

NINTH BIENNIAL REPORT

OF THE

STATE MINE INSPECTORS

TO THE

GOVERNOR OF THE STATE OF IOWA

FOR THE

TWO YEARS ENDING JUNE 30, 1899

JAMES A. CAMPBELL, District No. 1; JOHN VERNER, District No. 2;
JAMES W. MILLER, District No. 3.

PRINTED BY ORDER OF THE GENERAL ASSEMBLY

DES MOINES:
F. R. CONAWAY, STATE PRINTER.
1899

BIENNIAL REPORT
OF THE
FIRST DISTRICT,

EMBRACING

Adams, Appanoose, Davis, Lucas, Monroe, Page, Taylor,
Wapello, Warren and Wayne Counties.

JAMES A. CAMPBELL, INSPECTOR.

LETTER OF TRANSMITTAL.

To his Excellency, Leslie M. Shaw, Governor of Iowa:

SIR—In compliance with the requirements of the mining laws I have the honor herewith to submit my biennial report ending June 30, 1899. In this report will be found the number of mines, miners, and all other employes and such other information as I deemed of importance.

Very respectfully,

JAS. A. CAMPBELL.

REPORT OF FIRST DISTRICT.

The First district is located in the southern part of the state, taking in most of the second southern tier of counties. The largest coal producing counties are as follows: Monroe, Appanoose, Wapello, Wayne and Lucas. There has been quite an increased output of coal during the biennial period ending June 30, 1899, especially the last half of our biennial period. The most of the mines have given their men steadier work than for several years previous, and from the outlook the indication is a continuation of good work and better prices throughout the district.

There have been several strikes, locally, within the district during the past two years, but at present things are quiet, and all places settled and working steady. There is considerable prospecting being done in this district and quite a number of large mines being opened up and equipped. There occurred quite an extensive fire at Foster in the Deep Vein Coal company's mine, which burned their top works and the majority of the timber in the shaft, also about twenty head of mules which were in the mine stable below at the time of the fire, which occurred during the night, February 11, 1898. Also, a fire occurred at Centerville Block Coal company's mine No. 2, at Numa, where the top works were all burned. At Seymour there was a fire which burned the Chicago Coal company's top works of mine No. 1.

There were sixteen new mines opened and six abandoned in this district during the past two years.

The following new mines have been opened in the last two years in the First district: Klondike Coal company's, located at Mystic; Hocking Coal company's, two miles west of Cincinnati, at Centerville; the Dewey Coal company's, the White Oak Coal company's; two miles southwest of Albia, at Hocking Valley, the Hocking Coal company's; at and near Hynes City, the Smoky Hollow Coal company's two new mines, Nos. 4 and 5; the Star Coal company's, near Albia; the Lewisville Coal company's, west of Albia, near Tower 310; and at Lucas, the Whitebreast and the Wild Rose; the Lumsden Coal company's No. B; Excelsior Coal company's; Thomas Binks & Sons'; Sullivan Bros.'; Chapman Coal company's, and Parker Coal company's. The mines abandoned are Whitebreast Fuel company's No. 10, at Chrisholm; Smoky Hollow Coal company's, at Hynes, Nos. 2 and 3; Phillips Fuel company's No. 3; Lumsden Coal company's No. 1, and Swede Valley Coal company's.

There have been thirty-two sets of scales tested during the two years just ending, nine of which were found to weigh correctly and twenty-one set were found incorrect. They were adjusted and found weighing correctly when again visited.

TABLE No. 1.

Showing the number of mines, output of coal, number of miners and other employes, etc., in District No. 1, for the year ending June 30, 1898.

NAME OF COUNTY.	Number of mines.	Number of tons of coal of all grades produced.	Number of miners employed.	Number of other employes.	Amount paid miners.	Amount paid other employes.	Amount paid for timber, tracking, etc.	Average price paid for mining per ton of lump coal.	Av. selling price per ton of lump coal at mine.
Adams.....	13	21,300	100	31	\$ 21,300	\$ 8,880	\$ 1,020	\$1.00	\$2.00
Appanoose.....	73	421,100	1,290	350	378,990	99,050	8,900	.80	1.23
Davis.....	4	2,900	17	4	2,610	350	60	.85	1.20
Lucas.....	5	10,800	51	15	9,900	2,150	128	.95	1.45
Monroe.....	14	590,300	790	370	354,180	118,080	20,230	.72	1.14
Page.....	3	6,050	35	12	5,050	1,850	210	1.00	1.80
Taylor.....	4	11,800	38	16	11,800	3,140	285	1.00	1.70
Wapello.....	19	236,100	360	151	141,680	57,800	16,200	.72	1.15
Warren.....	8	13,800	50	17	8,280	3,150	1,340	.80	1.45
Wayne.....	7	41,200	165	58	32,960	9,890	2,700	.80	1.25
Total.....	150	1,354,350	2,898	1,024	\$966,730	\$304,300	\$52,073		

TABLE No. 2.

Showing the number of mines, output of coal, number of miners and other employes, etc., in District No. 1, for the year ending June 30, 1899.

NAME OF COUNTY.	Number of mines.	Number of tons of coal of all grades produced.	Number of miners employed.	Number of other employes.	Amount paid miners.	Amount paid other employes.	Amount paid for timber, tracking, etc.	Average price paid for mining per ton of lump coal.	Av. selling price per ton of lump coal at mine.
Adams.....	12	22,800	105	33	\$ 23,940	\$ 9,840	\$ 1,372	\$1.05	\$2.00
Appanoose.....	74	444,232	1,492	362	399,853	101,090	10,250	.85	1.25
Davis.....	3	3,300	18	5	2,970	385	70	.90	1.25
Lucas.....	5	12,800	58	16	12,800	2,890	1,280	1.00	1.50
Monroe.....	14	662,500	806	381	379,500	170,100	24,463	.75	1.18
Page.....	8	6,085	38	14	6,693	2,012	185	1.10	2.00
Taylor.....	4	14,100	34	15	14,100	3,980	250	1.00	1.75
Wapello.....	19	291,300	352	148	174,780	74,150	17,950	.75	1.18
Warren.....	9	15,000	53	19	9,550	4,500	1,400	.85	1.50
Wayne.....	8	48,300	154	50	38,400	13,400	2,700	.80	1.30
Total	151	1,520,467	3,110	1,048	\$1,062,586	\$382,317	\$59,920		

TABLE No. 3.

Output of coal of the counties comprising District No. 1, for the past five years.

COUNTIES.	1895.	1896.	1897.	1898.	1899.
Adams.....	35,000	21,320	30,500	21,300	22,800
Appanoose.....	350,000	348,453	372,402	421,100	444,282
Davis.....	2,900	2,800	3,120	2,900	3,300
Lucas.....	12,000	8,500	9,055	10,800	12,800
Monroe.....	313,354	401,650	389,706	590,300	662,500
Page.....	4,200	6,420	7,250	5,050	6,085
Taylor.....	13,000	10,100	13,200	11,800	14,100
Wapello.....	205,900	150,405	152,203	236,100	291,300
Warren.....	12,000	12,120	16,150	13,800	15,000
Wayne.....	45,700	30,100	32,120	41,200	48,300
Total.....	991,054	989,768	1,025,706	1,354,350	1,520,467

IMPROVEMENTS MADE IN MINES DURING THE LAST TWO YEARS.

APPANOOSE COUNTY.

NAME OF MINE.	Air shaft.	Second opening.	Stairway.	Cover on cages.	Safety catches.	Safety gates.	Brake on drum.	Fan.	Furnace.	Safety & trailer.
Centerville Block Coal company, No. 3.....	1	1	1	1	1	1	1	1	1	1
Centerville Block Coal company, No. 4.....	1	1	1	1	1	1	1	1	1	1
Centerville Block Coal company, No. 5.....	1	1	1	1	1	1	1	1	1	1
Numa Coal company, No. 2.....	1	1	1	2	2	4	1	1	1	1
White Oak Coal company.....	1	1	1	1	1	1	1	1	1	1
Hocking Coal company.....	1	1	1	1	1	1	1	1	1	1
Achon Coal company.....	1	1	1	1	1	1	1	1	1	1
Mystic Fuel company.....	1	1	1	1	1	1	1	1	1	1
Klondike Coal company.....	1	1	1	2	2	4	1	1	1	1
Peerless Coal company.....	1	1	1	1	1	1	1	1	1	1
Big Joe Coal company.....	1	1	1	2	2	4	1	1	1	1
Anchor Coal company, No. 2.....	1	1	1	1	1	1	1	1	1	1
Total.....	5	6	5	6	6	12	3	4	4	1

MONROE COUNTY.

Hocking Coal company.....	1	1	1	2	2	4	1	1	1	1
Central Coal company.....	1	1	1	1	1	1	1	1	1	1
Smoky Hollow Coal company.....	1	1	1	1	1	1	1	1	1	1
Total	2	2	2	2	2	4	2	2	1	1

WAPELLO COUNTY.

Excelsior Coal company.....	1	1	1	1	1	1	1	1	1	1
Spring Hill Coal company.....	1	1	1	1	1	1	1	1	1	1
Lumsden Coal company.....	1	1	1	1	1	1	1	1	1	1
Total.....	2	2	2	1	2	4	2	2	2	2

APPANOOSE COUNTY.

10

NINTH BIENNIAL REPORT OF THE

NAME OF COMPANY, FIRM OR OPERATOR.	SUPERINTENDENT.	POSTOFFICE ADDRESS.	Kind of mine.	PLAN OF WORK- ING MINE.	HOW VENTILATED.	Power used.	Shipping or local.
Centerville Block Coal Co., No. 1.....	Alex. Dargavell.....	Centerville.....	Shaft.....	Room and pillar.	Fan.....	Steam.....	Shipping.
Centerville Block Coal Co., No. 2.....	Alex. Dargavell.....	Centerville.....	Shaft.....	Room and pillar.	Fan.....	Steam.....	Shipping.
Centerville Block Coal Co., No. 3.....	Alex. Dargavell.....	Centerville.....	Shaft.....	Room and pillar.	Fan.....	Steam.....	Shipping.
Centerville Block Coal Co., No. 4.....	Alex. Dargavell.....	Centerville.....	Slope.....	Room and pillar.	Furnace.....	Steam.....	Shipping.
Centerville Block Coal Co., No. 5.....	Alex. Dargavell.....	Centerville.....	Slope.....	Room and pillar.	Furnace.....	Steam.....	Shipping.
Centerville Block Coal Co., No. 6.....	Alex. Dargavell.....	Centerville.....	Slope.....	Room and pillar.	Furnace.....	Horse.....	Shipping.
Centerville Block Coal Co., No. 7.....	Alex. Dargavell.....	Centerville.....	Slope.....	Room and pillar.	Furnace.....	Horse.....	Shipping.
Centerville Block Coal Co., No. 8.....	Alex. Dargavell.....	Centerville.....	Shaft.....	Room and pillar.	Furnace.....	Horse.....	Local.
Centerville Block Coal Co., No. 9.....	Alex. Dargavell.....	Centerville.....	Shaft.....	Room and pillar.	Fan.....	Steam.....	Shipping.
Centerville Block Coal Co., No. 10.....	Alex. Dargavell.....	Centerville.....	Shaft.....	Room and pillar.	Furnace.....	Steam.....	Shipping.
Appanoose Coal Co.....	Alex. Dargavell.....	Centerville.....	Shaft.....	Longwall.....	Fan.....	Steam.....	Shipping.
Anchor Coal Co., No. 1.....	James Wilson.....	Centerville.....	Shaft.....	Room and pillar.	Fan.....	Steam.....	Shipping.
Anchor Coal Co., No. 2.....	James Wilson.....	Centerville.....	Shaft.....	Room and pillar.	Fan.....	Steam.....	Shipping.
Anchor Coal Co., No. 3.....	James Wilson.....	Centerville.....	Shaft.....	Room and pillar.	Fan.....	Steam.....	Shipping.
Numa Coal Co.....	George Widmer.....	Seymour.....	Shaft.....	Longwall.....	Fan.....	Steam.....	Shipping.
Whitebreast Fuel Co., No. 19.....	T. J. Phillips.....	Ottumwa.....	Shaft.....	Longwall.....	Fan.....	Steam.....	Shipping.
Star Coal Co.....	George McCleary.....	Rathbun.....	Shaft.....	Longwall.....	Fan.....	Steam.....	Shipping.
Scandinavian Coal Co.....	Claus Johnson.....	Centerville.....	Shaft.....	Room and pillar.	Fan.....	Steam.....	Shipping.
Consumers Coal Co.....	J. L. Myers.....	Jerome.....	Shaft.....	Longwall.....	Fan.....	Steam.....	Shipping.
Big Joe, No. 1.....	John Ryan.....	Jerome.....	Shaft.....	Longwall.....	Fan.....	Steam.....	Shipping.
Big Joe, No. 2.....	John Ryan.....	Jerome.....	Shaft.....	Longwall.....	Furnace.....	Steam.....	Shipping.
Tipton Co-operative Coal Co.....	A. W. Buel.....	Brazil.....	Slope.....	Room and pillar.	Furnace.....	Horse.....	Shipping.
Iowa & Missouri Coal Co.....	C. W. Lewis.....	Centerville.....	Slope.....	Room and pillar.	Furnace.....	Steam.....	Shipping.
Brazil Coal Co.....	B. F. Silknetter.....	Brazil.....	Slope.....	Longwall.....	Furnace.....	Horse.....	Shipping.
Columbia Coal Co., No. 1.....	Thomas E. Lee.....	Centerville.....	Slope.....	Longwall.....	Furnace.....	Steam.....	Shipping.
Columbia Coal Co., No. 2.....	Thomas E. Lee.....	Centerville.....	Slope.....	Longwall.....	Furnace.....	Electric.....	Shipping.
Columbia Coal Co., No. 3.....	Thomas E. Lee.....	Centerville.....	Slope.....	Longwall.....	Furnace.....	Horse.....	Shipping.
Electric Coal Co., No. 1.....	Thomas E. Lee.....	Centerville.....	Slope.....	Longwall.....	Furnace.....	Horse.....	Shipping.
Electric Coal Co., No. 2.....	Thomas E. Lee.....	Centerville.....	Shaft.....	Longwall.....	Furnace.....	Horse.....	Shipping.
Electric Coal Co., No. 3.....	Thomas E. Lee.....	Centerville.....	Shaft.....	Longwall.....	Furnace.....	Horse.....	Shipping.
Electric Coal Co., No. 4.....	Thomas E. Lee.....	Centerville.....	Shaft.....	Longwall.....	Furnace.....	Horse.....	Shipping.
Peerless Coal Co.....	Thomas E. Lee.....	Centerville.....	Slope.....	Longwall.....	Furnace.....	Horse.....	Shipping.
Phoenix Coal Co.....	Joseph Turner.....	Brazil.....	Slope.....	Longwall.....	Furnace.....	Horse.....	Shipping.
Thistle Coal Co.....	Daniel Dinning.....	Cincinnati.....	Shaft.....	Room and pillar.	Fan.....	Steam.....	Shipping.
Eagle Coal Co.....	Wm. Bowie.....	Cincinnati.....	Shaft.....	Room and pillar.	Furnace.....	Horse.....	Shipping.
Merchants Coal Co.....	J. D. Collins.....	Cincinnati.....	Shaft.....	Room and pillar.	Fan.....	Horse.....	Shipping.
Albert Coal Co.....	Hugh Dinning.....	Cincinnati.....	Shaft.....	Room and pillar.	Furnace.....	Horse.....	Shipping.

STATE MINE INSPECTORS.

11

ADAMS COUNTY.

J. F. Wilds.....	J. F. Wilds.....	Carbon.....	Shaft.....	Longwall.....	Furnace.....	Horse.....	Local.
Pioneer Coal Co.....	Thomas Gabbie.....	Carbon.....	Shaft.....	Longwall.....	Furnace.....	Horse.....	Local.
McKee Bros.....	Gerrard McKee.....	Carbon.....	Shaft.....	Longwall.....	Furnace.....	Horse.....	Local.
Jones Bros.....	Martin Jones.....	Carbon.....	Shaft.....	Longwall.....	Furnace.....	Horse.....	Local.
Hazel Dell Coal Co.....	Eugene Durham.....	Carbon.....	Shaft.....	Longwall.....	Furnace.....	Horse.....	Local.
Cullen & Rees.....	John Cullen.....	Carbon.....	Shaft.....	Longwall.....	Furnace.....	Horse.....	Local.
Collins & Ruth.....	John Collins.....	Carbon.....	Shaft.....	Longwall.....	Furnace.....	Horse.....	Local.
Gibson Coal Co., No. 1.....	R. L. Gibson.....	Carbon.....	Shaft.....	Longwall.....	Furnace.....	Horse.....	Local.
Gibson Coal Co., No. 2.....	R. L. Gibson.....	Carbon.....	Shaft.....	Longwall.....	Furnace.....	Horse.....	Local.
J. M. Hinten.....	J. M. Hinten.....	Eureka.....	Shaft.....	Longwall.....	Furnace.....	Horse.....	Local.
purrier & Ingersol.....	M. Ingersol.....	Eureka.....	Shaft.....	Longwall.....	Furnace.....	Horse.....	Local.
Hartshorn Bros.....	Marion Hartshorn.....	Eureka.....	Shaft.....	Longwall.....	Furnace.....	Horse.....	Local.
Benjamin Trowbridge.....	Benj. Trowbridge.....	Carbon.....	Shaft.....	Longwall.....	Furnace.....	Horse.....	Local.
Thomas Nichols.....	Thomas Nichols.....	Briscoe.....	Shaft.....	Longwall.....	Furnace.....	Horse.....	Local.

DAVIS COUNTY.

NAME OF COMPANY, FIRM OR OPERATOR.	SUPERINTENDENT.	POSTOFFICE ADDRESS.	Kind of mine.	PLAN OF WORKING MINE.	HOW VENTILATED.	Power used.	Shipping or local.
Thomas Dial	Thomas Dial	Laddsdale.....	Slope...	Room and pillar	Furnace.....	Horse ..	Local.
John Jordan.....	John Jordan.....	Eldon	Slope...	Room and pillar	Furnace.....	Horse ..	Local.
G. W. Dye.....	G. W. Dye.....	Eldon	Slope...	Room and pillar	Furnace.....	Horse ..	Local.
J. Teesdale.....	J. Teesdale.....	Eldon	Slope...	Room and pillar	Furnace.....	Horse ..	Local.

LUCAS COUNTY.

Lucas & Cleveland Co-op. Coal Co.....	J. A. Evans.....	Lucas.....	Shaft...	Longwall.....	Furnace.....	Horse ..	Shipping.
James Griffen.....	James Griffen.....	Charlton.....	Slope...	Longwall.....	Furnace.....	Horse ..	Local.
James Hall.....	James Hall.....	Charlton.....	Slope...	Longwall.....	Furnace.....	Horse ..	Local.
Wm. Swanson.....	Wm. Swanson.....	Oakley.....	Slope...	Longwall.....	Furnace.....	Horse ..	Local.

MONROE COUNTY.

Wapello Coal company, No. 1.....	P. H. Waterman.....	Hiteman.....	Shaft...	Room and pillar	Fan.....	Steam..	Shipping.
Wapello Coal company, No. 2.....	P. H. Waterman.....	Hiteman.....	Shaft...	Room and pillar	Fan.....	Steam..	Shipping.
Hocking Coal company.....	Joseph Norwood.....	Hocking Valley.....	Shaft...	Room and pillar	Fan.....	Steam..	Shipping.
Smoky Hollow Coal company.....	F. Hines.....	Hines City.....	Slope...	Room and pillar	Fan.....	Steam..	Shipping.
Smoky Hollow Coal company, No. 4.....	F. Hines.....	Hines City.....	Slope...	Room and pillar	Furnace.....	Steam..	Shipping.
Smoky Hollow Coal company, No. 5.....	F. Hines.....	Hines City.....	Slope...	Room and pillar	Furnace.....	Steam..	Shipping.
Deep Vein Coal company.....	Robert Hughes.....	Foster.....	Shaft...	Room and pillar	Fan.....	Steam..	Shipping.
Central Coal company.....	Wm. Evans.....	Hickory.....	Slope...	Room and pillar	Furnace.....	Steam..	Shipping.
Diamond Coal company, No. 1.....	A. B. Little.....	Coalfield.....	Slope...	Room and pillar	Fan.....	Steam..	Shipping.
Diamond Coal company, No. 2.....	A. B. Little.....	Coalfield.....	Shaft...	Room and pillar	Furnace.....	Steam..	Shipping.
Star Coal company.....	N. A. Flanders.....	Albia.....	Shaft...	Room and pillar	Fan.....	Steam..	Local.

PAGE COUNTY.

George Howard.....	George Howard.....	Shambaugh.....	Shaft...	Longwall.....	Furnace.....	Horse ..	Local.
Wm. Turner.....	Wm. Turner.....	Shambaugh.....	Shaft...	Longwall.....	Furnace.....	Horse ..	Local.
Charles Pierson.....	Charles Pierson.....	Clarids.....	Shaft...	Longwall.....	Furnace.....	Horse ..	Local.

TAYLOR COUNTY.

Campbell Coal company.....	Richard Campbell.....	New Market.....	Shaft...	Longwall.....	Furnace.....	Horse ..	Shipping.
Anderson Coal company.....	Wm. Anderson.....	New Market.....	Shaft...	Longwall.....	Furnace.....	Horse ..	Shipping.
Browning Coal company.....	Wm. Browning.....	New Market.....	Shaft...	Longwall.....	Furnace.....	Horse ..	Shipping.
Charles Adams Coal company.....	Charles Adams.....	New Market.....	Shaft...	Longwall.....	Furnace.....	Horse ..	Shipping.

WAPELLO COUNTY.

Whitebreast Fuel Co., No. 22.....	T. J. Phillips.....	Ottumwa.....	Shaft...	Room and pillar	Fan.....	Steam..	Shipping.
Phillips Fuel Co., No. 4.....	Wm. Fox.....	Ottumwa.....	Shaft...	Room and pillar	Fan.....	Steam..	Shipping.
Lumsden Coal Co., No. 3.....	John Lumsden.....	Ottumwa.....	Shaft...	Room and pillar	Fan.....	Steam..	Shipping.
Eldon Coal and Mining Co.....	W. K. Dann.....	Ottumwa.....	Shaft...	Room and pillar	Fan.....	Steam..	Shipping.
Carbon Coal Co.....	L. Ludwick.....	Willard.....	Shaft...	Room and pillar	Fan.....	Steam..	Shipping.
South Ottumwa Coal and Mining Co.....	Elmer Grooms.....	Ottumwa.....	Shaft...	Room and pillar	Furnace.....	Horse ..	Local.
Star Coal Co.....	D. H. Baum.....	Ottumwa.....	Slope...	Room and pillar	Fan.....	Steam..	Local.
Baker Coal Co.....	W. J. Baker.....	Ottumwa.....	Slope...	Room and pillar	Fan.....	Steam..	Local.
Daniels' Mine.....	John Daniels.....	Ottumwa.....	Shaft...	Room and pillar	Fan.....	Steam..	Local.
Adams Coal Co.....	A. P. Adams.....	Ottumwa.....	Shaft...	Room and pillar	Furnace.....	Horse ..	Local.
Spring Valley Coal Co.....	Charles Oleson.....	Ottumwa.....	Shaft...	Room and pillar	Furnace.....	Horse ..	Local.
Sampson Coal Co.....	John Chapman.....	Ottumwa.....	Slope...	Room and pillar	Furnace.....	Horse ..	Local.
Excelsior Coal Co.....	Joseph Turner.....	Ottumwa.....	Shaft...	Room and pillar	Furnace.....	Horse ..	Local.
Parker Coal Co.....	Robert Parker.....	Ottumwa.....	Slope...	Room and pillar	Furnace.....	Horse ..	Local.
Black Hawk Coal Co.....	A. U. Caughlin.....	Ottumwa.....	Slope...	Room and pillar	Furnace.....	Horse ..	Local.
Binks & Son.....	Thomas Binks.....	Ottumwa.....	Slope...	Room and pillar	Furnace.....	Horse ..	Local.

WARREN COUNTY.

Land and Mining Co.....	B. E. Mann.....	Des Moines.....	Shaft...	Room and pillar	Furnace.....	Horse ..	Shipping.
D. K. Jones.....	D. K. Jones.....	Summerset.....	Shaft...	Longwall.....	Furnace.....	Horse ..	Local.
W. S. Benninn.....	W. S. Benninn.....	Summerset.....	Shaft...	Longwall.....	Furnace.....	Horse ..	Local.

WAYNE COUNTY.

Chicago Coal Co.....	Peter Thomas.....	Seymour.....	Shaft...	Longwall.....	Fan.....	Steam..	Shipping.
Seymour Coal Co.....	Geo. L. Moore.....	Seymour.....	Shaft...	Longwall.....	Fan.....	Steam..	Shipping.
Lewis Fry.....	Lewis Fry.....	Confidence.....	Shaft...	Longwall.....	Fan.....	Steam..	Local.
Will L. Rousson.....	Will L. Rousson.....	Confidence.....	Slope...	Longwall.....	Furnace.....	Horse ..	Local.
Aaron Radcliff.....	Aaron Radcliff.....	Confidence.....	Slope...	Longwall.....	Furnace.....	Horse ..	Local.

MONROE COUNTY.

Monroe county has long been known as one among the largest coal-producers in the First district. Having good railway facilities, the operators located in this county are enabled to ship coal to the far west and north—west over the C., B. & Q. railway and north over the Iowa Central railway. The largest coal-producing mines in this county are controlled by the Wapello Coal company, being its mines Nos. 1 and 2, located at Hiteman on a switch from the C., B. & Q. railway, about five miles from Albia. This company gives employment to about 550 men. The next largest mine is owned by the Smoky Hollow Coal company, and located about three miles from Avery. This company has its own line of railway from Avery up to Hines, where its mines Nos. 1, 4 and 5 are located. The company has its own engine to haul the product to the C., B. & Q. railway's main line. It employs about 450 men. Next would be the Hocking Coal company's mine, which has been in operation about one year. This mine is located on a switch from the Iowa Central railway, three miles south of Albia, and is one of the best equipped mines in the district, giving employment to 125 men. The Deep Vein Coal company has a mine located on the C., M. & St. P. railway at Foster, giving employment to 200 men. The Central Coal company has a slope located at Lockman, on the Iowa Central railway. This mine has been in operation about three and one-half years. The company has 100 employes. The Diamond Coal company's mine No. 2 is located at Hickory. Its No. 1 mine, which is the larger, is located at Coal-field; both mines loading their product on switches from the Iowa Central railway.

APPANOOSE COUNTY.

Appanoose county lies along the southern part of the state, touching the Missouri line. The coal in this county lies very regular, being about two and one-half feet in thickness and of a good quality. Most of the mines are worked on the longwall system or something similar. There are more mines in this county than in any other in the state. Coal being near the surface in most places makes it quite an inducement to open mines, there being also, as a rule, very good top and bottom.

Among the largest coal companies in this county are the Centerville Block Coal company, which has ten mines in operation, located on the various railways throughout the county. Its general office is at Centerville. The Whitebreast Fuel company has its mine No. 19 located at Forbush on the Iowa Central railway. The Star Coal company's mine is located on the Chicago, Milwaukee & St. Paul railway, at Rathbun. The Big Joe Coal company has a mine at Gladstone, on the Chicago, Milwaukee & St. Paul railway. The Anchor Coal company has three mines. No. 1 is located on the Keokuk & Western railway; Nos. 2 and 3 are located on the Chicago,

Rock Island & Pacific railway, near Centerville, at which place is the company's general office. The balance of the mines of this county are located within a radius of two miles of Mystic. There are also quite a number of mines around Cincinnati, and in other parts of the county.

WAPELLO COUNTY.

Wapello county has long been known as a coal producer. During the year 1898 the output was 236,100 tons. During the year ending June 30, 1899, there were produced 291,300 tons, being an increase of 55,200 tons over the first year of our biennial period. The largest companies in this county are as follows: The Whitebreast Fuel company, which has its mine No. 22 at Keb, located on a branch road connected with the Chicago, Burlington & Quincy railway, employs at this mine about 200 men. The Phillips Fuel company's mine No. 4, which employs about 100 men all told, is located four miles northeast of Ottumwa, on the Chicago, Milwaukee & St. Paul railway. There are several large local mines within a radius of three miles of Ottumwa, some of them working as many as fifty men during the winter or cold weather season.

WAYNE COUNTY.

Wayne county has two shipping or railway mines. The Chicago Coal company's mine is located on the Chicago, Milwaukee & St. Paul railway, at Seymour. The Seymour Coal company has a mine located on the Chicago, Rock Island & Pacific railway, near Seymour. There are six local mines situated in the different parts of the county, most of them within a radius of two miles of Confidence.

LUCAS COUNTY.

Lucas county was, some years ago, among the largest coal producing counties in the First district, but in the past few years there has been but one shipping mine in the county. During the biennial period, however, there has been considerable prospecting done throughout the county. Among the companies drilling were the Whitebreast Fuel company and the Wild Rose Coal company, which have both located near Lucas. The Whitebreast Fuel company is putting in a steel tower and top works, being the only steel tower in the state. The Wild Rose Coal company is also putting in a modern, improved mine. There seemed to be a large pocket of coal around Lucas. There are several local mines also in this county.

ADAMS, PAGE AND TAYLOR COUNTIES.

Adams, Page and Taylor counties lie in the southwestern part of the state. While the coal is thin, being only sixteen to twenty inches in thick-

ness, it is of very good quality, and generally not very deep. There are two shipping mines in Taylor county. With this exception the rest of the mines in these counties are local mines and have plenty of trade in winter, also during the summer season, if located near brickyards or any public works. Owing to competition from larger mines, coal sells for \$2 per ton at the mines.

WARREN COUNTY.

Warren county lies south of Polk. There are two shipping mines in this county that do a very nice business during the winter season. There are also several local mines, some of them being in operation for a number of years. The shipping mines are located near Summerset and are owned by the I and S Mining company of Des Moines; the others are owned by Summerset men.

DAVIS COUNTY.

Davis county lies near the center of the coal belt running northwest and southeast, being joined by several good coal producing counties which produce a large amount of coal. Yet the county has never been a very large coal producer; but the change in railways throughout this county may be the means of increasing the output of coal to quite a large extent. The present location of the mines in this county is near Eldon, the same being all local mines which deliver a great portion of their product to Eldon, selling the balance at the mines.

NON-FATAL ACCIDENTS.

Table showing Non-fatal Casualties for the First Mining District.

DATE.	NAME.	OCCUPATION.	CHARACTER OF INJURY.	CAUSE OF ACCIDENT.	RESIDENCE.
July 5, 1897	John McCanley	Cager	Back hurt	Falling roof	Laddsdale.
July 5, 1897	Franz Yoder	Driver	Finger cut	Car jumped track	Laddsdale.
July 12, 1897	John Hannis	Miner	Leg broken	Coal from shoe	Snooky Hollow.
October 12, 1897	E. X. Fodick	Driver	Finger bruised	Prop fell	Laddsdale.
December 10, 1897	William Young	Miner	Hand and face bruised	Shot explosion	Lockman.
January 10, 1898	William Holland	Miner	Hands and face burned	Falling roof	Lockman.
January 22, 1898	L. L. Higgenboth	Machine runner	Finger mashed	Glove caught in wheel	Diamond.
March 1, 1898	John Lewis	Miner	Hand and legs bruised	Falling roof	Diamond.
March 1, 1898	John Lewis	Miner	Hand and legs bruised	Falling roof	Diamond.
April 2, 1898	George Leggett	Driver	Leg broken	Caught leg on pillar	Snooky Hollow.
May 16, 1898	Benjamin James	Miner	Three ribs broken, back dislocated	Falling coal	Forbush.
July 23, 1898	F. H. Husted	Miner	Crushed internally	Falling coal	Forbush.
August 12, 1898	John Erhoff	Miner	Back bruised	Caught between roof and car	Snooky Hollow.
August 12, 1898	William Rounsburg	Teamster	Two toes broken	Falling coal	Snooky Hollow.
November 21, 1899	Charles Freeman	Miner	Body and legs bruised	Fell under car	Snooky Hollow.
January 27, 1899	Louis Lescoat	Miner	Hips slightly squeezed	Fell under car	Snooky Hollow.
March 27, 1899	James Warn	Track layer	Back bruised	Falling coal	Snooky Hollow.
March 11, 1899	James Warn	Track layer	Leg broken	Falling coal	Cincinnati.

FATAL ACCIDENTS.

Table showing Fatal Accidents in District No. 1, for the biennial period ending June 30, 1899.

DATE.	NAME OF DECEASED.	OCCUPATION.	CAUSE OF CASUALTY.	NAME OF COMPANY OR FIRM.	WHERE LOCATED.
September 3, 1897	T. R. Sullivan.....	Shaft sinker.....	Rope broke.....	Sullivan Bros.	Ottumwa.
September 16, 1897	Martin Anderson.....	Miner.....	Fall of roof.....	Scandinavian Coal Co.....	Centerville.
October 4, 1897	Robert Fenrolck.....	Miner.....	Fell under car...	Star Coal Co.....	Ottumwa.
December 16, 1897	Lincoln Perry.....	Miner.....	Fall of roof.....	Chrisholm Mine.....	Chrisholm.
January 11, 1898	Clarence McCreary.....	Miner.....	Coal from shot of adjoining room.	Iowa Central Coal Co.....	Hickory.
February 22, 1898	Carl V. Swanson.....	Miner.....	Fall of roof.....	Wapello Coal Co.....	Hiteman.
March 11, 1898	William Secreast.....	Miner.....	Fall of roof.....	Smoky Hollow Coal Co.....	Avery.
April 8, 1898	Samuel Toplin.....	Miner.....	Fall of roof.....	Wapello Coal Co.....	Hiteman.
September 26, 1898	Mike Semancik.....	Miner.....	Coal from shot.....	Smoky Hollow Coal Co.....	Avery.
November 14, 1898	Joseph Fletcher.....	Miner.....	Fall of roof.....	Smoky Hollow Coal Co.....	Avery.
April 6, 1899	Thomas G. Davies.....	Miner.....	Fall of roof.....	Achon Coal Co.....	Mystic.
June 14, 1899	Bryan Dale.....	Miner.....	Fall of roof.....	Wapello Coal Co.....	Hiteman.

BIENNIAL REPORT
OF THE
SECOND DISTRICT,
EMBRACING
Jasper, Jefferson, Keokuk, Mahaska, Scott and Van Buren
Counties.
JOHN VERNER, INSPECTOR.