4767 4858		7139 7186	Ziepprecht, Carl W. Dubuque.
	Point.	7364	Zender, M. J., Omaha, Neb.
6234	Young, C. W., Isabel, S. D.	7450	
6265	Young, C. B., Kansas City.	7541	Zimmerman, Julius, Kelley.
6353	York, T. E., Creston,	,,,,,	Zergen, Geo. F., Holywood,
6793	Young, Charles R., Toledo.	8189	
7185	Yocom, Wm. W., Marion.	8218	Zinn, Edgar, Fort Dodge,
7733	Young, Ralph R., St. Louis,	0210	Zimmerman, Wm., Cedar Rapids.
	. Mo.	8489	Zonf Date 1
9264	Yarnell, Elmer, Des Moines.	8791	Zopf, Peter, Jr., Waterloo,
9708	Youngerman, Juliette Potter, Des Moines.		Rapids. Joseph V., Cedar
10385		8853	Zender, Chas. H., Cresco.
	Young, Geo. W., Rock Island, Ill.	8901	Zastera, Chas. H., Cedar Rapids.
10471	Young, Stephen K., Center- ville.	9265	Zopf, Geo. J., Onalaska, Wash,
	Z	10271	Zopf, Louis C., Iowa City.
4444	Acceptance of the control of the con	10291	Zahrndt, Earl L., Elkader.
5718	Zilling, John A., Dubuque.	10338	Zimmerman, Carl, Des
6130	Zimmerman, Chas. F., Des		Moines.
****	Moines.	10398	Zimmer, Milton J., Rock Is-
6355	Zeiger, Frank W., Garner.	NO AMERICA	land, Ill.
6447	Zimmerman, Joe Jacob, Coffee Creek, Mont.	10473	Zarnow, Herman S., Des
6640	Zimmerman, W. J., Des	10507	Moines.
	Moines.	10307	Zinser, Alfrieda, Sioux City.
7067	Zimmerman, Chas. J., Water- loo.		

State of Iowa 1930

REPORT OF THE

State Mine Inspector

LETTER OF TRANSMITTAL

AND may unburster fifty you FOR THE at training and may would be

Biennial Period Ending December 31, 1929

INSPECTORS

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

> Published by THE STATE OF IOWA Des Moines

number to sinte

REPORT OF THE

LETTER OF TRANSMITTAL

Hon. John Hammill, Governor of Iowa. 91812

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 year 1928 and 1929.

Very respectfully submitted,

, drautoH E W. Ending December 31, 1929

R. T. RHYS,
EDWARD SWEENEY,
Iowa Mine Inspectors.

Des Moines, Iowa, April, 1930

STREET, STREET, WY

W. E. HOLLAND, Comercille, Iona
E. T. RHYS, Ottmanna, Iona
EDWARD SWELNIT, Inc. Maines, Iona
W. A. SCHEGE, Secretary, the Maines, Iona

CALCULATE OF ROLL OF STATE OF

REPORT OF IOWA MINE INSPECTORS

During the biennium ending December 31st, 1929, the total production of coal in Iowa was 8,096,558 tons, which is an increase of 260,514 tons over the preceeding biennium.

In over forty years the production of coal in our state reached its lowest stage in 1927. Since that year the production has steadily increased, and from all indications it will continue to increase until a normal out-put is again reached within our borders. This upward trend of production may be justly ascribed to the mutual efforts of the operators and miners to produce clean coal, and to the successful campaign, aided by Governor John Hammill and a large number of prominent business and professional men of our state, to increase the sale of Iowa coal.

In the later part of 1925, Governor Hammill, appointed a commission known as "The Agricultural and Industrial Commission of Iowa" of which Judge Frederick F. Faville, was chairman. This commission devoted particular attention to the production and sale of Iowa coal, and its conclusions did much to remove some of the prejudice that existed against our home product. The commission reported "That Iowa coal may be used, except only where a high sulphur content is prejudicial to the commodity being manufactured, with equal efficiency and greater economy than the imported commodity." It also reported "That the prevalent idea that Iowa coal is peculiary liable to spontaneous combustion is mythical."

On July 30th, 1929, the Commercial Club of Albia, initiated a movement for the purpose of forming an organization to promote the sale of Iowa coal. In order to aid and to give impetus to the above movement Governor Hammill invited mining and business men, and all others interested, to meet at Des Moines, on August 13th, 1929. Over two hundred persons attended this meeting, and after various phases of the coal industry in our state was discussed by several prominent men, a committee was appointed by the Governor to confer with the committee selected by the Commercial Club of Albia, and as a result of the joint conference of these two groups a permanent organization was formed, known as "The Iowa Coal Institute." The Institute inaugurated an extensive campaign to acquaint the people of our state with the true merits and of the economy of using Iowa coal. The good results therefrom were much greater than it was thought possible to achieve in the short

time the Institute had been in existence. The need of an organization such as The Iowa Coal Institute, has been evident for some time in order to counteract the erroneous statements that are being made continuously by certain salesmen concerning Iowa coal. The constant repetition of false statements regarding our coal, with no efficient or organized effort on the part of Iowa producers to disprove them, has undoubtedly been one of the main factors that have prejudiced our people against home product, and has caused them to manifest a preference for foreign products.

The Mine Inspection Department is sincerely hoping that The Iowa Coal Institute will continue to be a persistent, aggressive, and a mighty force for good to the coal industry of our state. It also heartily recommends that the work of the Institute be augmented by a liberal appropriation by the next General Assembly to our state institutions of learning at Iowa City, and at Ames, for the purpose of enabling them to carry on research in the correct use, and in the economic possibilities of Iowa coal. The cause is deserving and the appropriation is much needed, for scientifically the character and the potential value of Iowa coal is almost unknown. The result of such research would unquestionably not only advance and greatly benefit coal mining in our state, but it would also bring added wealth and a measure of prosperity to the state in general.

IOWA MINE INSPECTORS

District No. 1—W. E. HOLLAND, Office and residence, 509 E. Clark St., Phone 925, Centerville, Iowa.

District No. 2-R. T. Ruys, Office and residence, 709 N. Court St., Phone 574, Ottumwa, Iowa.

District No. 3—EDWARD SWEENEY, Office, State House, Phone 4-9111, Ext. 143; residence 2615 High St., Phone 3-2924; Des Moines, Iowa.

Secretary—W. A. Scheck, Office, State House, Phone 4-9111, Ext. 143; residence 2605 High St., Phone 4-2747; Des Moines, Iowa-

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 to the safety of the employes therein, proper ventilation, etc.

represents organization was ferried known as "The lows food leadings." The Institute inspiguenced an extensive companies to account the people of our state with the true merits and of the centum the people of our state with the true merits and of the centum of using lows coal. The good results therefrom overesment greater than it was thought possible to achieve in the short

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 the 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 term of the present inspectors expire July 1, 1931.

STATE BOARD OF EXAMINERS

JACOB RITTER, President, Centerville, Iowa.

C. E. HARVEY, Secretary, 706 45th St. Place, Phone 7-0929, Des Moines, Iowa.

FRED NOBWOOD, 2401 E. 9th St., Des Moines, Iowa. JAMES MITCHELL, SR., R. F. D. 3, Knoxville, Iowa. WM. Anderson, R. F. D. 5, Albia, Iowa.

The Board of Examiners are appointed by the State Executive Council for a period of two years. The term of the present officers expire July 1, 1930. Compensation for the members of the board is five (\$5.00) dollars per day and necessary expenses. The board holds examinations six times a year beginning January and thereafter every other month.

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. The examination for state mine inspectors is held the first Monday in March of even number of years in the office of the state mine inspector in the State House. A registration fee of two (\$2.00) dollars is made for all examinations. To those passing the examination an additional fee of two (\$2.00) dollars is required when the certificate is issued by the board. The law requires that such certificates is sued shall be recorded and kept on file in the office of the board and shall show the name, age, residence, classification, and years of experience of person to whom it is issued.

The following tables give the coal production, counties of the state, number of mines, number of employees, average days the miners worked, the distribution of coal and other statistics relative to the industry.

TONS OF DIFFERENT KINDS OF COAL MINED IN IOWA 1928-1929

a complete record at all mat-	1928	morned at		/1
of the state, including maps elected by the inspectors has corresponder abstract the office, them almost constantly in the	Number of tons of prepared hump coal produced	Number of tons of run of mine coal produced	Number of tons of slack coal produced	ot tons of coal produced
First District. 10013702 311 d	538,916 329,040 675,752	401,237 736,565 433,942	56,087 246,875 341,131	998,240 1,312,480 1,450,885
TotalsZHEZZIMA	1,048,708	1,571,744	644,093	3,759,545
th St. Place, Phone 7.0929, Dea	1929	Secretary	CHARGES.	M W
First District. 5-8-31 - married Second District. 5-8-31 - married Third District. 5-8-31 - married H	555,322 369,427 846,825	641,445 767,221 370,589	54,668 256,760 474,756	1,251,435 1,393,408 1,692,170
Totals [10]	1,771,574	1,779,255	786,184	4,337,013

ACCIDENTS RELATING TO TONNAGE Showing Tonnage of Iowa Mines, Accidents and Employes for Period of Thirty-four Years

beginning January and there- er inspectors, mine foremen,	Number of Fatal Accidents	Tons of Coal Produced	Tons of Coal Per Accident	Number of Em- ployes	Fatality Rate Per 1,000 Em- ployes
of five members; two coal	DOSE WILLIAM	59 J	Contraction of		
1890. 1897. 1898. 1899. 1899. 1899. 1890. 1990. 1990. 1990. 1994. 1996. 1996. 1996. 1996. 1996. 1997. 1996. 1996. 1997. 1997. 1998. 1998. 1998. 1998. 1998. 1998. 1999. 19	21 26 29 27 10 29 27 10 29 21 28 21 28 21 28 21 28 21 28 21 28 21 28 21 28 21 28 21 28 21 28 28 28 28 28 28 28 28 28 28 28 28 28	3,525,400 3,706,734 4,567,722 4,4567,722 4,956,310 5,117,285 5,441,403 6,185,734 6,366,611 7,062,84,377 6,866,425 7,185,436 7,185,436 7,722,480 7,	100,254 109,143 109,143 127,465 201,506 100,285 224,550 220,464 188,301 216,241 189,661 216,241 188,301 202,366 188,301 202,366 188,301 202,366 214,713 227,361 215,060 221,473 222,588 227,361 221,473 222,588 227,361 221,506 221,50	11,451 11,658 10,558 11,091 13,041 13,175 22,002 13,192 16,315 17,625 16,315 17,315 18,002 18,002 18,002 16,215 15,685 16,299 16,215 15,464 14,663 15,464 14,663 15,464 14,663 15,195 15,464 14,663 15,195 15,195 15,195 15,195 15,195 15,195 15,195 15,195 16,215 16	1.9 1.8 2.5 2.2 2.2 2.0 4.2 2.2 1.6 2.2 2.1 2.2 2.1 1.8 2.2 2.2 2.1 2.2 2.1 2.2 2.1 2.3 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1
927	19 15	4,883,631 4,770,316	257,033 318,102	9,619	1.68 1.56
	16 21	3,065,728	191,608 234,972	9,682 7,214	1.65
029	15	4,337,013	289,134	8,103	1.85

COAL PRODUCTION IN IOWA

For Calendar Years 1928 and 1929

FIRST DISTRICT

advisioner's	5,9810	Con	1928	Council	1929	
	Counties	-0.07,070 -0.00,100 -0.00,15	Tons of coal of all grades produced	Average number of employes	Tone of coal of all grades produced	Average number of employes
donroe (Pa Vayne	rt)		484,250 327,447 115,050 20,304 13,259 20,560 15,370	1,440 408 294 70 75 82 55	588,029 442,471 158,373 15,370 18,128 20,226 8,828	1,688 634 41
Tota	ls.		996,240	+ 2,424	1,251,435	2,901
	000 (36	SECO	ND DIST	RICT		talada W agartii ajadyafy
Jasper Wapello Mahaska Van Buren. Jefferson Davis	art)	Lene.	\$58,634 246,796 44,964 \$7,184 58,678 11,175 1,829 8,226 1,312,480	965 488 100 100 176 40 12 13 13	795,671 859,921 57,525 103,814 56,741 13,333 3,466 2,917	1,067 504 118 251 200 43 21 13
	0(1.4)	THI	RD DISTI	RICT		September 1
Polk	£(1,0)	403,004 000,004 000,4	591,752 273,470	953 568	419,897	10 00 00 00 00 00 00 00 00 00 00 00 00 0
Boone Warren Webster Greene Guthrie			399,458 163,290 9,096 4,918 8,901 1,450,825	873 288 29 19 51 2,806	902.083 1,150 7,069 9,409	selection of the select
Boone Warren Webster Greene Guthrie	100	100 M	399,458 163,290 9,095 4,918 8,901	288 299 19 51 2,806	902.088 1,150 7,069 9,409	37 37 31 31 31 31 31 31 31 31 31 31 31 31 31

COAL PRODUCTION OF IOWA

Calendar Year 1928

Countles	Mines in County	Prepared Lump Coal	Run of Mine Coal	Slack Coal	Total Production
Appanoose	70 5	435,731 13,911	30,115 297,800	18,404 15,736	484.25 327.44
Monroe (Part) Wayne	5 3	19,781 20,304 15,370	73,392	21,947	115,09 20,30 15,37
PageAdams	7 8	20,560 13,259 23,748	8,500	12,716	20,56 13,25 44,96
WarlonWapello	25 29 8	168,226 51,018 49,024	527,120 15,937 161,913	163,288 20,229 35,859	858,63 87,18 246,76
fahaska	30 7 2	25,984 7,759 2,000	22,279 666	10,415 2,750 1,220	58,6 11,1 3,2
efferson	19	1,281 191,894 167,428	318,495 6,911	398 81,363 99,131	1,8 591,7 273,4
Soone Varren Vebster	6 4	248,019 58,068 625	34,095 62,644 8,211	117,344 42,578 200	399.4 163,2 9,0
ireene	8 7	3,698 6,020	705 2,881	515	4.9 8,9
Totals	267	1,543,708	1,571,744	844,093	3,759,5

Calendar Year 1929

Countles	Mines in County	Prepared Lump Coal	Run of Mine Coal	Slack Coal	Total Production
Appanoose	63	494 ,907	11 FT 68,012	25,110	588,029
Lucas	8	14,930	411,426	16,115	442,471
Monroe (Part)	8	16,055	129,050	13,268	158,373
Wayne	6	10,295	4,900	175	15,370
Taylor	3	927	7,901		8,828
Page	4	17,008	3,228		20,236
Adams	8	1,200	16,928		18,128
Jasper	7	36,637	7,735	13,153	57,536
Marion	33	97,519	564,249	133,908	796,671
Wapello	27	58,013	21.254	24,547	103,814
Monroe (Part)	9	134,805	156,373	68,743	359,92
Mahaska	30	28,002	15,279	13,370	56,74
Van Buren	7	10,366	448	2,519	13,33
Jefferson	2	1,478	1,883	125	3,48
Davis	2	2,517	.,,,,,,	400	2,91
Polk	20	211, 209	244,833	113,639	569,68
Dallas	4	266,048	123	153,226	419,39
Warren	8	63,790	79,877	58,396	202,06
Webster	2		1.150		1,15
Greene	3	6,373	835	361	7,00
Guthrie	6	6,742	4		9,40
Boone	11	292,663	41,604	149,134	483,40
Totals	271	1,771,574	1,779,255	786,184	4,337,01

MINE OUTPUT AND EMPLOYEES

The Output of Coal, Miners and Loaders and All Other Employees Calendar Years 1928 and 1929

District No. 1, 1928

					_		
Counties	Mines in County	Amount of Coal of All Grades Produced	Number of Miners and Loaders Employed	Inside	Ou	ber of itside ployees	Total Number of Employees
		404 050	1,102	21		127	1,440
appanoose	70	484,250 327,447	232	13		41	408 294
	9	115,050	211	. 5		27	70
Monroe (Part)	5	20,304	54		8	9	75
	7	13,259	54	1		10	82
Page	5	20,560 15,370	44	1	6	. 5	56
Taylor	3	10,010	0.000		-	007	2,424
Totals	104	996,240	1,759	43	8	227	Unit a, a.
	1	District N	lo. 1, 19	29			
	1 62	588,029	1,288		55	145	1,688
Appanoose	8	442,471	412	1 1	79	42 24	255
Lucas		158,373	18		18	9	89
		15,370			5	10	89
		18,125		7	24	9	
	4 3	20,23t 8,82t			27	4	66
Taylor	- 3	0,02	1000	_	_		
			0.11	4 8	47	243	2,904
Totals	99	1,251,43	2,11	4	47	243	2,904
Totals	99	I Service	No. 2, 19	1	47		120
	40.00	District	No. 2, 19	028	216	60	965
Warion	26	District	No. 2, 19	028	216 63		965 5 438 9 240
Marion.	26	District 858,63 246,73 87,18	No. 2, 19	928	216 63 34	66 88 89 99	965 5 438 9 240 0 176
Marion. Monroe (Part)	25	District 858,63 246,70 87,18 58,67	No. 2, 19	928 84 10 57	216 63	68 33 39 31	5 965 5 438 9 246 0 176 6 100
Marion. Monroe (Part) Wapello Mahaska	25	District 858,63 246,76 87,16 58,63	No. 2, 19	928	216 68 34 16 20 4	64 34 33 31 31	5 965 5 438 9 176 0 176 6 100 7 40
Marion. Monroe (Part) Wapello Mahaska Jasper. Van Buren	25	District 858.63 246.77 87.18 58.65 44.99 11.17	No. 2, 19	9 2 8 9 2 8 9 3 4 9 9 9	216 63 34 16 20 4 2	64 38 39 14	5 965 5 438 9 240 0 110 6 100 7 46 2 11
Marion. Monroe (Part) Wapello Mahaska Jasper Van Buren Davis	25	District 858,63 246,76 87,16 58,63	No. 2, 19	928 944 100 57 90 90 90 90 90 90 90	216 68 34 16 20 4 2	64 33 33 31	5 965 5 438 9 2440 0 176 6 100 7 44 2 12 3 12
Marion. Monroe (Part) Wapello. Mahaska Jasper. Var Buren	25	District 855,63 246,77 87,16 95,66 44,09 7 11,17 2 3,2 2 1,8	No. 2, 19	9 2 8 34 40 67 90 90 90 90 90 90 90 90 90 90	216 63 34 16 20 4 2	64 38 39 14	5 965 5 438 9 2440 0 176 6 100 7 44 2 12 3 12
Marion. Monroe (Part) Wapello Mahaska Jasper Van Buren Davis. Jefferson.	25	District 858,63 246,77 87,18 58,63 344,98 11,17 2 3,2 1,81 1,312,4	No. 2, 19	9 2 8 84 100 57 90 90 90 90 91 932	216 68 34 16 20 4 2	64 33 33 31	5 965 5 438 9 240 0 176 6 100 7 44 2 13 3 11
Marion. Monroe (Part) Wapello Mahaska Jasper Van Buren Davis. Jefferson. Totals	22 23 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	District 855,65 266,76 87,11 87,12 10,10 10,10 10,10 11,11 11,312,4 District 33 796,63	No. 2, 15 4 66 33 64 4 16 17 17 17 17 17 17 17 17 17 17 17 17 17	928 94 90 90 90 90 90 90 90 90 90 90	216 63 34 16 20 4 2 0 355	68 38 33 31	5 965 5 438 9 240 6 100 7 44 2 13 3 11 77 1,984
Marion. Monroe (Part) Wapello. Mahaska. Jasper. Van Buren. Davis. Jefferson. Totals Marion.	25 25 33 11	District	No. 2, 15 4 66 336 66 48 18 18 19 18 19 18 19 18 19 18 19 18 19 18 19 18 19 18 19 18 19 18 19 18 18 18 18 18 18 18 18 18 18 18 18 18	928 84 100 157 157 157 157 157 157 157 157	216 63 34 16 20 4 2 0	64 38 33 3 3 1	5 965 5 438 5 9 240 0 176 6 1000 7 40 2 3 3 11 7 1,984
Marion. Monroe (Part) Wapello. Mahaska Jasper Van Buren Davis. Jefferson. Totals Marion Monroe (Part)	225	District 858,63 246,77 1,77 1,17 1,17 1,17 1,17 1,17 1,17	No. 2, 19 4 6 33 4 4 19 75 75 80 1,4 No. 2, 1	9 2 8 94 10 97 77 97 9 99 9 99 9 99 9 99 9 99 9 90 90 9	216 68 34 16 20 4 2 0 355	66 33 33 39 11	5 965 5 438 5 224 9 246 6 106 7 40 2 13 3 12 7 1,984
Marion. Monroe (Part) Wapello. Mahaska Jasper Van Buren. Davis. Totals Totals Marion. Monroe (Part) Wapello. Wapello. Wapello.	225	District	No. 2, 15 4 6 6 33 6 6 17 8 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	9 2 8 94 100 177 177 177 177 177 177 177	216 63 34 16 20 4 2 0 355	66 33 33 39 11	5 965 5 438 9 240 0 176 6 100 0 7 40 2 13 3 12 7 1,984
Marion. Monroe (Part) Wapello. Mahaska. Jasper. Van Buren. Davis. Jetferson. Totals Marion. Monroe (Part) Wapello. Mahaska Jasper.	225	District 858,63 867,13 87,13 98,67 11,17 1,312.6 District District District 0,33 795,4 90,7 10,000 10,00	No. 2, 19 4 6 6 34 4 4 8 19 75 10 75 10 76 11 77 1 10 77 1 10 77 1 11 77 1	9 2 8 34 100 777 100 100 100 100 100 100	216 63 34 16 20 4 4 2 2 0 355	66 33 33 39 11	5 965 5 438 5 9 240 6 176 6 100 7 44 22 12 3 11 77 1,98 88 1,06 96 96 96 96 96 97 97 98 98 98 98 98 98 98 98 98 98 98 98 98
Marion. Monroe (Part) Wapello Mahaska Jasper Van Buren Davis. Jefferson. Totals Marion. Monroe (Part) Wapello Mahaska Jasper Van Buren.	225	District	No. 2, 19 4 6 6 34 4 4 8 19 75 10 75 10 76 11 77 1 10 77 1 10 77 1 11 77 1	9 2 8 94 10 95 77 97 9 99 9 99 9 90 90 9 90 90 9 90 90 9 90 90 9 90 90 90 90 90 90 90 90 90 90 90 90 90 9	216 68 34 16 16 20 4 4 2 0 0 385 29 21 8 1	66 33 33 39 11	5 965 5 438 9 240 0 176 6 100 7 44 2 13 3 11 7 1,96
Marion. Monroe (Part) Wapello Mahaska Jasper Van Buren. Davis. Totals Marion Monroe (Part) Wapello Mahaska Jasper. Van Buren.	225	District 858,63,63,63,63,63,63,63,64,99,63,63,64,99,63,63,63,63,63,63,63,63,63,63,63,63,63,	No. 2, 19 46 66 336 66 47 18 75 10 75 10 75 10 77 1 77 1 77 1 77 1 77 1 77 1 77 1 7	9 2 8 34 100 777 100 100 100 100 100 100	216 63 34 16 20 4 4 2 2 0 355	66 33 33 39 11	5 965 433 9 240 9 176 6 100 7 40 2 13 3 11 7 1,964
Marion. Monroe (Part) Wapello Mahaska Jasper Van Buren Davis. Jefferson. Totals Marion. Monroe (Part) Wapello Mahaska Jasper Van Buren.	25 33 31 11	District 858,63 867,13 87,13 87,13 1,312,6 District District District 1,312,6 District 1,312,6	No. 2, 19 4 66 334 66 44 18 75 75 75 75 75 75 75 75 75 75 75 75 75 7	9 2 8 94 10 95 77 97 9 99 9 99 9 90 90 9 90 90 9 90 90 9 90 90 9 90 90 90 90 90 90 90 90 90 90 90 90 90 9	216 68 34 16 16 20 4 4 2 0 0 385 29 21 8 1	19	5 965 5 438 9 240 0 176 6 100 0 7 40 2 13 3 12 7 1,984

MINES, OUTPUT AND EMPLOYEES

Number of Mines, Output of Coal, Number of Miners and Other Employees for the Calendar Yéars 1328 and 1929

District No. 3, 1928

	1	District N	0. 3, 192	81		
later to reduce the secondary	Mines in County	All Grades	Number of Miners and Loaders Employed	Number of Other Inside Employees	Number of Outside Employees	Number
Pofk. Boone. Dalas	19 9 4	591,752 399,458 273,470	673 600 447	908 135	77 48	96
Warren	6	163,290	180	109	87	50
Greene	7 3	8,901 4,918	43		29 8	28
Webster	4	9,036	17	10	2 5	1
Totals	52	1,450,825	2,064	2/12 536	206	2,80
	Di	strict No	3, 1929	n n	4	
Polk	20		- I	-	-	
Boone.	11	569,681 483,401	648	189	61	100 mm 806
Dallas. Warren.	4	419,397	499	177	59	967
Guthrie	8	202,063	240	106	58	668 875
Webster	2	1,150	39	3 2	8	50
	3	7,069	20	2 2	1	8 23
Totals	54	1,692,170	2,182	590		2,989
District No. 12		1928	District 3			
District No. 2	52	996,240 1,312,480 1,450,825	1,759 1,432 2,064	438 355 536	227 197 206	2,424 1,984 2,806
	267	3,759,545	5,255	1,329	630	7,216
46-1 Nt 05		1929	SALTO, E	1/1	ting.	TO AN ENTER A
istrict No. 1	99 117 54 1	,251,435 ,393,408 ,692,170	2,114 1,591 2,182	547 412 590	243 207 217	2,904 2,210 2,980
Totals	270 4	,337,013	5,887	1,549	667	8,103
	Cotal for	r the Yes	rs 1928	and 1925	,	Adversed L
atricts No. 1, 2 & 3, 1928 atricts No. 1, 2 & 3, 1929 Totals	270 4,	759,545 337,013	5,255 5,887	1,329	630	7,214 8,103
	537 8,	006,558	11,142	2,878	1,297	15.817

15,817

COAL PRODUCTION AND DISTRIBUTION IN IOWA BY COUNTIES 1928

Counties	Mines	of Coal of All Grades	Sold to Local Trade, Not	Shipped to Points Within the	Shipped to Points Outside the	Sold to Rafl- roads	Used at the Mines for Mine
**************************************	200000	Produced		State	State	Stamp54	Purposes
and the same of the same	4	STATE OF STATE	coll - was	and .			
to bear I of scale to lay	AY min	of you le	io.I rel v	CR6L			
Appanoose.	20 1	484,250	7 66,260	166,373	146,012	103,831	1.774
Lucas	5 10	327,447	1,310	13,750		303,116	9,271
Monroe (Part)	9	115,050	11,841	19,224	813	81,436	1,736
Wayne	- 5	20,304	20,294				10
Adams	7	13,259	13,239				20
Page	5	20,560	16,769	3,450	341	**********	atotherus.
Taylor	3	15,870	11,114	4,166	40		50
Marion	25	858,634	64,924	214,586	858	560,696	17,570
Wapello	29	246,796 87,184	24,024 85,630	158,219	1,020	60,892	2,641
Mahaska		58,678	58,507	1,219	*********		171
Jasper	8	44 954	35,487	6,162	368		102,947
Van Buren		44,964 11,175	6,665	4,385	000		125
Davis	2	3,220	3,000	4,000		August	
Jefferson		1,829	1,811				officia 18
Boone	9	399,458	67,627	219,994	1,075	106,539	4,223
Dallas	4	273,470	7,017	103,559	93,999	67,578	1,317
Greene	3	4,918	4,678				240
Guthrie	7	8,901	8,871				20
Polk	19	591,752	285,394	253,202			Loc 8,133
Warren.	6	163,290	9,914	84,896	205	62,310	6,966
Webster	4	9,036	8,886			********	180
Totals	267	3,759,545	813.282	1,253,185	244.731	1,391,421	56 1/26
100	0.00	628	2000				41036
0 202 100	(N)(1)	140 2001	205			THE STATE OF THE S	York Warrels Webster
7 70 59	900 3850 1	1 E 111	929			Ala)	Websites
Appanoose	63	588,029	1929	251,008	161,252	Alah	2,599
Appanoose	63 8	588,029 442,471	1929	251,008	161,252	95,596 408,226	2,599 9,930
Appanoose	63 8 8	588,099 442,471 158,373	77,574 6,850 14,510	251,008 17,465 17,161	161,252	95,596 408,226 124,145	2,599 9,030 1,930
Appanoose	63 8 8 6	588,029 442,471 158,373 15,370	77,574 6,850 14,510 13,185	251,008	161,252	95,596 408,226	2,599 9,030 1,930 10
Appanoose	63 8 8 6 8	588,029 442,471 158,373 15,370 18,128	77,574 6,850 14,510 13,185 18,003	251,008 17,465 17,161	161,252	95,596 408,226 124,145	2,599 9,930 1,930 10 35
Appanoose. Lucas. Monroe (Part). Wayne. Adams.	63 8 8 6 8	588,029 442,471 158,373 15,370 18,128 30,236	77,574 6,850 14,510 13,185 18,063 20,233	251,008 17,465 17,161 360	161,252	95,596 408,226 124,145	2,599 9,930 1,930 10 35
AppanooseLucas	63 8 8 6 8	588,029 442,471 158,373 15,370 18,128 30,236 8,828	77,574 6,850 14,510 13,185 18,063 20,233 8,470	251,008 17,465 17,161 360	161,252 627 1,015	95,506 408,226 124,145 800	2,599 9,030 1,990 10 35
Appanoose. Lucas. Monroe (Part). Wayne. Adams. Page. Taylor.	63 8 8 6 8 4 4	588,029 442,471 158,373 15,370 18,128 20,236 8,828 795,671	77,574 6,850 14,510 13,185 18,008 20,233 8,470 71,618	251,008 17,465 17,161 360 358 216,931	161,252 627 1,015	95,506 408,226 124,145 800	2,599 9,030 1,030 10 35
Appanoose. Lucas. Monroe (Part). Wayne. Adams. Page. Taylor. Marlon. Monroe (Part).	63 8 8 6 6 8	588,099 442,471 158,373 15,370 18,128 20,236 8,828 796,671 259,921	77,574 6,850 14,510 13,185 18,063 20,233 8,470	251,008 17,465 17,161 360	161,252 627 1,015	95,506 408,226 124,145 800	2,509 9,930 1,930 10 35 17,541 1,445
Appanoose Luess	63 8 8 6 8 4 3 33 9	588,029 442,471 158,373 15,370 18,128 20,236 8,828 795,671 359,921 103,814 56,741	77,574 6,850 14,510 13,185 18,063 20,233 8,470 71,613 20,623 108,063 55,334	251,008 17,465 17,161 360 358 216,931 231,970 158 700	161,252 627 1,015	95,506 408,226 124,145 800	2,599 9,030 1,030 10 35
Appanoose. Lucas. Monroe (Part). Wayne. Adams. Page. Taylor. Marlon. Monroe (Part). Wapello. Mahaska	63 8 8 6 8 8 4 33 9 27 30 7	588,029 442,471 158,373 15,370 18,128 20,236 8,528 795,671 259,921 103,814 56,741 57,525	77,574 6,850 14,510 13,185 18,068 20,233 8,470 71,618 20,023 108,033 55,334 48,988	251,008 17,465 17,161 360 216,931 231,970 158	161,252 627 1,015 814 4,884	95,506 406,226 124,145 800 488,772 102,119	2,599 9,990 1,990 10 35 3 17,541 1,495 623 207 4,537
Appanoose Lucas Monroe (Part) Wayne Adams Page Taylor Marlon Monroe (Part) Wapello Mashaka	63 8 8 6 8 4 3 33 9 27 30 7	588,029 442,471 158,573 15,370 18,128 20,236 8,828 795,671 259,921 103,814 56,741 57,525 13,333	77,574 6,850 14,510 13,185 18,003 20,233 8,470 71,613 20,023 103,033 55,334 48,988 13,200	251,008 17,465 17,161 360 358 216,931 231,970 158 700	161,252 627 1,015 814 4,884	95,596 408,226 124,145 800 458,772 102,119	2,599 9,030 1,930 10 35 23 17,541 1,495 623 207 4,537
Appanoose. Lueas. Monroe (Part). Wayne. Adams. Page. Taylor. Marlon. Monroe (Part). Wapello. Mahaska	63 8 8 6 8 8 4 33 33 27 7 7 7 7	588,099 442,471 158,573 15,370 18,128 20,236 8,828 796,671 359,921 108,814 56,741 57,525 13,333 2,917	77,574 6,850 14,510 13,185 18,062 20,233 8,470 71,613 20,623 100,603 56,334 48,088 13,200 2,667	251,008 17,465 17,161 360 358 216,931 231,970 158 700	161,252 627 1,015 814 4,884	95,506 406,226 124,145 800 488,772 102,119	2,599 9,990 1,990 10 35 3 17,541 1,495 623 207 4,537
Appanoose Lucas Monroe (Part) Wayne Adams Page I aylor Marlon Wapello Mashaska Jasper Van Buren Davis	63 8 8 6 8 6 8 9 27 30 7 7 7 7	588,029 442,471 158,373 15,370 18,128 30,236 8,828 795,671 259,921 103,814 56,741 57,525 13,333 2,917 3,486	77,574 6,850 14,510 13,185 18,063 20,233 8,470 71,613 20,023 102,023 55,334 48,088 13,200 2,667 3,480	251,008 17,465 17,161 360 258 216,931 231,970 1,588 700 4,000	161,252 627 1,015 814 4,384	95,506 408,226 124,145 800 488,772 102,119	2,599 9,030 1,030 10 35 3 17,541 1,495 623 207 4,537 183
Appanoose. Lucas. Monroe (Part). Wayne. Adams. Page. Taylor. Marlon. Monroe (Part). Wapello. Mahaska Jasper. Van Buren. Davis. Jefferson.	63 8 8 6 8 8 4 33 97 27 27 7 7 7 7 7 2	588,029 442,471 158,373 15,370 18,128 20,236 8,828 795,671 259,921 103,814 56,741 57,525 13,333 2,917 3,486 569,681	77,574 6,850 14,510 13,185 18,063 20,233 8,470 71,618 20,623 65,334 68,988 13,200 2,667 3,486 2,667 3,486	251,008 17,465 17,161 280 216,031 231,970 4,000	161,252 627 1,015 814 4,384 500	95,506 408,226 124,145 800 458,772 102,119	2,599 9,930 1,930 10 35 4,3 11,691 1,425 623 297 4,537 188
Appanoose Lucas Monroe (Part) Wayne Adams Page Taylor Monroe (Part) Wapello Mashaska Jasper Van Buren Davia Jefferson	63 8 8 6 8 6 8 4 3 33 9 27 7 7 7 7 2 2 2 4	588,099 442,471 158,373 15,370 18,128 20,236 8,528 795,671 259,921 103,814 56,741 57,525 13,333 2,917 3,486 569,681 419,897	77,574 6,850 14,610 13,185 18,063 20,233 8,470 71,613 20,023 102,063 103,063 103,063 13,200 2,667 3,486 286,341	251,008 17,465 17,161 360 258 216,931 231,970 1,588 700 4,000	161,252 627 1,015 814 4,384 500	95,506 408,226 124,145 800 488,772 102,119	2,509 9,930 1,930 10 35 3,3 11,641 1,445 907 4,537 4,537 4,537 1,639
Appanoose Lucas Monroe (Part) Wayne Adams Page Taylor Marion Monroe (Part) Wapello Mahaska Jasper Van Buren Dayls Jefferson Polk Dallas Greene	63 8 8 6 8 8 4 33 33 37 7 7 7 7 2 2 2 2 4 4 4 4 4 4 4 4 4 4 4	588,029 442,471 158,473 15,370 18,128 20,236 8,838 706,673 359,921 103,814 56,741 57,825 13,838 2,917 3,489 569,681 419,897 7,609	77,574 6,850 14,510 13,185 18,963 20,233 8,470 71,613 20,623 102,663 48,988 13,260 2,667 3,486 255,344 113,261 6,954	251,008 17,465 17,161 280 216,031 231,970 4,000	161,252 627 1,015 814 4,384 500	95,506 408,226 124,145 800 458,772 102,119	2,599 9,930 1,930 10 38 38 4,537 4,5
Appanoose Lucas Monroe (Part) Wayne Adams Page Taylor Morroe (Part) Wapello Mahaska Jasper Van Buren Davis Jefferson Polk Jorden	63 8 8 6 8 8 6 8 9 27 30 7 7 7 7 2 2 2 3 4 4 3 6 6 4 4 6 6 7 7 7 7 7 8 7 8 7 8 7 8 7 8 7 8 7 8	588,099 442,471 158,373 15,370 18,128 20,296 8,528 705,673 359,914 66,741 57,525 13,333 2,333 4,89 569,681 419,897 7,695 9,406	77,574 6,850 14,510 13,185, 18,063 8,470 71,613 20,023 102,063 55,334 64,988 13,200 2,667 3,486 286,341 13,200 2,663 16,954 9,381	251,008 17,465 17,461 360 216,931 231,970 4,000 242,339 307,655	161,252 627 1,015 514 4,384 500	95,696 408,226 124,145 800 458,772 102,119 22,221 96,842	2,599 9,930 1,930 35 32 17,611 1,455 623 4,537 4,537 1,639 1,639 1,639
Appanoose. Lucas. Monroe (Part). Wayne. Adams. Page. Taylor. Monroe (Part). Wapello. Monroe (Part). Wapello. Jasper. Van Buren. Davis. Jefferson. Jefferso	63 8 8 6 6 8 4 33 33 9 27 7 7 2 2 30 4 4 3 6 6 11	588,029 442,471 155,373 15,373 15,373 18,128 20,286 8,598 795,671 359,921 103,814 57,525 13,338 2,917 3,449 57,625 13,338 419,897 7,693 9,405	77,574 6,850 14,510 13,185 18,963 20,233 8,470 71,618 20,623 64,988 13,200 2,667 3,486 2,673 3,486 9,381 7,381 7,381 7,381	251,008 17,465 17,461 17,161 360 231,76 158 700 4,000 242,339 307,655	161,252 627 1,015 814 4,384 500	95,606 408,226 124,145 800 458,772 102,119 22,221 96,842	2,599 9,930 1,590 1,590 35 32 11,641 1,445 623 2077 4,537 1,639 1,639 1,639 1,639 1,639 2,681
Appanoose Lucas Monroe (Part) Wayne Adams Page Taylor Morroe (Part) Wapello Mahaska Jasper Van Buren Davis Jefferson Polk Jordan	63 8 8 6 8 4 3 33 9 27 7 7 7 7 2 2 9 9 4 3 6 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	588,029 442,471 158,373 15,370 18,128 20,296 8,528 705,671 259,921 103,814 56,741 57,525 13,333 2,917 3,480 569,681 1419,597 7,669 9,400 483,401 202,063	77,574 6,850 14,510 13,185, 18,063 8,470 71,613 20,023 102,063 55,334 48,988 13,209 2,653 3,486 286,341 6,954 9,954 70,237 12,714	251,008 17,465 17,461 360 216,931 231,970 4,000 242,339 307,655	161,252 627 1,015 514 4,384 500	95,696 408,226 124,145 800 458,772 102,119 22,221 96,842	2,599 9,930 1,930 35 32 17,611 1,455 623 4,537 4,537 1,639 1,639 1,639
Appanoose Lucas Monroe (Part) Wayne Adams Page Taylor Morroe (Part) Wapello Mahaska Jasper Van Buren Davis Jefferson Polk Jordan	63 8 8 6 8 4 3 33 9 27 30 7 7 7 2 2 2 30 4 4 3 6 6 1 1 1 1 1 1 1 2 2 2 2 3 4 4 4 1 1 1 1 1 1 1 2 2 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	588,029 442,471 158,373 15,370 18,128 29,296 8,828 70,677 259,921 108,812 2,917 3,489 569,681 14,57,669 9,400 483,401 202,083 1,150	77,574 6,850 14,510 13,185 18,963 20,233 8,470 71,618 20,623 64,988 13,200 2,667 3,486 2,673 3,486 9,381 7,381 7,381 7,381	251,008 17,465 17,461 17,161 360 231,76 158 700 4,000 242,339 307,655	161,252 627 1,015 814 4,384 500	95,606 408,226 124,145 800 458,772 102,119 22,221 96,842	2,509 9,930 1,930 35 32 11,691 1,495 683 297 4,587 1,589 1,580 1,5
Appanoose Lucas Monroe (Part) Wayne Adams Page Taylor Marion Monroe (Part) Wapelo Mshaska Jasper Van Buren Davis Jefferson Polk Greene	63 8 8 6 8 4 3 33 9 27 30 7 7 7 2 2 2 30 4 4 3 6 6 1 1 1 1 1 1 1 2 2 2 2 3 4 4 4 1 1 1 1 1 1 1 2 2 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	588,029 442,471 158,373 15,370 18,128 20,296 8,528 705,671 259,921 103,814 56,741 57,525 13,333 2,917 3,480 569,681 1419,597 7,669 9,400 483,401 202,063	77,574 6,850 14,510 14,510 14,510 13,18,062 20,233 8,470 71,613 20,623 102,663 55,334 48,988 13,200 2,667 13,486 266,341 13,261 6,964 9,381 70,227 1,150	251,008 17,465 17,461 17,161 360 231,76 158 700 4,000 242,339 307,655	161,252 697 1,015 814 4,384 500	95,506 466,226 124,145 800 488,772 102,119 22,221 96,842 137,851 73,411	2,599 9,930 1,590
Appanoose Lucas Monroe (Part) Wayne Adams Page Taylor Marion Monroe (Part) Wapello Mahaska Jasper Van Buren Davis Jefferson Polk Dallas Gürene Güthrie Boone Warren Webster	63 8 8 6 8 4 3 33 9 27 30 7 7 7 2 2 2 30 4 4 3 6 6 1 1 1 1 1 1 1 2 2 2 2 3 4 4 4 1 1 1 1 1 1 1 1 2 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	588,029 442,471 188,373 115,373 18,128 20,206 8,828 706,671 309,921 30	77,574 6,850 14,510 14,510 14,510 13,18,062 20,233 8,470 71,613 20,623 102,663 55,334 48,988 13,200 2,667 13,486 266,341 13,261 6,964 9,381 70,227 1,150	251,008 17,465 17,165 17,165 216,031 231,970 4,000 4,000 242,339 307,655 271,482 1111,429	161,252 697 1,015 814 4,384 500	95,506 466,226 124,145 800 488,772 102,119 22,221 96,842 137,851 73,411	2,599 9,930 1,590
Appanoose Lucas Monroe (Part) Wayne Adams Page Taylor Marion Monroe (Part) Wapello Mahaska Jasper Van Buren Davis Jefferson Polk Dallas Greene Guthrie Boone Warren Webster Totals	63 8 8 6 8 4 3 33 9 27 30 7 7 7 2 2 2 30 4 4 3 6 6 1 1 1 1 1 1 1 2 2 2 2 3 4 4 4 1 1 1 1 1 1 1 1 2 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	588,029 442,471 188,573 115,373 18,198 20,298 8,898 796,671 359,921 359,921 359,921 367,425 567,441 567,441 567,441 567,441 567,441 567,441 3489 599,940 483,401 202,069 1,150 4,337,013	77,574 6,850 14,510 14,510 14,510 13,18,062 20,233 8,470 71,613 20,623 102,663 55,334 48,988 13,200 2,667 13,486 266,341 13,261 6,964 9,381 70,227 1,150	251,008 17,465 17,165 17,165 216,031 231,970 4,000 4,000 242,339 307,655 271,482 1111,429	161,252 697 1,015 814 4,384 500	95,506 466,226 124,145 800 488,772 102,119 22,221 96,842 137,851 73,411	2,599 9,930 1,590

AVERAGE DAYS OF EMPLOYMENT HOUSE THE

1928

Andrew Peters Sent to America.	Miner Los		Other ground I	Under- Employees	Sur Empl	ace Oyees
Counties	Average Days in Shipping Mines	Average Days in Local or Wagon Mines	Average Days in Shipping Mines	Average Days in Local or Wagon Mines	Average Days in Shioping Mines	Average Days in Local or Wagon Mines
Appanoose Lucas Mouroe (Part) Wayne Adams Page Taylor Marion Morroe (Part) Wapello Mahakka Jasper Van Buren Davis Jefferson Boone Dallas Greene	163 159 139 220 186 250 190 	111 140 102 185 161 72 150 151 165 135 141 253 127 126 126	169 165 160 220 222 266 211 211 138 159	70 140 49 111 56 72 278 167 157 204 212 176 87	169 167 163 220 236 262 262 213 138 159	100 144 118 123 166 177 160 144 144 123 155 151 111
Guthrie	225 179	129 148 108 117	250 206	89 132 68 60	251 218	13 14 6 7

Appanoose	139.2	119.1	148.2	84.3	151.4	106.4
Lucas	208.6	119.5	214.0	91.6	219.2	20014
Monroe (Part)	234.0	138.0	250.0	105.3	284.0	139.4
Wayne	70.0	128.0	85.0	98.0	76.0	193.0
age	2000	140.0	0010	140.0		141.0
'aylor	172.0	95.0	172.0	80.0	216.0	95.0
dams		173.3	******	83.1	1000000	77.1
Vapello	87.0	117.0		80.0	87.0	199.5
dahaska	0110	135.0	100000000000000000000000000000000000000	82.2	01.0	128.4
darion	248.2	134.5	961.0	82.2	258.6	128.4
fonroe	184.0	127.4	205.0	53.6		140.5
asper	106.0	121.4			200.0	196.3
an Buren			*******	102.2	********	141 4
	*******	130.6	*********	79.1	*********	
efferson		171.4	*******	90.0	******	306.4
		150,0	*******	150.0		142.4
A STATE OF THE PARTY OF THE PAR		131.3	278.2	123.0	275.0	115:1
**	198.0	******	232,2		281.2	
	238.0	114.0	244.0	69.1	257.4	91.0
W. b	137.0	147.3	144.1	142.3	141.2	134.1
	*******	84.0		84.0		54.0
******	*******	136.2		83.0		55.0
outhrie	********	138.4	********	58.4	*********	156.6
Totals	148.1	129.5	157.9	89.6	162.6	117.

MINES, OUTPUT AND EMPLOYEES BY COUNTIES

Local or Wagon Mines

1928

Countles	Wagon or Local Mines	Tons of Coal of All Kinds Produced	Miners and Loaders Em- ployed	Other Under- ground Em- ployees	Surface Em- ployees	Total Number of Em- ployees
Appanoose Lucas Monroe (Part) Wayne Page Taylor Adams Mahaska Dawis Wapello Monroe (Part) Van Buren Jefferson Marion Jasper Polk	45 2 7 5 4 4 2 8 30 2 29 3 7 2 29 3 8 18 18 18 18 18 18 18 18 18 18 18 18 1		314 9 33 54 7 9 62 130 9 167 8 29 9 9 64 330 80	56 2 2 2 8 6 4 16 2 34 4 11 20 90 13	7 3	419 13 43 70 16 11 75 176 13 240 11 40 12 115 100 465
Boone Dallas Warren Guthrie Greene Webstet	7	8,901	43 17	10	3 8 2 5	3 5 1 2

1929

	40	80,126	297	52	43	892 19
Appanoose	5	3,535	16	3		96
Lucas	7	39,501	69	14.	12	82
Monroe (Part)	- 6	18,128	67	. 5	10	90
Adams.	4	20,236	57	24	9	8
Page	0	1,011	5	1	2	
Taylor		12,045	37	8	6.	51
Wayne.	- 00	41,273	113	26	19	158
Marion	120	103,150	184	30	23	247
Wapello.	26	56,741	145	29	30	204
Mahaska	30	5,748	11	3	. 5	19
Monroe (Part)	4.1	57,525	76	21	21	118
Jasper	7		31	8	8	42
Van Buren	7	13,333	9	1	3	18
Davis.	2	2,917	15	3	3	21
Jefferson	2	3,486	48	13	7	68
Boone	5/	15,247	90	140		Delini.
Dallas		*********	0.00	104	34	506
	17	239,868	367	104	6	58
	6	6,945	38	8	8	50
	6 3	9,409	39		1	28
Guthrle	3	7,069	20	2 2	1	3
Greene.	2	1,150	5	2		
Webster		-	The state of the s	010	261	2,266
200	217	738,528	1,649	356	204	2,100
Totals	See.					-

SHIPPING MINES PHOTO RAPER

Mines, Output and Employment by Counties

1928

Counties	Num- ber of Mines	Tons of Coal of All Grades Produced	Miners and Loaders Em- ployed	Other Under- ground Em- ployees	Surface Em- ployees	Total Number of Em- ployees
Appanoose, Lucas. Monroe (Part).	29 4 2 1	406,769 326,133 107,582	788 223 178	155 133 54	78 39 19	1,023 390 251
TaylorAdams	1	18,400 13,180	47 35	12 6	7 3	66
Marion Monroe (Part) Van Buren Mabaska	5	816,472 240,280	597 332	205 63	48 32	850 427
Jasper		***************************************				
Davis Polk Dallas	3 4	338,980 273,470	343 447	118	35	491
Boone Warren Guthrie	2	363,246 157,204	610	122 73	37 39 26	598 771 253
Greene						reledant.
Totals	60	3,061,716	3,754	1,045	363	5,162

1929

Totals	54	8,598,485	4,238	1,198	406	5,837
Greene						
Dallas Boone Warren Webster	3 4 6 2	329,813 419,397 468,154 195,118	281 499 683 202	85 111 164 97	27 58 52 23	398 608 899 322
Van Buren Davis				:		- Long
Monroe (Part). Jasper. Jefferson.	5	354,178	371	79	85	485
Marion	4	754,398 664	633	217	49	800
Taylor	1	7,817	30	26	2	
Appanoose_ Lucas_ Monroe (Part)_ Wayne Page_	28 3 1 1	507,903 438,936 118,782 3,325	991 397 118 30	203 176 30 5	102 42 12 3	1,296 615 160

Mines, Output and Employment by Counties

1928

Counties	Mines in County	Amount of Coal of All Grades Produced	Number of Min- ers and Loaders Em- ployed	Number of Other Inside Em- ployees	Number of Outside Em- ployees	Total Number of Em- ployees
Appanoose	70	484,250	1,102	211	127	1,440
Lucus	5	327,447	232	135	41	408
Monroe (Part)	9	115,060	211	56	27	294
Wayne	5	20,304		8	8	70
Adams	7	13,259	62		v	55
Taylor	3	15,370	44	18	10	80
Page	5 25	20,560	684	216	65	968
Marion	8	858,634 246,796	340	63	35	438
Monroe (Part)	29	87,184	167	.34	39	240
Wahaska	30	58,678	130	16	30	176
Jasper	8	44,964	64	20	16	100
Van Buren	7	11,175	29	4	7	40
Davis	9	3,220	9	2	2	15
Jefferson	9	1,829	9		3	15
Polk	19	501,752	673	203	77	963
Boone	9	399,458	690	135	48	875
Dallas	4	273,470	447	109	37	598
Warren	6	163,290	180	79	29	28
Guthrie	7	8,901	43		8	51
Webster.	4	9,036	14	10	5	20
Greene	8	4,918	17		2	15
Totals	267	8,759,545	5,255	1,329	630	7,214

1929

Appanoose	63	588,029	1,288	255	145	1,688
Lucas	8	442,471	418	179	42	634
Monroe	8	158,373	187	44	24	255
Wayne	6	15,370	67	18	9	89
Adams	8	18,128	67	. 5	10	82
Taylor	3	8,828	35	27	4	66
Page	4	20,236	57	24	9	90
Marion.	33	795,671	746	243	68	1,067
Monroe (Part)	9	359,921	382	82	40	504
	27	106,814	187	30	84	251
Wapello	30	56,741	145	29	30	204
	2	57,525	76	21	21	118
Jasper		13,333	31	8	8	42
Van Buren	- 0	2,917	9	1	8	18
	2	3,496	15	- 2	8	21
Jefferson	20	569,681	648	189	61	898
Polk	11		731	177	50	967
Boone	11	483,401	499	iii	58	668
Dallas		419,397		106	29	1 875
Warren	8	202,063	240	106	29	810
Guthrie	6	9,409	89	3	8	50
Webster	2	1,150	B	2	11	8
Greene	3	7,069	20	2	- 11	23
Totals	271	4,337,013	5,887	1,549	667	8,108

INSTALL MEDICAL MONTHS

POWDER, DYNAMITE, PERMISSIBLE EXPLOSIVES, MINING MA-CHINES, HORSES AND MULES, DAYS IDLE, ETC.

1928

Counties	powder used at		permissible ex- sed at mines	mining machines	es and mules afnes	re closed down ed down be- es or disagree-	tons produced ch strikes or	
101 01 02 10 02 10 04 10 04 10 04	Kegs of black mines	Pounds of dyn	Pounds of perplosives used	Number of min in use	Number of horses and mules used at the mines	Days mines were or partly closed cause of strikes ments	Curtailment in ton because of such disagreements	
Appanoose	92 11,981 7,941	1,763 40,550 5,291 150	23,700	20 7	122 19 29 4	885 4 322	\$8,000 4,44) 86,300	
dams		1.340		4				
aylor	*******	2,960 2,200 26,285	Ed.					
Inrion	51,634 20,218	26,286	************	3 1	84 41	11	10,510	
Vapello	20,218 5,374	3,345	*******	1	38			
asper.	3,690 1,351	3,685 185	25	5	33			
an Buren	917	650			3	18	19	
efferson	174	50 200	********		2		********	
Boone	23,859	11,640		2	25	1	1,40	
Pallas	11,086 217	3,100	35,850	6	52	1	28	
Juthrie	21	35						
Polk	18,164 843	35,647 2,750	43,456 113,450	20	88 23	2 2	1,59	
Webster	170	385	1101100					
Totals	158,129	165,793	216,481	80	572	1,246	158,02	
	100	100	1929				and a	
						7114	Committee	
	8	1,885		29	151	30	1,50	
ucas	17,426	18,560		29 11	48	30	1,50	
Jucas	17,426 11,119	18,560 9,483 250		29 11		30	1,50	
Aucas	17,426 11,119	18,560 9,483 250 1,180		11	48 28		1,50	
Adams Page Favior	17, 426 11, 119 500	18,560 9,483 250 1,180 2,880 1,330		11	48 28 8	1	- 1 - 6	
Adams Page Favior	17, 426 11, 119 500 50, 330	18,560 9,483 250 1,180 2,880 1,330 17,230	1,400	11	48 28 8		- 1 - 6	
Juens donroe Wayne Adams Page Faylor Marion Monroe (Part) Wapello	17,426 11,119 500 50,330 26,219 5,356	18,560 9,483 250 1,180 2,880 1,330 17,230 34,565 2,340	410	11	48 28 8 76 44 30	1	- 1 - 6	
Aucas Monroe Wayne Adams Page Faylor Marion Monroe (Part) Wapello Muhakka	17,426 11,119 500 50,330 26,219 5,356 4,006	18,560 9,483 250 1,180 2,880 1,330 17,230 34,565 2,340 4,437	********	2 6 2	48 28 8 76 44 30 31	1	- 1 - 6	
Aucas Monroe Nayne Adams Page Faylor Marion Monroe (Part) Wapello Mahaska Jasper Van Buren	17,425 11,119 500 50,330 26,219 5,356 4,096 1,632 856	18,560 9,483 250 1,180 2,880 1,330 17,230 34,565 2,340 4,437 250 420	410	2 6	48 28 8 76 44 30 31 9 4	1	- 1 - 6	
Jucas Monroe Wayne Adams Page Taylor Marion Monroe (Part) Wapello Mahaska Jasper Van Buren Davis	17,425 11,119 500 50,330 26,219 5,356 4,096 1,632 856 498	18,560 9,483 250 1,180 2,880 1,330 17,230 34,565 2,340 4,437 250 420 50	410 4,130 250	2 6 2	48 28 8 76 44 30 31 9 4 2	1	- 1 - 6	
Jucas Monroe Wayne Adams Page Taylor Marion Monroe (Part) Wapello Mahaska Tasper Van Buren Davis Lefferson Boone	17, 426 11, 119 500 50, 330 26, 219 5, 356 4, 096 1, 632 856 498 250 28,875	18,560 9,483 250 1,180 2,880 1,330 17,230 34,565 2,340 4,437 250 420	410 4,130	2 6 2	48 28 8 76 44 30 31 9 4	1	6,40	
Aucas Monroe Wayne Adams Page Caylor Marion Monroe (Part) Wapello Mahaska Jasper Kan Buren Davis Jetferson Boone	17,426 11,119 500 50,330 26,219 5,356 4,006 1,632 856 408 250 28,875	18,560 9,483 250 1,180 2,880 1,330 17,230 34,565 2,340 4,437 250 420 50 50 12,716	410 4,130 250	2 6 2 4	48 28 8 76 44 30 31 9 4 2 1	6	6,40	
Appanoose Lucas Monroe Wayne Adams Page Faylor Marion Monroe (Part) Wapello Mahaska Lasper Van Buren Davis Lefterson Boone Greene Guthrie Dallas	17,426 11,119 300 50,330 26,219 5,356 4,096 1,682 856 498 250 28,875 360 2	18,560 9,483 250 1,180 2,880 17,230 34,565 2,340 4,437 250 420 50 12,716	410 4,130 250 1,255	11 2 2 3 4 4 2 2 2 3 4 4 3 4 4 4 4 4 4 4 4	48 28 8 76 44 30 31 9 4 2 1	6	6,40	
Lucas Monroe Wayne Adams Page Faylor Marion Monroe (Part) Wayello Wayello Mashaka Lasper Van Buren Davis Lefferson Boone Greene Guthrie Dallas Polk	17, 426 11, 119 500 50, 330 26, 219 5, 356 4, 096 1, 632 856 250 28, 875 22, 765	18,560 9,483 250 1,180 2,880 17,230 34,665 2,340 4,437 250 420 50 56 12,716	410 4,130 250 1,255 5,504 2,887	2 6 2 4 2 2 2 2	48 28 8 76 44 300 31 9 4 2 1 1 33	1 6	1,50 6 6,40 2,00	
Lucas Monroe Wayne Addams Page Faylor Marion Monroe (Part) Wapello Mahaska Jasper Van Buren Davis Lefferson Boone Greene Guthrie Dallas	17, 426 11, 119 500 50, 330 26, 219 5, 356 4, 096 1, 632 250 28, 875 360 211, 698	18,560 9,483 250 1,180 2,880 17,230 34,565 2,340 4,437 250 420 50 12,716	410 4,130 250 1,255	11 2 6 2 4 2 2	48 28 8 76 44 30 31 9 4 2 1 33	6	6,40	

SUMMARY OF IOWA COAL PRODUCTION AND DISTRIBUTION

1928	10.708
Number of tons prepared lump coal produced	44,030
Number of tons of and	59 545
Total number of tons of coal produced	5 255
Total numbers and loaders employed	1 220
Average number of all other underground employees	630
Average number of miners and loaders employees Average number of all other underground employees	620
Average number of surface employee	
Total number of employees. Average number of days miners and loaders were employed	STATE OF THE STATE
number of days miners and loaders	178.3
Average number of day	200.0
local or wagon mines. Average number of days other underground employees Average number of in local or wagon mines.	1993
local or wagon employees Average number of days other underground employees were employed in local or wagon mines	122.0
Average number of days surface	136
Number of pounds of dynamite used in Iowa mines. Number of pounds of permissible explosives used in Iowa mines. Number of mining machines in operation in Iowa mines. Number of mining machines in operation in Iowa mines.	216,481
mines. Number of mining machines in operation in lowa mines. Number of horses and mules worked in lowa mines. Average number of horse mines were closed down because of	572
or sales Estimate total loss of output because of lack of orders or sales	513.167
Estimate total loss of same	0.20,20
sales produced in	1928
DISTRIBUTION OF IOWA COAL PRODUCED IN	972 982
do not shinned	4 05 2 1 2 5
DISTRIBUTION OF IOWA COAL PRODUCED IN Sold to local trade, not shipped Shipped to points within the state. Shipped to points outside the state.	944 721
Shipped to points while the state	+ 201 491
Shipped to points outside the	1,001,402
Shipped to points within Shipped to points outside the state	90,320
Shipped to points outside the sales Sold to railroads. Used at mines for mine purposes	0.750.545
Used at mines for mine purpose.	3,159,540
Total	
Total	
A THE PART OF THE PARTY OF THE	
and where the last to the second or the party and the second and a	
The state of the s	
The Real Property Co. For party the party medical and the party of the	
the restriction of the first particular in the section of a property of the section of the particular in the section of the se	

SUMMARY OF IOWA COAL PRODUCTION AND DISTRIBUTION

1929	
Number of tons prepared lump coal produced	1 771 574
Number of tons of mine run coal produced	1 779 955
Number of tons of slack coal produced	798 101
Admost of tone of stack coar produced (100,184
Total number of tons of coal produced	4.337 019
Average number of miners and loaders employed	5,887
Average number of all other underground employees	1,549
Average number of surface employees	667
THE THE PROPERTY OF THE PROPER	001
Total number of employees.	8,102
Average number of days miners and loaders were employed	THE RESERVE
in shipping mines	168.3
Average number of days other underground employees	OH GROSSIA
were employed in shipping mines	180.4
Average number of days surface employees were employed	DO BERTSON
in shipping mines	184.2
Average number of days miners and loaders were employed	
in local or wagon mines	127.5
Average number of days other underground employees	on others
were employed in local or wagon mines	88.3
Average number of days surface employees were employed	UD ASSESSED
in local or wagon mines	
Number of kegs of powder used in Iowa mines	
Number of pounds of dynamite used in Iowa mines	146,268
Number of pounds of permissible explosives used in Iowa	the graduates
mines	17,211
Number of mining machines in operation in Iowa mines	103
Average number of horses worked in Iowa mines	607
Average number of days mines were closed down because of	
strike or disagreement with employees	72
Estimate of curtailment of output on account of disagree-	
ment	36,960
Number of days miners were idle because of lack of orders	
or sales	2,689
Estimate total loss of output because of lack of orders or	
sales	679,456
DISTRIBUTION OF IOWA COAL PRODUCED IN 1	929
Sold to local trade, not shipped	877.297
Shipped to points within the state	
Shipped to points outside the state	
The state of the s	

Used at mines for mine purposes..... 57,827

GYPSUM PRODUCTS OF IOWA

1929

County	Tons of gypsum products pro-	Miners and loaders employed	Other underground employees	Surface employees	Total number of employees	Number of mining machines in use	Numbr of borses and mules used at the mines-
Webster	701,661 8,236	82	34	176 14	202 29	17 0	18
Total	709,897	91	40	190	321	17	21

County County	Tons of gypsum products pro- duced	Total number of employees	Average days miners and loaders worked	Average days other underground em- employees worked	Average days sur- face men worked	Kegs of black powder used at mines	Pounds of dynamike used at mines
Webster	701,661 8,236	292 29	1,113	1,079	1,298 240	1,196	342,846 18,540
Total	709,897	321	1,853	1,319	1,538	1,196	361,386

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 Inspector's Office.

In these inspections the gypsum mines of the state have been generally found in excellent condition. Where recommendations have been made, we have found the managers of the mines willing to comply with requests made. There has also been an excellent spirit of co-opera-tion 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.

The Gypsum industry is confined to Webster and Appanoose counties. Webster produces about 95.5 per cent of the total production in Iowa. The rock is from 20 to 50 feet below the surface in Webster county,

and about 550 feet in Appanoose.

The U. S. Gypsum Co. are using the strip method and are removing from 20 to 50 feet of earth from over the rock. This has been working quite satisfactorily.

The above table shows the output, etc., of the gypsum mines in Iowa.

REPORT OF FIRST INSPECTION DISTRICT

W. E. Holland, Inspector, Centerville, Iowa

This district is composed of the following counties: APPANOOSE, MONROE (part) LUCAS, WAYNE, TAYLOR, PAGE and ADAMS. The total number of men and boys employed in and around the mines of the district is approximately 2,904.

The total number employed has increased over the last biennial period, while the total number of mines has decreased. The sinking of one of the largest mines in the state in Lucas county during 1929, is responsible for the increased number of employees in the district. The output from this mine will more than compensate in tonnage, the loss of some mines which have been abandoned. The total tonnage shows an increase of 255,195 over the last year.

APPANOOSE COUNTY

This county shows an increase of 103,779 tons over the year 1928. The county produced in 1928, 484,250 tons of coal of all kinds, while in 1929 the amount was 588,029 tons. This county is unique among the coal producing counties of the state in that it is underlaid with perhaps the largest connected acreage of clean workable coal of any county in the state. The increase in last years tonnage was largely due to the railroads again taking a stipulated weekly tonnage from the mines here, after a lapse of many months in which none was taken, This is of paramount importance as it enables the mines to work part time during the summer months, which is not only beneficial but absolutely necessary for the economical operation of longwall mines. At the present time the price of local coal F. O. B. at the mine seems to have settled at \$2.50 per ton, with a slightly higher price to the railroads. When the present price of mining and day work in the mines is taken into consideration, this is positively a justifiable and bedrock price for commercial coal. Nevertheless, there has prevailed in this county for a number of years in the past, the tactics of trying by unscrupulous means to obtain an unfair advantage over the other competitors to the trade, by lowering the price of commercial coal below what the cost of production plus a reasonable profit on the property investment would judiciously warrant.

Cut throat competition has so completely ruined every industry that it was ever allowed to enter, and did it so thoroughly that the combined enemies of it that remained were as harmless and inoperative as soda water. It is in the strictest sense a positive evil, but not a necessary one. However, it has hitherto successfully resisted every effort for its removal; and left in its wake a trail of suffering, jealousy and recrimination that for comparable intensity is unparalleled.

Its distinctive characteristics have been carefully and scientifically diagnosed, antidotes for the relief of the scourge have been tried, some seemed to give temporary relief only to have it return later in a more malignant and aggravated state. In comparison it is like leprosy for being incurable, and if ultimately some permanent cure is found for the pestilential progress of them both, it will be hailed with joy unspeakable and endless delight.

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The Organical State of the controlled to Webster and Appendix controlled in the Organic State State of the root of the roles preduction to hear roots; the controlled in the root of the curries in Webster roots; and about 350 feet in Appendix.

the L. S. Cripcam Co. are never the virty marked and the local residual from the total facilities of the local residual confidencing.

The above table charge the output, site, of the ground infere in tow-

LUCAS COUNTY

This county will, during the coming year, place itself among the leading counties of the state and continue there for some time. The Central Iowa Fuel Company have two large mines that are capable of producing more than a thousand tons each, per day. One is electrically equipped throughout, and the other one has a steam hoist.

The Consolidated Indiana Coal Co. put down a new mine in this county last year. The shaft is timbered with 6x6 dressed timbers from top to bottom. The mine bottom is concreted the entire length of both loaded and empty tracks, with steel cross bars overhead. It is ventilated by a Jeffries multiblade fan capable of producing 75,000 cubic feet of air per minute. This will be ample to care for the needs of the mine during its entire operation. The daily tonnage from this mine alone will approximate 2,000 tons daily. These three mines are equipped with hollow tile wash houses, showers and everything necessary for the convenience of the employees. They are located about ten miles northeast of Charlton.

The other counties are small producers as they are mostly wagon mines. There being only one railroad mine in Wayne county, one in Taylor county, one in Page and none in Adams county. The vein in Taylor, Page and Adams counties lies at a variable distance from the surface of the ground. This ranges from 40 to 250 feet. It is overlaid in most cases with rock or very strong bastard material that is practically just as good as rock, while beneath the vein there is an abundance of fireclay for mining purposes. These conditions make it possible to operate the mines successfully by the longwall method of mining.

The Hospital for the Insane at Clarinda was furnished for many years with coal from Page and Taylor Counties, but is now being furnished with coal from Appanoose County. A new mine was put down last summer about four miles west, of Clarinda by the New Market Coal Co. of Taylor County. This will increase the output in Page County during the coming year.

REPORT OF FIRST INSPECTION DISTRICT W. E. Holland, Inspector Centerville, Iowa

FATAL ACCIDENTS IN DISTRICT NO. 1

1928

Date and Hour of Accident	Name and Occupation	Age	Married or Single	No. of Chil- dren	Cause of Death	Employing Company and County
	C. B. Paine, timberman. Frank Briggs, miner. R. L. Caldwell, foreman.	49 40 51	Single	No. 15 Part	Slate fall	Central Iowa Fuel Co., Lucas Briggs Coal Co., Lucas Central Iowa Fuel Co., Lucas

FATAL ACCIDENTS IN DISTRICT NO. 1

Date and Hour of Accident	Name and Occupation	Age	Married or Single	No. of Chill- dren	Cause of Death	Employing Company and County
May 21, 10:15 a. m. Aug. 6, 9:30 a. m.	J. Maholic, miner F. Mattioda, driver	81	Married	1	Fall of slate.	Central Iowa Fuel Co., Lucas Sunshine Coal Co., Appanoose

NON-FATAL ACCIDENTS IN DISTRICT NO. 1

1928 -

Date and Hour of Accident	Name and Occupation	Cause of Accident	Nature of Injury	Employing Company and County
Jan. 12, 10:00 a. m.	R. B. Lafoliette, miner	Struck knee with pick	Infection of knee	McConville & Sons C. Co., Appanoos
Jan. 15, 3:45 p. m.	Floyd Gates, machine man	Fall of brushing	Contusion knee joint	McConville & Sons C. Co., Appanoos
Jan. 23, 8:00 a. m.	Otis Clark, loader	Caught between cars	Laceration fingers	McConville & Sons C. Co., Appanoos
Peb. 2, 10:30 a. m.	Jack Fox, driver	Caught between cars	Injured right ankle	Numa Coal Co., Appanoose
Feb. 3, 9:00 a. m.	Ira Lawson, machine runner	Fall of coal at face	Injured right leg	Numa Coal Co., Appanoose
Peb. 4, 11:00 a. m.	John Alt, loader	Fall of coal	Injured right wrist	Numa Coal Co., Appanoose
Feb. 6, 11:00 a. m.	J. Goodman, loader	Fall of coal	Injured thigh	McConville & Sons C. Co., Appanoos
Feb. 6, 3:50 p. m.	E. F. McKachan, mach. shove	Fall of coal	Fracture 10th rib	McConville & Sons C. Co., Appanoos
Feb. 14, 10:00 a. m.	J. Huffacne, loader	Fall of coal	Infection knee and groin	McConville & Sons C. Co., Appanoose
řeb. 23, 2:15 p. m.	Jas. Acwalt, machine shoveler.	Fall of coal at face	Rib broken, bruised other-	
		Wall of sout	wine	Liberty Coal Co., Appanoose
Feb. 27, 2:30 p. m.	P. J. Richmond, loader	Fall of coal	Laceration left leg	McConville & Sons C. Co., Appanoose
Feb. 28, 2:00 p. m. Mar. 8, 9:00 a. m.	J. Stearnes, machine man	Loading coal at face	Injured leg Injured fingers	Fairlawn Coal Co., Appanoose
	L. Graves, miner	Sprogging after machine	Broken leg	Armstrong Coal Co., Appanoose Diamond Lump Coal Co., Appanoose
Mar. 22, 10:15 a. m. Apr. 9, 1:00 p. m.	C. Hazeltine, loader	Fall of black bat	Back sprained	Numa Coal Co., Appanoose
Apr. 9, 9:00 a. m.	C. Kennis, loader	Caught between cars.	Injured muscles left leg	McConville & Sons C. Co., Appanoose
May 4, 11:45 a. m.	R. Henderson, miner	Fall of coal	Broken leg	Appanoose Co. Coal Co., Appanoose
May 12, 11:00 a. m.	W. H. Allen, mine supt	Nail puncture	Finger amputated	Numa Coal Co., Appanoose
June 22, 3:00 p. m.	L. Crenis, miner	Fall of coal	Broken collar bone	Appangose Co. Coal Co., Appangose
July 18, 3:00 p. m.	V. Johnson, miner	Fall of coal	Broken left arm	Numa Coal Co., Appanoose
July 17, 8:00 a. m.	M. Seddon, roustabout	R. R. tie fell on thumb	Cut and mashed thumb	Hi Test Coal Co., Appanoose
Aug. 21, 1:30 p. m.	C. E. Belzer, driver	Faulty trip	Shoulder fractured	McConville & Sons C. Co., Appanoose
Aug. 27, 1:00 p. m.	Ray Ervin, miner	Fall of coal.	Injured right leg	Armstrong Coal Co., Appanoose
Sept. 6, 9:00 s. m.	M. Cross, miner	Fall of coal at face	Injured right ankle	Numa Coal Co., Appanoose
Sept. 7, 3:30 p. m.	J. Stratton, loader	Pall of coal	Contusion left leg	McConville & Sons C. Co., Appanoose
Sept. 25, 10:00 a. m.	P. Baugher, driver	Lifting car coal	Ruptured ligaments, back.	McConville & Sons C. Co., Appanoose
Oct. 11, 9:30 a.m.	J. G. Mitchell, miner	Pick handle struck face	Lip cut, tooth out	Hi Test Coal Co., Appanoose
Oct. 18, 10:30 a. m.	H. Elliott, cager	Coal fell down shaft.	Spine dislocated	Hi Test Coal Co., Appanoose
Oct. 18, 1:30 a. m. Oct. 28, 8:30 a. m.	L. Peel, chunker	Fall of dirt	Scratched hand, infected Small finger broken	McConville & Sons C. Co., Appanoose
	L. Ely, miner	Fall top brushing	Back injured	Appanoose C. & M. Co., Appanoose Appanoose C. & M. Co., Appanoose
Nov. 1, 10:30 a. m. Nov. 3, 8:00 p. m.	C. Farley, machine runner	Caught in chain	Middle finger taken off	Numa Coal Co., Appanoose
Nov. 12, 10:00 a. m.	S. Napier, miner	Fall of coal near face	Right arm broken	Appanoose C. & M. Co., Appanoose
Nov. 16, 9:00 a. m.	G. Van Blaricon, loader	Fall of coal from car.	Finger crushed	McConville & Sons C. C., Appanoose
Nov. 28, 2:30 p. m.	Geo. Fisher, miner	Fall of coal at face		Appanoose C. & M. Co., Appanoose

Date		and Hour of Accident Name and Occupation		Cause of Accident	Nature of Injury	Employing Company and County
Feb. Mar. Aug. Aug. Sept. Det.	8, 22, 26, 21, 8, 21, 27, 15, 18, 19, 8, 1	2:00 p. m. 12:00 m. 8:15 a. m. 2:00 p. m. 0:00 a. m. 8:00 a. m. 7:30 a. m. 2:00 p. m. 2:00 p. m. 9:00 a. m. 8:30 a. m. 8:30 a. m. 8:30 a. m. 8:30 a. m.	Jas. Scott, miner Ira Besse, miner W. Stickler, track layer P. Corley, loader. T. Kozelishi, day man R. Oswalt, miner A. C. Huston, top man H. Bowdre, timberman L. A. Walraven, miner W. C. Barton, miner W. Longcor, miner F. Lewis, miner F. Lewis, miner H. Bicks, driver	Fall of black bat. Flying coal particle. Fall of coal from car. Fell on rod in pan. Cutting, axe slirped. Fall of slate. Lifting coal	Injured right leg. Back sprained Rib fractured Uleer right eye Injured finger Two ribs broken Thumb split Chest and back injured. Sprained side Toe broken Sprained back Injured right hand.	Hi Test Coal Co., Appanoose Armstrong Coal Co., Appanoose Armstrong Coal Co., Appanoose McConville & Sons C. C., Appanoose McConville & Sons C. C., Appanoose McConville & Sons C. C., Appanoose Graham Coal Co., Monroe Hocking Coal Co., Monroe Hocking Coal Co., Monroe
	11日本のの日本日	\$172 Ly py 100 (100 (100 (100 (100 (100 (100 (10	Topol trains, morthin mon., Ployed trains, morthin mon., Ployed trains, morthin mon., Ployed trains, morthin mon., Ployed trains, morthin remark., Ployed trains, morthin remark., Ployed trains, morthin remark., Ployed trains, morthin shore, Ployed trains, morthin morthin, Ployed trains, morthin minerals.	The second of th	This type of Son. Confidence have point Confidence have point Confidence have been Confidence have Conf	Markovskie a samet i ga areanana Markovskie a samet i ga areanana Franca Samet a samet i ga areanana Samet a samet a samet a samet a samet a Markovskie a samet i ga areananananan Markovskie a samet i ga areanananan Markovskie a samet i ga areanananan Markovskie a samet i ga areananananan Markovskie a samet i ga areanananan Markovskie a samet i ga areananananan Markovskie a samet i ga areanananananananananananananananananana
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NON-FATAL ACCIDENTS IN DISTRICT NO. 1 1929

Date and Honr of Accident	Name and Occupation	Cause of Accident	Nature of Injury	Employing Company and County
Jan. 19, 2:00 p. m. Feb. 15, 6:30 p. m. Aug. 6, 9:00 a. m. June 17, 2:00 p. m. June 18, 2:00 p. m. June 18, 2:00 p. m. June 18, 5:00 p. m. June 6, 5:00 p. m. Aug. 18, 9:30 a. m. Sept. 15, 10:00 a. m. Sept. 28, 10:00 a. m. Sept. 15, 10:00 a. m. Sept. 15, 10:00 a. m. Sept. 15, 10:00 a. m. Oct. 28, 3:45 p. m. Oct. 28, 3:45 p. m. Oct. 28, 3:45 p. m. Oct. 31, 1:00 p. m. Jan. 10, 11:00 a. m. Jan. 10, 10:00 a. m. Mar. 29, 9:00 a. m. Mar. 18, 4:10 p. m. Sept. 5, 3:30 p. m. Mar. 18, 4:10 p. m. Sept. 5, 3:30 p. m. Sept. 3, 3:00 p. m. Sept. 30, 9:30 a. m.	Bert Clark, miner Ed Marroy, machine man F. Matoda, driver A. Anderson, miner Jas. Tighe, miner B. F. Erickson, miner Harry Hope, miner Wm. Lembe, miner Wm. A. Thomas, miner Wm. A. Thomas, miner O. Light, miner D. Scott, miner C. A. Parker, miner C. A. Dever, miner R. B. Snodgrass, driver J. Morley, miner R. C. C. Modester, miner C. A. Dever, miner C. A. Dever, miner T. Kanslorich, shot firer T. Kanslorich, shot firer T. Morgan, miner C. A. Patterson, driver J. Coates, miner C. A. Patterson, driver J. Coates, miner C. A. Patterson, driver J. Coates, miner J. Coates, miner C. A. Patterson, driver J. Coates, miner J. Coates, miner	Fall of black bat Fall of coal. Fall of rock. Fall of rock. Lifting coal Loading coal on car. Gravel in shoe. Fall of slate. Filing particle sulphur. Folson ivy Fiving particle sulphur. Fall of slate. Coupling cars Filing particle sulphur. Coupling cars Fall of slate. Caught between cars. Cutting fuses Fall of slate. Caught between car and gob Shot blowout Shot blowout Contact trolley wire. Car run over hand. Fall of coal.	Leg broken Right knee cap crushed Back dislocated Back aprained Left leg sprained Abcess right leg Sprained and brulsed ankle Injured left eye. Contracted setting propa- Cut right eyeball Back Sprained Left hand crushed. Injured right eye Finger crushed Left leg broken Injured right foot, knee. Finger badly cut. Right leg broken Left knee injured. Brulsed about hipe Face and hands burned. Face and hands burned. Face and back burned. Faver shock Two fingers crushed Leg fractured	New Rock Val. Coal Co., Appanoose Liberty Coal Co., Appanoose Sunshine Coal Co., Appanoose Consolidated Indiana C. Co., Lucai Consolidated Indiana C. Co., L

FATAL ACCIDENTS IN DISTRICT NO. 1 Classified by Causes of Accident and Occupation of Injured For the Years 1928 and 1929

DO AND TAKE OF THE LOCAL PROPERTY AND THE PARTY OF THE PA	Miners	Londers	Drivers	Top men	Machine men	Entry men	Company men	Shot fire	Track man	Foreman	Engineer	Miner	Timberman	Londer	Driver	Machine man	Entry man	Company man	Track man	Shot fire	Cager	Cheek weighman	Top man	Engineer	Mechanic	Spragger	Trapper	Electrician
Fall of roof (rock, slate, etc.)		1	T	1	-1	1	-1	-1	- 1	1		211)	100	1111	- 1	1	1	- 11	- 71	and I	7	~!	51	Hel	41	2 6	HI	23
At Working face	104				- 1		11	-1	874	334	pay	1.5		1	134				- 4		24	6	64	T	1	31	.1.	T
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in room or chamber	41	0	1	Dib.	-	- 4	211	+	31		4	777		0.5000	M.			11	2	100	000	77 1	2017		3	-	-	-
Fall of roof (rock, slate, etc.)	100		-	-	**		1				-	00	-	12.0					1	101	0.91	0 6		T	334			
In road or entry	0		143	200	201	7 12	100	-	-116		1	927	1956		10			10	200	160	031	1	77 7		7 77	2		
zen di coni.	3	10	13/2	7	-					1.			-14			227		10	1		931	1.0		1	1 20	4	1	
	1991	100	0	-		-	-	-	-16			- 1	- 1	374				9	STATE OF	No.	134	- IF	23	1	7	7	th:	TIT
(b) Fall of pillar coal. Mine cars and locomotives:	134	17	10	FIF	190	mp:	15 1				00		-			-	-			12:13		11	0.00		1	100	Ti.	
	200	97		-		-					-	-	4				-	2				28	9				17	*
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(b) Caught between car and rib			E			9	7	7		-	27	-	77.	100		27/2	-	46							1.5		123	300
(d) Caught between car and top.			50				1-		20	17 5	77 5	111	***		2 17	27/1	***	-16	65	10.0	-			2	2 2 3	1000	100	
		1	7	9			6		7 1		3	-		-	-	***		\rightarrow		100		4.44	-	1	1.3		130	3
(I) Fall Irom ear of motor		-					1	7	18		100	170	771	100	950	WO	100	÷į.	100	10.5		4	-	1.5			10	900
(6) OWITCHINE OF SDragging			-	1.					13	2 5	1	200	10	30	7-1-	A		76		17/1/		-	-	1	-	1	133	30
				1							7		75	TITLE !	-	***	-	Zin	-	100		100	- 1		-20		13	12
(i) Fan irom railroad car		-	-	-	-	-		-	115	7	1	20			55				30	10	7.5	4.55			1-10		-	1
	2	-	100		-		-	-	L E		1	27						200	200		7635	100		-	1000			-
	77.77	-	-	100		-	-	-	- 15			100		10	100			100		E 55	Del.	100	17.7	1	1000	***		-
		-		-		-	-				72						M	13114	10	935	1	177	103	2.27	2	355	222	-
(m) Cars jumping track and collisions.	5 55	-	2 27	-	-	-		-			-		-								1		1				-	
	-	77-	-	-	-	-	-			-		-	-	-			1	1	T			100	1					
(a) High tension or mining machines		1	1	1.7	191	Ser.				10	1/4		4	1	10	1	10		1		1	1	1		33			
(b) Electric welders, etc.		-		13	K	1		1		1				-	-			-	122		1	(3)1)			37.	Us 7	72.4	
(a) Caught in harness			1		1		1	1	1	1	-	-	1-		-		-					-						-
(b) Mule fell down	-			-						-		-	1		1	1	100	1	13	100	1000	200	-	-1	-	1	1	
(c) Kicked by mule	-	1	1	-	212	777								-					-	77.					77	-		*
(d) Mule ran away	3165	102	ESS.	1777	33.3	27.75	1000	255	1000	-	1000		-	1000	+				1	100			200	-				-

(4) Charles and a second	
8. Miscellaneous:	
(a) Caught in cage	
(b) Flying particles hitting eye	
(c) Loading coal, rock, slate and dirt	
(d) Falling rails and timbers	
(f) Caught in conveyors and cables	
(k) Objects falling down shaft	
(m) Persons falling or stumbling	
9. Explosives:	are techniques to train the train of a little to the littl
(a) Premature and windy shots	A 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1
(b) Dust explosion, fire and gas	
Axes, bars, picks, shovels, nails, wedges, minin	at the little to the state of t
machines, weighing apparatus and mechanics	
devices	
Unknown	
APPENDING THE LABOR METERS OF THE PERSON OF	The Assessment of the Section of the

1923

PATAL ACCIDENTS IN DISTRICT NO A

The counties comprising the second inspection district are as follows: Minion, Montoe (part). Wapello, Mahaka, Laster, Van Buren, Kenkok, Dayts and Jefferson. The number of mines, transfer traplayers and the output of the mines are arranged by counties and districts in the front part of this report.

R. T. HHYS, Inspector

REPORT OF SECOND INSPECTION DISTRICT

R. T. RHYS, Inspector

The counties comprising the second inspection district are as follows: Marion, Monroe (part), Wapello, Mahaska, Jasper, Van Buren, Keokuk, Davis and Jefferson. The number of mines, number employees and the output of the mines are arranged by counties and districts in the front part of this report.

FATAL ACCIDENTS IN DISTRICT NO. 2

1928

Date and Hour of Accident	Name and Occupation	Age	Married or Single	No. of Chil- dren	Cause of Death	Employing Company and County
Feb. 14, 10:20 a. m. Sept. 18, 2:30 p. m. Nov. 3, 11:15 a. m. Mar. 29, 3:45 p. m. Mar. 29, 3:45 p. m.	John Mercer, miner. W. H. Bainbridge, driver D. Jamieson, driver. Elmer Clouse, shot firer. H. Phillips, shot firer.	29 46 35 28 33	Married Married Married Married	1 5 1 3 2	Siate fall Slate fall Unknown Dust explosion from shot. Dust explosion from shot.	

FATAL ACCIDENTS IN DISTRICT NO. 2

1929

Date and Hour of Accident	post documents process and occupation contains the same and occupation	Age	Married or Single	No. of Chil- dren	Cause of Death	Employing Company and County
Oct. 31, 10:30 a. m.	Geo. Keller, miner. W. Welsh, driver J. Lucas, miner. W. Swim, miner.	45 41 31 65	Married Married Married	90 00 00 90	Fall of slate	Rex Fuel Co., Monroe Carbon Coal Co., Monroe Cons. Indiana Coal Co., Marion Rex Fuel Co., Monroe

NON-FATAL ACCIDENTS IN DISTRICT NO. 2 1928

Date and Hour of Accident	Name and Occupation	Cause of Accident	Nature of Injury	Employing Company and C	ounty
an. 5, 8:15 a.m.	C. Coughlan, driver	Kicked by mule	Injured left side	Pershing Coal Co., Marion Consolidated Ind. Coal Co.,	Mario
an. 8, 1:15 p. m.	D. J. Jamison, driver	Fall of slate	Sprained back	Consolidated Ind. Coal Co.,	Mario
an. 11, 11:15 a. m.	C. Thomas, loader	Lifting coal	Injured finger right hand	Consolidated Ind. Coal Co.,	Mario
an. 17, 10:00 a. m.	C. Benson, miner	Caught between cars	Injured legs	Consolidated Ind. Coal Co.,	Mario
an. 18, 9:30 a.m.	J. Burns, driver	Flying sulphur	Struck right eye	Consolidated Ind. Coal Co.,	Mario
an. 20, 9:00 a. m.	J. Peterson, miner	Fall of coal	Injured right foot and toes	Pershing Coal Co., Marion	
an. 24, 2:00 p. m.	A. Marshall, miner C. Cecirul, fireman	Bursted blow off pipe	Face and arm burned	Pershing Coal Co., Marion	40.00
an. 30, 10:30 a. m. an. 30, 7:30 a. m.	C. Thomas, miner	Fell on tie-	Injured breast	Consolidated Ind. Coal Co.,	Sinrio
an. 30, 7:30 a.m. feb. 13, 10:00 a.m.	J. Morris, miner	Pick struck foot	Left foot injured	Pershing Coal Co., Marion Consolidated Ind. Coal Co.,	Marie
reb. 14, 3:00 p. m.	Chas, Wise, miner	Powder explosion	Powder burned	Pershing Coal Co., Marion	Marie 14
řeb. 14, 10:00 a. m.	Wm. Nichols, miner	Blistered left hand	Infection set in	Consolidated Ind. Coal Co.,	Mario
řeb. 20, 2:00 p. m.	A. Williams, miner	Coal struck knee	Injuring knee cap Injured back and legs	Pershing Coal Co., Marlon	-
Feb. 23, 9:00 a. m.	L. Jones, miner	Fall of slate	Injured right hand	Pershing Coal Co., Marion	
Feb. 24, 3:30 p. m.	J. Harding, miner	Coal fell on hand	Injured head	Hamilton Coal Co., Marion	
Feb. 27, 9:15,a. m.	J. Bolton, timberman	Falling timber	Injured shoulders, head,	STATE OF THE PARTY	
Mar. 7, 10:00 a. m.	A. Prusnak, miner	Fall of slate	hands	Pershing Coal Co., Marion	
Mar. 9, 11:00 a. m.	W. G. Jones, miner	riying coat from shot	Finger cut and bruised	Persbing Coal Co., Marion	
	A. Moses, miner	Slipped from car wheel	Injured right side	Pershing Coal Co., Marion	
Mar. 12, 1:00 p. m.	Alex Benson, motorman	Collision mine cars	Injured head and hips	Pershing Coal Co., Marion	Maria
Mar. 14, 11:00 p. m.	R. Dayton, coupler	Coupling cars	Right wrist fractured	Consolidated Ind. Coal Co	Mario
Mar. 16, 11:15 a. m. Mar. 28, 9:30 a. m.	Thos. McLeod, miner	Flying sulphur	Injured right eye	Consolidated Ind. Coal Co., Consolidated Ind. Coal Co.,	Mario
Mar. 29, 2:00 p. m.	Ben Henry, miner	Falling rock	Injured right shin	Consolidated Ind. Coal Co.,	Murio
Mar. 31, 12:40 p. m.	T. Llewellyn, boller man	Falling coal	Injured left hand	Consolidated Ind. Coal Co.,	Mario
April 16, 3:00 p. m.	N. Long, miner	Sledging slate	Injured fingers	Pershing Coal Co., Marion	
April 17, 2:00 p. m.	W. Nichols, miner	Lifting slate	Injured back and hips	Pershing Coal Co., Marion	
April 19, 10:30 a. m.	R. Smith, miner	Fall of slate	Injured shoulders and	***************************************	
April 22, 10:00 a. m.	C. Goodwin, miner	Fail of state	hand	Pershing Coal Co., Marion	
	m M Which all defended	Fell from car	Right foot injured	Consolidated Ind. Coal Co.,	Marie
April 28, 11:00 a. m.		Flying sulphur	Struck left eye	Consolidated Ind. Coal Co.,	Marie
May 3, 9:30 a. m.		Prop fell	Injured right shoulder	Pershing Coal Co., Marion	20.00
May 17, 3:00 p. m.		Flying sulphur	Injured right eye	Consolidated Ind. Coal Co.,	MULLIC
May 23, 10:30 a. m. May 23, 10:00 a. m.		Lifting black jack	Injured back	Pershing Coal Co., Marion	Marie
May 23, 10:00 a. m.		Caught betwee car and prop	Injured back and legs	Consolidated Ind. Coal Co.,	30.0115

Date and Hour of	Name and Occupation	Cause of Accident	Nature of Injury	Description of the second
June 14, 2:00 p. m. June 18, 9:00 a. m. June 25, 9:30 a. m. June 25, 9:30 a. m. June 25, 9:30 a. m. June 26, 11:00 a. m. June 26, 11:00 a. m. June 26, 11:00 a. m. June 27, 3:30 p. m. July 11, 2:15 p. m. July 12, 3:30 p. m. July 27, 3:30 p. m. Aug. 8, 2:00 p. m. Aug. 9, 10:30 a. m. Aug. 9, 10:30 a. m. Sept. 1, 12:45 p. m. Sept. 21, 12:25 p. m. Sept. 21, 10:30 a. m. Sept. 22, 2:30 p. m. Sept. 23, 2:00 p. m. Sept. 25, 5:45 a. m. Sept. 28, 9:00 a. m. Oct. 18, 3:30 p. m. Oct. 22, 8:30 a. m. Oct. 23, 3:30 p. m. Nov. 1, 3:30 p. m.	L. Rinard, miner. C. Hopkins, miner. Geo. Wise miner. Geo. When miner. Geo. Green, miner. J. Barnhill, driver. J. Heath, Jr. miner. J. Heath, Jr. miner. J. Hicks, miner. J. Hicks, miner. J. Hicks, miner. J. Rewland, Jr., motorman. R. E. Miller, driver. P. Neal, top man. T. Rowland, Jr., motorman. G. Patters, miner. W. Courtupy miner. B. Brum, miner. O. Gray, stable boss. J. Laws, Jr. miner. P. Shepieh, miner. P. Shepheh, miner. John Laws, Sr., miner.	Flying coal Fall of slate Flying sulphur Lifting slate Lifting coal Car wheel struck foot. Fall of coal Foot caught in latch Coal fell from chute Electricity flashed Blocking car Lifting slate Fall of coal Sprasging cars Flying substance Falling prop Mining a shot. Falling a shot.	Struck right eye. Injured shoulder and back Injured right eye. Back strained Strained left shoulder Injured right foot. Injured left foot. Injured left foot. Injured left shoulder Injured left hand and leg. Hand cut and bruised Injured left hand. Injured left hand. Injured left foot. Eyes burned Finger crushed under wheel Sprained back Fingers injured under wheel Injured right eye. Injured lack and hip. Sprained back and hip. Sprained back	Consolidated Ind. Coal Co. Marion Pershing Coal Co. Marion Consolidated Ind. Coal Co. Marion Consolidated Ind. Coal Co. Marion Pershing Coal Co. Marion Pershing Coal Co. Marion Pershing Coal Co. Marion Consolidated Ind. Coal Co. Marion
Nov. 7, 12:30 p. m. Nov. 13, 3:45 p. m. Nov. 19, 1:00 p. m. Nov. 19, 1:00 p. m. Nov. 29, 9:30 a. m. Nov. 23, 2:00 p. m. Nov. 25, 7:40 a. m. Dec. 10, 1:00 p. m. Dec. 20, 2:00 p. m.	J. Barbour, miner J. Sidlock, Jr., driver H. Fosenburs, driver E. Horill, miner M. Allen, miner J. Barbour, miner J. Barbour, miner V. Luksetich, miner J. Windras, miner J. Windras, miner	Car left rails. Chain unhooked and caught. Fall of dirt. Finger caught on lump coal. Fall of coal. Dropped keg powder. Caught, coal and hook on car. Car left rails.	Injured left foot Injured right eye. Injured right foot Injured left foot Injured left foot Injured left foot Injured left foot Little finger amputated. Right foot injured Left leg injured. Finger lascerated Right foot	Consolidated Ind. Coal Co., Marion Consolidated Ind. Coal Co., Marion Consolidated Ind. Coal Co., Marion Pershing Coal Co., Marion Consolidated Ind. Coal Co., Marion
Jan. 21, 1:30 p. m. Feb. 2, 9:00 a. m. Feb. 3, 9:00 a. m.	F. O. Harkin, miner Wm. Carter, timberman L. Johnson, timberman S. Matrovich, timberman	Prop fell Chip from file Loading slate Breaking rock Timbering	Back injured Injured instep Clipiured right eye Finger broken Toe of left foot broken R	Pershing Coal Co., Marion Onsolidated Ind., Coal Co., Marion moky Hollow Coal Co., Morroe Expel Co., Monroe Expel Co., Monroe Expel Co., Monroe

Sept. Oct. Oct. Oct. Oct. Nov.	92. 4. 5. 15. 5.	2:00 p. m. 4:00 p. m. 10:00 a. m. 2:00 p. m. 9:00 a. m. 3:45 p. m.	M. Jes H. W. V.	Luke, mine foreman. Ridgeway, driver. Ridgeway, driver. So Sbelly, machine man. Howe, machine man. T. Sullivan, machine man. Wassenhove, driver. Conway, Jr., miner. Zachery, top man.	Jack slipped, struck knee. Fell under car Caught, load and roof. Fall of slate Fall of coal Fell under car. Fall of rock. Fell down steps.	Feet and legs injured. Two ribs broken Left ankle broken. Right ankle fractured. Knee cap injured. Crushed big toe.	Carbon Coal Co., Monroe Carbon Coal Co., Monroe Union Coal Co., Wapello Union Coal Co., Wapello Union Coal Co., Wapello Union Coal Co., Wapello Roberts Bros. Coal Co., Manska Prairie City Coal Co., Jasper Prairie City Coal Co., Jasper
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NON-FATAL ACCIDENTS IN DISTRICT NO. 2, 1929

Sept. 12, 11:00 a. m.	John Fridley, miner	Fall of coal	Left arm broken	Stribling Coal Co., Wapello
an. 30, 3:00 p. m.	M. Ouder, miner	Lifting coal	Sprained back	Lovilla Coal Co., Monroe
une 26, 10:00 a. m.	J. H. Davidson, miner.	Fall of coal		Smoky Hollow Coal Co., Monroe
eb. 7, 9:00 a. m.	Wm, Bennett, top man			Smoky Hollow Coal Co., Monroe
eb. 19, 2:00 p. m.	L. Friday, top man	Loading boom	Finger crushed	Smoky Hollow Coal Co., Monroe
lar. 28, 11:20 a. m.	J. McGrath, top man	Loading boom	Finger crushed	Smoky Hollow Coal Co., Monroe
lar. 6, 11:00 a. m.	Wm. Dunner, driver	Caught, car and roof	Shoulder injured	Roberts Bros., Mahaska
an, 10, 10:00 a, m,	H. Haney, miner	Fall of slate	Body injury	Pershing Coal Co., Marion
an. 12, 10:00 a. m.	C. Coghlan, driver	Fall of slate	Left hand cut	Pershing Coal Co., Marion
an. 14, 2:30 p. m.	Joe Dursky, timberman	Axe slipped	Finger cut	Pershing Coal Co., Marion
an. 25, 10:00 a. m.	Wm. Moses, miner	Blistered hand, cutting	Infection set in	Pershing Coal Co., Marion
eb. 20, 3:45 p. m.	C. Goodwin, Sr., miner	Flying particle slate	Right eye injured	Pershing Coal Co., Marion
eb. 18, 2:00 p. m.	Joe Tonda, miner		Finger injured	Pershing Coal Co., Marion
eb. 26, 1:00 p. m.	D. Dallerio, miner	Fall of slate	Back injured	Pershing Coal Co., Marion
eb. 15, 2:30 p. m.	W. Nichols, miner	Fall of slate	Back and legs injured	Pershing Coal Co., Marion
eb. 7, 9:30 a. m.	H. Hunt, slate man	Fall of slate	Head injured	Pershing Coal Co., Marion
lar. 6, 10:00 a. m.	Wm. Pyle, miner	Slipped loading coal	Back sprained	Pershing Coal Co., Marion
lar. 8, 10:30 a. m.	H. L. Conners, miner.	Flying particle coal	Eye injured	Pershing Coal Co., Marion
lar. 9, 10:00 a. m.	John Kerr, miner	Pick strock band	Hand bruised	Pershing Coal Co., Marion
lar. 13, 2:00 p. m.	Chas, Kissinger, miner	Flying particle coal	Eye injured	Pershing Coal Co., Marion
eb. 26, 1:00 p. m.	D. Dallerio, miner	Fall of slate	Back injured	Pershing Coal Co., Marion
lar. 16, 3:30 p. m.	John Hlad, motorman.	Caught, car and motor	Hand crushed	Pershing Coal Co., Marion
lar. 18, 9:00 a. m.	R. Smith, miner.	Lifting coal	Back sprained	
lay 14, 10:00 a. m.	H. Russell, miner	Lifting coal	Hand injured	Pershing Coal Co., Marion
lay 9, 7:45 a. m.	Tony Shrome, miner		Body injury	Pershing Coal Co., Marion
ay 28, 9:00 a. m.	E. Saxton, miner	Axe slipped	Three fingers cut	Pershing Coal Co., Marion
ay 28, 10:30 a. m.		Fall of coal		Pershing Coal Co., Marion
ay 23, 9:30 a. m.	Jas. Cunnins, Jr., miner	Timbers fell on road	Right hand injured	Pershing Coal Co., Marion
ine 25, 10:00 a. m.			Back injured	Pershing Coal Co., Marion
aly 24, 8:00 a. m.	Chas. Dooley, miner	Fall of rock	Foot injured	Pershing Coal Co., Marion
	F. Walters, miner		Leg injured	Pershing Coal Co., Marion
	D. Melin, miner	Fall of rock	Groins injured	Pershing Coal Co., Marion
ept. 25, 12:30 p. m. ec. 19, 2:30 p. m.	F. Gustafsen, miner B. Vanderhorst, miner	Fall of slate	Right leg broken	Pershing Coal Co., Marion Consolidated Ind. Coal Co., Mario

Date and Hour of Accident	Name and Occupation	Cause of Accident	Nature of Injury	Employing	Company and County
ec. 31, 9:00 a.m.	G. Anderson, miner	Fall of Slate	Fractured right pelvis	Consolidated	Ind. Coal Co., Mario
ec. 27, 3:30 p. m.	Jesse Willis, miner	Fall of Slate			Ind. Coal Co., Mario
pril 2, 10:00 a, m.	C. Jeffreys, miner	Fall of coal	Right leg injured		Ind. Coal Co., Mario
pril 9, 10:30 a. m.	C. Foster, laborer	Flying particle sulphur	Right eye injured		Ind. Coal Co., Mario
pril 15, 2:30 p. m.	H. Smith, miner	Fall of coal	Large toe fractured	Consolidated	Ind. Coal Co., Mario
pril 13, 3:00 p. m.	M. F. Mitchell, driver	Car left ralls	Right ankle injured		Ind. Coal Co., Mario
an. 7, 1:00 p. m.	M. Cleain, helper	Lifting car	Right side sprained		Ind. Coal Co., Mario
an, 11, 2:45 p. m.	J. M. Perry, miner	Fall of slate	Left leg broken		Ind. Coal Co., Mario
ar. 25, 11:00 a. m.	F. Beston, miner	Fall of coal	Toes left foot injured		Ind. Coal Co., Mario
ar. 11, 12:20 p. m.	Thos, Spolan, miner	Fall of slate		Consolidated	Ind. Coal Co., Mario
ar. 23, 8:30 a. m.	W. Jeffreys, timberman	Fall of slate	Knee cap injured	Consolidated	
ar. 1, 10:00 a. m.	Wm. Thomas, driver	Pinned, mule and car	Left side injured		Ind. Coal Co., Mario
eb. 19, 3:00 p. m.	Wm. Kersey, miner	Fall of slate	Left leg injured	Consolidated	
ar. 5, 2:00 p. m.	A. Maitre, miner	Rolling rock	Ruptured left side		Ind. Coal Co., Mario
ar. 30, 9:00 a. m.	Jas. Crowe, helper	Fall of slate	Leg fractured		Ind. Coal Co., Mario
eb. 18, 2:00 p. m.	John Cetina, miner	Fall of slate	Left foot injured		Ind. Coal Co., Mario
eb. 8, 10:00 a. m.	Robt, Child, miner	Fall of slate	Left knee injured		Ind. Coal Co., Mario
eb. 21, 8:45 a. m.	Wm. Perry, miner	Flying particle sulphur			Ind. Coal Co., Mario
eb. 3, 3:20 p. m.	F. Fonietta, timberman	Fall of slate	Fractured right toes	Consolidated	
eb. 6, 11:00 a. m.	O. Carlson, miner	Flying particle sulphur	Right eye injured	Consolidated	
eb. 7, 10:30 a. m.	Chas, Ellis, miner	Flying particle sulphur.		Consolidated	
ay 24, 11,15 a. m.	P. Kanglarich, laborer	Caught, car and rib	Left leg injured	Consolidated	
ay 18, 9:00 a. m.	J. Kanglarich, miner	Fall of coal	Right knee injured	Consolidated	
ay 28, 10:30 a. m.	J. Richards, miner	Caught under car	Right leg injured		Ind. Coal Co., Mario
ay 15, 11:00 a. m.	L. Johnson, laborer	Caught, car and rib	Legs injured	Consolidated	Ind. Coal Co., Mario
ay 24, 8:00 a. m.	Albert Howe, miner	Fall of slate	Finger crushed		Ind. Coal Co., Mario
me 3, 9:30 a. m.	Cleo Foster, helper	Fall of slate	Right hip injured	Consolidated	Ind. Coal Co., Mario
me 11, 8:00 a. m.	F. O. Harkins, miner	Fall of coal	Left toes injured		Ind. Coal Co., Mario
me 10, 11:00 a. m.	J. Candino, driver	Kicked by mule	Left leg injured		Ind. Coal Co., Mario
ne 10, 10:15 a. m.	J. Moreland, driver	Mule stepped on foot	Foot cut and bruised		Ind. Coal Co., Mario
nly 30, 9:00 a. m.	W. Kirfman, driver	Fall of slate	Fingers left hand injured		Ind. Coal Co., Mario
ug. 20, 8:00 a. m.	J. Gardiner, driver	Handling props	Poison lyy, arms and face		Ind. Coal Co., Marion
ept. 29, 11:15 a. m.	Frank Fonietta, timberman	Fall of slate	Back injured		Ind. Coal Co., Marion
et. 5, 10:30 a. m.	B. Vanderhorst, miner	Lifting car	Back injured		Ind. Coal Co., Marior
ept. 16, 12:15 p. m.	J. Kanzlarich, miner	Rolling slate	Crushed thumb	Consolidated	Ind. Coal Co., Marior
uly 12, 8:30 a. m.	C. C. Day, miner	Fall of slate	Right foot injured	Consolldated	Ind. Coal Co., Marion
lay 7, 4:06 p. m.	Chas, Spore, driver	Kicked by mule	Neck and chest injured	Consolidated	Ind. Coal Co., Marion
day 25, 10:00 a. m.	F. Fonietta, timberman	Flying particle sulphur Opening trap door	Ankle dislocated	Consommated	Ind. Coal Co., Marion Coal Co., 1. Mahaska

Sept. 1 Nov. 2 Oct. 3 Nov. 2 Dec. 1 Oct. 2 Dec. 1 Dec. Dec. Dec.	2, 11:00 a. m. 1, 10:30 a. m. 1, 2:30 p. m. 1, 10:00 a. m. 6, 10:00 a. m. 6, 10:10 a. m. 0, 10:30 a. m. 8, 9:30 a. m. 7, 7:50 a. m. 4, 2:00 p. m.	J. Fridley, miner W. Dooley, driver Jas. Reed, miner J. Lucas, miner D. McRoberts, miner J. Spolan, miner A. Kanzlarich, miner R. Truman, miner L. Urieh, driver A. Jones, miner	Kicked by mule Axe slipped Fall of slate Flying Particle coal Fall of slate Struck with sledge Fall of coal Fall of coal Screen fell Fall of slate	Arm fractured Five ribs fractured. Knee badly cut. Back injured Eye injured Arm, leg, bend injured. Thumb crushed Toe fractured Right foot crushed. Back injured.	Pershing Coal Co., Marion Pershing Coal Co., Marion Consolidated Ind. Coal Co., Marion Union Coal Co., Wapello Pershing Coal Co., Marion
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FATAL ACCIDENTS IN DISTRICT NO. 2 Classified by Cause of Accident and Occupation of Injured For the Years 1928 and 1929

Cause of Accidents (U. S. Bureau of Mines Classification)	Miners	Loaders	Drivers	Тор иел	Machine men	Entry men	Company men	Shot fire	Track men	Foremen	Engineer	Miner	Timbermen	Loader	Driver	Machine men	Entry men	Сопряпу теп	Track men	Shot fire	Cager	Check weighmen	Top men	Engineer	Mechanic	Spragger	Trapper	Electrician
. Fall of roof (rock, slate, etc.)							1								-					1	1						1	1
At working face			***										***															
. Fall of roof (rock, slate, etc.)	O.																											
In room or chamber	2		1											***														
. Fall of roof (rock, slate, etc.) In road or entry																												
Fall of coal:	2	***																				***						
(a) Fall of coal at face																		- 1			- 1							
(b) Fall of pillar coal.																												
Mine cars and locomotives:	***																											
(a) Run over by car			4																									
(b) Caught between car and rib																												
(c) Caught between car and timber		***		-		***		100		***			***	777														
(d) Caught between car and top	-	***		***				-		-	-			-											-	77		
(e) Putting car on track																												
(f) Fall from car or motor	1	***	-	158							-		1			***												10
(g) Switching or spragging																												100
(h) Coupling cars																					-	-						
(i) Fall from railroad car		350	309						300				300						25		3.1	S. F						
(j) Runaway car on trip																												
(k) Caught between cars	-										1																	
(l) Pushing cars																								-		-		
(m) Cars jumping track and collisions		00																						+			-	
Electricity:	62.0	26.30	100	96.9	200	201		2000	1	3.0	1	000	-					3	2		1				20	SFS.	1	
(a) High tension or mining machines																												
(b) Electric welders, etc			***				***																			-		- 1-00
. Animals:		1	56	20	260																	00	11/3		10	et o	1	1
(a) Caught in harness	***	***	***	-		-		-					33					3 5						300			12	-
(e) Kicked by mule	221	100	100	2233	1000	101	22.3	-						-											-			-
(d) Mule run away	-			200	100		3324	1000	166	1	PERM	301	ROOM			223	mm 141				-						***	

(a) Squeezed by a mule	
(f) Shoeing mule or pony	
(a) Caught in cage	
(a) Caught in cage	
On Flying particles hitting eye.	
Yearding coal rock slate and dirt	
(e) Loading coar, the hard	
(d) Falling ratis and timbers.	
(a) Caught in tail rope	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Caught in conveyors and cables	
(1) Chught is tenn door	450 000 000 000 000 000 000 000 000 000
(g) Caught in trap door	
(h) Repairing machinery	
(i) Places broken machinery flying	
Thereas falling down shaft	
()) Persons latting down shaft	
(k) Objects falling down share-	
(I) Using blow toreh	
Dersons falling or stumbling.	
(III) Fersons taming or	
9. Explosives:	
(a) Premature and windy shots	
(b) Dust explosion, fire and gas.	
The state of the s	
 Hand tools: Axes, bars, picks, shovels, nails, wedges, mining axes, bars, picks, shovels, nails, wedges, mining 	
Axes, bars, picks, shovels, hans, and mechanical	1
machines, weighing apparatus	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
devices	
GEANCE TOTAL	

REPORT THIRD INSPECTION DISTRICT EDWARD SWEENEY, Inspector

Des Moines, Iowa

The third inspection district is composed of the following counties: Polk, Boone, Dallas, Warren, Greene, Guthrie and Webster counties

The total amount of coal of all grades produced in said district during 1929 exceeds that of 1928 by 241,345 tons, total tonnage for 1929 being 1.692,170 tons. The coal companies of this district gave employment to 2,989 miners and other employees during 1929, same being an increase of 183 men over that of the previous year. A few years are Story and Hardin counties were a part of District No. 3 but in recent years rel mines in said counties have been abandoned and have been eliminated from this district.

Eight fatal accidents occurred in 1929 as against thirteen in 1928. a decrease of five accidents.

Strikes and disagreements between miners and operators which occurred in District No. 3 during 1929 were of minor importance. Only 72 days were lost during the year owing to such trouble and all misunderstandings were amicably settled between both parties con-

cerned within a very few days after strikes were called.

Webster county produced about 85 per cent of the gypsum mined in the state in 1929. There are six gypsum mines located in the vicinity of Ft. Dodge with a total tonnage of 701,661 tons. This is an increase over our previous record of 58,882 tons. These mines have been working practically full time and no labor trouble. The rock is found at a depth of about 20 to 50 feet below the surface and 17 mining machines are in use. The gypsum mines of Webster county gave employment to 321 employees during 1929.

POLK COUNTY

Compilation of reports for the third inspection district show Polk county to be the highest coal producing county in said district. During 1928 there were 19 coal mines in active operation, 16 local and 3 shipping, producing a total tonnage of 591,762 tons of all grades.

During 1929 there were 20 coal mines in active operation, 17 local and 3 shipping, producing a total tonnage of 569,681 tons of all grades. The tonnage in 1929 shows a decrease under 1928 of 22,071 tons, although there was one more mine in operation during 1929 than in 1928. The decrease in production in Polk county we believe is due to the enormous increase in production of the shipping mines in nearby counties. The consumption of coal in Des Moines and surrounding territory was doubtless greater during 1929 than in 1928.

Polk county ranks third in coal production in the state. Marion county taking first place in quantity production and Appanoose county

being second.

There are 7 counties composing District No. 3, all of which show a decided gain in production excepting Polk and Webster counties, both of which show a slight decrease in 1929.

For the calendar year ending December 31, 1929, the mining companies of Polk county gave employment to 898 miners and other em-

Coal mining in Polk county has been carried on continuously for about 85 years, as the first record of mining done in said county show operations as early as 1850. The beds of coal that have been worked show an average thickness of about 41/2 feet, although the workable seams vary in thickness of from 2 to 7 feet. The more important mines now operating are in the immediate vicinity of Des Moines, but only those located within the city limits do a local business entirely, the others, having railroad connections, are doing 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.

At one time in its history Polk county mined nearly 2,000,000 tons of coal, most of which was shipped to points north and west. In recent years however the tonnage has dropped off until there is slightly over one-half million tons mined.

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 fuel. It is claimed that it will store much better than the foreign coals which are shipped into Iowa each year.

Repeated analyses of coal produced in Polk county shows it to be high in heat unit value which runs from 11,000 to 13,000 B. T. U to the pound. This puts Polk county coal on a level with many of the eastern coals shipped into the state, which by reason of high freight rates from other points, must sell for much higher prices than the coal mined in this county.

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

BOONE COUNTY

Boone county ranks second in coal production in the third inspection district in 1929 with a total production of 483,401 tons of all grades, an increase over 1928 of 83,943 tons. During 1928 Boone county took third place for the year's production, the total amount being 399,458 tons. During 1929 there were 11 mines in active operation of which 6 were shipping and 5 were local. For the calendar year of 1929 the mining companies of Boone county gave employment to 967 miners and other employees.

It is gratifying to note the splendid increase in the coal production

in Boone county during 1929.

Boone county was one of the first countles of the state 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 principal mining in Boone county is done in the vicinity of Madrid near the southern border of the county. The Scandia Coal Co. operate two large producing mines of a high grade coal in this vicinity. Formerly there was a great deal of coal mined in the vicinity of Angus and while the veins there average from 4 to 6 feet in thickness, there is usually a large body of water and sand overlying a thin strata of slate, making a bad roof, and coal cannot be mined at a profit. Near Ogden the seam runs from 3 to 5 feet in thickness and is found at a depth of 270 feet, the coal is of excellent quality, containing but little ash Mining machines are being used in the mines

Most of the coal mined in this vicinity is mined on the longwall system and few accidents have occurred in the mines of Boone county

during the biennial period.

No new mines have opened up in Boone county during the biennial period. However the old Ogden Coal Co. workings which ceased operations several years ago, was taken over by the Ft. Dodge, Des Moines & Southern R. R. Co. and reopened late during the summer of 1929 and the future prospects are that this mine will be one of the large coal producing mines of Boone county.

DALLAS COUNTY

Dallas county ranks third in production of coal for the calendar year of 1929. During 1928 this county ranked second, but in 1929

STATISTICS OF IOWA MINING

Boone county surpassed Dallas county by a total of 64,004 tons. During 1929 there were 4 mines in active operation in Dallas county, all of which are shipping mines having railroad connections.

For the year ending December 31, 1929, records show a total production of 419,397 tons of all grades. This is an increase of 145,927 tons over the previous year. During 1928 the total production of all grades of coal was 273,470 tons.

The mining companies during 1929 gave employment to 668 miners and other employees. The above is a splendid record for Dallas county and we trust the same good record can be maintained in future years.

Coal has been mined in Dallas county in a small way along the Raccoon river for many years at shallow depths, but it was not until 1907 that any large operations were undertaken in the county. Prospecting during 1907 at a greater depth than formerly, resulted in the Scandia Coal Co. sinking a shaft to a depth of 170 feet to a fine vein of coal, near the present sight of Scandia. Later the Dallas Coal Co. opened up a large mine north of Granger. Still later the Norwood White Coal Co. opened up a large mine with railroad connections at Moran. This was followed by the sinking of a shaft near Waukee by the Shuler Coal Co. This shaft was driven to a depth of 373 feet to a splendid vein of coal. This mine is one of the deepest in the state

All of the mines mentioned above are large producers and have added much to the wealth of Dallas county, which is classed as one of the richest farming counties in the state.

WEBSTER COUNTY

Webster county has practically ceased as a coal producing county. During 1928 there were but 4 mines in active operation producing a total tonnage of 9,036 tons. During 1929 there were but 2 mines operating the early part of the year, with a total tonnage of 1,150 tons or a decrease of 7,886 tons.

These two mines ceased operation early in the spring of 1929, and failed to reopen the following fall, therefore presume they are defi-

There is considerable coal underlying Webster county south of Ft. Dodge and along the Des Moines river in the immediate vicinity of Coalville, Kalo, Otho and Lehigh, but not of sufficient quantity to induce capital to invest in a large way.

Webster county is also a large producer of commercial gypsum in paying quantities. There are 6 gypsum mines in active operation in the vicinity of Ft. Dodge.

distribution and a second for GUTHRIE COUNTY

There is little or no change in the coal activities of Guthrie county since our last blennial report was issued. During 1928 there were 7 small local mines in operation producing a total tonnage of 8,901 tons. During 1929 there were 6 mines in operation producing a total of 9,409 tons, an increase of 508 tons. All mines in Guthrie county are small local mines, beginning operations about September of each year and are fairly active during the winter but cease operation during the summer months and do not open up again until the following fall. These mines supply local trade only within the vicinity wherein the mine is located. From 3 to 10 men are employed in the mines in this county, and in most part the gin method is used for hoisting. Mining is done on the longwall system as natural conditions favor this system. Coal thus mined is nearly all lump and of good quality, being very hard, bright and a free burner. Coal is found at a depth of 50 to 100 feet.

WARREN COUNTY

Warren county has shown a satisfactory increase in coal production in 1929 over the previous year. During 1929 the total tonnage of all grades of coal amounted to 202,063 tons; during 1928, 163,290 tons, which shows an increase of 38,773 tons.

Eight mines are in active operation in Warren county, 2 of which are shipping and 6 local. The Great Western Coal Co. mine located near Orillia, and the Indian Valley Gloss Coal Co. mine located near Hartford, are the two mines with railroad connections and the increase in production of coal in Warren county is due to the mines mentioned above. The six small local mines are active during the fall and winter months and cease operations during the summer months, supplying local trade only.

Practically all of the mining in Warren county is in the northern part of the county, near Orillia, Carlisle and Hartford. However, there are a few small local mines in the southeastern corner near Lacona. A few years ago there were mines near Spring Hill and Summerset, but the mines in these localities have been abandoned.

The mining companies of this county gave employment to 375 miners and other employees during the year 1929.

Warren county has made a good showing for 1929 and we hope in the future to see a decided increase from year to year in the output of coal in said county.

GREENE COUNTY

Greene county is recognized as a small coal producing county. There were but three mines in operation in Greene county during the biennial period of 1928-29. The total tonnage for 1928 was 4,918 tons and for 1929 the tonnage was 7,069 tons, an increase of 2,151 tons. Operations begin in the fall and continue through the winter, but cease operations during the summer months, supplying the local trade within the vicinity of the mine. The gin system is used for hoisting. The tonnage for Greene county for 1929 is the largest since 1918 as records show a total tonnage of 9,976 tons that year and since then has run about 2,000 to 3,000 tons each year.

REPORT OF THIRD INSPECTION DISTRICT EDWARD SWEENEY, Inspector Des Moines, Iowa FATAL ACCIDENTS IN DISTRICT NO. 3 1928

Date and Hour of Accident	Name and Occupation	Age	Married or Single	No. of Chil- dren	Cause of Death	Employing Company and County
Mar. 22, 11:30 a. m. Aug. 27, 9:45 a. m. Oet. 20, 3:52 p. m. Nov. 9, 2:00 p. m. Dec. 19, 2:30 p. m. Dec. 18, 8:20 a. m. May 8, 3:45 p. m. Mag. 28, 3:15 p. m. Sept. 7, 1:00 p. m. Sept. 7, 1:00 p. m. Oet. 30, 10:00 a. m. Det. 30, 10:00 a. m. Aug. 31, 3:15 p. m.	Santeen Vignaroli, miner Lee Wolf, miner	24 48 46 40 29 26 47 27 21	Married Single Married Single	5 2 4 1	Fall of slate Thrown under ear Slate fall Electrocuted Coal shot Crushed by ear. Unknown Slate fall Slate fall	Norwood White Coal Co., Polk

Date		d Ho	ur of	Name and Occupation	Age	Married or Single	No. of Chil- dren	Cause of Death	Employing Company and County
Mar. April June June Oct.	6, 18, 23, 11, 25, 7,	10:45 9:00 9:15 3:00 2:30 9:00	n. m.	T. Papas, shot firer. A. Santi, miner. C. Cooley, driver. H. Chipchase, miner. C. Christensen, foreman D. Utterson, miner. C. Shires, mach, helper. D. Burton, miner.		Married Single Married		Firing shot Slate fall Crushed under car Slate fall Crushed by car Slate fall Slate fall Slate fall Fall of boulder.	Beck Coal & Mining Co., Polk Scandia Coal Co., No. 4, Boone Norwood White C. Co. No. 8, Poll Bennett Bros. Coal Co., Polk Clover Leaf Coal & Mag. Co., Polk Norwood White C. Co. No. 8, Polk Central Service Co. No. 8, Polk Scandia Coal Co. No. 6, Boone

NON-FATAL ACCIDENTS IN DISTRICT NO. 3-1928

Date and Hour of Accident	Name and Occupation	Cause of Accident	Nature of Injury	Employing Company and County
Nov. 2, 3:00 p. m. Nov. 9, 2:00 p. m. Nov. 19, 11:45 p. m. Nov. 114:10:00 a. m. Nov. 114:10:00 a. m. Nov. 12, 3:15 p. m. Nov. 12, 3:15 p. m. Nov. 22, 3:00 p. m. Nov. 22, 3:00 p. m. Nov. 28, 10:00 a. m. Dec. 31, 2:00 p. m. Jan. 25, 11:25 a. m. Feb. 21, 11:00 a. m. Feb. 21, 11:00 a. m. Feb. 21, 11:00 p. m. Feb. 23, 3:00 p. m. Mar. 7, 8:30 a. m. Mar. 12, 8:30 p. m. Mar. 12, 8:30 a. m. June 20, 11:00 p. m. June 18, 1:00 p. m. June 18, 1:00 p. m. June 20, 11:00 a. m. June 20, 11:00 a. m. June 30, 11:00 a. m. Feb. 28, 10:00 p. m. June 30, 10:00 p. m. June 30, 10:00 p. m. June 30, 10:00 p. m. Feb. 28, 10:00 p. m. June 30, 10:00 p. m.	G. Vukovich, miner. J. A. Jones, miner. L. Banks, miner. C. Sullivan, motorman. G. Blondi, miner. Fred Howard, miner. G. Krusic, timberman. H. Clevinger, miner. A. Larson, miner. G. Constock, miner. J. Davis, miner. J. Davis, miner. V. Glopeddi, miner. F. Spener, engineer. J. Parkins, miner. G. Potts, miner. G. Potts, miner. M. Rappick, driver. M. Rastovac, miner. M. Rastovac, miner. M. Rastovac, miner. M. Rastovac, miner. M. Richten.	Fall of coal. Lost control motor, jumped Coal fell from car. Flying sulphur Fall of slate. Flying coal particle. Fall of slate. Loading car Caught under car. Fall of slate. Loading car Fell closing gate. Flying coal particle. Lifting car. Fall of slate. Caught, timber and car. Miners shot Fall of coal.	Right foot crushed. Two fingers crushed. Injured left leg. Finger broken, head cut. Left leg broken. Injured right eye. Left ribs injured. Injured right eye. Left thumb injured. Cut paim right hand. Right foot crushed. Foot and ankle injured. Strained back Right wrist fractured. Injured left eye. Sprained back Body injury Sprained left foot. Infection left hand. Sprained shoulder	Bennett Bros. Coal Co., Polk

Date and Hour of Accident	Name and Occupation	Cause of Accident	Nature of Injury	Employing Company and County
Mar. 3, 12:30 p. m. Mar. 10, 8:30 a. m. Mar. 10, 8:30 a. m. Mar. 2, 11:30 a. m. Mar. 17, 10:00 a. m. April 16, 10:00 a. m. April 16, 9:30 a. m. April 19, 9:30 a. m. April 19, 9:30 a. m. April 19, 9:30 a. m. April 16, 9:30 a. m. April 16, 9:30 a. m. April 12, 12:00 poon May 17, 12:00 poon May 19, 2:00 p. m. May 21, 5:00 p. m. May 21, 5:00 p. m. May 21, 5:00 p. m. May 22, 5:00 a. m. Aug. 20, 8:30 a. m. Aug. 20, 8:30 a. m. Sept. 24, 11:45 a. m. Det. 11, 8:00 a. m. Sept. 25, 10:00 a. m. Sept. 24, 11:45 a. m. Det. 15, 3:00 p. m. Nov. 25, 3:15 p. m. Aug. 10, 10:00 a. m. I an. 12, 10:00 a. m. I an. 12, 10:00 a. m. Mar. 21, 10:00 a. m. Mar. 21, 10:00 a. m. Mar. 22, 10:00 a. m. Mar. 21, 10:00 a. m. Mar. 22, 10:00 a. m. Mar. 22, 10:00 a. m. Mar. 21, 10:00 a. m. Mar. 22, 10:00 a. m. Oct. 16, 10:00 p. m.	N. Neison, miner A. Lamberti, miner W. Holmes, miner G. Johnston, timberman C. King, miner T. Zelhin, miner H. Rappieh, driver F. Gnader, miner P. Dante, miner P. Dante, miner A. Carzoli, driver M. Gajanavich miner T. Oyers, spragger S. Jones, driver A. Carpenter, miner T. Oyers, spragger L. Cross, miner L. Cross, miner L. Cross, miner L. Cross, miner L. Gastello, miner L. Gastello, miner J. Fillman, driver B. Vignovich, miner J. Castello, miner J. Castello, miner J. Castello, miner J. Gastello, miner J. Hatchinson, miner F. Polish, driver G. King, miner J. Wilson, miner E. Vignaroli, miner F. Van Eigh, miner L. Van Eigh, miner L. Vignaroli, miner D. Battani, trapper E. Vignaroli, miner G. Skinner, dirt man H. Edmond, miner J. Goline, coupler E. Vignoroli, Coger E. Vignoroli, Coger	Loading car, fell. Lifting slate Fall of slate Fall of slate Fall of slate Slipped and fell. Slipped and fell. Car over body. Fall of slate. Slipped and fell. Car over body. Fall of slate. Slipped and fell. Crawling through crossent. Caught, ear and rib. Fall of coal. Caught ear and rib. Bar slipped striking foot. Caught between car and rib. Struck lump coal. Plached loading car. Caught toot, ear and prop. Fall of coal, loading. Fall of coal, loading. Fall of slate. Flying coal particle. Caught, trip and rib. Lifting coal. Claimed bad air. Slipped pushing car. Finger under trip. Finger in wheel and rope. Fall of slate. Fall of coal. Unloading dirt Funce road of sate. Fall of coal. Unloading dirt Funce road of sate. Fall of slate. Fall of slate. Fall of slate. Fall of slate. Finger under rion foot. Fall of slate. Finger and of slate. Finger and of slate. Finger and of slate. Finger and of slate. Fall of slate. Finger care and care Finger care and		Beek Coal & Mining Co., Polk Beek Coal & Mining Co., Polk Urbandale Coal Co., Polk Urbandale Coal Co., Polk Urbandale Coal Co., Polk Norwood White Coal Co. No. 8, Polk Beek Coal & Mining Co., Polk Norwood White Coal Co. No. 8, Polk Beek Coal & Mining Co., Polk Norwood White Coal Co. No. 8, Polk Norwood White Coal Co. No. 8, Polk Norwood White Coal Co. No. 8, Polk Vrbandale Coal Co., Polk Seandia Coal Co. No. 4, Boone Seandia Coal Co. No. 7, Dallas Norwood White C. Co. No. 7, Dallas Norwood White C. Co. No. 7, Dallas Norwood White C. Co. No. 7, Dallas

Nov. 30, 3:00 p. m. John Carzoli, driver. Caught between cars. Left ankle fractured. Norwood W Dec. 6, 4:00 p. m. Z. Valentina, miner. Fall of coal. Head cut, back sprained. Norwood W Dec. 13, 10:00 a. m. Evagnaroli, driver. Squeezed under car. Stomach injured Indian Vali Indian Va	d White C. Co. No. 7, Dallas Valley Gloss Coal Co., Warren Valley Gloss Coal Co., Warren Valley Gloss Coal Co., Warren
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NON-FATAL ACCIDENTS IN DISTRICT NO. 3-1929

Nov. 16, 1.60 p. m. T. Malcomb, miner. Fall of slate. Figure particle sulphur Right eye injury. Beck Coal & Mining Co., Polk Piying particle sulphur Right eye injury. Beck Coal & Mining Co., Polk Piying particle sulphur Right eye injury. Beck Coal & Mining Co., Polk Piying particle sulphur Right eye injury. Beck Coal & Mining Co., Polk Piying particle sulphur Right eye injury. Beck Coal & Mining Co., Polk Piying particle sulphur Right eye injury. Beck Coal & Mining Co., Polk Piying particle sulphur Right eye injury. Bennett Bros. Coal Co. No. 2. Polk Pixing Coal Coal Coal Coal Coal Coal Coal Coal			THE PARTY OF THE P	a to note
	Mar. 14, 10:00 a. m. Feb. 18, 3:00 p. m. Feb. 11, 12:00 noon Aug. 6, 11:00 a. m. Jan. 4, 2:00 p. m. Jan. 19, 8:00 a. m. Jan. 19, 8:00 a. m. Jan. 29, 9:00 a. m. Sept. 20, 3:30 p. m. Oct. 12, 9:00 a. m. Oct. 12, 9:00 a. m. Oct. 23, 2:45 p. m. Oct. 23, 2:45 p. m. Oct. 24, 2:00 p. m. June 15, 10:00 a. m. June 15, 4:29 p. m. June 24, 3:30 p. m. Feb. 18, 10:00 a. m. Feb. 11, 10:00 a. m. Feb. 18, 10:00 a. m. April 11, 8:00 p. m. April 11, 8:00 p. m. April 11, 8:00 p. m. Sept. 26, 2:00 p. m. By Chest, miner. Oct. 24, 3:00 p. m. Oct. 25, 2:00 p. m. Oct. 26, 2:00 p. m. Oct. 27, 2:00 p. m. Oct. 28, 2:00	Flying particle sulphur Fall of slate. Fall of slate. Fall of slate. Fall of coal. Foot under loaded car Fall of slate. Loading cars Fall of slate. Loading cars Fall of slate. Loading coal. Caught-car and rib. Lifting car Lifting car Flying particle sulphur Loading dirt Rope jack fell. Caught-car and rib. Fall of slate. Caught car and post Fall of slate. Fall of slate. Caught under car. Loading coal. Fall of slate. Fall of coal. Fall of coal. Fall of coal. Fall of coal. Fall of slate. Fall of slate. Fall of slate. Fall of coal.	Right eye injury Spilt large toe. Toes right foot crushed. Back sprained Toe fractured Shoulder injured Back sprained Head and shoulder injured Finger crushed Back sprained Eye injured Hand injured Hand injured Finger fractured Finger fractured High and legs injured. Heigh and legs injured Back injured Left arm injured. Right arm injured. Right foot injured. Right foot injured. Finger brushed Left knee injured. Left knee injured. Left knee injured. Arm and leg injured. Arm and leg injured. Arm and leg injured. Right foot, ankle injured. Arm and leg injured. Breatured Left sankle injured. Back injured Left sankle injured. Back injured Left sankle injured. Back injured Back injured Left sankle injured. Back injured Back injured Back injured Back injured	Bennett Bros. Coal Co. No. 2, Polk Central Service Co. No. 5, Polk Central Service Co. No. 6, Polk Norwood White Co. No. 6, Polk Norwood White Co. No. 8, Polk

Feb. 22, 10:00 a. m. M. Gibullino, miner. Feb. 22, 10:00 a. m. M. Gibullino, miner. Feb. 23, 10:00 a. m. M. Gibullino, miner. Feb. 13, 10:00 a. m. John Carison, miner. Feb. 13, 10:00 a. m. W. Treat, miner. Sept. 12, 20:00 p. m. W. Treat, miner. Sept. 12, 20:00 p. m. S. Centarino, miner. Fiying particle coal. Feb. 13, 10:00 a. m. G. Carison, miner. Feb. 13, 10:00 a. m. G. Carison, miner. Feb. 13, 10:00 a. m. G. Carison, miner. Fell on rails. Fell on rails. Fiying particle coal. Left eye injured. Norwood White C. Co. No. 7, Dallas Seandia Coal Co. No. 5, Dallas Seandia Coal Co. No. 7, Dallas Seandia Coal Co. No. 8, Dallas Seandia Coal Co. No. 8, Dallas Seandia Coal Co. No. 8, Dallas	Date and Hour of Accident	Name and Occupation	Cause of Accident	Nature of Injury	Employing Company and County
Oct. 4, 11:00 a. m. d. Malone, miner. Fall of slate Cut.—bead, and shoulders. Scandia Coal Co. No. 4, Boone	Feb. 22, 10:30 a. m. Feb. 3, 10:00 a. m. Feb. 2, 10:00 a. m. Jan. 19, 11:00 a. m. Sept. 23, 2:00 p. m. Sept. 23, 2:00 p. m. Sept. 13, 2:00 p. m. Sept. 13, 2:00 p. m. Oct. 14, 39:30 a. m. Oct. 24, 30:30 a. m. Jan. 24, 11:00 a. m. Jan. 25, 10:00 a. m. Jan. 26, 11:00 a. m. Jan. 26, 11:00 a. m. Jan. 27, 10:00 p. m. Jan. 28, 10:00 p. m. Jan. 29, 10:00 p. m. Jan. 20, 10:00 p	Joe Witt, laborer. L. A. Walker, miner. A. Bertina, miner. M. Gibilino, miner. Joe Glime, timberman. John Carison, miner. T. Tadey, miner. W. Treat, miner. W. Treat, miner. S. Centarino, miner. S. Centarino, miner. S. Centarino, miner. S. Centarino, miner. F. Renslow, miner. F. Renslow, miner. Tony Turk, miner. T. Johnson, machine man. Tony Turk, miner. S. Jenkins, track man. E. Hiller, miner. S. Jenkins, track man. E. Miller, miner. S. Brackett, miner. J. Mochonok, miner. L. Gibbs, cager. M. Yursich, timberman. R. Spray, miner. M. Toigan, miner. J. B. Wilson, trip rider. J. B. Wilson, trip rider. J. B. By Wilson, trip rider. J. Hout, miner. J. Hunt, miner. Ray Gibbs, trip rider. W. Southall, miner. J. Monfredtin, miner. J. Monfredtin, miner.	Fell with prop. Pall of coal. Fall of coal. Fill of coal. Fill of coal. Fill of coal. Fall of coal. Fill of coal. Fill of coal. Fill of coal. Fill of size coal. Fall of size coal. Fill of slate. Warped timbers in cage. Unknown Squeezed—car and tipple. Moving machine from truck Fall of coal. Squeezed—car and rib. Contact electric wire. Snubbing coal fall. Flying particle coal. Flying particle dirt. Slipped on steps. Fall of slate. Fill of slate. Fill of slate. Filling particle coal. Coal fell down shaft. Fall of slate. Filling particle coal. Loading coal. Hand caught throwing latch Loading coal. Axe slipped Car run over block. Flying particle coal. Flying particle coal. Flying particle coal. Filling particle coal.	Shoulder blade fractured. Right foot crushed. Left eye injured. Right foot injured. Back sprained Left eye injured. Left eye injured. Left sakie crushed. Left sakie crushed. Left sakie crushed. Left sakie crushed. Right foot crushed. Left sakie crushed. Finger lacerated Severe shock Knee injured Left eye injured. Left eye injured. Left eye injured. Left foot fractured. Right eye injured. Left foot fractured. Right eye injured. Left of finger amputated. Finger lacerated Finger crushed Left thumb cut. Finger lacerated Left eye injured. Left teye injured. Left thumb cut. Finger lacerated Left eye injured. Left eye injured. Left the injured. Left see injured.	Dallas Fuel Co., Dallas Norwood White C. Co. No. 7, Dallas Seandia Coal Co. No. 4, Dallas Seandia Coal Co. No. 5, Dallas Seandia Coal Co. No. 5, Dallas Seandia Coal Co. No. 5, Dallas Seandia Coal Co. No. 6, Dallas Norwood White C. Co. No. 7, Dallas Sipa Coal Co. No. 1, Dallas Bipe Coal Co. Dallas Sipe Coal Co., Dallas Sipe Coal Co., Dallas Sipe Coal Co., Warren Indian Valley Gloss Coal Co., Warren Seandia Coal Co. No. 4, Boone

Nov. Nov. Nov. Nov. Nov. Nov. Nov. Nov.	12, 11, 19, 19, 19, 19, 19, 2, 6, 7, 8, 6, 9, 11, 11, 16, 28, 27, 22, 30, 2, 14, 9, 11, 9, 11, 11, 11, 12, 12, 13, 14, 15, 16, 17, 18, 18, 18, 18, 18, 18, 18, 18, 18, 18	10:00 a. m. 2:45 p. m. 2:45 p. m. 2:45 p. m. 2:40 p. m. 1:40 a. m. 1:40 p. m.	Wm. Daugherty, dirt man. J. Cavil, miner. J. Hutchison, miner. E. McIntire, top man. C. Wambyan, miner. F. Johnson, miner. V. Brown, driver. G. Erickson, miner. Wm. Cole, Machine man. Geo. Smith, driver. W. Haynes, miner.	Flying particle coal. Fyor eaught under car. Fall of coal in room. Fall of slate. Kicked by mule. Slipped and fell. Caught in chain. Fall of coal. Loading coal.	Finger crusbed Ankle sprained, face cut. Hands, arms, face burned. Hands, arms, face burned. Hands, arms, face burned. Hands, arms, face burned, lost sight one eye. Knee injured Back linjured Back injured Back injured Hip and leg injured. Bight foot injured. Bight foot injured. Bruised hand and hip. Bruised knee cap. Right eye injured. Bight eye injured. Hip and legs injured. Hips and legs injured. Right eye injured. Fractured bone of foot. Toe crusbed Toe crusbed Fractured wrist Two fingers crushed. Leg cut and bruised. Finger crushed. Finger crushed.	Scandia Coal Co. No. 4, Boone Scandia Coal Co. Webster Central Service Co. No. 6, Polk Central Service Co. No. 6, Boone Scandia Coal Co. No. 6, Boone Norwood White C. Co. No. 7, Dallas Norwood White Coal Co. No. 8, Polk Norwood White Coal Co. No. 8, Polk Scandia Coal Co. No. 6, Boone Scandia Coal Co. No. 4, Boone Scandia Coal Co. No. 5, Boone Scandia Coal Co. No. 5, Polk Urbandale Coal Co. Polk
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FATAL ACCIDENTS IN DISTRICT NO. 3

Classified by Cause of Accident and Occupation of Injured For the Years 1928 and 1929

Cause of Accidents (U. S. Bureau of Mines Classification)	Miners	Loaders	Drivers	Top men	Machine men	Entry men			Track man	9	Engineer	Miner	Timberman	Loader	Driver	Machine man	Entry men	Сопряпу тяп	Track man	Shot fire	Cager	Check weighman	Тор шап	Engineer	Mechanic	Spragger	Trapper	Electrician
Fall of roof (rock, slate, etc.)																		1			1	1			1	1	1	1
At working face	1		-																				100			4		30
Fall of roof (rock, slate, etc.)	100									13/			100															
In room or chamber	3		-		1																-					-		
Fall of roof (rock, slate, etc.)	1	7			1		1	100				200	100															
In road or entry	6					***																						
Fall of coal:	100		183	1	100		100	12.75		20		207	100	701	200				1		1	100				100		
(a) Fall of coal at face										-22		110			222				20		100	-		35		12		
(b) Fall of pillar coal																		-1	50		10	Sec. Se				313		
Mine cars and locomotives:			100				1					30	700	100	7000	200								ün				
(a) Run over by car			2		350	100				20		2			2													
(b) Caught between car and rib	***																					0.	331					
(c) Caught between car and timber																				(33)	CH		32		231			Ell
(d) Caught between car and top													!		28.					335		(E)	102	26				20
(e) Putting car on track		200		100						100	330		320						33		100	100		3515	63	17 6		
(f) Fall from ear or motor		20.	35		200		12.			183	100	0.0	233	20	11.3													SIE
(g) Switching or spragging	222				U					100	230	100		2				2.5		0.0	1.01	228	035.0	000	Ga 3	2010		312
(h) Coupling ears		223		0.00						282			200		000						200		23 3	333				.013
(i) Fall from railroad car																			01	916		100		110				
(j) Runaway car on trip					203	100				-											50	55	350	5010			0 35	. 3
(k) Caught between cars	1	120		1111	200					-23		1											3	4				
(l) Pushing cars																												
(m) Cars jumping track and collisions			1																		44				-			
Electricity:		100				100					900	20															100	
(a) High tension or mining machines	1	***	-		1												-									-	-	100
(b) Electric welders, etc.			***																				-			-	-	
Animals: (a) Caught in harness		100		Core		hal			11	Sed	200	-		aci.		-	10	1	2 0	600	1	-	1	-	1	. hele	l	
(a) Caught in harness	110				1																-1	in lane		-	-	Jana.		
(c) Kicked by mule				1	BEG.	50.0	201		1	12.5	1		-					200		-		A	alam.	alvan	Sant	1		

	(d) Mule run away
	(d) Mule run away
	(d) Mule rou average (e) Squeezed by mule.
	(f) Shoeing mule or pour.
R.	(f) Shoeing mule or pony
2000	
	Oh Pluing particles hitting eye
	(a) Caught in cage (b) Flying particles hitting eye. (c) Loading coal, rock, slate and dirt.
7750	(c) Loading coal, rock, state and diff-
	(c) Loading coal, rock, state and ditter. (d) Falling rails and timbers.
	(d) Falling rais and times
	(g) Caught in trap door
	(b) Repairing machinery
	(b) Repairing machinery flying.
	(3) Persons railing down shart.
	(k) Objects failing down snatt. (l) Using blow toreh
	(1) Using blow torch
	(m) Persons failing or stumbling.
9.	(m) Persons raining of statement of the persons raining
	Explosives: (a) Premature and windy shots.
	(b) Dust explosion, fire and gas.
10.	Hand tools:
1.4	Hand tools, and tools, nalls, wedges, mining Axes, bars, picks, shovels, nalls, wedges, mining
	machines, weighing apparatus and mechanical
	A
	devices
	Cause of accident unanowa

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

Name of Company and Number of Mine	Superintendent	Address	Shaft or Slope	Pian of Working	How Ventilated	Power Used	Shipping or Local
Appanoose Coal & Mining Co	Robt, Hunter	Centerville	Shaft	Longwall	Fan.	Electricity	S. I. U. Co.
Armstrong Coal Co	Chas, Harrison	Cincinnati	Shaft	Room and Pillar		Steam	
Barrett Coal Co	Jno, Barrett	Mystic	Slope	Longwall		Electricity	C., M. & St. P. R.E
Bradshaw Coal Co	Don Bradshaw	Dean, Rt. 1	Shaft	Longwall		Horse	Local
Battle Creek Coal Co		Mystic, Rt. 2	Slope	Longwall	Furnace		Local
Big Slope Coal Co	John Kennis	Centerville Rt. 3.	Slope			Gas Engine	Local
Buban Coal Co	John Buban	Mystic, Rt. 1	Slope	Longwall		Horse.	Local
Byte Coal Co	V. Byte	Centerville Rt. 3.	Slope			Gas Engine	Local
Caldwell Coal Co		Exline	Slope	Longwall		Gas Engine	Local
Centerville Coal Co.	J. Panerazio	Centerville	Slope	Longwall		Electricity	Local
Center Coal Co	L. Anderson	Centerville	Shaft	Longwall	Fan.	Electricity	
Clark Coal Co.	Dan Clark	Centerville	Shaft	Longwall		Steam.	C., R. I. & P. R. I
	H. G. Graham	Centerville	Shaft				Local
Citizens Coal Co		Mystic		Longwall		Electricity	S. I. U. Co.
Colgan Coal Co	Jas. Colgan	Centerville	Shaft	Longwall	Fan	Electricity	Local
Columbus Coal Co	C. Cuechira		Slope	Longwall	Fan	Electricity	Local
Diamond Lump Coal Co	W. M. Evans	Centerville	Shaft	Longwall		Electricity	C., B. & Q. R. R.
Domestic Coal Co	A. Horrocks	Mystic	Shaft	Longwall		Steam	Local
Ouff Coal Co	W. H. Duff	Mystle, Rt. 2	Shaft	Longwall	Fan	Horse	Local
Sgypt Coal Co	A. V. Vinell	Centerville	Slope	Longwall		Steam	C., M. & St. P. R.F.
Empire Coal Co	W. Krapfel	Centerville	Shaft	Longwall		Electricity	S. I. U. Co.
Enterprise Coal Co	C. A. Owens	Numa	Shaft	Longwall		Horse	Local
Fairlawn Coal Co	T. Lundgren	Centerville	Shaft	Longwall	Fan	Electricity	Local
Fenton Coal Co	W. Lyons	Centerville, Rt. 2	Shaft	Longwall		Horse	Local
Friendship Coal Co	D. Richardson	Cincinnati	Shaft	Longwall	Furnace	Horse.	Local
arfield Coal Co	Wm. Bradley	Centerville	Shaft	Longwall	Fan	Electricity	C. B. & Q. R. R.
Guinn Coal Co	Ira Guinn	Coal City	Slope	Room and Pillar	Furnace	Horse	Local
Happy Hollow Coal Co	O. L. Bozwell	Cincinnati, R. 2	Slope	Longwall	Fan	Horse	Local
Helman Coal Co.	Chas. Helman	Plano.	Shaft	Longwall	Fan	Horse	Local
Herr Coal Co	Ben Herr	Plano, R. 1	Shaft	Room and Pillar	Fan	Horse	Local
HI Test Coal Co	W. Young	Mystic	Shaft.	Longwall	Fan	Electricity	C., M. & St. P. R.R.
Hillside Coal Co	C. Blazarich	Mystic	Slope				Local
lowa Block Coal Co	Wm. Bradley	Exline	Shaft				C. B. & Q. R. B.
Jerome Coal Co	T. Tracey	Jerome	Shaft			Electricity	C., M. & St. P. R.R.
Kincade Coal Co	E. Kinkaid	Centerville, Rt. 4	Slope				Local
Koontz Coal Co	J. Koontz	Centerville	Shaft.				Local
Little Walnut Coal CoLee Hill Coal Co	J. Ball	Mystic, Rt. 1				forse 1	Local

					Fan.	Mule	Local
	and the same of th	Mystle	Slope	Longwall	T. Spire war and a con-	Horse	C., M. & St. P. R.R.
berty Coal Co., No. 3	E. Moss.	Mystic	Slope	Longwall	Pan	Pony	
berty Coal Co., No. 4	E. Moss		Slope	Longwall		Trongs	Local
addalozza Coal Co	V. Maddalozza	Mystic	Slope	Room and Pillar	Fan	ER COR STOCK STATE	le I II Co.
addalozza Coni Co	Wm. Marshall	Mystic	Shaft	Longwall	Fan	Electricity	C., B. & Q. R. R.
arshall Coal Co	O. McConville	Centerville		Longwall	Fan	Electricity	S. I. U. Co.
eConville & Sons Coal Co., No. 1		Centerville	. Shaft	Longwall	Fan	Electricity	
		Centerville	Shaft	Longwall	Fan	Electricity	Local A St D P R
Convilla & Sons Coal Co.,	ware write a favorage	Centerville	Shaft	_Longwall	Fan	Steam	C., M. & St. P. R.R.
coltor Coal Co.	W. Hitchens	Mystic	Shaft	_Longwall	Fan	Flootricity	Local
ystic Coal Co		Centerville	Shaft	Longwall		Horse	Local
ew Rock Valley Coal Co	J. E. Campbell	Centerville, Rt. 1	Shaft	Room and Pillar	Fan	Housestern	
ew Rock valley Coal Co.	Van Pugh	Centervine, Ac.	Chiares	* TO SECTION OF THE PARTY OF TH		**********	Local
ew Star Coal Co		The state of the s	Shaft	Longwall	Fan	Electricity	C., R. I. & P. R. R
orth Hill Coal Co	oughey	Centerville		Longwall	Fan	Electricity	C., B. & Q. R. R.
	B. Arbogast	Numa.	Shaft	Longwait	Fan	Electricity	U., B. & G. P. P.
uma Coal Co		Centerville	Shaft	Longwall	Furnace	Horse	C., B. & Q. R. R.
ld King Coal Co	Jacob Ritter	Brazil	Slope	Longwall	Furnace	Horse	
escock Coal Co		Exline	Slope	Longwall		Electricity	C., M. & St. P. R.1
rospect Coal Co		Exime	Slope	Longwall	Fan		
athburn Coal Co		Rathbun		Longwall	Fan	. Horse	
athburn Coar Co		Seymour, Rt. 1.	Slope	Longwall	Fan	Horse	
ted Bird Coal Co		Mystle		Longwall	Furnace	Horse	
star Coal Co		Centerville, Rt.	3. Slope	Longwall	Fan	Electricity	
imatorich Coal Co		Centerville	Shaft	Longwall	Fan.	Steam	
Amphine Coal Co	d. R. Hamm	Cincinnati	Shaft	Room and Pillar.	Fan	Gas Engine	Local
Chietla Coal Co.	- Geo. Dinuma.	Jerome	Shaft	Longwall		Gas Engine	Local
Walnut Creek Coal Co	A. Guiespie	Rathbun		Longwall	Furnace	Horse	Local
Walter Lilly Coal Co		- Rathbun		Longwall	Furnace		Local
Whiter Liny Com Co.	John Seals	Exline		Longwall	Furnace	Horse	Advisor
White Oak Coal Co		Brazil	Stope	Louis a and	1		
LONE COM SOME	V. Con	LUC	AS COU	NTY			
		1 25.7 5	T. C. C.	Maria A	- Lan	Horse	Local
	1	** * · · · · · · · · · · · · · · · · ·	Slope	Room and Pillar.	- Furnace.		C R. I. & P. R.
- 1 0-10-	Wm. Briggs	Melrose, Rt. 4		Room and Pillar	Fan	Steam	
Cedar Coal Co		Chariton		Boom and Pillar	- Fan	Electricity	
Central Iowa Fuel Co., No. 4		Chariton	Shaft		1000	The same of the sa	C., R. I. & P. R.
Central Iowa Fuel Co., No. 5	11 . 101 . 1011	- CC1000 - CET	200	Room and Pillar	Fan	Electricity	
Consolidated Indiana Com Co	J. Hall	Melcher	Slope	Longwall	Furnace.	Horse	Local
Vo 9			Slope		Wan.	Horse	Local
Kusebaum Coal Co		Lucas	Shaft	Longwall	Pan Pan	Horse	Local
Union Coal Co		Lacona, Rt. 1.	Slope	Room and Pillar	+- FBH	and was a second	
Mederals Coal Co	H. Medearis	Lacona, Bt. 1-					
Mederals Coal Collision		1					
District of Arter	10-10	MON	ROE CO	UNTY			
			1		TO A CORNEL	ler	Local
							AND ADDRESS.
Name to Winner and Add			Stone	Room and Pillat	Fallers	District Control	Local
hrisman Coal Co	B. Chrisman	Albia, R. 3	Slope Shaft.	Room and Pillar	- Fan	Steam	Local

LIST OF OPERATING COAL	COMPANIES	SUPERINTENDENTS	ETC IN	DISTRICT NO	1-Continued

Name of Company and Number of Mine	Superintendent	Address	Shaft or Slope	Plan of Working	How Ventilated	Power Used	Shipping or Local
De Ross Coal Co Graham Coal Co Hocking Coal Co Federal Coal Co Oak Block Coal Co Plainview Coal Co	A. C. Bridges A. E. Hupton B. Chedister W. J. Gregg	Albia, Rt. 3 Avery	Slope Shaft Shaft Slope Slope Slope	Room and Pillar Room and Pillar Room and Pillar Room and Pillar Room and Pillar Room and Pillar	Fan	Steam	Local C., B. & Q. R. R. M. & St. L. B. R. Local Local Local
		WAYN	NE COUN	TY			
Rissler Coal Co	P. Poli. A. Hayhurst. F. H. Rissier. S. Mascogni. Wm. Steffy. B. Whalan.	Promise City, B. Promise City, R. Meirose, Rt. 3 Mystic. Seymour. Seymour.	Shaft	Longwall Longwall Longwall Longwall Longwall Longwall	FanFanFurnaceFan	Horse Horse Pony Gas Engine Steam	Local Local Local Local Local C., R. I. & P.
The second secon	F Francis	ADAM	is coun	ry	11:11		
Ankney Coal Co Black Diamond Coal Co Henton Coal Co Larson Coal Co McKee Coal Co Ruth Coal Co Smith Coal Co Wild Coal Co	E. G. Meggison J. Henton Corning, Rt. 6 R. McKee J. F. Ruth	Villises Nodaway, Rt. 1. Carbon, Rt. 1. C. Larson. Carbon, Rt. 6. Carbon. Carbon. Carbon.	Shaft	Longwall	Furnace Furnace Furnace Furnace Furnace	Gas Engine Gas Engine Horse Horse Horse Horse Horse Horse	Local Local Local Local Local Local Local Local Local
	7/ 1/2	PAGE	COUNT	Y		mercen &	
Evans Coal Co	H. Pearson.	Clarinda Clarinda Clarinda Clarinda	ShaftShaftShaft	Longwall.	FanFan	Electricity	Local Local Local

TAYLOR COUNTY

-	to accom		Pan	Horse	Local
Bean Coal Co		Drift present along a marrane	Fan. Furnace	Electricity	C., B. & Q. R. R. Local

Name of Company and Number of Mine	Superintendent	Address	Shaft or Slope	Plan of Working	How Ventilated	Power Used	Shipping or Loca
Indian Head Coal Co., No. 1	Edw. Sparin	Ottumwa	Shaft	Room and Pillar	Fan	Electricity	
Union Coal Co	W. Sullivan	Ottumwa	Shaft	Room and Pillar	Fan	Electricity	Local
Big Four Coal Co	J. Genochia	Ottumwa	Shaft	Room and Pillar			Local
Wapello Coal Co	John Howard	Ottumwa		Room and Pillar		Steam	
Hendale Coal Co		Ottumwa	Shaft	Room and Pillar		Horse	
Akers (Chas.) Coal Co	Chas. Akers	Ottumwa	Slope	Longwall	Natural	Horse	Local
Itterback (A. H.) Coal Co		Ottumwa, Rt. 6					Local
Simpson Bros, Coal Co		Ottumwa	Shaft		Fan	Steam	Local
fiers & Houk Coal Co		Ottumwa, Rt. 8		Room and Pillar		Horse	Local
Vm. Rogers Coal Co		Ottumwa, Rt. S	Shaft	Room and Pillar		Horse	Local
ibbs Bros. Coal Co		Ottumwa, Rt. 8	Shaft	Room and Pillar	Fan	Horse	Local
irkville Coal Co	R. Lipovac	Ottumwa, 614 W.					
		Main St	Slope	Room and Pillar	Natural	Horse.	Local
afayette Coal Co	Wm, Griffith	Ottumwa, Rt. 8	Slope	Room and Pillar		Horse	
irline Coal Co	J. Genochlo	Ottumwa, 415 So.					and the same of th
		Willard	Shaft	Room and Pillar	Fan	Steam	Local
funterville Coal Co	R. Griffith	Blakesburgh, R.					Local
		F. D	Shaft	Room and Pillar	Fan	Horse.	Local
owley Coal Co	H. Rowley	Blakesburgh, R.				*************	LOCAL
one) com commission	M. Montejana	F. D.	Shaft	Room and Pillar	Fan	Steam	Lone
hode Coal Co	J. Serterr	Blakesburgh, R.	- Condition	ttoom and I mai	* *********	oveam	Locar
noue com commencement	or cerecitization	F. D.	Shaft	Room and Pillar	Van	Gas	T nant
awson Coal Co	J. W. Dawson	Kirkville	Shaft				
arr Bros. Coal Co	E. Carr		Shaft				Local
		Eldon	Slope				Local
eist Coal Co., No. 2		Eldon					Local
leist Coal Co., No. 3	H. Weist M. Stribling	Eldon	Shaft				Local
tribling Coal Co.							Local
artwig (Harley) Coal Co			Slope				C., R. I. & P. R. 1
lartwig (Chas.) Coal Co			Slope	Room and Pillar	Natural	Horse	Local
anten (Chas) Coal Co	C. Santen	Ottumwa, 1237 E.	Ob a fa	Room and Pillar	Fan	Woman	
Tomas Walless Coal Co.	market branch	Haynes.	Shaft			Horse	
Lappy Hollow Coal Co	LODEY EVADS	Ottumwa, R.F.D.	Siope	Room and Pillar	Cambridge Min 1	Horse	LOCAL

NATURAL PROPERTY AND A SECOND SECOND	Well Jilding		100	Comment of the last			W. W. W. W.
CONTRACTOR OF THE PARTY OF THE	12.5	Eddyville	Slope			Horse	Local
vans Bros. Coal Co		Eddyvine	Shaft	Room and Pillar	R. Spyr = = = = = = =		
weitzer Coal Co	C. Sweitzer	Eddyville	Shaft	Room and Pillar	Fan	Horse	Local
weitzer Coal Co		Given, R.F.D	slope	Room and Pillar	Fan	Steam	Local
	A. M. Evans	Given		Boom and Pillar	Fan	Gas	Local
	Roy Ellis	Given	Slope	Room and Pillar	Natural		Local
	Tom Lewis	Given	Slope	Room and Pillar	Natural		Local
	Geo. Cromwell	Oskaloosa	Slope	Room and Pillar	Natural		Local
	H. Mathes	Given	Slope		Natural		Local
tathes Coal Co		Oskaloosa	Slope		Pan.	Steam	Local
S Frehn Coal Co.	W. De Frehn	Oakaloosa	Shaft	. Room and Pillar		Horse	Local
oberts Bros. Coal Co	R. RODELFE	Oskaloosa	Slope		Natural	Horse	Local
wanson & Hohn Coal Co., No. 1	M. Hohn	Rose Hill	Slope	Room and Pillar	Natural	Hotse	ALCOURT .
lansel (C. A.) Coal Co	C. A. Hansel	Rose Hill.	Ciro pe secon	11 to 100 Miles S. (1) 475.71	Ball and and and		Local
skaloosa Coal Co	J. Hastings	Oskaloosa, 616 N.	Slope	Room and Pillar	FBD	Gas	Tocas
skaloosa Coal Co	The state of the s	4th St		The same times a series	L#45137	21938	
SECRETARIA SERVICE SER	C. H. Mitchell	Oskaloosa, 902 Ist	man .	Room and Pillar	Fan	Horse	Local
ditchell Coal Co	C. WITTERLY	Ave. W	Slope	Room and Piliar	Natural	Horse	Local
CORP. CORP. CO.	M. Edwards	Oskaloosa	Slope	- Room and I man	and the later of t	Colon Colonia	THE PLANTS
dwards Bros. Coal Co., No. 2		Oskaloosa, 607 N.	A COLUMN	Do and Dillian	Natural	Gas	Local
dwards Bros. Coal Co., No. 3	M. Edwards	B. St	Shaft	Room and Pillar	Natural	Horse	Local
	III-S REPORT BUTTON	Evans	Slope	. Room and Pillar	Fan	Horse	Local
O'Brien & Edwards Coal Co	D. Edwards	Evans	Slope	Room and Pillar	Pan	Hotel	FRANK
Evans (Thos.) Coal Co	THOS. EVALUATION	Oskaloosa, 802 Sc		Country of the Countr		Steam	Local
Morrisey Conl Co	D. D. Morrisey	11th St.	Slope	Room and Pillar	Natural		Local
MOTTINE'S COM COLL	C. BANKS CAR	Oskaloosa, R.F.I		Room and Pillar	Natural	Horse	Local
Martison (J. M.) Coal Co	J. M. Martison	Oskaloosa, R.F.L	Slope	Room and Pillar	Natural	Horse	Local
Thatcher (W. T.) Coal Co	W. T. Thatchet.	Oskaloosa, R.F.I	Blope	Room and Pillar	Natural	Horse	
Thatcher (W. 1.) Coal Co		Oskaloosa, R.F.I) Slope	Room and Pillaf	Natural	Horse	Local
Ahweller Coal Co		Rose Hill	Shaft	Room and Pillar.	Natural	Gas	Local
Ferguson & White Bros. Coal Co.		New Sharon	Slope	Room and Pillar.	Natural	. Gas	Local
Williams (E. F.) Coal Co	S. Gasper		Slope	Room and Pillar	Natural	- Gas	Local
Gasper Coal Co		Dencon	Slope	Room and Pillar		Horse	Local
Owens & Griffiths Coal Co		Oskaloosa, R.F.	D Slope	Room and Pillar	Natural	Gas	Local
Lockhart (Arthur) Coal Co	A. LOCKHBIT	Lovilla, R.F.D.	Slope	Room and Pillar.	- Natural	Horse	Local
Blomeren Bros. Coal Co	- E. Blomgren	Given, R.F.D	Slope	Boem and Pillar.	-Natural	. Hotse	77.11.7
Fedora (Mike) Coal Co	M. Fedora	Given, B. Z. D.					Total Control
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	1		1	now and piller	Fan	Electricity	C., R. I. & P. R.
Consolidated Indiana Coal Co.	John Hall	Melcher	Shaft	Room and Pillar.	Eur	Steam	. West Beach of the Land
No 9	" Ann Trum	Melcher	Shaft	Room and Pillar. Room and Pillar.	Pan	Steam	Wabash R. R. Co.
Red Rock Coal Co	C. Anderson	Pershing	Shaft	Room and Pillar.	Fan	Gas	
Pershing Coal Co	d. E. William	Dallas					
McClean Conl Co.	W. MCERTHE						Local
McAllister & Gilchrist Coal Co	M. J. McAllister	Knoxville		Room and Pillar	Fan-		-2.4/4/C-840

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MONROE COUNTY

Slope....

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Address

Knoxville, R. 8... Marysville

Otley. Knoxville, R.F.D. Knoxville, R.F.D.

No. 1.... Knoxville.

Pleasantville

Bussey.

Bussey.

Dallas

Tracey.... Knoxville

Marysville.

Marysville ...

No. 1..... Melcher....

Harvey....

Hamilton Knoxville, .R. Knoxville, R. 3...

Hamilton, R.F.D

Harvey...... Hamilton.....

Shaft or Slope

Plan of Working

Room and Pillar.

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Natural. Fan..... Natural.

Name of Company and Number of Mine

Fortner (Chas.) Coal Co... Hudson (Roy) Coal Co.... Kendall Coal Co....

Bradley Bros. Coal Co

Vancuniebrock Bros. Coal Co., No. 3 Swan Coal Co.

Swan Coal Co...

Miller Coal Co...

Riggen Coal Co...

Hamilton Coal Co...

Horne Shoe Coal Co...

Johns Bros. Coal Co...

Robinson Coal Co...

Robinson Coal Co...

Rowley (Ben) Coal Co., No. 1...

Davis & McKenzie Coal Co...

Clark (Jas.) Coal Co...

Slimmons (Fred) Coal Co...

Slimmons (Fred) Coal Co...

Jackson Bros. Coal Co... Mayer Coal Co....

Success Coal Co... Bishop Coal Co...

Hays Bros. Coal Co ...

Superintendent

Chas. Fortner ...

Roy Hudson.... E. Kendall..... J. Langdon....

Phil. Bishop.... L. H. Bradley...

C. McAlliste.
John Miller.
C. A. Riggen.
C. Bolton.
Villant.

Johns ...

Robinson

Ben Rowley ...

Thos. Davis... L. Dufner.....

F. Simmons... Bert Cox.....

Art Jones..... Albert Davis...

Geo. Jackson Jones Mayer.

Jas. Clark

J. Kopman ...

C.

F. Vancounibrock Knoxville. C. McAllister..... Swan.....

C. H. Hays.

Shipping or Local

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C., B. & Q. R. R. Local Local

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Greef a Son Co	Daniels Coal Co	R. A. Radeliffe.	Douds	Shaft Shaft	Room and Pillar Room and Pillar	Natural.	Horse Horse Horse	Local Local Local
Carmichael Coal Co	Daniels Coal Co	R. A. Radellffa. Jas. Tweedy Alex. Clark	Douds	Shaft Shaft	Room and Pillar Room and Pillar Room and Pillar Room and Pillar	Natural Fan Natural	Horse Horse Horse	Local Local Local Local
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DAVIS COUNTY	Daniels Coal Co	R. A. Radeliffe. Jas. Tweedy Alex. Clark Chas. Greer Chas. Roe	Douds	Shaft Shaft Shaft Shaft	Room and Pillar	Natural Fan Natural Natural	Horse Horse Horse	Local Local Local Local
	Daniels Coal Co	R. A. Radeliffe. Jas. Tweedy Alex. Clark Chas. Greer Chas. Roe	Douds Douds Douds Douds Farmington Mt. Zion, R.F.I. Mt. Zion, R.F.D. Birmingham.	Shaft Shaft Shaft Shaft Shaft Shaft	Room and Pillar	Natural Fan Natural Natural	Horse Horse Horse	Local Local Local Local
Total	Daniels Coal Co	R. A. Radeliffe. Jas. Tweedy Alex. Clark Chas. Greer Chas. Roe	Douds Douds Douds Douds Farmington Mt. Zion, R.F.I. Mt. Zion, R.F.D. Birmingham.	Shaft Shaft Shaft Shaft Shaft Shaft	Room and Pillar	Natural Fan Natural Natural	Horse Horse Horse	Local Local Local Local
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Van Patten Coal Co. G. Van Patten Floris. Slope Room and Pillar. Natural Steam Local Lunsford Bros. Coal Co. D. D. Lunsford. Bloomfield. Shaft. Room and Pillar. Fau. Steam Local	Daniels Coal Co	R. A. Radellifa. Jas. Tweedy Alex. Clark Chas. Greer Chas. Roe. A. Carmichael	Douds. Douds. Douds. Douds. Farmington. Mt. Zion, R. F. I. Mt. Zion, R. F. D. Birmingham. DAV	ShaftShaftShaftShaftShaftShaftShaftShaftShaftShaft	Room and Pillar- Room and Pillar- Room and Pillar- Room and Pillar- Room and Pillar- Room and Pillar-	Fan Natural Fan Natural Natural	Horse Horse Horse Horse Horse	Local Local Local Local Local Local Local

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

delphi Coal Coek Coal & Mining Co	John Beck	Adelphi Des Moines, 507	Shaft		-		
and the same of th	No. of the state o	Dog Moines For	SHRIV	Room and Pillar	Fan	Gas	Local
nnet Bros Coal Co No 9		6th Ave.	Shaft	Room and Pillar	Fan	Electricity	Local
muce Dion. Cour co.! wo. weeks	A. Bennett	Des Moines, 427	The state of the s	STATE OF THE PARTY	DAMES STORES	Children of the Control	The state of the s
arbon Mining Co	J. D. Phillips	Grand Ave Des Moines, 907	Shaft	Room and Pillar	Fan	Steam	Local
ntral Service Co., No. 5	Contract of the Contract of th	B. T. Bldg	Shaft	Room and Pillar	Fan	Electricity	Local
	The state of the s	Des Moines, 100 Maple St	Shaft	Room and Pillar	Fan	Electricity	Local
ntral Service Co., No. 6	H. Blount	Des Moines, 100 Maple St	Shaft	Room and Pillar	Fan	Electricity	Local
over Leaf Coal Co., No. 2		Des Moines	Shaft	L. W. & R. & P	Fan	Electricity	Local
mmerce Coal Cos Moines Coal Co., No. 4		Commerce Des Moines, 418	Shaft	Longwall	Fan	Horse	Local
onomy Coal Co., No. 2	T. Darmen	V. N. B. Bldg. Des Molnes, 423	Shaft	Room and Pillar	Fan	Electricity	Local
	Appear of the property of the same	Grand Ave	Shaft	Room and Pillar			C., R. I. & P. R. R
onomy Coal Co., No. 3		Des Moines	Shaft	Room and Pillar Room and Pillar		Electricity	
bson Coal Co., No. 1		Des Moines, 225	DODON'S COLUMN	STATE OF STA			1
oss Coal Co., No. 1	J. R. Gross	Iowa Bidg Carlisle R. 1	Shaft		Fan Natural	Electricity	C., M. & St. P. R.R.
dependent Coal Co	W. Griffith	Des Moines, 410 B. T. Bldg	Shaft	Room and Pillar	China.	Steam	2000
plin Coal Co., No. 1	D. Joplin	Runnells	Shaft			Steam	Local
rwood White Coal Co., No. 8	J. D. Phillips	Des Moines, 907 B. T. Bidg	Shaft	Room and Pillar	Fan.	Electricity	I. Urban R. R.
anford Coal Co		Des Moines. Des Moines, 2456	Shaft			Electricity	Local
STATE OF THE PROPERTY OF THE PROPERTY OF		E. Grand	Slope	Room and Pillar	Fan	Gas	Local
bandale Coal Co., No. 1	N. E. Burriss	Des Moines, 804 11th St.	Shaft	Room and Pillar	Fan	Electricity	Local

BOONE COUNTY

Shaft Longwall Fan Electricity Ft. D., D. M. & S.

WARREN COUNTY

	R. Carpenter		Drift	Room and	Pillar.	Natural Fan	Local C. & G.	w. 1	R. R.	
Great Western Coal Co., No. 1 Indian Valley Gloss Coal Co., No. Miller Coal Co Och HUI Coal Co	W. Prior L. Miller	Hartford Lacona.	Shaft Drift Shaft Shaft	Room and Room and Longwall. Longwall. Room and	Pillar	Fan Fan Fan	C., R. Local Local Local Local Local	(. &)	P. R.	R.

GUTHRIE COUNTY

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		Guthrle Center		Longwall	Natural	Horse	Local Local
Mansell Coal Co	John Mansell	Guthrie Center, R.F.D Guthrie Center	Shaft	Longwall	Natural	Horse	Local Local
Sipe Coal Co	L. B. Sipe	Guthrie Center,	The second	Longwall	Furnace	Horse	Local
Thomas Coar Co	W. Amountaine	R.F.D. No. 8 Guthrie Center		Longwall	. Natural	Horse	Local

Continued 00 NO. DISTRICT ETC SUPERINTENDENTS. COMPANIES, OPERATING COAL OF

Name of Company and Number of Mine		Superintendent	Address	Shaft or Slope	Shaft or Slope Pian of Working Ventilated	How	Power	Shipping or Local
Dallas Fuel Co I. Love Norwood White Coal Co., No. 7 J. D. Philips. Scandia Coal Co., No. 5 Bhuler Coal Co H. M. Shuler.	H . O H		Des Moines 641 Ins. Ex. Bidg Des Moines, 807 B. T. Bidg Des Moines, 606 Des Moines, 706 Bes Moines, 706 So. Surety	ShaftShaftShaftShaft	Room and Pillar Fan Room and Pillar Fan Room and Pillar Fan		Electricity	Electricity C., M. & St. P. R.R. Electricity I. Urban R. R. Steam C., M. & St. P. R.R. Electricity C., M. & St. P. R.R.
Miller Comments	7		WEBST	WEBSTER COUNTY	YTY		The state of the s	THE R. P. LEWIS CO., LANSING, MICH.
Riverside Coal Co.	000	G. Marcy	Lehigh Shaft. Ft. Dodge, R. F. D Shaft.	Shaft	Longwall	Natural Horse.	Horse	Local Local
	-		GREEN	GREENE COUNTY	TY			
Creekside Coal Co. McElherey Coal Co. Riverside Coal Co., No. 1	KH.S	S. Black. Dawson. H. A. McElbeney. Rippey. M. Feith. Rippey.		Shaft Shaft Slope	Room and Pillar Fan. Room and Pillar Fan. Room and Pillar Fan.	Fan. Fan.	Horse. Horse. Steam.	Local Local

1928-1930 AGREEMENT BETWEEN THE MEMBERS OF DISTRICT NO. 13, U. M. W. OF A., PARTIES OF THE FIRST PART, AND THE MEMBERS OF THE IOWA COAL OPERATORS' ASSOCIATION, PARTIES OF THE SECOND PART, OCTOBER 1, 1928, TO MARCH 31, 1930.

DES MOINES AGREEMENT

This contract, made and entered into by and between District No. 13, of the U. M. W. of A. and each member thereof, party of the first part, and the Iowa Coal Operators' Association and each member thereof, party of the second part.

WITNESSETH: That it is understood and agreed that all of the terms and provisions herein contained are for the exclusive joint use and benefit of District No. 13 of the U. M. W. of A. and each member thereof, and each and every member of the Iowa Coal Operators' Association, and this agreement is entered into with the hope and belief that the good relations existing between the members of the two Associations will continue without the interruption of local strikes called in violation of the Agreement which is not countenanced by either Association.

It is agreed that said contract shall take effect October 1, 1928, and remain in effect until March 31, 1930.

AGREEMENT MADE BY THE IOWA COAL OPERATORS ASSOCIA-TION OF IOWA AND THE UNITED MINE WORKERS OF DISTRICT NO. 13, EFECETIVE OCTOBER 1, 1928. UNTIL MARCH 31, 1930, BOTH INCLUSIVE

The prices to be paid for pick mined coal in the various subdistricts named below, of said District 13, during the period commencing October 1, 1928, and ending March 31, 1930, shall be as follows, per ton of two thousand pounds, mine run or lump coal, as hereinafter provided in the various sub-districts.

SUB-DISTRICT NO. TWO

SUB-DISTRICT NO. 1 WO
All mines in Sub-District No. 2 shall operate on an absolute mine
run basis. Mine Run Coal, per ton
Mine Run Coal, per ton
ENTRY PRICES
Eight-Foot Entry, per yard
Twelve-Foot Entry, per yard. The yardage prices provided above are made on the condition that the yardage prices provided above are made on the condition that the yardage prices from and bottom, before
The yardage prices provided above are made on the entry men must cut all normal entries, top and bottom, before the entry men must cut all normal entries, top and bottom, before they are shot. This shall not prevent the firing of practical lifting
shots.
Agreements on the price of deficient eight-foot entry work:
Agreements on the price of deficient by having rock or other im- Entry, 3½ to 4 ft. vein, deficient by having rock or other im-
Entry, 3½ to 4 ft. vein, deficient by having rock or other impurities, price including coal, per yard
purities, not sufficient coal to cut, price including coal,

per yard 8,08

Entry, 4 to 5 ft. vein, deficient by having rock or other impurities, price including coal, per yard	
per yard	
purities, not sufficient coal to cut, price including coal	
per yard	
Entry, 6½ to 8 ft. vein, deficient by having rock or other impurities, not sufficient coal to cut, price including coal, per yard	
Note: The above prices shall be in full payment, both for the yardage and the mining.	
Whose the usin is under three and one half fact	

Where the vein is under three and one-half feet or over eight feet in thickness, or where jumpers have to be used, entries shall be worked by the day, or at such price per yard as may be agreed upon between the entry men and the pit boss.

If by the day, the wages shall be \$5.95 per day, the company to furnish tools and supplies.

In deficient entries, entrymen to load out rock of other impurities. It is understood that the intent of this agreement is that the entrymen shall do the cutting in the same manner as he would if paid no deficiency, to-wit: When cutting in the bottom, to extend the cut upwards until an actual obstruction is encountered, and if the same is such that it can be readily broken with the sledge, the same shall be done and the cut carried to the top of the vein.

No top shots to be used except to break down the coal that lies above an actual obstruction. If the obstruction be near the bottom and the cutting is done in top coal, the same rule to apply to bottom coal as above stated for top coal.

Whenever any entry that is now deficient becomes normal by the disappearance of bands of impurities or other obstructions which prevent cutting, the entrymen must square up and proceed to work it as a normal entry.

The occurrence of a sulphur ball or lump or other impurities which does not extend to a greater width than the cut, and which can be readily broken out, or a thin band of impurity which can be readily broken, will not be considered as preventing the cutting the full height of the vein.

At any mine in lieu of the above scale for deficient entries, such work may be paid for \$4.52 per yard and the coal. The miner to load out the impurities.

The adoption of the above deficient entry scale does not prevent individuals from doing this class of work with such allowance above the normal scale as may be agreed upon between the men concerned and the mine foreman. In case they disagree the gross yardage scale for deficient entries shall apply.

ROCK IN ROOMS

Whenever a miner has rock shot down in his room that is in his way and which prevents him loading his coal, the company shall remove the large rock or pay the miner for doing the same at the rate of 72½ cents per hour. Resolution No. 4, Section C, to govern as to notification of foreman and time of waiting.

But, in the event the rock is mixed with the miner's coal, the miner shall separate the same and throw all small rock into the gob.

ROOM TURNING

Room turning with neck 8 feet wide not to exceed 9 feet deep, \$6.97. Rooms shall be considered turned when they are 18 feet deep and 18 feet wide at the face.

Where neck is required to be cut more than 3 feet on one side,

\$3.10 additional shall be paid.

The company cannot require the miner to turn the rooms for the pick mining room turning price and then mine the rooms with machines after machines have once been installed in the mine.

DOUBLE SHIFTING

Double shifting in entries, 25 cents per yard extra.

BREAK-THROUGHS

Break-throughs between rooms and entries shall be made in accordance with the state law as to distance, and in rooms where break-throughs are required to be cut at entry widths they shall be paid at entry prices.

BRUSHING-WIDTH OF ROOMS-UNLOADING SLATE

Brushing by taking up bottom or taking down top shall be 7 9/10 cents per inch, measured from the top or the bottom of the vein as the case may be, and of sufficient width for roadway not to exceed 5 feet. This to apply to top and bottom of ordinary slate or clay material, but if of an unusually hard material, then the price to be agreed upon locally, and failing to agree, the company to do the brushing, in which case the said brushing shall be kept up to within 15 feet of the face. The minimum width of any room shall be 20 feet. Loading or unloading slate done by the miner, 24 cents per car, provided if there is any change in the capacity of the car there can be a readjustment of the price but there shall be no change in existing local agreements on the subject.

BLACKSMITHING

The company shall do the sharpening, which shall mean only the sharpening of picks, augers, and wedges, the buttoning of scrapers and cutting off of augers, and the price of the same shall be 3/4 of one per cent of gross earnings, and the miners' tools shall be given preference over all other work done by the blacksmith, and be sharpened in a workmanlike manner.

It is further agreed that the operator will furnish a suitable place or places for the miners to receive their tools, and in first class mines, where it can be shown that it is necessary for the proper regulation of the tool question, to have them separated or handed out, the operator will furnish some one to do the work, and the question of wages and duties shall be left to the operator.

DAY WAGE SCALE

Track layers, timbermen, cagers, per day\$5.80)
Drivers, Trip Riders and Water Haulers, per day 5.8	1
Track Layers and Timbermen Helpers, per day 565	
Boy Couplers, per day	5
Trappers, per day350	ì
Motormen, per day 6.10	ŝ
Oilers, per day 3.50	í
Spike Team Drivers, per day, when engaged in regular switch-	1
ing 5.95	ė
Drillers and Shooters, per day	Ž.
All other inside adult labor, per day	Ď.
Cold made adult labor, per day	N.

Stable men now receiving \$7.50 per day or over, shall be reduced \$1.70 per day. Those receiving less than \$7.50 per day, shall be reduced \$1.55 per day. Those paid by the month shall be reduced \$1.55 per day, based on 30 days.

Boy drivers may be used between partings, but when used at regular switching they shall be considered as men and receive men's wages.

ELECTRIC MINING MACHINE SCALE FOR SUB-DISTRICT NO. 2

Loading,	drilling,	shooting	and	furnishing	of	explosives,	mine
run	coal, per	r ton			10		\$0.82
Machine	Runner,	per day	·		W. N.	. exalas vela	6.21
Machine	Helper	per day	Saw walls				5.05

It is understood that the day wage fixed for machine crew shall not prevent them from agreeing on a price per ton and yardage and room turning; provided, the earnings be not less than the above day wage scale.

NARROW WORK

Eight-Foot Entry, loaders, per yard\$1.37
Twelve-Foot Entry, loaders, per yard
Room Necks, same measurements as pick mining, loaders 279

Break-throughs between rooms and entries shall be paid for at same rate as entries of equal widths.

Loaders in narrow work and room turning to have the option of accepting tonnage and yardage rates, or being paid at the rate of \$5.95 per day, this to include use of miners' tools. The company to have the right to select loaders for this work who may be transferred at the company's option to a normal place to load or mine coal without loss of time. Blacksmithing shall be ½ of 1% of the loaders' gross earnings.

DUTIES OF MACHINE CREW

The company shall furnish all parts and supplies to keep machines in repair. The machine crew shall perform the necessary labor for repairs, not exceeding thirty minutes at any one time, without extra compensation, all excess time shall be paid for at the rate of .72½ cents per hour. The machine crew shall cut the coal within four (4) inches of the bottom unless prevented by physical conditions; if they fail to do so and a loader is required to do extra work the mine boss and mine president shall agree on the amount due the loader for this work, and this amount shall be deducted from the machine crew's earnings at the rate of .72½ cents per hour.

The machine crew shall connect the machine wires to entry wires and take proper care of the machine and perform the necessary labor in moving from place to place. The machine crew shall receive and deliver bits and supplies at the same point at which pick miners receive their tools. Machines may run double shift or they may run one shift each twenty-four hours whether it is during the time the mine is running coal or not, provided one machine crew does not run a machine to exceed forty-eight hours a week when the mine runs every day, or as many hours as the mine runs coal; but the machine crew may work overtime in repairing their machines.

Coal that is cut may be shot at any time during the twenty-four hour day when the mine is not in operation.

DUTIES OF LOADERS

The loader shall have the same care and responsibility of the working place as the pick miner; he will take up to and including four inches of bottom coal left by the machine when the same is ordinary; (what is meant by ordinary is where it can be taken up in from 40 to 50 minutes across the room). If it takes more time, or if at any time the machine crew leaves more than four inches of bottom coal, whether caused by impurities or otherwise, the loader shall do the work at 72½ cents per hour.

No restriction shall be placed on the amount of coal which machines may mine, or upon the number of places in which machines may cut, or upon the number of loaders who may work after one machine, provided loaders shall have sufficient number of places to keep them employed regularly while the mine is in operation and there shall not be more loaders employed at any mine than can be given a fair turn. Where pick and machine miners are employed in the same mine the turn shall be made equal in earnings.

Should any operator employ more loaders than machine can cut for, they shall be employed at .72½ cents per hour until loading places can be furnished.

This guarantee of work shall not apply in cases of major accidents to machines or machinery or when power is off for an unreasonable length of time, nor for the last hour of the day or when the loader leaves his working place before quitting time the preceding day.

Note: The above paragraph is inserted so that it will not be necessary to close down the entire mine when a section of the mine is prevented from loading coal by any of the above causes.

Where required, the loader shall snub the coal before being shot and leave the place in proper condition for the machine crew. The loader shall not be held responsible for conditions beyond his control.

GENERAL PROVISIONS

Any special work, such as making man holes, partings, mule barns, etc., can be done by the day at the wages guaranteed above. It is understood that the loader in timbering his place shall set props so as to clear the machine when practicable; if props are set as to interfere with the machine on account of safety the machine crew shall remove and re-set such props without compensation. The width of rooms shall be not less than twenty feet. The company shall have the right, whenever any loaders are absent, to place other loaders in the vacant places, either by the ton or by the day, at the option of the loader, in order that said machine crew will not be deprived of the use of said places. If at any time there is any dispute as to the loading out of any place, the case shall be taken up as provided by Resolution VIII of the Des Moines Agreement, and said loaders shall continue at work loading out said places pending settlement of same. All settlements shall date from the time question was raised.

Rules in the General Resolutions and Underground Working Conditions governing pick miners and operators shall also apply to machine loaders and crews and operators of machine mines.

TOP LABOR

SUB-DISTRICT NO. THREE

The yardage prices provided above are made on condition that the entrymen must cut all normal entries, top and bottom, before they are shot. This shall not prevent the firing of practical lifting shots.

ROOM TURNING

Room turning, 9 foot neck, 8 feet wide, each, \$6.97.

Rooms shall be considered turned when they are 18 feet deep and 18 feet wide at the face.

Each additional yard or fraction thereof to be paid at the rate of \$2.32 per yard.

Where the neck is required to be cut more than 3 feet on one side, \$3.10 additional shall be paid.

The company cannot require the miner to turn the rooms for the pick mining room turning price and then mine the rooms with machines after machines have once been installed in the mine.

DOUBLE SHIFTING

Double shifting in entries, 25 cents per yard extra. This is construed to mean where entrymen are employed two separate shifts of eight hours each in twenty-four hours.

BREAK-THROUGHS

Break-throughs between rooms and entries shall be made in accordance with the state law as to distance, and in rooms where break-throughs are required to be cut at entry widths they shall be paid at entry prices.

BRUSHING

Brushing by taking up bottom or taking down top shall be 7 9/10 cents per inch measured from the top or the bottom of the vein, as the case may be, and of sufficient width for roadway not to exceed 5 feet. This to apply to top and bottom of ordinary slate or clay material, but if of an unusually hard material, then the price to be agreed upon locally, and failing to agree the company to do the brushing, in which case the said brushing shall be kept up to within 15 feet of the face.

WIDTH OF ROOMS

The minimum width of any room shall be 20 feet.

UNLOADING SLATE

Loading or unloading slate, when done by the miner, 24 cents per car, provided if there is any change in the capacity of the car there can be a readjustment of the price, but there shall be no change in existing local agreements on the subject.

BLACKSMITHING

The company shall do the sharpening, which shall mean only the sharpening of picks, augers, and wedges, the buttoning of scrapers and cutting off of augers, and the price of the same shall be 34 of one per cent of gross earnings, and miners' tools shall be given preference over all other work done by the blacksmith, and be sharpened in a workmanlike manner.

It is further agreed that the operator will furnish a suitable place or places for the miners to receive their tools, and in first class mines, where it can be shown that it is necessary for the proper regulation of the tool question, to have them separate or handed out, the operator will furnish some one to do the work, and the question of wages and duties shall be left to the operator.

DAY WAGE SCALE

Track layers, timbermen, cagers, per day\$5.80
Drivers, trip riders and water haulers, per day
Track layers and timbermen helpers, per day 5.65
Boy couplers, per day
Oilers, per day
Trappers, per day 3.50
Motormen, per day
Drillers and shooters, per day
Spike team drivers when engaged in regular switching, per day 505
All other inside adult labor, per day
Stable men now receiving \$7.50 per day or over shall be reduced
\$1.70 per day. Those receiving less than \$7.50 per day shall be

reduced \$1.55 per day. Those being paid by the month shall be reduced \$1.55 per day, based on 30 days.

Boy drivers may be used between partings, but when used at reqular switching they shall be considered as men and receive men's wages.

TOP LABOR

The wages of dumpers, chunkers, screening car men, box car men, outside drivers for outside work only, mine teamsters and all other common top labor shall be \$5.18 per day, provided those now receiving a higher rate of wages shall not be reduced.

Motormen, per day	5.58
Boy Slate Pickers, per day 3	3.50
Blacksmith and machinists, per day, minimum	5.80

ELECTRIC MINING MACHINE SCALE FOR SUB-DISTRICT NO. 3

Loading,								
mine	run coal	, per to	n		 	 		\$0.831/2
Machine	Runner,	per day		este.	 	 		6.21
Machine	Helper p	er day					12,533	5.95

It is understood that the day wage fixed for machine crew shall not prevent them from agreeing on a price per ton and yardage and room turning; provided, the earnings be not less than the above day wage scale.

NARROW WORK

Eight-foot Entry, loaders, per yard\$1.0	9
Twelve-foot Entry, loaders, per yard	17
Room necks, same measurement as pick mining, loaders 27	9

Break-throughs between rooms and entries shall be paid for at the

same rate as entries of equal widths.

Loaders in narrow work and room turning to have the option of accepting tonnage and yardage rates, or being paid at the rate of \$5.95 per day, this to include use of miners' tools. The company to have the right to select loaders for this work who may be transferred at the company's option to a normal place to load or mine coal without loss of time.

Blacksmithing shall be 1/2 of 1% of the loader's gross earnings.

DUTIES OF MACHINE CREW

The company shall furnish all parts and supplies to keep machines in repair. The machine crew shall perform the necessary labor for repairs, not exceeding 30 minutes at any one time, without extra compensation; all excess time shall be paid for at the rate of 721/2 cents per hour. The machine crew shall cut the coal within four inches of the bottom, unless prevented by physical conditions; if they fail to do so and a loader is required to do extra work the mine boss and the mine president shall agree on the amount due the loader for this work, and this amount shall be deducted from the machine crew's earnings at the rate of 721/2 cents per hour.

The machine crew shall connect the machine wires to entry wires and take proper care of the machine and perform the necessary labor in moving from place to place. The machine crew shall receive and deliver bits and supplies at the same point at which pick miners receive their tools. Machines may run double shift, or they may run one shift each twenty-four hours, whether it is during the time the mine is running coal or not, provided one machine crew does not run a machine to exceed forty-eight hours a week when the mine runs every day, or as many hours as the mine runs coal, but the machine crew may work overtime in repairing their machines.

Coal that is cut may be shot at any time during the twenty-four hour day, when the mine is not in operation.

DUTIES OF LOADERS

The loader shall have the same care and responsibility of the working place as the pick miner; he will take up to and including four inches of bottom coal left by the machine when the same is ordinary (what is meant by ordinary is where it can be taken up in from 40 to 50 minutes across the room). If it takes more time, or if at any time the machine crew leaves more than four inches of bottom coal, whether caused by impurities or otherwise, the loader shall do the work at 721/2 cents per hour.

No restrictions shall be placed on the amount of coal which machines may mine, or upon the number of places in which machines may cut, or upon the number of loaders who may work after one machine, provided loaders shall have a sufficient number of places to keep them employed regularly while the mine is in operation, and there shall not be more loaders employed at any time than can be given a fair turn. Where pick and machine miners are employed in the same mine the turn shall be made equal in earnings.

Should any operator employ more loaders than machine can cut for, they shall be employed at 721/2 cents per hour, until loading places can be furnished.

This guarantee of work shall not apply in cases of major accidents to machine or machinery or when power is off for an unreasonable length of time, nor for the last hour of the day or when the loader leaves his working place before quitting time the preceding Note: The above paragraph is inserted so that it will not be necessary to close down the entire mine when a section of the mine is prevented from loading coal by any of the above causes.

Where required, the loader shall snub the coal before being shot and leave the place in proper condition for the machine crew. The loader shall not be held responsible for conditions beyond his control.

GENERAL PROVISIONS

Any special work, such as making man holes, partings, mule barns, etc., can be done by the day at the wages guaranteed above It is understood that the loader in timbering his place shall set props so as to clear the machine when practicable; if props are set as to interfere with the machine on account of safety the machine crew shall remove and re-set such props without compensation. The width of rooms shall be not less than twenty feet. The company shall have the right, whenever any loaders are absent, to place other loaders in the vacant places, either by the ton or by the day, at the option of the loader in order that said machine crew will not be deprived of the use of said places. If at any time there is any dispute as to the loading out of any place the case shall be taken up as provided by Resolution VIII of the Des Moines Agreement, and said loaders shall continue at work loading out said places pending settlement of same. All settlements shall date from the time question was raised.

Rules in the General Resolutions and Underground Working Conditions governing pick miners and operators shall also apply to machine loaders, and crews, and operators of machine mines.

SUB-DISTRICT NO. FOUR

SCREENS

DOMESTIC
In Boone county the screens shall be of diamond bars, with 3/4 of
an inch between the bars.
Screened Lump, per ton\$1.80
Mine run price, 10% less than screened lump price.
Entry Driving, per yard 3.10
Room Turning, not to exceed 9 ft. neck, each 7.78
DOUBLE SHIFTING

Double shifting entries 25 cents per yard extra. This is construed to mean where entrymen are employed two separate shifts of eight hours each in twenty-four hours.

Coal at Boone less than 27 inches thick shall be considered defi-

	GE SCALE
Head Track Layer, per day	\$5.
Head Timberman, per day	
Drivers, Cagers, Trip Riders, pe	day
Boy Couplers, per day	
Drillers and Shooters, per day.	
Dilers, Trappers, per day	J
All other inside adult labor, per	ay 5.

TOP LABOR

BLACKSMITHING

The company shall do the sharpening, which shall mean only the sharpening of picks, augers, and wedges, buttoning of scrapers and the cutting off of augers, the price of same shall be ¾ of 1% of the gross earnings. Miners' tools shall be given preference over all other work done by the blacksmith and sharpened in a workmanlike manner.

It is further agreed that the operator will furnish suitable place or places for the miners to receive their tools.

RULES AND CONDITIONS GOVERNING SUB-DISTRICT NO. 4, UNLESS OTHERWISE PROVIDED

1st. Pushing not to exceed 150 feet and no miner shall be required to push beyond the second switch from face of entry; if required to push more than 150 feet, 12 cents per ton extra shall be paid for the first 30 feet. Beyond that distance the price to be agreed upon locally.

2nd. All track on entry and room roads to be iron and laid at the

expense of the company.

3rd. Brushing not to be more than 9 feet back from face of coal, company to build roadside buildings in entries and roadways. The miner shall leave the usual space on either side of track for said buildings, but in cases where the gob is entirely filled, the miner shall not be required to load out any dirt unless suitably compensated for so doing.

4th. Skips driven along old gobs shall be paid for at the rate of 12 cents per ton extra where it is necessary for the miner to move

crushed coal or loose dirt.

MINING MACHINE SCALE FOR LONGWALL WORK—4TH SUB-DISTRICT

It is understood that the day wage fixed for machine crew shall not prevent them from agreeing on a price per ton, provided their earnings be not less than the above wage scale.

DUTIES OF THE MACHINE CREW

They shall mine in the clay as near the coal as is practical, leaving not more than four inches of clay above the cutter bar. In case the runner leaves more than four inches of clay above the cutter bar, the company shall handle the clay so left, and in case it is the fault of the runner the amount so paid shall be deducted from the wages of the machine crew, if the crew is working by the ton. Any black jack or other impurities between the coal and clay shall be considered a part of the vein. They shall remove the dirt cut by the machine from under the coal and gob the same, clean up, sprag the coal, and prop the place ready for the loader. Make connection of machine wire to main wire on entry, remove and replace all picks used for undercutting the coal, deliver dull picks to blacksmith shop on mine premises and receive the sharpened ones once each day if necessary.

Blacksmithing to be 1/4 of 1% of gross earnings of loaders.

Should the machine require the attention of the machinist, the machine crew shall notify the mine foreman, and if the machinist should require a helper to repair said machine, then one or more of the machine crew shall assist him at the rate of .72½ cents per hour.

They are to remove and load all lump coal and check same to their credit. If the machine cuts up to the coal at any time, the machine crew can load out the coal, clean up the place same as a loader, and check the coal to their credit to be divided equally between runner, shoveller, and helper. When the machine crew is working by the day all coal loaded by them shall be credited to the company. When necessary the company shall furnish mule and driver to move the machine.

The machine crew shall have the same care and responsibility of places as the pick miner. Should the machine crew fail or neglect to perform any of the cares, duties or responsibilities as set forth above, and it is necessary for the loader to perform such work, the mine foreman shall be notified by the party finding this condition, and in the absence of the interested party he shall call the mine president and the two shall agree on a price for such work, and the amount so agreed upon shall be deducted from the machine crew's account and paid to the party doing such work.

LENGTH OF CUTTER BARS ON MACHINES

It is agreed that the length of the cutter bars on the machines in Boone shall not exceed three feet; in Ogden, four feet.

DURIES OF THE LOADERS

They shall have the same care and responsibility of places as the pick miners. The places shall be taken on the rule of "first out, first in," and no restriction shall be placed on the number of loaders loading after a machine, but in case there are more loaders on the crew than there are places for them to load out, when requested by the loader, the company shall employ such loaders at company work at the rate of 72½ cents per hour, until places are cut for them to load coal. This guarantee of work shall not apply in cases of accident to machines or machinery or unavoidable causes or delay, nor for the last hour of the day or where the loader leaves his working place before quitting time the preceding day.

Should they fail to clean up their places ready for the machine crew, the pit boss and mine president shall investigate the matter, and shall agree on the price for cleaning same and the amount so agreed upon shall be deducted from the pay of the loader leaving the place in bad condition, and paid to the party cleaning same.

Where cap rock breaks with the coal the loader shall handle same for the loading price up to and including eight inches in thickness. When it exceeds this thickness the company shall handle the same,

provided it cannot be left up.

At Boone, coal below 27 inches in height shall be considered deficient. In case the loader and the pit boss fail to agree on a price for loading out a deficient place, the loader can appeal the case to the local president and superintendent of the mine or their representatives whose decision shall be final and the loader shall continue at work pending settlement.

RUNNING TIME

A machine may run double shift or it may run one shift each twenty-four hours whether it is during the time the mine is running coal or not, provided one machine crew does not run a machine to exceed 48 hours a week when the mine runs every day, or as many hours as the mine runs coal, but the machine crew may work overtime in helping to repair machines.

GENERAL RULES

Rules in the General Resolutions and Underground Working Conditions governing pick miners and operators shall also apply to machine loaders and crews and operators of machine mines.

If at any time it becomes necessary to load coal by the day the rate shall be \$5.90 per day, this to include the use of miners' tools.

GENERAL RESOLUTIONS APPLYING TO DISTRICT NO. 13

RESOLUTION NO. ONE

DEFINITION OF EIGHT HOUR WORK DAY

(a) The above is based upon an eight hour work day and it is definitely understood and agreed that an eight hour day means eight hours' work in the mine at the usual working places for each individual employe, six days a week when required by the operator (Sundays and the following holidays excepted: New Year's Day, Washington's Birthday, April First, Decoration Day, Fourth of July, Labor Day, Thanksgiving Day, second Tuesday in December, 1928, and Christmas Day. The above named holidays shall be the only holidays under this agreement except as hereinafter provided regarding pay days.) This shall be exclusive of the time required in reaching said working places in the morning and returning from same at night.

Note: Should any of the above mentioned holidays fall on Sunday the following Monday shall be observed as same, except Washington's Birthday.

PAY DAYS AND STATEMENT OF ACCOUNT

(b) On pay days work will be discontinued at the end of five consecutive hours of the operation of the mines and the operator shall commence paying as soon as practicable after the mines have

ceased operation.

The operators shall pay all wages earned during the first fifteen days of each month, not later than the first Saturday after the twentieth of said month; and for wages earned after the fifteenth of said month not later than the first Saturday after the fifth of the following month (except should pay day fall on any of the above mentioned holidays the operator agrees to pay on the preceding day in conformity with the provisions made for pay days), and statements properly dated shall be issued to employes before day payment is made, and if for any good reason an advance is asked and made it shall be done without discount, either directly or indirectly.

Where satisfactory arrangements can be made locally, the miners

may at their option accept checks.

The shorter work day is granted employes on pay day with the express understanding that each individual employe will faithfully observe the rules of working eight hours, each working day and six days a week, as provided in clause (a) of this resolution. And all local unions and the individual members thereof shall adhere strictly to this rule, and in case the employes of any mine shall show a disregard for the same the operator affected may file his complaint with the Joint Board, who shall deprive the local union so offending of the privilege extended in this resolution.

RULES GOVERNING DRIVERS

(c) Drivers shall take their mules to and from the stables and the time required in so doing shall not include any part of the day's labor, their work beginning at the place where they receive empty cars; but in no case shall a driver's time be docked while he is waiting for cars at the point named. And in no case shall the drivers be required to put in more than ten minutes extra time on the road each way with their mules from the stables to the place where they receive their empty cars, without compensation for the entire time, and the custom of harnessing and unharnessing the mules shall remain the same at each mine as heretofore. Where it is the practice to haul men in the trip, the latter shall leave the bottom at such time as the company may determine to be necessary for employes to reach their working places in time to begin work at the hour fixed. It is further agreed when the day men go down into the mine in the morning they shall have at least two hours' work. This not to apply in case of accidents occurring where the men would have to be called out of the mine through a violation of the state mining law.

RESOLUTION NO. TWO

STARTING TIME

The eight hour work day shall commence at 7 a. m. from April 1 to October 1, and 8 a. m. from October 1 to April 1, except when

otherwise agreed locally, with one-half hour for noon where firing but once a day occurs, and one hour for noon where it is necessary to fire twice a day. In neither case shall such nooning be counted a part of the eight hour day.

RESOLUTION NO. THREE

PENALTIES FOR LOADING IMPURITIES

(a) Both the miners and operators realizing the importance of getting clean coal, to insure the sale of same, it is mutually understood and agreed that the miners and loaders will produce their coal in such a manner as not to increase the percentage of fine coal either by carelessness or reckless shooting, and will load the coal free from

impurities as nearly as possible.

- (b) It is the duty of the miner and loaders to clean his coal in his working place and load it as nearly as possible free from slate, sulphur, and other impurities, and if any miner be docked for sending out dirty coal, he shall be notified by the mine foreman; if he be docked a second time, he shall be fined fifty cents (50 cents); if he be docked a third time within fifteen days from the time of the first offense, or if he at any time sends out large quantities of impurities in any one car, he shall be fined \$1.00 or discharged at the option of the operator. But before discharge the mine president and superintendent shall investigate such case, and if found guilty the discharge penalty may be enforced. At all mines not now having agreements and at all new mines, the company and the local union shall, upon request of either party, determine the average car for the mine affected, and when the weight of the average car has been determined six and four-tenths per cent (64/10%) of the weight shall be considered a large quantity and three and two-tenths percent (3 2/10%) shall be considered a dock.
- (c) It is hereby agreed that the local officers shall co-operate with the coal company to insure clean coal.

RESOLUTION NO. FOUR (Applies to Sub-Districts 2, 3 and 4.)

RESPONSIBILITIES, TIMBERING AND CARE OF PLACES

(a) In accordance with the state law, the company shall furnish all necessary timbers and the miner shall keep his room securely propped. If a miner working in a room fails to securely prop the same, or neglects to prop as directed by the mine foreman, or carelessly shoots down the props or timbers, and a fall of slate occurs through such failure, neglect or carelessness, he shall immediately clear his roadway of such falls of slate and do all necessary retimbering, and in case of his neglect to do so, the company may do such work and charge the expense thereof to such miner.

DOUBLE TIMBERING

(b) In case the room has been properly timbered as above set forth and the roof from any cause becomes dangerous so as to re-

quire double timbering the company shall, when notified by the miner, do the necessary work to protect the roadway.

FALLS, ETC.

(c) When a fall of slate occurs between the inside props and the face of his room of an average thickness not to exceed three inches, he shall immediately remove such fall, and in case of his neglect to do so, the company may do such work and charge the expense thereof to such miner. If of a greater thickness he shall notify the mine foreman, and if the mine foreman or his representative fail to visit the miners' room within two hours after notification, the miner shall clean the fall at the rate of 721/2 cents per hour. but if, upon visiting the miner's room within the time specified above, the mine foreman and miner affected can agree on a price for cleaning said fall either by the inch, hour, or lump sum, they shall do so; if by the inch, it shall be 7 9/10 cents per inch per running yard; if by the hour it shall be 721/2 cents per hour; if they fail to agree on the lump sum or hour basis, the miner may remove same at 79/10 cents per inch. If he refuses to do this he shall immediately notify the mine foreman who shall furnish the necessary labor to make such removal. If the fall is not removed and the place properly secured within twenty-four hours, the miners affected thereby shall be given employment until the same is removed.

MINERS' RIGHT OF APPEAL

(d) If any miner is dissatisfied with any decision of the mine foreman, an appeal may be taken to the superintendent and the mine president, who shall decide the question, and their decision shall be final, but the miner shall continue at work pending decision.

RESOLUTION NO. FIVE

RIGHT TO HIRE AND DISCHARGE-COMPENSATION

The right to hire and discharge, the management of the mine and the direction of the working force, are vested exclusively in the operator and the U. M. W. of A. shall not abridge this right. It is not the intention of this provision to encourage the discharge of employes or the refusal of employment to applicants because of personal prejudice or activity in matters affecting the U. M. W. of A., nor on account of creed, color or nationality. If any employee shall be suspended or discharged by the company, and it is claimed that an injustice has been done him, an investigation to be conducted by the parties and in the manner set forth in Resolution No. 8 of this agreement, shall be taken up promptly, and if it is proven an injustice has been done, the operator shall reinstate said employe and pay him full compensation for the time he has been suspended and out of employment; provided, that if no decision shall be rendered within five days, the case shall be considered closed in so far as compensation is concerned, except, in cases going to arbitration the compensation limit is extended to ten days.

RESOLUTION NO. SIX

FATAL ACCIDENTS AND FUNERALS

In the event of an instantaneous death by accident in the mine, the miners and the underground employes shall have the privilege of discontinuing work for the remainder of that day. It is agreed on the part of the Local Unions of the U. M. W. of A., in District No. 13, and the coal companies of the Iowa Coal Operators' Association that the following rules will govern the question of the funerals of the members and their wives of the above locals.

It is understood that this agreement is made so that the members of the above locals shall have an opportunity to attend the funerals of their brother members and their wives, and that the company in agreeing to the following rules does so in order to facilitate the attendance at said funerals with the least possible loss of time on the part of the employes of said company.

It is agreed that each local union will appoint a committee of three (3) members to be known as the funeral committee. It shall be the duty of that committee to notify the coal company at its office of the date and time of the funeral of any member in good standing in said local, or the wife of any member in good standing in said local. This notice shall be given not later than 11 a. m. on the day preceding the day on which the funeral is to be held.

If the coal company announces work before the close of work or at whistling time on the date of such notice for the day on which such funeral is to be held, it is agreed it shall be for four (4) hours on said day of funeral and each local agrees and guarantees on behalf of all its members, the attendance of each and every member for the said half day in order that the half day output of the company's mine will not be reduced by reason of members failing to report for work on the said half day. In the event the funeral takes place in the morning, the mine will not operate on that date unless other arrangements are made.

This agreement applies only where employes are in good standing in the said local unions and have been employes of the coal company up to the date of their last sickness or where the husband of a deceased wife is a member in good standing of the said local union and is an employe of the said coal company.

It is understood that where more than one mine is under the jurisdiction of one local union this rule applies to the mine where the deceased member had been employed just prior to his death or if the deceased is the wife of a member the rule shall only apply to the mine where said member is employed.

RESOLUTION NO. SEVEN

(Applying to Shooting Coal Mines.)

TRACK LAYING BY THE MINER

It is agreed that the miner shall lay the track in his working place, and the operator shall have the option of furnishing either wooden or iron track, provided, that if iron track is furnished the rails will be drilled and ready for use. Ties may be of wood or steel; if wood, they must be sawed or flat, and if steel they must be provided with suitable and convenient fastenings. The length of rails furnished by the operator shall not exceed twelve feet. Whenever necessary for temporary use, the miner shall be furnished short length rails.

RESOLUTION NO. EIGHT

SETTLEMENT OF DISPUTES—DUTIES AND LIMITATIONS OF MINE PRESIDENT

The duties of the mine president shall be confined to the adjustment of disputes between the pit boss and miners or mine laborers arising out of this agreement or any local agreement made in connection herewith. The mine president and the superintendent are empowered to adjust, and in case of their disagreement it shall be referred in writing to the president of the Iowa Coal Operators' Association and the president of District 13, U. M. W. of A., who may decide the matter, either in person or by representatives; their decisions shall be subject to the review and approval of the presidents; should the presidents fail to agree, they must either submit the matter to arbitration or convene the Joint Board and submit in writing the question in dispute.

No case of discharge shall be submitted to the Joint Board, and in all cases the miners or mine laborers and parties involved (except discharged employees) must continue at work until a final decision

is reached in the manner above set forth.

(The Joint Board shall consist of the executive committee of the Iowa Coal Operators' Association and the executive board of Dis-

trict No. 13, U. M. W. of A.)

(b) If any employee doing day work shall cease work because of a grievance which has not been taken up for adjustment in the manner herein provided, and such action shall seem likely to impede the operation of the mine, the mine president shall assist the company in obtaining a man or men to take such vacant place or places at the scale rate in order that the mine may continue at work. In case the mine is shut down in violation of these agreements, or any of them, the organization will at all times furnish all the men required by the operator at the scale rate to properly care for the mine.

It is further agreed and understood no person not an actual em-

ployee in the mine can officiate as the mine president.

Note: The superintendent or the mine president will have the right to demand the Local Executive Board, the meeting of said Board not to be held while the mine is in operation, and should they fail to adjust it, it shall be referred as stated above.

RESOLUTION NO. NINE

FALSE TOP AND BOTTOM AND HOW PAID

All false top or bottom, in shooting coal mines of an average thickness of over three inches, shall be paid 7 9/10 cents an inch per

running yard; provided when the top can be left up, or the bottom left down, then the company shall not be required to pay the same.

RESOLUTION NO. TEN

ADJUSTMENT OF DEFICIENT WORK

That all deficient work not covered by this agreement shall be paid for at a price to be mutually agreed upon between the mine boss and the party concerned; if they cannot agree in any other manner, they may agree on a price per day, and failing to agree the matter shall be referred to the superintendent of the mine and the mine president for adjustment; and in case they fail to agree it shall be referred for final settlement to the operator of the mine (or his representative), and the miners' state president (or some one designated to represent him); the miner shall continue to work pending an investigation and whatever settlement is made shall date from the time the question of deficiency was raised; if the company decides to stop the place no investigation shall be made, but the miner shall be given another place.

RESOLUTION NO. ELEVEN A WAR AND THE

PRICE OF HOUSE COAL

The company shall furnish coal to its employes for ordinary house use only, and only when such employee is the head of the household, at the following prices:

Lump coal, per ton
Third District— Lump coal, per ton
Fourth District— Lump coal, per ton\$3.30

RESOLUTION NO. TWELVE

PRICES FOR DEAD WORK

All labor and dead work not covered in this agreement shall be reduced 14 per cent.

RESOLUTION NO. THIRTEEN

ENGINEERS' DUTIES AND WAGES

(a) Engineers, first class, lump coal, 300 tons and over, mine run 425 tons and over, \$180.16 per month; second class, lump coal 200 to 300 tons, mine run 285 to 425, \$173.15 per month; third class, lump coal 200 tons or less, mine run 285 tons or less, \$160.32 per month. Tail rope engineer's wages to be \$5.75 per day or \$160.32 per month, nine hours to constitute a day's work. Sunday work without extra pay shall be confined to customary care, but not

operation of machinery or boilers, and such work shall not exceed four hours per day. Should the company decide to employ a hoisting engineer by the day in lieu of monthly wages, the rate per day shall be \$6.70 (six dollars and seventy cents). This change can only be made when the coal company notifies the engineer before the first of the month of the change.

TONNAGE

(b) The tonnage shall be determined by the average of the mine for the month of November of each year effective the following April, based on screened or mine run coal, and computed on the basis of the number of hours the mine operates. This scale of wages only applies to mines in operation at least one year, and in all new mines the wages of the engineer shall be advanced with the increased tonnage each month until the maximum rate is reached. In no case shall the engineers, firemen or pumpers, be interfered with or asked to cease work by any local committee or local union official during the life of this agreement.

RESOLUTION NO. FOURTEEN

RULES AND WAGES—FIREMEN, PUMPERS, BLACKSMITHS AND NIGHTWATCHMEN

- (a) Firemen and pumpers shall be permitted to work such hours as may be mutually agreed upon between them and the operators, provided that the minimum rate shall be 6434 cents for fireman, and the minimum wages for inside pumpers shall be 705% cents per hour.
- (b) Twelve hours for night watchmen shall constitute a day's work, and their wages shall be reduced \$1.55 per day under wages they are now receiving, but no nightwatchman now working less than twelve hours shall be required to work more than present hours. All other company men shall be permitted to work 56 hours per week when necessary, but no company men, except those necessary to get men in and out of the mine shall be compelled to work regularly more than eight hours per day. In case of emergency, mechanics, blacksmiths and other necessary men to make repairs may work over 8 hours per day and 56 hours per week.

RESOLUTION NO. FIFTEEN

CHECK OFF

The operators agree to check off all dues, initiation fees, assessments and hospital dues not to exceed five (\$5.00) dollars in any one pay from the miners and mine laborers when desired and this agreement is their authority therefor. An additional five (\$5.00) dollars per pay may be deducted for dues, initiation fees, assessments, and hospital dues at the option of the U. M. W. of A., after house rent, fuel, mine expenses and accepted orders have been made, but no compensation shall be charged for any deductions. The U. M. W. of A., District No. 13, agrees to protect the operators where such checking is done.

RESOLUTION NO. SIXTEEN

PAYMENT AND DEDUCTIONS

This agreement is based upon cash payments after deducting mine expenses, organization and hospital dues, accepted orders, house rent and fuel. No discrimination shall be made against any employee refusing to deal in the company store or live in a company house, and the same and th

RESOLUTION NO. SEVENTEEN

WAGES OF MINERS TAKEN FROM FACE

Miners taken from the face shall be paid \$5.80 per day and will be given their turn of cars for one day. Any one refusing to do day work may have his turn stopped; provided he is qualified by experience to do such work; and provided further, that no one shall be required to do such day work two consecutive days and such qualified men shall be called upon in their turn.

Boys cannot be compelled to leave the face to do day work, but if so used they shall be paid the rate of wages provided for that class of work performed, and be given the turn for that day.

RESOLUTION NO. EIGHTEEN

FRACTIONAL TIME When a mine works part of the morning the miners may continue at work until noon; when a mine works part of the afternoon the miners may continue at work for the balance of the day. The operator must notify men as soon as practicable after the mine shuts down.

No miner shall be permitted to work at the face on idle days to make coal ready and shall only be permitted to do work with permission of the mine president, the same to be in urgent cases.

This resolution to mean that no miner can work at the face to make coal ready or perform any other labor or do timbering on idle days in his place without the consent of the mine president, and in harmony with the above resolution it must be in urgent cases. If the company desires to secure miners to perform extra work they can call upon such competent help in their turn as long as they are not displacing any of the regular day men who are qualified to do such work.

RESOLUTION NO. NINETEEN

RULES GOVERNING FOREMAN DOING DAY WORK

The foreman may lend a hand when working a crew, but the company cannot lay off a man and fill his place by working a foreman or boss. The and to sured and sured but the tratte

It is not the intent of this resolution that the foreman will be prevented from doing anything that is necessary to keep the mine in operation.

RESOLUTION NO. TWENTY

DOUBLE SHIFTING OF ROOMS

There shall be no double shifting of rooms without the consent of the miner or miners affected.

RESOLUTION NO. TWENTY-ONE

SHOT EXAMINERS' DUTIES AND QUALIFICATIONS

(a) In all mines where coal is blasted from the solid, competent persons shall be employed by the company to examine all shots before they are charged. Said examiners shall have the power to prohibit the charging or firing of any shot, which, in their judgment is unsafe. Before entering upon the discharge of their duties, said examiners shall receive certificates of competency from the state mine inspector in the district in which the mine where they are employed is located. No mine foreman employed by the company shall be permitted to act as shot examiner. The state mine inspector shall have the power to refuse to give a certificate to any person to act as shot examiner who, in his judgment, is not sufficiently competent, or he may revoke the certificate granted should it appear that a shot examiner is negligent or careless in the performance of his work.

WHEN SHOT EXAMINERS MAY ACT AS SHOT FIRERS

(b) Whenever a majority of the miners in any mine so decide, they may employ shot firers for said mine, and whenever satisfactory arrangements can be made between the miners and the shot examiners for the same persons to act as shot examiners and shot firers, the same may be done.

RULES GOVERNING SHOT FIRING

(c) The operator shall decide as to the necessity of firing twice a day in mines that have been in operation less than one year, and a majority of the miners employed in any mine shall decide as to the necessity of firing twice a day in all mines that have been in operation more than a year; provided that in all mines where the majority of the miners decide to fire but once a day, they shall give the operator sufficient time to develop his mine so that the same working force and output per miner per day, shall not be reduced; and provided, further, that if after changing from twice to once a day firing, the majority of the miners in any mine shall decide to return to twice a day firing, or, if, after trying once a day firing for a period of thirty days that the mine is in operation, it shall be proven that the output per miner per day is less than when shooting twice a day, on account of the miner not being able to produce the coal, the operator shall have the right to return to twice a day firing.

SAFETY OF EMPLOYEES AND DUTIES OF THE MINE FOREMAN

(d) The miner shall keep his working place and the operator the entries as free from dust as practicable, and the entries shall be sprinkled as often as necessary to keep them in damp condition. (e) In accordance with the state law only sand, soil, or clay shall be used for tamping which shall be placed in, or near each cross cut in entries, when rooms are being turned continuous. Where the block system is used it shall be placed in the center cross-cut on the entry between the rooms, and the shot holes shall be tamped solidly from the powder to the mouth of the hole, whether squibs or fuse are used to ignite the powder. Any shot having blown the tamping shall not be recharged and fired the second time.

(f) The wages of the shot examiners shall be \$8.44 per day, and they may be employed on fractional time at the above mentioned

rate.

The operator shall have the privilege of installing electric shot firing machines, provided the expense of firing will be no greater

on the miner than the present system.

(g) No person shall interfere with the shot examiner or shot firer in discharge of his duties, except those who have a right to do so, under the state law.

RESOLUTION NO. TWENTY-TWO

CONDITION OF WORKING PLACES

(a) The company shall as far as practicable keep the water off the road and out of the working place. When a miner has to leave his working place on account of water through the neglect of the company, it shall employ said miner at company work; provided that said miner is competent to do such work, or he will be given another working place until such water is taken out of his place.

(b) Where it is an established condition or agreement that the track shall be laid by the company, and a miner has to leave his working place on account of such track not being laid through the neglect of the company, it shall employ said miner at company work when practicable, provided said miner is competent to do such work, or he shall be given another place until such time as such track is laid in his place. In shooting coal mines, it is understood that under ordinary conditions, the miner can demand his switch when his place is in fifteen feet.

RESOLUTION NO. TWENTY-THREE

SIGNALS

In all mines when the men are going to and from their work at regular starting and quitting time, the company shall employ men at the top and bottom of the shaft, whose duty shall be to attend to signal bells.

RESOLUTION NO. TWENTY-FOUR

PRICE AND QUALITY OF POWDER

"The price of powder shall be \$2.20 per keg, and powder and other explosives shall be delivered at the miners' working places as early as practicable and to be of standard grade and quality."

Dynamite caps and fuse shall be sold at cost at the mines and shall be handled as in the past, with no additional charge. When there is any complaint against the brand of powder in use in any mine a joint investigation shall be made under the authority of the Joint Board and their decision shall be final.

REGULATING CHARACTER OF POWDER TO BE USED IN COAL

RESOLUTION NO. TWENTY-FIVE

SINKING AND DEVELOPMENT OF NEW MINES

Sinkers per day of eight hours, \$5.95. This rate of wages shall apply to men employed in opening new slopes and retimbering shafts or enlarging same. Sinkers may be continued at the above wage to complete the bottom partings and any other work in connection therewith, and if the mine is not prepared by that time to operate under the terms of this agreement and the development of entry work begins under this condition, the tonnage and yardage prices as provided for in this agreement to govern the various subdistricts, shall prevail, and twenty-seven (27) cubic feet shall be the basis for measuring a ton of mine run coal.

This to apply to normal entries. In case the entries should be abnormal, then extra compensation for such deficiency shall be allowed, the same to be determined as herein provided for the gov-

ernment of deficient work.

RESOLUTION NO. TWENTY-SIX

REGARDING MAN TRAIN

It is hereby agreed that this agreement does not in any way govern the operation of railroad trains, and where such are operated for the purpose of hauling men to and from the mine, all questions affecting the same must be settled without interfering with the operation of the mine. If any disagreement occurs locally, the question shall be referred to the district presidents of the two associations.

RESOLUTION NO. TWENTY-SEVEN

AMBULANCES, BANDAGES, ETC.

At all mines the operator shall keep a supply of blankets, oil, bandages, and stretchers, and in case of accidents, shall furnish a suitable conveyance to care for and convey the injured persons to their homes.

The Joint Board shall encourage "First-Aid to the Injured" work, and a committee of three operators and three miners shall be appointed for this purpose.

RESOLUTION NO. TWENTY-EIGHT

RAILROAD CAR QUESTION

It is understood that an operator shall not ask the miners to go to work when he has no assurance of cars, or less than enough to

provide two hours' work, but when the operator has the assurance that cars will be received within two hours from the starting time, the men shall go to their working places.

If cars are not received at the end of two hours, the operator must notify the men immediately, and the miners shall not be required to go to work the next day, unless enough cars are at the mine for at least one-half day's continuous operation. If an operator abuses this resolution he shall be fined \$25.00 for each offense.

RESOLUTION NO. TWENTY-NINE

SQUARE TURN

In all mines, the mine foreman must keep a square turn as nearly as possible, and the turn must be made even once each day or oftener, if practicable.

RESOLUTION NO. THIRTY

PENALTIES FOR VIOLATION OF AGREEMENT

(a) Should any local union or its members employed at any mine cause the mine or a part of the mine to shut down, in violation of this agreement (where the state mining law is not being violated) each member of the U. M. W. of A. employed at said mine, except those who continue at work, shall be fined two dollars (\$2.00) for each day or part of a day the mine is thus thrown idle.

When the miners shut a mine down, or part of the mine, because they claim the state mining law is being violated, and the above fine is assessed, and it should be proven upon investigation that said law was being violated, as they claimed, then the operator shall be fined two dollars (\$2.00) per day per man affected; provided that the miners have handed to the operator or his representative a written statement, signed by officers of the local union at the time of said shut down and before they leave the premises, setting forth why the shut down occurred, also how and wherein the said law was being violated.

(b) Should any operator, or his representatives, cause the mine or a part of the mine to shut down in violation of this agreement, where the state mining law is not being violated, he shall be fined two dollars (\$2.00) per man affected, for each day or part of a day the mine is thus thrown idle.

(c) Any U. M. W. of A. officer or committeeman who shall advise or encourage any employe to refuse or cease work, where he has a right to work under this agreement, may be discharged.

(d) Any operator, who, through his mine foreman or any other representative, refuses to live up to this agreement, as interpreted by joint authority or refuses to redeem any written promise he makes an employee, or causes any employee to lose work that he is entitled to under this agreement shall be fined five dollars (\$5.00) for each offense.

(e) Whenever at any mine one or more men regularly employed

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at day work refuse or fail to work, because of any grievance he or they shall be fined two dollars (\$2.00) for each day or part of a day.

(f) Not more than five days' fine can be assessed, by either party for any one shut down in violation of this agreement.

(g) All fines assessed against employees under this agreement shall be collected by the operator from the pay for the half month in which the fine is applied in accordance with Paragraph (i) of this resolution, or the first money due thereafter, and the operator shall remit the same to the treasurer of the Joint Board within twenty days after collection, with an itemized statement of the same for the U. M. W. of A. and the Coal Operators Association. A failure on the part of the operator to do so shall make him liable to a penalty of 50 per cent of the amount involved.

(h) All fines assessed against the operator shall be remitted to the treasurer of the Joint Board within twenty days after official notice is given in writing. Said notice shall be given within two weeks from the alleged violation, stating the cause of the fine from

the local union to the operator affected.

(i) Before any fine is assessed under the above provision an investigation as to whether the agreement has been violated shall be made by three miners and three operators selected by the presidents of the two organizations within three days after shut down has been reported, and if they fail to agree, the question shall be arbitrated within one week from the time of their appointment.

It is further agreed that where any employee enters suit in the civil courts to recover any fine collected in accordance herewith the District Organization shall reimburse the operator for expense in-

curred on account of such suit.

The Joint Board may use all the monies received from fines for such worthy purposes as it may deem proper.

RIGHT OF APPEAL

If any local union or operator claims that a fine has been collected contrary to the terms of this agreement, they shall have the right of appeal to the Joint Board. Any appeal not settled within thirty (30) days must be arbitrated.

RESOLUTION NO. THIRTY-ONE

LABOR SAVING MACHINERY

The right to install mechanical loaders and conveyors of all types is recognized. For the purpose of providing a tonnage basis if practicable for loading coal with such machinery, a commission of two from each side shall be appointed to study and investigate the various conditions surrounding the use of such machinery so that a tonnage basis will be arrived at that will be just to all districts within the state and enable the operators to load coal on a basis that will be fairly competitive. We agree further that until such a time as this commission completes its work and is in a position to render a joint decision, the following scale of wages shall apply:

Runner, per	day.									v.										L	 	\$	7.5	1
Chaveller per	day		а	1/2	1	17.	34			-			٠.				w.				 	. 1	1.0	55
Loader, per	day.	٠.							٠.										*	÷			7.0))

Loader to furnish his own tools for the above prices.

RESOLUTION NO. THIRTY-TWO

In all new shooting coal mines opened during the term of this agreement there shall be end doors in mine cars. This shall not prevent the use of open end cars for the handling of dirt.

RESOLUTION NO. THIRTY-THREE

DISTRICTS

District No. 2, all shooting coal mines in Wapello, Marion, Monroe, Davis, Warren, Lucas, Mahaska and Keokuk counties. District No. 3, all shooting mines of Polk, Jasper, Dallas and Boone counties. District No. 4, all mining coal mines of Boone and Webster counties.

When a new mine is opened and there is any question as to which district it should be placed in, the Joint Board shall decide as to the district, or if it is found necessary to have a special scale for said mine, the Joint Board shall make such scale as to them seems just and proper.

RESOLUTION NO. THIRTY-FOUR

TIME LIMIT IN WHICH CASES SHALL BE TAKEN UP AND DISPOSED OF

It is understood that all cases arising out of this agreement shall be taken up for investigation and settlement, within the time limits herein specified.

- (1) All discharge cases must be taken up and settled within one week from date discharge occurs.
- (2) All deficiency cases must be disposed of within two weeks from date case was placed in the hands of the officers.
- (3) All other cases arising out of this agreement shall be disposed of within thirty (30) days including cases going to the Joint Board.

RESOLUTION NO. THIRTY-FIVE

LOCAL DEMANDS

There shall be no demands made locally which are in conflict with this agreement and all established working local agreements and customs heretofore existing not in conflict with the present agreement, shall remain in force, unless changed by mutual consent. Signed on behalf of the Operators,

GEORGE HEAPS, JR.,
President.
SAM BALLENTYNE.

Secretary.

Signed on behalf of the Miners.

J. H. MORRIS,

INO. GAY,

President. Secretary.

MINERS WAGE AGREEMENT FOR 1930

The joint scale committee of the United Mine Workers of America, District No. 13, which embraces the state of Iowa and the Iowa Coal Operators' Association on Tuesday, April 15th, agreed to continue the same wage scale as that which expired March 31, 1930, for another year, the agreement being effective to and including March 31, 1931.

The new agreement makes several changes from the pay days arrangements under the old contract, the miners were being paid the first Saturdays after the fifth and twentieth of the month. This sometimes has resulted in pay days falling three weeks apart. Under the new contract pay days will come on the tenth and twenty-fifth days of each month regardless of the day of the week.

Provision is also made whereby the miners will accept checks instead of cash wherever suitable banking facilities can be arranged or method of cash being offered.

LOCAL DISLANDS