	Room and Pillar	Natural	Horse	Local
Holland Coal Company	Geo. A. Uhlman	Des Moines	Shaft	Room and Pillar	Fan	Steam	Local
Vanceonebrak Bros. Coal Co.	K. Vanceonebrak	Knoxville	Slope	Room and Pillar	Natural	Horse	Local

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

JASPER COUNTY.

Colfax Cons. Coal Co., No. 9	John Pearson	Colfax	Shaft	Room and Pillar	Fan	Steam	Colfax & N. Ry.
Sunny Brook Coal Company	Steve J. Smith	Colfax	Shaft	Room and Pillar	Fan	Steam	Local
Newton Coal Company	U. G. Brown	Newton	Shaft	Room and Pillar	Fan	Steam	Local
William White Coal Company	William White	Prairie City	Slope	Room and Pillar	Natural	Horse	Local
Prairie City Coal Company	E. F. Rorabaugh	Prairie City	Slope	Room and Pillar	Fan	Horse	Local
J. E. Jackson Coal Company	J. E. Jackson	Monroe	Slope	Room and Pillar	Fan	Horse	Local
Flanders Bros. Coal Company	Jas. Flanders	Newton	Shaft	Room and Pillar	Fan	Horse	Local
Bear's Grove Coal Company	T. J. Morris	Colfax	Shaft	Room and Pillar	Fan	Horse	Local
Howard Sheeter Coal Company	H. Sheeter	Monroe	Shaft	Room and Pillar	Fan	Horse	Local
McKeever's Coal Company	Wm. Pollard	Colfax	Shaft	Room and Pillar	Fan	Steam	Local
Norris Bros. Coal Company	D. C. Norris	Prairie City	Shaft	Room and Pillar	Fan	Gasoline	Local

KEOKUK COUNTY.

Big Four Coal Company	Edward Bell	What Cheer	Shaft	Room and Pillar	Jet	Steam	Local
Carson Bros. Coal Company	Thomas Carson	What Cheer	Slope	Room and Pillar	Natural	Horse	Local
Newcomb Bros. Coal Company	E. Newcomb	What Cheer	Shaft	Room and Pillar	Natural	Horse and Gin	Local
O. W. Olive Coal Company	O. W. Olive	Delta	Slope	Room and Pillar	Natural	Horse	Local
Wyckoff Coal Company	J. S. Wyckoff	Richland	Shaft	Room and Pillar	Natural	Horse	Local
A. G. Willey Coal Company	A. G. Willey	Delta	Slope	Room and Pillar	Natural	Horse	Local
Smothers & Rhollet Coal Co.	O. L. Smothers	Sigourney	Slope	Room and Pillar	Natural	Gasoline	Local

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

VAN BUREN COUNTY.

Name of Company	Superintendent	Postoffice Address	Shaft or Slope	Plan of Working	How Ventil'd	Power Used	Shipping or Local
Daniels Coal Company.....	John Daniels...	Douds	Shaft...	Room and Pillar.	Furnace.	Horse and Gin....	Local
Douds Coal Company.....	S. Douds.....	Douds	Slope...	Room and Pillar.	Furnace.	Horse....	Local
Cahill Coal Company.....	A. L. Cahill...	Farmington	Shaft...	Room and Pillar.	Natural.	Horse and Gin....	Local
B. F. Donrad Coal Company.....	B. F. Donrad...	Mt. Zion, R. F. D.	Slope...	Room and Pillar.	Natural.	Horse....	Local
Hugh Findlay Coal Company.....	Hugh Findlay...	Douds	Slope...	Room and Pillar.	Natural.	Horse....	Local
James Tweedy Coal Company.....	James Tweedy...	Douds	Shaft...	Room and Pillar.	Natural.	Horse and Gin....	Local
Fletcher Coal Company.....	Clarence Fletcher...	Stockport	Slope...	Room and Pillar.	Natural.	Horse....	Local
Albert Gardner Coal Company.....	Albert Gardner...	Bonsarte	Slope...	Room and Pillar.	Natural.	Horse....	Local
Ernest Parrott Coal Company.....	Ernest Parrott...	Selma	Slope...	Room and Pillar.	Natural.	Horse....	Local
Hinkle Coal Company.....	Geo. Hinkle.....	Selma	Slope...	Room and Pillar.	Natural.	Horse....	Local
Albright Coal Company.....	Frank Albright...	Birmingham	Shaft...	Room and Pillar.	Natural.	Horse....	Local
Oliver Coal Company.....	H. Oliver.....	Selma	Shaft...	Room and Pillar.	Natural.	Horse....	Local
J. M. Brobston Coal Company.....	J. M. Brobston...	Libertyville	Shaft...	Room and Pillar.	Natural.	Horse....	Local

JEFFERSON COUNTY.

C. S. Hennes Coal Company.....	C. S. Hennes...	Fairfield	Shaft...	Room and Pillar.	Natural.	Gasoline....	Local
Trots & Tucker Coal Company.....	Ben Trots.....	Fairfield	Shaft...	Room and Pillar.	Natural.	Horse....	Local

DAVIS COUNTY.

Art Henderson Coal Company.....	Art Henderson...	Floris	Slope...	Room and Pillar.	Natural.	Horse....	Local
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LIST OF COAL COMPANIES, SUPERINTENDENTS, ETC., IN DISTRICT NO. 3.

POLK COUNTY.

Acme Coal Mining Company.....	C. R. Hutchings...	1139 Park Ave., Des Moines...	Shaft...	Room and Pillar.	Fan....	Steam....	Local
Bennett Bros. Coal Company.....	A. A. Bennett...	427 W. Grand Ave., Des Moines	Shaft...	Room and Pillar.	Fan....	Steam....	Local
Bloomfield Coal & Mining Company	George Yarn...	Rt. 4, Des Moines	Shaft...	Room and Pillar.	Fan....	Electricity.	C. & N. W. Ry.
Beck Coal & Mining Company.....	John T. Beck...	Des Moines.....	Shaft...	Room and Pillar.	Fan....	Steam....	Local
Des Moines Coal Company, No. 3.....	Fred Norwood...	919 W. Grand Ave., Des Moines	Shaft...	Room and Pillar.	Fan....	Electricity.	Local
Des Moines Coal Company, No. 4.....	Fred Norwood...	910 W. Grand Ave., Des Moines	Shaft...	Room and Pillar.	Fan....	Electricity.	Local
Diamond Joe Coal Company.....	David Jopling...	Runnells	Shaft...	Room and Pillar.	Fan....	Electricity.	Local
Des Moines Ice & Fuel Co., Inter-Urban	S. Blount.....	109 E. Maple St., Des Moines	Shaft...	Room and Pillar.	Fan....	Steam....	Wabash Ry.
Des Moines Ice & Fuel Co., West Side	Isaac Evans....	100 E. Maple St., Des Moines	Shaft...	Room and Pillar.	Fan....	Steam....	Local
Economy Coal Company.....	John H. Ramsay...	1015 19th St., Des Moines	Shaft...	Room and Pillar.	Fan....	Steam....	Local
Liberty Coal Mining Company.....	W. R. Gibson...	2412 University Ave., Des Moines	Shaft...	Room and Pillar.	Fan....	Steam....	C. M. & St. P. Ry.
Norwood-White Coal Co., No. 3.....	J. D. Phillips...	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.....	H. D. Phillips...	Des Moines	Shaft...	Room and Pillar.	Fan....	Electricity.	C. & N. W. Ry.
Saylor Coal Company, No. 2.....	E. F. Roberts...	R. F. D. Ankeny	Shaft...	Room and Pillar.	Fan....	Steam....	Local
Great Western C. & M. Company.....	John Duro.....	820 E. 26th St., Des Moines	Shaft...	Room and Pillar.	Fan....	Electricity.	C. G. W. Ry.
Urbandale Coal Company.....	Leroy Twining...	Des Moines	Shaft...	Room and Pillar.	Fan....	Steam....	Inter Urban
Wright Coal Company.....	D. G. McDonald...	803 Lyon St., Des Moines	Shaft...	Room and Pillar.	Fan....	Steam....	Inter Urban
Griffith Coal Company.....	Wm. Griffiths...	Des Moines	Shaft...	Room and Pillar.	Fan....	Electricity.	C. & N. W. Ry.
Sayre Coal & Mining Company.....	Frank Burris...	Des Moines	Shaft...	Room and Pillar.	Fan....	Steam....	Local
Diamond Block Coal Company.....	M. M. Swanson...	Des Moines	Shaft...	Room and Pillar.	Fan....	Electricity.	Inter Urban Ry.
Chever Leaf Coal Company.....	O. E. Heggen...	Des Moines	Shaft...	Room and Pillar.	Fan....	Horse....	Local
J. H. Gross Coal Company.....	J. H. Gross.....	Des Moines	Shaft...	Room and Pillar.	Natural.	Gasoline....	Local
Adelphi Coal Company.....	C. B. Halseman...	Adelphi	Shaft...	Room and Pillar.	Natural.	Gasoline....	Local
Commerce Coal Company.....	G. Harwood....	Commerce	Shaft...	Longwall	Natural.	Horse....	Local

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

BOONE COUNTY.

Name of Company	Superintendent	Postoffice Address	Shaft or Slope	Plan of Working	How Ventil'd	Power Used	Shipping or Local
Boone Coal Company	S. Smiley, Jr.	Boone	Shaft	Longwall	Fan	Steam	Ft. D., D. M. & S. Ry.
Boone Coal Company	S. Smiley, Jr.	Boone	Shaft	Longwall	Fan	Steam	C. & N. W. Ry.
Moingona Coal Company	Otto C. Herman	Boone	Shaft	Longwall	Fan	Steam	Local
McCaskey Coal Company	J. S. McCaskey	Pilot Mound	Shaft	Room and Pillar	Fan	Horse	Ft. D., D. M. & S. Ry.
Ogden Coal Company	Robert Kennedy	Ogden	Shaft	Room and Pillar	Fan	Steam	C. M. & St. P. Ry.
Madrid Coal Company	John May	Madrid	Shaft	Longwall	Natural	Horse	Ft. D., D. M. & S. Ry.
South Side Coal Company	S. O. Currier	Pilot Mound	Shaft	Longwall	Natural	Horse	Local
Carrier Coal Company	Chas. Otis	Boone	Shaft	Longwall	Natural	Horse	Local
Chas. Otis Coal Company	Chas. Otis	Boone	Shaft	Room and Pillar	Natural	Horse	Local
Richard May Coal Company	Richard May	Boone	Shaft	Room and Pillar	Natural	Horse	Local

DALLAS COUNTY.

Dallas Coal Company	John Lindblom	204 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 Company	Wm. T. Ramsay	Adel	Shaft	Room and Pillar	Fan	Electricity	C. M. & St. P. Ry.
Scandia Coal Company, No. 2	Owen Reese	Madrid	Shaft	Room and Pillar	Fan	Steam	C. M. & St. P. Ry.
Scandia Coal Company, No. 5	Owen Reese	Madrid	Shaft	Room and Pillar	Fan	Steam	C. M. & St. P. Ry.
Scandia Coal Company, No. 4	Owen Reese	Madrid	Shaft	Room and Pillar	Fan	Steam	C. M. & St. P. Ry.
Shuler Coal Company	Chas. Shuler, Jr.	802 Hippee Bldg., Des Moines	Shaft	Room and Pillar	Fan	Electricity	C. M. & St. P. Ry.

GREENE COUNTY.

Buckeye Coal Company		Ripley	Shaft	Room and Pillar	Furnace	Horse	Local
Keystone Coal Company		Ripley	Shaft	Room and Pillar	Furnace	Horse	Local
Riverside Coal Company	M. Feith	Ripley	Shaft	Room and Pillar	Natural	Horse	Local

WARREN COUNTY.

Des Moines Ice & Fuel Co.		Spring Hill	Shaft	Room and Pillar	Fan	Steam	C. & R. I. Ry.
Hartford Coal Company	V. McCall	Runnells	Shaft	Room and Pillar	Fan	Steam	Local
Middle River Coal Company	Jas. Watson	Indianola	Shaft	Longwall	Fan	Electricity	C. & R. I. Ry.

GUTHRIE COUNTY.

Butler Coal Company	Jas. G. Butler	Guthrie Center	Shaft	Longwall	Furnace	Horse	Local
Sipe Coal Company	H. M. Sipe	Guthrie Center	Shaft	Longwall	Furnace	Horse	Local
W. H. Scott Coal Company	W. H. Scott	Guthrie Center	Shaft	Longwall	Furnace	Horse	Local
John Mansell Coal Company	John Mansell	Guthrie Center	Shaft	Longwall	Furnace	Horse	Local
Wine & Wine Coal Company	Wine & Wine	Guthrie Center	Shaft	Longwall	Furnace	Horse	Local

STORY COUNTY.

Summit Coal Company	Frank Ellis	Ames	Shaft	Room and Pillar	Steam	Steam	Local
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WEBSTER COUNTY.

Lehigh Coal Company	Ed Highy	Lehigh	Shaft	Room and Pillar	Fan	Steam	Ft. D., D. M. & S. Ry.
A. L. McGovern Coal Company	A. L. McGovern	Ft. Dodge	Shaft	Room and Pillar	Natural	Horse	Local
George Marcy Coal Company	Geo. Marcy	Lehigh	Slope	Longwall	Natural	Horse	Local

SUMMARY OF IOWA COAL PRODUCTION.

1923.

Number of tons of prepared lump coal produced.....	2,676,274
Number of tons of run of mine coal produced.....	2,507,976
Number of tons of slack coal produced	936,082
Total output for the year 1923 in tons.....	6,120,332
Average number of miners and loaders employed.....	8,841
Average number of all other underground employes.....	3,046
Average number of surface employes	1,212
Average number of days miners and loaders in shipping mines	186½
Average number of days of underground employes in shipping mines	209½
Average number of days of surface employes in shipping mines	213
Average number of days miners and loaders in local mines..	136
Average number of days other underground employes in local mines	143½
Average number of days of surface employes in local mines..	141½
Number of kegs of powder used in the mines in 1923.....	277,156
Number of pounds of dynamite used in the mines.....	399,182
Number of pound of permissible explosives used	48,445
Number of mining machines in operation in the mines.....	83
Number of horses and mules used in the mines.....	1,029
Number of days mines were closed down or partly closed down by reason of strikes or disagreements with employes.....	171½
Estimate of the curtailment of the output in tons because of such strikes or disagreements with employes.....	77,610
Number of days mines of the state were idle for lack of R. R. cars	477
Estimate of the loss of output of coal in tons because of lack of railroad cars	229,738
Total number of idle days in all mines in the state because of lack of orders or sales.....	16,854
Estimate of the total number of tons of coal that all mines would produce if they worked the days idle because of lack of orders or sales in 1923.....	2,701,645

DISTRIBUTION OF COAL PRODUCED IN 1923.

Sold to the local trade, not shipped.....	836,199 tons
Shipped to points within the state	1,727,783 tons
Shipped to points outside the state	330,083 tons
Sold to railroads	3,107,838 tons
Used at the mines for mine purposes.....	134,210 tons