

**SIXTEENTH BIENNIAL REPORT**

**OF THE**

**STATE MINE INSPECTORS**

**FOR THE**

**Two Years Ending June 30, 1912**

**TO THE**

**GOVERNOR OF THE STATE OF IOWA**

**Printed By Order of the General Assembly**

---

**DES MOINES**  
**EMORY H. ENGLISH STATE PRINTER**  
**1912**

STATE MINE INSPECTORS.

---

District No. 1—JOHN E. JEFFREYS, Albia.

District No. 2—RHYS T. RHYS, Ottumwa.

District No. 3—EDWARD SWEENEY, Des Moines.

L. E. STAMM, Secretary, Des Moines.

---

BOARD OF EXAMINERS.

---

FOR MINE INSPECTORS, MINE FOREMEN AND HOISTING ENGINEERS.

EDWARD GRAY, President, Des Moines.

H. W. LADD, Secretary, Madrid.

T. L. EVANS, Lockman.

DAVID ANDERSON, Albia.

W. L. JONES, Colfax.

---

# FIRST DISTRICT

---

BIENNIAL REPORT OF THE  
FIRST DISTRICT.

---

COUNTIES COMPRISING THE FIRST DISTRICT.

---

APPANOOSE  
LUCAS  
TAYLOR  
ADAMS

MONROE (part)  
PAGE  
WAYNE

JOHN E. JEFFREYS, INSPECTOR,  
Albia, Iowa.

LETTER OF TRANSMITTAL.

---

HON. BERYL F. CARROLL, Governor of Iowa:

SIR.—I have the honor to submit herewith my report as Mine Inspector for the First Inspection District of the State of Iowa, covering the biennial period ending with June 30, 1912.

Very respectfully submitted,

JOHN E. JEFFREYS,  
Inspector First District.

## REPORT OF FIRST DISTRICT

---

The First Inspection District of Iowa comprises the counties of Appanoose, Monroe (part), Wayne, Lucas, Taylor, Page and Adams.

During the biennial period ending with June 30, 1912, these counties produced 5,355,697 tons of coal, while an average of 6,727 men were given employment in and around the mines of the district. This production shows a gain in the output of coal for the district over the output of the years of 1909 and 1910 of 201,861 tons, and is a very creditable showing when it is taken into consideration that the operations in the mines were suspended pending the agreement between the miners and operators for a period of nearly sixty days, while the suspension in former years did not last much more than half that length of time.

Owing to a change in the method of gathering the statistics relating to the number of men employed in the mines, it is not possible, in any fair manner, to compare the number of men employed in former years with the number of men employed during the last biennial period. This because formerly the information asked for was the average number of men employed during the first half of February of each year, while now the average number of men employed the entire year is required.

The mines of the district worked fairly steady during the first year of the biennial period, and more coal was produced this first year than in the second year of the period. This was in a measure due to the suspension of work in the mines while the new wage scale agreement was being perfected by the miners and operators of the state. This suspension lasted for nearly sixty days, and after the agreement was entered into but little mining was done before the close of the fiscal year ending June 30, 1912, and some of the mines in the district did not resume operations at all during that time.

This accounts for the slight decrease in the coal production during the second year of the biennial period. Had the mines been in operation during the entire time of the suspension I am sure the showing would have been fully as great, perhaps greater, than that of 1911.

Numerous improvements in the mines and in the working conditions as to safety and sanitary regulations surrounding the work in the mines have been made since my appointment as inspector for the First District in April, 1909. Some of the improvements which have been made in the mines of the district during the last biennial period are as follows:

Egypt Coal Company, Mystic, a new furnace shaft; Centerville Block Coal Company, a new furnace shaft at mine No. 5 Brazil; White Ash Coal Company, Avery, a new fan slope; Royal Block Coal Company, Exline, changed the system of ventilation from furnace to fan. All these improvements were necessary to better the ventilation in these mines so that the same would comply with the mining laws relating to ventilation in mines.

Other improvements in the district during the same period are as follows: Acken Coal Company, Mystic, a new escape shaft; Lodwick Bros. Coal Company, Mystic, a new escape shaft for Diamond Mine No. 22; Howe Coal Company, Brazil, a new escape shaft; Wapello Coal Company, Hiteman, a new escape shaft for mine No. 6; Thistle Coal Company, Cincinnati, are constructing a new mining plant which is known as No. 4, and which is located on the C. B. & Q. R. R., about two and one-half miles east of Cincinnati. This plant is still under construction, and when this mine is fully developed it gives promise of being one of the largest producers in this part of Appanoose county. The F. C. Hand Company are also opening a new mine about two miles southwest of Cincinnati and this mine is still under construction. A new escape shaft for Mine No. 2 of the Centerville Block Coal Company, at Numa, is also being constructed.

Mine No. 3 of the Anchor Coal Company in Appanoose county, and the mine of the Star Coal Company in Monroe county, have been abandoned.

During the biennial period the mining industry of the district has not suffered by reason of strikes or lockouts, and the agreements just entered into by the operators and miners, as to labor conditions and wages, will insure the active operation of all the mines of the district for the coming year.

Taken as a whole the mines of the First District are in a fairly satisfactory condition, and I look to their betterment the coming year as many improvements are promised. The outlook for working conditions, safety appliances, and general conditions of the mines in the First District are therefore good.

## FATAL ACCIDENTS IN DISTRICT No. 1, FOR

| Date           | Name of Deceased            | Name of Employer or Mine Where Accident Occurred | Age | Occupation       |
|----------------|-----------------------------|--|-----|------------------|
| 1910           |                             |  |     |                  |
| July 20..      | Dominik Silverio .....      | Wapello Coal Co.....                             | 15  | Coupler .....    |
| July 31..      | Clarence Campbell .....     | Prairie Block Coal Co.....                       | 35  | Topman .....     |
| September 15.. | A. O. Steele.....           | Hocking Coal Co.....                             | --- | Shot firer ..... |
| September 21.. | Harlan Walden .....         | Albia Coal Co.....                               | 34  | Topman .....     |
| October 26..   | Peter Baretti .....         | Carbon Block Coal Co.....                        | 22  | Miner .....      |
| November 19..  | Paul Battistone .....       | Fowler & Wilson Coal Co.,                        | 50  | Brusher .....    |
| 1911           |                             |  |     |                  |
| January 24..   | A. K. Grant.....            | White Ash Coal Co.....                           | 31  | Miner .....      |
| March 30..     | Christopher Stevenson ..... | Hocking Coal Co.....                             | 50  | Miner .....      |
| March 30..     | Fred Prior .....            | Hocking Coal Co.....                             | --- | Driver .....     |
| April 14..     | Sam. Ashton .....           | Peerless Coal Co.....                            | 33  | Miner .....      |
| July 8..       | John Karmatz .....          | National Union Coal Co.....                      | 20  | Miner .....      |
| July 19..      | Alexander Seath .....       | Centerville Block Coal Co.                       | 60  | Trackman .....   |
| August 11..    | Jesse Thompson .....        | Numa Block Coal Co.....                          | 17  | Driver .....     |
| October 17..   | Richard Ray .....           | Smoky Hollow Coal Co.....                        | 21  | Co. man .....    |
| October 19..   | Peter Bister .....          | Wapello Coal Co.....                             | 64  | Miner .....      |
| November 18..  | Robt. R. Cotteral.....      | National Union Coal Co.....                      | 22  | Driver .....     |
| November 27..  | C. R. Gilmore.....          | A. D. Crawford Coal Co.....                      | 35  | Cager .....      |
| December 22..  | James Nelson .....          | Smoky Hollow Coal Co.....                        | 36  | Co. man .....    |
| 1912           |                             |  |     |                  |
| January 6..    | James Lynch .....           | Tracy Bros. Coal Co.....                         | 45  | Miner .....      |
| January 17..   | John Hughes .....           | Lodwick Bros. No. 12.....                        | 69  | Miner .....      |
| March 12..     | Rush Pullen .....           | Centerville Block Coal Co.                       | 34  | Miner .....      |

\*Sisters.

## THE TWO YEARS ENDING JUNE 30, 1912.

| Married or single | Wife         | Number of children | Nationality    | Cause of Accident                    | Time of accident | County     |
|-------------------|--------------|--------------------|----------------|--------------------------------------|------------------|------------|
| Single .....      | ---          | ---                | Italian .....  | Fall of slate.....                   | 10 a.m.          | Monroe     |
| Married .....     | Wife.....    | 2                  | American ..... | Fell down main shaft....             | 9 p.m.           | Appanoose  |
| Married .....     | Wife.....    | 3                  | Scotch .....   | Blast of coal.....                   | 5 p.m.           | Monroe     |
| Single .....      | ---          | ---                | ---            | On tracks leading from mine .....    | ---              | Monroe     |
| Single .....      | ---          | ---                | Italian .....  | Fall o coal.....                     | 1:15 p.m.        | Appannoose |
| Married .....     | Wife.....    | 8                  | Italian .....  | Fall of rock.....                    | 12 p.m.          | Appannoose |
| Single .....      | ---          | ---                | American ..... | Fall of slate.....                   | 3 p.m.           | Monroe     |
| Widower .....     | ---          | 1                  | American ..... | Fall of slate.....                   | 8 a.m.           | Monroe     |
| Married .....     | Wife.....    | 5                  | American ..... | Fall of slate.....                   | 8 a.m.           | Monroe     |
| Married .....     | Wife.....    | 1                  | English .....  | Caught by mining mach.               | 4 p.m.           | Appannoose |
| Single .....      | ---          | ---                | American ..... | Run over by car.....                 | 12:20 p.m.       | Monroe     |
| Married .....     | Wife.....    | 6                  | ---            | Fall of rock.....                    | 2 p.m.           | Appannoose |
| Single .....      | Mother ..... | *4                 | American ..... | Fall of slate.....                   | 3:15 p.m.        | Wayne      |
| Single .....      | ---          | ---                | American ..... | Fall of slate.....                   | 8:30 a.m.        | Monroe     |
| Married .....     | Wife.....    | 3                  | Swede .....    | Fall of slate.....                   | 9:30 a.m.        | Monroe     |
| Single .....      | ---          | ---                | American ..... | Run over by car.....                 | 9:30 a.m.        | Monroe     |
| Married .....     | Wife.....    | 5                  | American ..... | Point of rail run through body ..... | 2:15 a.m.        | Appannoose |
| Single .....      | ---          | ---                | Swede .....    | Run over by trip.....                | 4:15 p.m.        | Monroe     |
| Married .....     | Wife.....    | 3                  | American ..... | Fall of coal.....                    | 11:30 a.m.       | Wayne      |
| Married .....     | Wife.....    | 6                  | Welch .....    | Fall of coal.....                    | ---              | Appannoose |
| Married .....     | Wife.....    | 2                  | Negro .....    | Fall of rock.....                    | 4 p.m.           | Appannoose |

## REPORT OF NON FATAL ACCIDENTS IN DISTRICT No. 1, FROM JULY 1, 1910 TO JUNE 30, 1911.

| Date         | Name             | Occupation  | Cause of Accident  | Character of Injury             | Employed by              | County    |
|--------------|------------------|-------------|--------------------|---------------------------------|--------------------------|-----------|
| <b>1910</b>  |                  |             |                    |                                 |                          |           |
| July 20      | Geo. King        | Miner       | Fell off car       | Broken wrist                    | Consumers Coal Co.       | Appanoose |
| August 10    | John Meyers      | Driver      | Caught by car      | Back sprained                   | Smoky Hollow Coal Co.    | Monroe    |
| August 16    | James Dunning    | Entry man   | Fall of slate      | Leg broken, back hurt           | Smoky Hollow Coal Co.    | Monroe    |
| September 1  | W. A. Stewart    | Miner       | Fall of slate      | Face and shoulder hurt          | Smoky Hollow Coal Co.    | Monroe    |
| September 16 | Chas. Hales      | Miner       | Fall of slate      | Leg broken                      | National Union Coal Co.  | Monroe    |
| October 14   | J. Bryant        | Driver      | Fell off car       | Broken knee cap                 | Peerless Coal Co.        | Appanoose |
| October 24   | Joe Gragg        | Miner       | Fall of slate      | Hand mashed                     | National Union Coal Co.  | Monroe    |
| November 7   | Otto Lewis       | Topman      | Caught by car      | Fingers mashed                  | Smoky Hollow Coal Co.    | Monroe    |
| November 25  | Wm. Nicholson    | Driver      | Caught by car      | Leg bruised                     | Smoky Hollow Coal Co.    | Monroe    |
| November 26  | David Gibbon     | Miner       | Fall of slate      | Back injured                    | Winifred Coal Co.        | Appanoose |
| December 6   | Emery Hackathorn | Driver      | Caught by car      | Thumb dislocated                | Royal Block Coal Co.     | Appanoose |
| December 9   | Hiram Annis      | Driver      | Fall of rock       | Back and legs hurt              | Exline Coal Co.          | Appanoose |
| December 14  | Joe Krupa        | Miner       | Fall of coal       | Hand mashed                     | A. D. Crawford Coal Co.  | Appanoose |
| December 16  | Henry Spiegel    | Miner       | Fall of slate      | Leg bruised                     | Smoky Hollow Coal Co.    | Monroe    |
| December 24  | John Garner      | Miner       | Fall of coal       | Abdomen bruised                 | Oriental Coal Co.        | Appanoose |
| December 31  | Lem Ryan         | Driver      | Struck by car      | Leg bruised                     | Smoky Hollow Coal Co.    | Monroe    |
| December 17  | S. W. Stiles     | Top laborer | Fell off dirt dump | Broken leg                      | Numa Block Coal Co.      | Wayne     |
| <b>1911</b>  |                  |             |                    |                                 |                          |           |
| January 7    | Geo. Simpson     | Pit boss    | Fall of rock       | Two ribs broken                 | Center Coal Co.          | Appanoose |
| January 16   | Michael Soro     | Miner       | Fall of slate      | Leg broken                      | Peacock Coal Co.         | Appanoose |
| January 18   | John McMahon     | Driver      | Caught by car      | Fingers mashed                  | A. D. Crawford Coal Co.  | Appanoose |
| January 20   | Enoch Bars       | Miner       | Fall of coal       | Ankle bruised                   | Winifred Coal Co.        | Appanoose |
| January 28   | Lew Nicoletti    | Miner       | Fall of slate      | Back and hips crushed           | Smoky Hollow Coal Co.    | Monroe    |
| February 6   | Edward Thomas    | Shot firer  | Windy shot         | Face and hands burned           | National Union Coal Co.  | Monroe    |
| February 14  | Lars Larson      | Miner       | Fall of coal       | Leg broken                      | Scandinavian Coal Co.    | Appanoose |
| March 6      | Lewis Rolucci    | Entry man   | Fall of coal       | Hand crushed                    | Smoky Hollow Coal Co.    | Monroe    |
| March 6      | John Richardson  | Miner       | Fall of slate      | Leg and arm bruised             | Smoky Hollow Coal Co.    | Monroe    |
| March 8      | Santo Maliano    | Miner       | Fall of coal       | Head and shoulders in-<br>jured | Anchor Coal Co.          | Appanoose |
| March 13     | J. Showers       | Miner       | Fall of coal       | Ankle hurt                      | Peerless Coal Co.        | Appanoose |
| April 26     | Steve Matkovick  | Miner       | Caught by car      | Face and back injured           | Fowler & Wilson Coal Co. | Appanoose |
| May 9        | Geo. Laidlow     | Driver      | Caught by car      | Bruised about hips              | Hocking Coal Co.         | Monroe    |
| May 15       | Harry Davis      | Driver      | Crushed by car     | Three ribs broken               | National Union Coal Co.  | Monroe    |
| June 14      | Sam Anderson     | Driver      | Run over by car    | Foot badly bruised              | A. D. Crawford Coal Co.  | Appanoose |
| June 14      | John Wakesminsky | Driver      | Caught by car      | Foot badly bruised              | A. D. Crawford Coal Co.  | Appanoose |
| July 1       | Arthur Welsh     | Boss driver | Caught by cars     | Two fingers mashed              | Wapello Coal Co.         | Monroe    |
| July 6       | Jas. Deskin      | Miner       | Fall of slate      | Left ankle bruised              | Smoky Hollow Coal Co.    | Monroe    |

|              |                     |              |  |                                    |                            |           |
|--------------|---------------------|--------------|--|------------------------------------|----------------------------|-----------|
|              |                     |              |  |                                    |                            |           |
| July 6       | Emerson Peart       | Spragger     | Caught by car                                | Two fingers mashed                 | Wapello Coal Co.           | Monroe    |
| July 10      | Albert Peterson     | Driver       | Coal fell on hand                            | Thumb broken                       | Center Coal Co.            | Appanoose |
| July 27      | Pete Tragnago       | Miner        | Fall of rock                                 | Back injured                       | A. D. Crawford Coal Co.    | Appanoose |
| July 24      | Ben Leggett         | Driver       | Caught by car                                | Leg bruised                        | Smoky Hollow Coal Co.      | Monroe    |
| August 3     | Wm. Wilkerson       | Driver       | Mule fell on him in barn                     | Ribs fractured                     | A. D. Crawford Coal Co.    | Appanoose |
| August 13    | Ross Dobbins        | Miner        | Fall of coal                                 | Fractured rib                      | Coal City Coal Co.         | Appanoose |
| August 17    | W. A. Hollingsworth | Miner        | Fall of coal                                 | Broken leg                         | Woodland Coal Co.          | Appanoose |
| September 6  | John Foster         | Miner        | Fall of coal                                 | Body bruised                       | Centerville Block Coal Co. | Appanoose |
| September 9  | John Archbold       | Mine foreman | Fall of slate                                | Leg broken                         | Walnut Block Coal Co.      | Appanoose |
| September 14 | M. Bendilla         | Miner        | Fall of coal                                 | Body bruised                       | Anchor Coal Co.            | Appanoose |
| September 15 | Chas. Montibello    | Miner        | Fall of coal                                 | Pelvis dislocated                  | Fowler & Wilson Coal Co.   | Appanoose |
| September 25 | Dave Jones          | Driver       | Caught by car                                | Arm broken                         | National Union Coal Co.    | Monroe    |
| September 25 | Hiram Merrill       | Driver       | Caught by car                                | Leg broken                         | National Union Coal Co.    | Monroe    |
| September 29 | Fred Bennett        | Chunker      | Caught between R.R. car<br>and upright frame | Collar bone and two ribs<br>broken | Centerville Block Coal Co. | Appanoose |
| September 29 | Henry Hunter        | Miner        | Fall of slate                                | Broken leg                         | Hocking Coal Co.           | Monroe    |
| September 29 | A. Miatenick        | Miner        | Lifting car on rails                         | Finger cut off                     | A. D. Crawford Coal Co.    | Appanoose |
| September 25 | Robert Caldwell     | Miner        | Caught by car                                | Leg broken                         | Numa Block Coal Co.        | Wayne     |
| October 2    | Geo. Tomlinson      | Timberman    | Fall of slate                                | Leg broken, ankle dislo-<br>cated  | Hocking Coal Co.           | Monroe    |
| October 9    | John Roberts        | Miner        | Fall of rock                                 | Dislocated shoulder                | Inter Ocean Coal Co.       | Appanoose |
| October 9    | Chas. Angove        | Company man  | Fall of slate                                | Fractured ankle                    | Wapello Coal Co.           | Monroe    |
| October 18   | Axel Anderson       | Miner        | Fall of slate                                | Back and hips bruised              | Wapello Coal Co.           | Monroe    |
| October 19   | Wm. Hauxby          | Driver       | Caught by car                                | Hip bones injured                  | Hocking Coal Co.           | Monroe    |
| October 28   | Rudolf Vials        | Miner        | Fall of rock                                 | Arm and leg broken                 | Big Jo Coal Co.            | Appanoose |
| October 30   | Chas. Minus         | Chunker      | Struck by coal                               | Foot bruised                       | Phoenix Coal Co.           | Appanoose |
| October 30   | Joe Milburn         | Driver       | Fall of slate                                | Body bruised, hand<br>mashed       | Hocking Coal Co.           | Monroe    |
| November 1   | W. T. Jones         | Miner        | Fall of slate                                | Bruised hips                       | Inter Ocean Coal Co.       | Appanoose |
| November 7   | Wm. Frazell         | Miner        | Fall of coal                                 | Crushed in breast                  | Numa Block Coal Co.        | Appanoose |
| November 11  | Dom Pernal          | Driver       | Kicked by mule                               | Cheekbone fractured                | Fowler & Wilson Coal Co.   | Appanoose |
| November 15  | Martin Anderson     | Driver       | Run over by car                              | Leg broken, body cut               | Wapello Coal Co.           | Monroe    |
| November 17  | Joe Bubon           | Miner        | Fall of coal                                 | Foot and ankle bruised             | Fowler & Wilson Coal Co.   | Appanoose |
| November 17  | E. J. Fox           | Miner        | Fall of slate                                | Body bruised                       | Smoky Hollow Coal Co.      | Monroe    |
| November 20  | Albert Drew         | Miner        | Fall of coal                                 | Broken leg                         | Oriental Coal Co.          | Appanoose |
| December 2   | Cal Workman         | Cager        | Coal fell down shaft                         | Arm broken                         | Numa Block Coal Co.        | Wayne     |
| <b>1912</b>  |                     |              |  |                                    |                            |           |
| January 10   | Sam Anderson        | Driver       | Caught by car                                | Bones of foot broken               | A. D. Crawford Coal Co.    | Appanoose |
| January 8    | Tony Caularich      | Miner        | Fall of coal                                 | Leg broken                         | Fowler & Wilson Coal Co.   | Appanoose |
| January 24   | John Blosovich      | Miner        | Fall of coal                                 | Leg broken                         | Fowler & Wilson Coal Co.   | Appanoose |
| February 1   | Jas. Cook           | Miner        | Fall of coal                                 | Dislocated shoulder                | Goben Coal Co.             | Lucas     |
| February 22  | Wm. Laird           | Driver       | Kicked by mule                               | Arm broken                         | Fowler & Wilson Coal Co.   | Appanoose |
| <b>1911</b>  |                     |              |  |                                    |                            |           |
| July 25      | Jas. Sackfield      | Miner        | Fall of coal                                 | Leg injured                        | Egypt Coal Co.             | Appanoose |
| August 2     | August Colson       | Miner        | Fall of slate                                | Arm and ribs broken                | Wapello Coal Co.           | Monroe    |
| November 23  | John Brooks         | Miner        | Fall of roof                                 | Ankle broken                       | Centerville Block Coal Co. | Appanoose |
| November 25  | John Smith          | Miner        | Struck by cage                               | Back injured                       | Lodwick Bros. Coal Co.     | Appanoose |
| December 21  | Thompson Teasdale   | Timberman    | Fall of slate                                | Leg bruised                        | Hocking Coal Co.           | Monroe    |

## REPORT OF NON FATAL ACCIDENTS IN DISTRICT No. 1. FROM JULY 1, 1910 TO JUNE 30, 1911—CONTINUED

| Date        | Name            | Occupation | Cause of Accident | Character of Injury | Employed by                | County    |
|-------------|-----------------|------------|-------------------|---------------------|----------------------------|-----------|
| 1911        |                 |            |                   |                     |                            |           |
| February 11 | Geo. Phillips   | Miner      | Fall of slate     | Knee injured        | Centerville Block Coal Co. | Appanoose |
| February 14 | Charles Skinner | Timberman  | Fall of slate     | Eye ball injured    | Smoky Hollow Coal Co.      | Monroe    |
| February 15 | Frank Agnewson  | Miner      | Fall of roof      | Leg broken          | Centerville Block Coal Co. | Appanoose |
| February 16 | W. Broun        | Miner      | Fall of slate     | Leg broken          | Centerville Block Coal Co. | Appanoose |
| February 17 | W. Broun        | Miner      | Fall of slate     | Hurt inwardly       | Joe, Horridge Coal Co.     | Appanoose |
| February 18 | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| February 19 | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| February 20 | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| February 21 | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| February 22 | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| February 23 | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| February 24 | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| February 25 | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| February 26 | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| February 27 | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| February 28 | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| February 29 | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| February 30 | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| March 1     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| March 2     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| March 3     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| March 4     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| March 5     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| March 6     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| March 7     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| March 8     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| March 9     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| March 10    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| March 11    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| March 12    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| March 13    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| March 14    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| March 15    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| March 16    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| March 17    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| March 18    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| March 19    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| March 20    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| March 21    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| March 22    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| March 23    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| March 24    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| March 25    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| March 26    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| March 27    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| March 28    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| March 29    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| March 30    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| March 31    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| April 1     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| April 2     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| April 3     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| April 4     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| April 5     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| April 6     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| April 7     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| April 8     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| April 9     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| April 10    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| April 11    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| April 12    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| April 13    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| April 14    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| April 15    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| April 16    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| April 17    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| April 18    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| April 19    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| April 20    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| April 21    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| April 22    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| April 23    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| April 24    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| April 25    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| April 26    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| April 27    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| April 28    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| April 29    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| April 30    | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| May 1       | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| May 2       | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| May 3       | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| May 4       | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| May 5       | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| May 6       | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| May 7       | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| May 8       | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| May 9       | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| May 10      | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| May 11      | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| May 12      | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| May 13      | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| May 14      | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| May 15      | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| May 16      | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| May 17      | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| May 18      | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| May 19      | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| May 20      | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| May 21      | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| May 22      | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| May 23      | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| May 24      | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| May 25      | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| May 26      | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| May 27      | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| May 28      | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| May 29      | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| May 30      | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| May 31      | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| June 1      | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| June 2      | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| June 3      | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| June 4      | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| June 5      | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| June 6      | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| June 7      | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| June 8      | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| June 9      | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| June 10     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| June 11     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| June 12     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| June 13     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| June 14     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| June 15     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| June 16     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| June 17     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| June 18     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| June 19     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| June 20     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| June 21     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| June 22     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| June 23     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| June 24     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| June 25     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| June 26     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| June 27     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| June 28     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| June 29     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |
| June 30     | W. Broun        | Miner      | Fall of slate     | Broken hip          | Joe, Horridge Coal Co.     | Appanoose |

## APPANOOSE COUNTY.

Appanoose county still retains its position as being the third coal producing county in the state, with Monroe first, and Polk county second. This order has prevailed for a number of years, and notwithstanding that there are more mines operated in Appanoose county than in any other county in the state. Its rank in coal production is accounted for in a measure, because the seam of coal worked in this county is different from that worked in the larger coal producing counties of the state.

In Appanoose county, what is known as the Mystic seam of coal appears to be present under the entire western half of the county, and the adjoining portions of Wayne county on the west, and Missouri on the south. This seam is persistent over the western and southern parts of the county. In spite of the millions of tons of coal which have been taken from the Appanoose formation, only a narrow strip on each side of portions of the lines of railroads has been mined. Great quantities of coal still remain unmined in the Mystic seam. The area of coal in this seam in the county probably covers more than two hundred and fifty square miles of territory.

The seam of coal in this county averages about two and one-half feet in thickness, but is very valuable on account of its easy accessibility, regularity, quality and extent. On this account the future will see greater operations in the coal industry in this county than is now carried on. It has also been determined that another vein of coal lies below the seam now mined.

This is the only county in the district where mining machines are used, and these but in a few places. Some are used by the Centerville Block Coal Company in their mines near Centerville, and a few are in operation in the mines of the Peerless Coal Company near Mystic. Not so many mining machines now used as formerly.

The coal production of Appanoose county for the biennial year ending June 30, 1912, amounted to 2,265,168 tons. Of this amount there was produced during the year 1911, 1,205,878 tons, and during the year ending June 30, 1912, 1,059,290 tons. To

produce this tonnage employment was given to 3,985 men in and around the mines in 1911, and to 3,975 men during the year 1912.

Sixty mines are in operation in the county, and these mines worked on an average 178 days during the year 1911, and 162 days during the year 1912. Fewer days worked in 1912 is due to the fact that all the mines of the county were idle during a suspension while a working agreement was being formulated by the miners and operators of the state. This suspension lasted for nearly sixty days, and it was sometime after an agreement was perfected before the mines of the county resumed work, and in some cases mines did not resume work before the end of the fiscal year. It is quite probable that with continuous working conditions as they were in 1911, that the year 1912 would have showed a much greater tonnage.

# MINES IN APPANOOSE COUNTY, THEIR LOCATION, ETC.

| Corporation, Firm or Operator | Mine No. | Location of Mine                    | Railroad Connection if any | Kind of opening | System of working | Power used | Means of ventilation |
|-------------------------------|----------|-------------------------------------|----------------------------|-----------------|-------------------|------------|----------------------|
| Scandinavian Coal Co.         | 2        | Plano                               | K. & W.                    | Shaft           | Room and pillar   | Steam      | Fan                  |
| Lodwick Bros. Coal Co.        | 3        | West of Brazil                      | K. & W.                    | Slope           | Room and pillar   | Steam      | Furnace              |
| Walnut Block Coal Co.         |          | Brazil                              | K. & W.                    | Drift           | Long wall         | Electric   | Furnace              |
| Phoenix Coal Co.              |          | Brazil                              | K. & W.                    | Slope           | Long wall         | Horse      | Furnace              |
| Centerville Block Coal Co.    | 5        | Brazil                              | K. & W.                    | Slope           | Long wall         | Steam      | Furnace              |
| Peacock Coal Co.              |          | Brazil                              | K. & W.                    | Slope           | Long wall         | Horse      | Furnace              |
| Oriental Coal Co.             | 1        | South of Brazil                     | K. & W.                    | Slope           | Long wall         | Horse      | Furnace              |
| Louis Anderson Coal Co.       |          | 1 mile southeast of Brazil          | K. & W.                    | Shaft           | Long wall         | Steam      | Fan                  |
| Sunshine Coal Co.             |          | 3 miles west of Centerville         | K. & W.                    | Shaft           | Long wall         | Steam      | Fan                  |
| Centerville Block Coal Co.    | 3        | West of Centerville                 | K. & W. & I. C.            | Shaft           | Long wall         | Steam      | Fan                  |
| Anchor Coal Co.               | 1        | Centerville                         | K. & W.                    | Shaft           | Room and pillar   | Steam      | Fan                  |
| Scandinavian Coal Co.         | 1        | Centerville                         | K. & W.                    | Shaft           | Room and pillar   | Steam      | Fan                  |
| Dewey Coal Co.                |          | 1 1/2 miles southeast of Cincinnati | K. & W.                    | Shaft           | Room and pillar   | Steam      | Fan                  |
| Consolidated Coal Co.         |          | 1 1/2 miles southwest of Cincinnati | C. B. & K. C.              | Slope           | Long wall         | Steam      | Fan                  |
| Mendota Coal & Mining Co.     | 2        | West of Cincinnati                  | C. B. & K. C.              | Shaft           | Long wall         | Steam      | Fan                  |
| Mendota Coal & Mining Co.     | 1        | Cincinnati                          | C. B. & K. C.              | Shaft           | Long wall         | Steam      | Fan                  |
| Armstrong Coal Co.            |          | West of Cincinnati                  | C. B. & K. C.              | Shaft           | Room and pillar   | Steam      | Fan                  |
| Thistle Coal Co.              | 3        | Southeast of Cincinnati             | C. B. & K. C.              | Shaft           | Room and pillar   | Steam      | Fan                  |
| Thistle Coal Co.              | 2        | 1 1/2 miles east of Cincinnati      | C. B. & K. C.              | Shaft           | Room and pillar   | Steam      | Fan                  |
| Exline Coal Co.               | 1        | West of Exline                      | C. B. & K. C.              | Shaft           | Room and pillar   | Steam      | Fan                  |
| Exline Coal Co.               | 2        | West of Exline                      | C. B. & K. C.              | Shaft           | Room and pillar   | Steam      | Fan                  |
| Iowa Block Coal Co.           |          | Exline                              | C. B. & K. C.              | Shaft           | Room and pillar   | Steam      | Fan                  |
| Royal Block Coal Co.          |          | Northeast of Exline                 | C. B. & K. C.              | Shaft           | Room and pillar   | Steam      | Fan                  |
| Centerville Block Coal Co.    | 9        | West of Centerville                 | Iowa Cent.                 | Shaft           | Room and pillar   | Steam      | Fan                  |
| Centerville Block Coal Co.    | 2        | Numa                                | C. R. I. & P.              | Shaft           | Long wall         | Steam      | Fan                  |
| Numa Block Coal Co.           | 1        | Numa                                | C. R. I. & P.              | Slope           | Long wall         | Steam      | Fan                  |
| Prairie Block Coal Co.        |          | 4 miles south of Centerville        | C. R. I. & P.              | Shaft           | Long wall         | Steam      | Fan                  |
| Anchor Coal Co.               | 2        | 2 miles south of Centerville        | C. R. I. & P.              | Shaft           | Room and pillar   | Steam      | Fan                  |
| Center Coal Co.               |          | South of Centerville                | C. R. I. & P.              | Shaft           | Room and pillar   | Steam      | Fan                  |
| F. C. Hand Coal Co.           | 1        | South of Cincinnati                 | C. B. & K. C.              | Shaft           | Room and pillar   | Steam      | Furnace              |
| Thistle Coal Co.              | 4        | East of Cincinnati                  | C. B. & K. C.              | Shaft           | Room and pillar   | Steam      | Fan                  |

## MINES IN APPANOOSE COUNTY, THEIR LOCATION, ETC.—CONTINUED.

| Corporation, Firm or Operator | Mine No. | Location or Mine             | Railroad Connection if any | Kind of opening | System of working | Power used | Means of ventilation |
|-------------------------------|----------|------------------------------|----------------------------|-----------------|-------------------|------------|----------------------|
| Rossbrook Coal Co.            |          | R. F. D. No. 4, Centerville. | Iowa Cent.                 | Shaft           | Long wall         | Steam      | Fan                  |
| Centerville Block Coal Co.    | 1        | East of Centerville.         | C., R. I. & P.             | Shaft           | Room and pillar   | Steam      | Fan                  |
| Centerville Block Coal Co.    | 10       | East of Centerville.         | C., R. I. & P.             | Shaft           | Room and pillar   | Steam      | Fan                  |
| Consumers Coal Co.            |          | Jerome                       | C., M. & St. P.            | Shaft           | Long wall         | Steam      | Fan                  |
| Big Jo Coal Co.               | 1        | 1½ miles east of Jerome.     | C., M. & St. P.            | Shaft           | Long wall         | Steam      | Fan                  |
| Lodwick Bros. Coal Co.        | 2        | 3 miles southwest of Mystic. | C., M. & St. P.            | Shaft           | Long wall         | Steam      | Fan                  |
| Peerless Coal Co.             | 5        | West of Mystic.              | C., M. & St. P.            | Shaft           | Long wall         | Steam      | Furnace              |
| Egypt Coal Co.                |          | West of Mystic.              | C., M. & St. P.            | Shaft           | Long wall         | Steam      | Furnace              |
| Leard Coal Co.                | 1        | Mystic                       | C., M. & St. P.            | Drift           | Long wall         | Horse      | Fan                  |
| Acken Coal Co.                | 1        | West of Mystic.              | C., M. & St. P.            | Drift           | Long wall         | Steam      | Fan                  |
| Acken Coal Co.                | 12       | West of Mystic.              | C., M. & St. P.            | Slope           | Long wall         | Horse      | Fan                  |
| Peerless                      | 12       | West of Mystic.              | C., M. & St. P.            | Shaft           | Long wall         | Steam      | Fan                  |
| Mystic Coal Co.               | 12       | West of Mystic.              | C., M. & St. P.            | Shaft           | Long wall         | Steam      | Fan                  |
| Artic Coal Co.                | 1        | West of Mystic.              | C., M. & St. P.            | Slope           | Long wall         | Mule       | Furnace              |
| Mystic Coal Co.               | 3        | West of Mystic.              | C., M. & St. P.            | Slope           | Long wall         | Horse      | Fan                  |
| Lodwick Coal Co.              | 29       | Mystic                       | C., M. & St. P.            | Shaft           | Long wall         | Steam      | Fan                  |
| Peerless Coal Co.             | 6        | Mystic                       | C., M. & St. P.            | Slope           | Long wall         | Steam      | Fan                  |
| Lodwick Coal Co.              | 12       | Mystic                       | C., M. & St. P.            | Slope           | Long wall         | Horse      | Furnace              |
| Winnifred Coal Co.            |          | East of Mystic.              | C., M. & St. P.            | Slope           | Long wall         | Steam      | Furnace              |
| Beggs Coal Co.                |          | 1½ miles east of Mystic.     | C., M. & St. P.            | Shaft           | Long wall         | Horse      | Furnace              |
| Elgin & Barret Coal Co.       |          | 1½ miles east of Mystic.     | C., M. & St. P.            | Slope           | Long wall         | Steam      | Furnace              |
| Inter-Ocean Coal Co.          |          | 1½ miles east of Mystic.     | C., M. & St. P.            | Shaft           | Long wall         | Steam      | Fan                  |
| Lodwick Bros. Coal Co.        | 5        | Clarkdale                    | C., M. & St. P.            | Shaft           | Long wall         | Steam      | Fan                  |
| Fowler & Wilson Coal Co.      |          | Rathbun                      | C., M. & St. P.            | Shaft           | Long wall         | Steam      | Fan                  |
| Carbon Block Coal Co.         | 30       | South of Centerville.        | C., R. I. & P.             | Shaft           | Room and pillar   | Steam      | Fan                  |
| Domestic Coal Co.             |          | Cincinnati                   |                            | Shaft           | Room and pillar   | Horse      | Furnace              |
| White Oak Coal Co.            |          | North of Exline.             | C., R. I. & P.             | Shaft           | Room and pillar   | Horse      | Furnace              |
| Ira A. Guinn Coal Co.         |          | Coal City                    |                            | Drift           | Long wall         | Horse      | Furnace              |
| J. B. Wright                  |          | South of Centerville.        |                            | Shaft           |                   |            |                      |
| W. Smith                      |          | South of Centerville.        |                            | Shaft           |                   |            |                      |
| Graham & Parker Coal Co.      |          | South of Centerville.        |                            | Shaft           |                   |            |                      |
| Walnut Coal Co.               |          | South of Centerville.        |                            | Shaft           |                   |            |                      |

|                              |    |                           |                |       |                 |       |         |
|------------------------------|----|---------------------------|----------------|-------|-----------------|-------|---------|
| White Oak Coal Co.           |    | Centerville               | C., R. I. & P. | Shaft | Room and pillar | Horse | Furnace |
| Monitor Coal Co.             |    | Centerville               |                | Shaft | Room and pillar | Horse | Furnace |
| Star Coal Co.                |    | North of Centerville.     |                | Shaft | Room and pillar | Horse | Furnace |
| Trio Coal Co.                |    | Northeast of Centerville. |                | Shaft | Room and pillar | Horse | Furnace |
| Rock Valley Coal Co.         |    | North of Centerville.     |                | Shaft | Room and pillar | Horse | Furnace |
| John Schrum Coal Co.         |    | North of Centerville.     |                | Shaft | Room and pillar | Horse | Furnace |
| John Koontz Coal Co.         |    | Centerville               |                | Shaft | Room and pillar | Horse | Furnace |
| Manufacturer Coal & Coke Co. | 10 | Coal City                 | I. & St. L.    | Slope | Room and pillar | Steam | Furnace |
| Fowler & Wilson Coal Co.     | 2  | Rathbun                   |                | Slope | Long wall       | Mule  | Fan     |
| S. D. Morrow Coal Co.        |    | Coal City                 |                | Slope | Room and pillar | Mule  | Furnace |
| Maggie Linn Coal Co.         |    | South of Centerville.     |                | Shaft | Room and pillar | Horse | Furnace |
| Woodland Coal Co.            |    | Centerville               |                | Shaft | Room and pillar | Horse | Furnace |
| Grundy Block Coal Co.        |    | South of Numa.            |                | Shaft | Room and pillar | Horse | Furnace |

## MONROE COUNTY.

Monroe County still easily maintains its position as being the largest coal producing county in Iowa.

In 1903 that part of Monroe County bounded on the west by the Wabash Railroad and on the south by the C., B. & Q. was taken out of the First Inspection District and added to the Second. This division of the county still remains.

The coal tonnage produced by Monroe County for the fiscal year ending June 30, 1911, is as follows:

From mines in First District .....1,489,333 tons  
From mines in Second District ..... 724,771 tons

Total .....2,214,104 tons

The coal tonnage produced by Monroe County for the fiscal year ending June 30, 1912, is as follows:

From mines in First District .....1,281,823 tons  
From mines in Second District ..... 913,983 tons

Total .....2,195,806 tons

Total tons of coal produced by Monroe County for the biennial period ending June 30, 1912, 4,409,910 tons.

This production for years 1911 and 1912, shows a slight decrease in production as compared to the years 1909 and 1910. This is shown fully in Table No. 4, which gives the coal production of District No. 1 for the past 12 years, with number of fatal accidents, number of employes per accident, etc.

During the fiscal year ending June 30, 1911, the mines of the county worked 192 days, while for the year ending with June 30, 1912, the mines worked but 168 days. 3,844 employes were given work around the mines in 1911 and 4,045 were given work in 1912. All mines in the county were idle during the fiscal year of 1912 for a period of nearly 60 days while a working agreement was perfected by the miners and operators of the state. This would, in a measure, account for the decreased production of the year.

The outlook is bright for the coal production in this county for the coming biennial period.

## MINES IN MONROE COUNTY (PART), THEIR LOCATION, ETC.

| Corporation, Firm or Operator | Mine No. | Location of Mines          | Railroad Connection if any | Kind of Opening | System of Working | Power used | Means of Ventilation |
|-------------------------------|----------|----------------------------|----------------------------|-----------------|-------------------|------------|----------------------|
| Wapello Coal Co.              | 5        | Northwest of Hiteman       | C., B. & Q.                | Shaft           | Room and pillar   | Steam      | Fan                  |
| Wapello Coal Co.              | 6        | Northwest of Hiteman       | C., B. & Q.                | Shaft           | Room and pillar   | Steam      | Fan                  |
| Smoky Hollow Coal Co.         | 7        | 4 miles southeast of Hynes | C., B. & Q.                | Slope           | Room and pillar   | Steam      | Fan                  |
| Smoky Hollow Coal Co.         | 6        | 4 miles southeast of Hynes | C., B. & Q.                | Slope           | Room and pillar   | Steam      | Fan                  |
| Phillips Fuel Co.             | 7        | West of Foster             | C., M. & St. P.            | Shaft           | Room and pillar   | Steam      | Fan                  |
| Hocking Coal Co.              | 3        | 2 1/2 miles south of Albia | Iowa Cent.                 | Shaft           | Room and pillar   | Steam      | Fan                  |
| Star Coal Co.                 | ---      | Northwest of Albia         | C., B. & Q.                | Shaft           | Room and pillar   | Steam      | Fan                  |
| White Ash Coal Co.            | ---      | South of Avery             | C., B. & Q.                | Slope           | Room and pillar   | Steam      | Fan                  |
| Albia Coal Co.                | ---      | Southwest of Hiteman       | Iowa Cent.                 | Shaft           | Room and pillar   | Steam      | Fan                  |
| National Union Coal Co.       | ---      | West of Hocking            | C., B. & Q.                | Shaft           | Room and pillar   | Steam      | Fan                  |
| Hocking Coal Co.              | 4        | West of Hocking            | Iowa Cent.                 | Shaft           | Room and pillar   | Steam      | Fan                  |
| Smoky Hollow Coal Co.         | 8        | South of Hynes             | C., B. & Q.                | Shaft           | Room and pillar   | Steam      | Fan                  |

## LUCAS COUNTY.

For some years the coal production of Lucas county has steadily declined. This because the big mines which formerly operated in this county have been worked out and abandoned. At one time in the history of the county the coal tonnage produced in the county reached a maximum of 269,539 tons. This was during 1903, when two big mines in the county were in operation. These were at Cleveland and Lucas. Since the abandonment of the operations of the Whitebreast Company at Cleveland, and the shutting down of the mine of the Big Hill Fuel Company at Lucas, the decline in coal production has been very rapid. No shipping mines are at present in operation in the county. The largest local mine is that of the Inland Fuel Company, northeast of Chariton. This is said to be one of the best local mines in the state. Some talk of late has been to the effect that this mine was preparing to connect by switch with the line of the newly constructed Rock Island road running from Des Moines to Allerton. If this is done, in all probability the output of this mine will be largely increased during the coming year.

It must not be understood that the coal fields of Lucas county have become exhausted. Lack of railroad facilities in the part of the county where coal has been found is largely the reason for but few mines being operated. Much drilling by parties operating in Monroe county has been done in the eastern and north-eastern parts of Lucas county and with flattering prospects. Much of the land is underlaid with coal, and it is only a question of time until active operations in the coal industry will be resumed in this county. It looked for a time during the year just closed as though the mine of the Big Hill Coal Company at Lucas would be reopened and operations resumed, but as yet nothing has been done.

The coal tonnage produced by Lucas county for the biennial period amounted to 26,352 tons.

## WAYNE COUNTY.

A considerable portion of Wayne county appears to be underlaid with the same seam of workable coal that exists in Appanoose county, but so far mining has not been carried on extensively. As stated above the coal worked is a continuation of the Mystic seam. The shipping mines of the county are located at Seymour and these have done a fairly good mining business in the past, and are yet mining considerable coal. I understand the Ramseys from Oskaloosa have been prospecting about two miles east of Seymour, but I have not learned the results from this prospecting. I would suppose that the vein would be found as regular as at Seymour.

Small mines conducted on a local scale are operated near Confidence and Promise City. These only operate during the fall and winter months, and the tonnage is not large.

The mines of Wayne county are worked on the longwall system of mining. They are in fairly satisfactory condition.

The mines in Wayne county for the biennial period ending June 30, 1912, produced 250,974 tons of coal, and gave employment to more than four hundred men.

## MINES IN LUCAS COUNTY, THEIR LOCATION, ETC.

| Corporation, Firm or Operator     | Mine No. | Location of Mines                                  | Railroad Connection if any | Kind of opening | System of Working            | Power used     | Means of Ventilation |
|-----------------------------------|----------|--|----------------------------|-----------------|------------------------------|----------------|----------------------|
| Inland Fuel Co.<br>Goben Coal Co. | 31       | Miles northeast of Chariton<br>Northeast of Lucas. | C., B. & Q.<br>C., B. & Q. | Shaft<br>Shaft  | Room and pillar<br>Long wall | Steam<br>Horse | Fan<br>Furnace       |

## MINES IN WAYNE COUNTY, THEIR LOCATION, ETC.

|                                     |   |                                |                 |       |           |       |         |
|-------------------------------------|---|--------------------------------|-----------------|-------|-----------|-------|---------|
| Numa Block Coal Co.                 | 2 | 1 mile east of Seymour.        | C., M. & St. P. | Shaft | Long wall | Steam | Fan     |
| Numa Block Coal Co.                 | 3 | Seymour                        | C., R. I. & P.  | Shaft | Long wall | Steam | Fan     |
| Carey Bros. Coal Co.                |   | 1 miles southwest of Seymour.  |                 | Shaft | Long wall | Steam | Furnace |
| Ben Carman Coal Co.                 |   | 1 miles south of Confidence.   |                 | Shaft | Long wall | Steam | Furnace |
| Jos. Hayhurst Coal Co.              |   | 1/2 miles south of Confidence. |                 | Shaft | Long wall | Horse | Furnace |
| Cherry, Livingston & Fogle Coal Co. |   | Melrose, R. F. D. No. 8.       |                 |       |           |       |         |
| Travey Bros. Coal Co.               |   | Fromlise City, R. F. D. No. 2. |                 |       |           |       |         |

## PAGE, TAYLOR AND ADAMS COUNTIES.

These counties are located in southwestern Iowa, on the Missouri river slope. The coal vein worked in these counties belongs to the upper coal strata entirely. The vein worked is very thin, being from 16 to 20 inches in thickness. No permanent paying operations can be conducted on account of thinness of the vein.

The mines of these counties are for the most part worked or conducted as local mines, and are operated only during the fall and winter months to supply local trade. The production, however, taken as a whole amounts to considerable each year. The mines are fairly well equipped and the coal produced gives good satisfaction.

Mining operations in Adams county are conducted near Carbon, Eureka and Bristoe. In Page county the mines are located near Clarinda, while in Taylor county all the mines of the county are located near New Market.

Mining operations in these counties will likely be conducted for many years, but the tonnage produced will never be large, on account of the thinness of the vein worked. For the biennial period coal was produced in these counties as follows: Page county produced 15,262 tons of coal and gave employment to 37 men. Taylor county produced 14,495 tons of coal and gave employment to 44 men. Adams county produced 10,500 tons of coal and gave employment to 36 men.

No accidents were reported from these counties.

## MINES IN TAYLOR COUNTY, THEIR LOCATION, ETC.

| Corporation, Firm or Operator | Mine No. | Location of Mines           | Railroad Connection if any | Kind of opening | System of Working | Power used | Means of Ventilation |
|-------------------------------|----------|-----------------------------|----------------------------|-----------------|-------------------|------------|----------------------|
| Union Coal Co.                |          | East of New Market.         | C., B. & Q.                | Shaft           | Long wall         | Horse      | Furnace              |
| Campbell Coal Co.             |          | East of New Market.         | C., B. & Q.                | Shaft           | Long wall         | Horse      | Furnace              |
| New Market Coal Co.           |          | East of New Market.         |                            | Shaft           | Long wall         | Horse      | Furnace              |
| N. Easter Coal Co.            |          | 2 miles east of New Market. |                            | Shaft           | Long wall         | Horse      | Furnace              |
| Baker & Welch Coal Co.        |          | 2 miles east of New Market. |                            | Shaft           | Long wall         | Horse      | Furnace              |

## MINES IN PAGE COUNTY, THEIR LOCATION, ETC.

|                 |   |                                |  |       |           |       |         |
|-----------------|---|--------------------------------|--|-------|-----------|-------|---------|
| Johnson & Co.   |   | 2 miles west of Clarinda.      |  | Shaft | Long wall | Steam | Furnace |
| H. Howard Co.   |   | West of Clarinda               |  | Shaft | Long wall | Horse | Furnace |
| Person Coal Co. |   | 2 miles southwest of Clarinda. |  | Shaft | Long wall | Horse | Furnace |
| Coin Coal Co.   | 1 | Coin                           |  | Shaft | Long wall | Steam | Jet     |

## MINES IN ADAMS COUNTY, THEIR LOCATION, ETC.

|                  |  |                     |  |       |           |       |         |
|------------------|--|---------------------|--|-------|-----------|-------|---------|
| M. Jones         |  | Carbon              |  | Shaft | Long wall | Horse | Furnace |
| J. F. Ruth       |  | Carbon              |  | Shaft | Long wall | Horse | Furnace |
| J. F. Wild       |  | Carbon              |  | Shaft | Long wall | Horse | Furnace |
| McKay & Howell   |  | West of Carbon      |  | Shaft | Long wall | Horse | Furnace |
| H. K. Dermirjean |  | Northwest of Carbon |  | Shaft | Long wall | Horse | Furnace |
| Dougherty & Son  |  | Briscoe             |  | Shaft | Long wall | Horse | Furnace |

TABLE No. 7

SHOWING NUMBER OF MINES, OUTPUT OF COAL, NUMBER OF MINERS AND OTHER EMPLOYEES IN DISTRICT NO. 1, FOR YEAR ENDING JUNE 30, 1911.

| Name of County | Number of mines | Amount of all kinds of coal produced | Number of miners employed | Number of other inside employees | Number of outside employees | Total number of employees |
|----------------|-----------------|--------------------------------------|---------------------------|----------------------------------|-----------------------------|---------------------------|
| Appanoose      | 60              | 1,205,878                            | 3,037                     | 570                              | 378                         | 3,985                     |
| Monroe (part)  | 10              | 1,489,333                            | 1,470                     | 571                              | 240                         | 2,281                     |
| Lucas          | 1               | 10,895                               | 13                        | 6                                | 5                           | 24                        |
| Wayne          | 6               | 144,358                              | 303                       | 101                              | 35                          | 439                       |
| Taylor         | 4               | 7,655                                | 33                        | 7                                | 4                           | 44                        |
| Page           | 2               | 4,500                                | 25                        | 6                                | 6                           | 37                        |
| Adams          | 2               | 6,490                                | 27                        | 4                                | 3                           | 34                        |
| Total          | 85              | 2,869,109                            | 4,908                     | 1,265                            | 671                         | 6,844                     |

TABLE No. 8

SHOWING NUMBER OF MINES, OUTPUT OF COAL, NUMBER OF MINERS AND OTHER EMPLOYEES IN DISTRICT NO. 1, FOR YEAR ENDING JUNE 30, 1912.

| Name of County | Number of mines | Amount of all kinds of coal produced | Number of miners employed | Number of other inside employees | Number of outside employees | Total number of employees |
|----------------|-----------------|--------------------------------------|---------------------------|----------------------------------|-----------------------------|---------------------------|
| Appanoose      | 60              | 1,059,200                            | 3,113                     | 530                              | 332                         | 3,975                     |
| Monroe (part)  | 10              | 1,281,823                            | 1,449                     | 491                              | 193                         | 2,133                     |
| Lucas          | 2               | 15,457                               | 25                        | 8                                | 7                           | 40                        |
| Wayne          | 7               | 106,616                              | 257                       | 84                               | 35                          | 376                       |
| Taylor         | 4               | 6,840                                | 25                        | 7                                | 3                           | 35                        |
| Page           | 2               | 10,762                               | 20                        | 3                                | 2                           | 25                        |
| Adams          | 2               | 5,800                                | 22                        | 1                                | 2                           | 25                        |
| Total          | 87              | 2,486,588                            | 4,911                     | 1,124                            | 574                         | 6,600                     |

TABLE No. 9

SHOWING THE OUTPUT OF THE COAL PRODUCING COUNTIES OF DISTRICT NO. 1, FOR THE PAST SIX YEARS.

| Counties      | 1907      | 1908      | 1909      | 1910      | 1911      | 1912      |
|---------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Appanoose     | 1,157,967 | 1,107,806 | 1,186,524 | 1,138,289 | 1,205,878 | 1,050,200 |
| Monroe (part) | 1,346,297 | 1,301,374 | 1,340,374 | 1,102,697 | 1,489,333 | 1,281,823 |
| Lucas         | 126,579   | 74,283    | 9,717     | 10,410    | 10,895    | 15,457    |
| Wayne         | 159,768   | 124,465   | 142,640   | 135,376   | 144,358   | 106,616   |
| Taylor        | 15,951    | 13,861    | 13,347    | 10,727    | 7,655     | 6,840     |
| Page          | 15,981    | 14,045    | 14,054    | 12,247    | 4,500     | 10,762    |
| Adams         | 20,490    | 17,760    | 18,413    | 19,021    | 6,490     | 5,800     |
| Total         | 2,843,023 | 2,653,599 | 2,725,069 | 2,428,767 | 2,869,109 | 2,486,588 |

TABLE No. 10

SHOWING TONNAGE IN DISTRICT NO. 1, FOR PAST TEN YEARS, WITH NUMBER  
OF FATAL ACCIDENTS AND NUMBER OF EMPLOYEES, WITH  
TON PER ACCIDENT, ETC.

| Yaar | Number of fatal<br>accidents | Tons of coal<br>produced<br>each year | Number of<br>employees | Tons of coal<br>mined per<br>accident | Number of em-<br>ployees for<br>each accident |
|------|------------------------------|---------------------------------------|------------------------|---------------------------------------|---|
| 1901 | 18                           | 1,964,050                             | 5,302                  | 109,114                               | 295   |
| 1902 | 11                           | 2,318,535                             | 5,937                  | 210,776                               | 539   |
| 1903 | 11                           | 2,883,675                             | 6,359                  | 262,152                               | 578   |
| 1904 | 13                           | 2,395,470                             | 6,796                  | 184,267                               | 523   |
| 1905 | 7                            | 2,347,360                             | 7,250                  | 335,323                               | 1,036   |
| 1906 | 16                           | 2,648,519                             | 7,075                  | 165,532                               | 442   |
| 1907 | 9                            | 2,843,023                             | 7,089                  | 315,891                               | 737   |
| 1908 | 15                           | 2,653,599                             | 7,069                  | 176,906                               | 471   |
| 1909 | 8                            | 2,725,069                             | 7,213                  | 340,634                               | 901   |
| 1910 | 10                           | 2,428,767                             | 7,411                  | 242,877                               | 741   |
| 1911 | 10                           | 2,869,109                             | 6,844                  | 286,910                               | 684   |
| 1912 | 11                           | 2,486,588                             | 6,609                  | 226,053                               | 601   |

## SECOND DISTRICT

BIENNIAL REPORT OF THE  
SECOND DISTRICT.

---

EMBRACING THE FOLLOWING COUNTIES.

MONROE (part)  
WAPELLO  
MARION  
KEOKUK  
WARREN

MAHASKA  
JASPER  
VAN BUREN  
JEFFERSON  
DAVIS

R. T. RHYS, INSPECTOR,  
Ottumwa, Iowa.

LETTER OF TRANSMITTAL.

---

HONORABLE BERYL F. CARROLL, Governor of Iowa:

SIR.—I have the honor to submit herewith my report as Mine Inspector of the Second Inspection District for the biennial period ending June 30, 1912.

Very respectfully,

R. T. RHYS, Inspector.

## REPORT OF THE SECOND INSPECTION DISTRICT

The following counties are included in the Second Inspection District: Monroe (part), Mahaska, Wapello, Jasper, Marion, Van Buren, Keokuk, Jefferson, Warren and Davis, and these counties above named have a total of 107 mines in operation, and are giving employment on an average to 5,047 men.

The total coal production of the district for the biennial period ending June 30, 1912, was 4,893,097 tons. Comparing this with the biennial period ending June 30, 1910, it shows an increased output of 660,047 tons; but by not including in the above total the output of Jasper county, which was included in the Third Inspection District in the biennial period ending June 30, 1910, the output of the district shows a gain of only 82,357 tons.

The production of coal, the number of men employed, and the fatal and non-fatal accidents in each county is given elsewhere in this report.

### ACCIDENTS.

I hope the list of accidents contained in these reports will receive more than a passing attention from the operators, mine officials and every mine worker in our state. It is only by carefully studying our mine accidents that we can come to a correct understanding of how to prevent them, or, to reduce their number to a minimum.

The number of fatal accidents in and around the mines of the Second Inspection District for the biennial period ending June 30, 1912, were twenty-three, and the number of non-fatal accidents for the same period were seventy-eight, and were due to the following causes:

| Accidents Due to                              | Fatal | Non<br>Fatal |
|---|-------|--------------|
| Fall of slate                                 | 13    | 35           |
| Hit or run over by mine cars, trips or motors | 6     | 28           |
| Dust explosion                                | 2     |              |
| Kicked by mule                                | 1     |              |
| Explosion of mis-shot while cleaning it out   | 1     |              |
| Fall of coal                                  |       | 8            |
| By other causes                               |       | 12           |
| Total   | 23    | 78           |

|   |    |
|---|----|
| Number of wives made widows .....                       | 11 |
| Number of children under legal age made fatherless..... | 25 |

From the above classification it will be noticed that thirteen, or about 57 per cent of all the fatal accidents in this district for the period named were caused by fall of slate, and out of the above number eleven of them occurred at or near the face, and the remaining two on the entry.

Classifying these fatal accidents named from fall of slate as to the age of the men killed, we find among them the old and the young miner. The experienced and the unexperienced.

Two were between 60 and 70 years of age.

One between 50 and 60 years of age.

Three between 40 and 50 years of age.

Three between 30 and 40 years of age.

Three between 20 and 30 years of age.

One under 20 years of age.

The age given above, however, should not always be taken as truly indicating the probable number of years of experience these men had in the mines, for the reason that some of these, although passed middle age, had but very limited experience in the mines, and some of them could not be truly classed as good practical miners.

Classifying again the same fatal accidents from fall of slate as to the time of the day they occurred, there were:

Two between 8 and 9 a. m.

Two between 9 and 10 a. m.

Six between 11 and noon.

One between noon and 1 p. m.

One between 1 and 2 p. m.

One between 2 and 3 p. m.

It is worthy of notice that almost 77 per cent of the above class of accidents took place before noon. A period as a general rule when the props, knocked out by the shots the evening before, have not been reset. The above table also points out to us very clearly that the inspection of the working face, by the mine foreman or his assistant, in order to accomplish the most good, should be done before the noon hour.

Six lives were lost, in this district, in the above period named, or 26 per cent of the total fatal accidents in this district were

caused by being hit, or run over by mine cars, trips, or motors.

Two lives were lost in an explosion at the Regal mine. The following is my report, in part, of this explosion, written the following day after it occurred:

"Ottumwa, Iowa, Jan. 16, 1912.

"Upon being notified that an explosion had taken place yesterday, January 15th, at the Regal Coal Company's mine No. 3, seven miles north of Albia, I proceeded to the place as soon as possible.

"The main shaft of this mine reached the coal last July, and is 210 feet deep. The air shaft is about the same depth, and located 400 feet almost due north of the main shaft. The vein of coal will average about four and one-half feet in thickness, and what has been developed of it, so far, lies in a wavy or hilly formation. The mine was last inspected December 14, 1911. At that time parts of it, here and there, were wet, and the dry places in it did not, in my opinion, near approach the stage to be called dusty. But since the above date, the unusual cold weather that has prevailed almost continually since the last of December, has frozen the wet places, and the mine now is dry throughout—except at the bottom of the air shaft. While it could not be classed as a dusty mine, yet on account of its dryness, the roadways were sprinkled. The last sprinkling was done January 7th. Parts of the mine, however, were so cold that the water very soon after it was sprinkled, formed into small cakes of ice on the floor and sides of the roadways. Connection between the hoisting shaft and the air shaft was made last month. The mine is ventilated for the present by a 10x2½ foot fan, on top of the quarter shaft. This is only a temporary method of ventilating the mine. The same was used in sinking it. A larger fan probably will be erected on top of the air shaft in the near future. At the request of the shot firers the top of the air shaft was covered with boards, and hence was made of no use as an air shaft since the cold weather prevailed. This they (the shot firers) thought would diminish the possibility of an explosion to take place, and therefore add to their safety. The day shift had retired at 4:30 p. m., and no person, except the two shot firers, was in the mine at the time of the explosion, which occurred a few minutes before 5 p. m. Both cages (self-dumping) were not far from being midway in the shaft, when the explosion took place, and the force of it lifted the west cage up to the dump room. The east cage, by all account, was only lifted a few feet. The partition between the quarter shaft, (which is

on the east side of the main shaft) and the hoisting compartment, was burst open from the bottom up for about sixty or seventy feet. This undoubtedly accounts for the east cage not being lifted like the west cage, because the force found a way of escape through the quarter shaft. Several feet of the guides were made useless. No material damage was done to the fan nor its casing, but on account of the partition of the quarter shaft being out, its service, immediately after the explosion, was of no value. Eye witnesses stated that the explosion appeared first through the main shaft, and a second or two later through the air shaft. Before and after the explosion the main shaft acted as an up-cast, and rescuers were lowered through the air shaft, and found the shot firers in about one hour and a half, after it had taken place. The body of Thomas Bridges was found between the second and third room, on the first west entry, on the north side of the mine. His torch lamp, however, was found in room number three in the same entry. No sign of burns was discovered on the body nor clothing, nor was he mutilated or seemingly injured, except his neck, which the physician declared broken. He was dead when found. George Mitchell was found in room number four, in the second west entry, on the same side of the mine. He was severely burned, and died from his injuries January 16th, without regaining consciousness. The two shot firers had fired all the shots in the mine that evening, except the shots in the rooms of the first and second west entries on the north side of the mine. As was their custom, one took one entry and the other the other parallel entry. They fired each pair of entries by lighting the entry shots first, and then the room shots of their respective entry on retreating. As stated, none but the entry shots had been fired in the first and second west entries, and it was plain to be seen that the explosion had originated in one of these entries. The last ninety feet of both of these entries are going to the rise of about 6 per cent grade. Both are driven about fifteen or twenty feet beyond the last cross-cut, which is partially completed. The second cross-cut from the face is open and of proper area. In the first west entry two holes had been fired. One was about the center of the entry and was about five feet deep. This hole was drilled practically straight in, and was fully three feet in the solid coal beyond what little cutting was done, and remained to be seen as an indisputable evidence against the dangerous practice of drilling holes far into the solid coal beyond the cutting. The

second hole in this entry was on the left rib, drilled to a depth of about four feet, and charged with seven charges of black powder. The hole was a fair one, and aimed to remove both top and bottom coal, but it only removed the bottom coal. According to the testimonies of the men working in this entry, these shots were not examined by the shot examiner, but he was informed by them that they had two shots, and the understanding was that he was to fire the center hole first, which was charged with dynamite. In the second west entry only one shot was fired. This was on the right rib, and was about five feet deep, and claimed to have been charged with dynamite only. This hole was also drilled practically straight in, and was two feet three inches in the solid coal beyond the cut."

The remainder of my report, dealing with the course of the explosion, and also of the different opinions that prevailed at the time as to its origin, is here omitted, deeming it more essential in this report to call attention to what I believe were errors, and dangerous practices revealed by this explosion, with the hope that in the future the former may not be committed, nor the latter practiced.

First. I believe it was an error to close up the top of the air shaft during firing time.

Second. That it was an error to have allowed the cages to remain in the position they were in the shaft during firing time.

I do not charge these two things as having caused the explosion, but I am of the belief that they were conducive to bring about a condition favorable to an explosion; or, at least they were more of an aid for one to occur than they were of prevention. With these things named existing, and the large number of shots to be fired, and the area excavated in the mine but small, there was very little room for the air to expand, or for it to escape rapidly as the successive shots were fired and raised its temperature.

Third. I also believe that these unfortunate men erred in the manner of firing shots. The simultaneous firing of entries in pairs as they did is evidently not a safe method, and should not be practiced. Ample time should be taken to fire shots at all times, and in all mines, but this is especially essential in winter season, and in new mines like this one.

Fourth. It was an error also to think that holes charged with dynamite would not cause an explosion. This belief existed among some of the men in this mine, as the testimonies in the coroner's in-

quest over the bodies indicated it. And I have found this erroneous belief to be in a number of other mines throughout this district. While I do not believe that this explosion can be attributed to a charge of dynamite, yet the extent of the center hole in the first west, and of the rib hole in the second west entry, were drilled into the solid coal ahead of the cut, both of which were charged with dynamite, was such as not to make it impossible for one or both of these holes to cause an explosion. This belief in the supposed safety of dynamite from causing an explosion, has undoubtedly led men to drill holes far into the solid beyond the cut, and for the same reason shot examiners have been led to accept them as safe. It is true dynamite is less liable to cause an explosion than ordinary black powder, but it is not a sure preventive. If dynamite was incapable of igniting or of causing an explosion the problem of mine explosions would have been practically solved, but unfortunately there is not an explosive made for mining purposes but what will when used in certain quantities and under certain conditions cause an explosion.

Fifth. The inquiry into the cause of this explosion led me to suspect that some men in this mine would occasionally use two kinds of explosives (powder and dynamite) in the same hole. I am glad to say that this dangerous practice is not as common in this district as it has been. If two kinds of explosives are used today, it is usually without the knowledge of the shot firer. No matter what may be gained, if there is anything at all, by using two explosives in this manner, the risk from it to human life is too great, and it should never be practiced in our mines. All explosives should be used as the makers intended for them to be used. Any other method makes each explosive less safe than if used alone.

Sixth. From the testimonies of the men working in the first and second west entries, we must conclude that the unfortunate victims of this explosion failed to examine the holes in these two entries. They simply inquired as to the number of shots that were to be fired, and that was all. It would be far more agreeable to me to pass by this error and charitably say nothing about it; but duty demands that I point it out to other shot examiners, and to warn them against the temptation of allowing friendship and good fellowship to interfere with the performance of their duties, and not to neglect examining every hole before it is charged. I sincerely believe in the wisdom and the protective value of our

shot examiners' law, especially when the examiners employed are also shot firers. This law is to us today, because of the way we are mining coal, like a safety valve, and without a question in my mind, has preserved us from great catastrophies. It was enacted with the sole purpose of preserving life and property, and it is to be greatly regretted that some of our shot examiners have not respected and observed it better.

Classifying the fatal accidents in this district for the biennial period named, as to occupation, at the time the accident took place:

Fourteen were miners.  
Three were drivers.  
Two were shot firers.  
One trip rider.  
One motorman.  
Two assistant foremen.

Classifying the same accidents for the same period as to race and nationality:

Nine were American born.  
Six negro.  
Two Italian.  
One Austrian.  
One Welsh.  
One Irish.  
One Swede.  
One English.  
One Scotch.

#### NON-FATAL ACCIDENTS.

Nearly 49 per cent of the non-fatal accidents in this district for the biennial period ending June 30, 1912, were caused by fall of slate and coal. Thirty-six per cent were caused by being hit or run over by mine cars, trips or motors, and 15 per cent were by other causes.

These non-fatal accidents resulted in twenty-nine broken legs, ten broken arms, and five fingers cut off. Thirteen persons had ribs and other bones fractured, and twenty-three were badly bruised or maimed.

Classifying these same non-fatal accidents as to occupation at the time they occur:

Thirty-seven were miners.  
 Twenty-one were drivers and trip-riders.  
 Nine were couplers and trappers.  
 Four were timbermen.  
 Three were engineers and pumpmen.  
 One mine foreman.  
 One tracklayer.  
 One shot firer.  
 One chunker.

#### AVERAGE TIME OF DISABILITY.

To arrive at the exact number of days that all of these injured persons were disabled to work is a very difficult task, for the reason that when an accident occurs and reported, the mine foreman in charge can only estimate the probable length of time that will be lost, and only when the accident happens and the persons returning to work within the same month does he give the exact number of days of disability or, in other words, no record is kept of the time lost if the accident happens in one month and the injured person returns to work some other month. From my personal knowledge of many of these accidents, and from the reports of them received at this office, I believe that a total loss of 4,368 days would be a conservative estimate or an average loss of 56 days for each person injured.

#### MONROE COUNTY (Part).

The part of Monroe county included in this district has regained its former position, and for the last biennial period ending June 30, 1912, ranks first in production of coal in the second inspection district.

There are thirteen mines at present in operation in the part of the county belonging to this district, and their total production for the above period named was 1,723,509 tons, and gave on an average employment to 1,738 men. Compared with the biennial period ending June 30, 1910, this shows an increase in production of 321,659 tons, and 366 in the average number of men employed in this part of the county.

Since the last report of this department was issued, two mines, the Regal Coal Company mine No. 2, and the Consolidation Coal Company mine No. 10, have been abandoned, and the following six mines have been opened, or, are now in course of construction:

Consolidation Coal Company, mines No. 16 and 17;  
 Hoover Fuel Company No. 1;  
 Regal Coal Company No. 3;  
 The Crescent Coal Company No. 7; and  
 Maple Coal Company No. 1.

All these new mines named are shafts, and vary in depths from 60 to 226 feet. They are built and equipped very substantially, and have a high factor of safety in their construction and arrangement, both on the surface and under-ground. These mines will undoubtedly greatly aid this part of the county to be the leading producer in this district for some time to come.

The average number of days operated by the mines of the county in this district for the year ending June 30, 1911, was 230, and for the year ending June 30, 1912, was 187 days.

Five fatal and seven non-fatal accidents occurred in and around the mines of the county in this district during the year ending June 30, 1911, and five fatal and fifteen non-fatal for the year ending June 30, 1912. In the first year of this biennial period named 161,905 tons, and in the second year 182,796 tons of coal were produced for every life lost. One life was lost for every 352 persons employed in the first year named, and one life lost for every 342 persons employed in the second year.

The largest producer in the county and in the state is the Consolidation Coal Company. Were this company leading only in matter of production of coal it would have been no great credit to them; but I am pleased to report that they are also making commendable efforts to lead in things that tend to make mining safer for life and limb. They desire not simply to make their mines to comply with the law, but are showing willingness to make any reasonable additions beyond the requirements of the state law where a greater degree of safety to their employes may be secured. Their recent action in employing a "Mine Safety Inspection Committee" is sufficient proof of the above fact. This committee is composed of two competent and experienced mining men from each mine. The employes select one and the company the other, and it is the duty of this committee to inspect every

part of the mine and the equipment, both on the surface and underground, once every month, and make a written report of their inspection to the company. They are to report all unsafe places and machinery and to suggest measures that in their judgment would improve the safety of the men employed in the mine. The committee is paid for its time in inspecting the mine by the company. This is the first Mine Safety Inspection Committee that has been employed regularly by any coal company in this state, and it is to be hoped that the good results from it may prove so beneficial in reducing the number of accidents in their mines, that other companies will likewise voluntarily employ similar committees at their different mines.

Also this company has completed arrangements to have a Mine Rescue Station at a central place for their mines, to be equipped with one or two oxygen helmets, and a complete outfit for "First Aid to the Injured." It is the intention of the company to send a few men to one of the government rescue stations to receive instructions in the use of the above apparatuses, and thus form the first mine rescue station and crew in Iowa.

#### MAHASKA COUNTY.

The total production of coal in this county for the biennial period ending June 30, 1912, was 1,564,795 tons, and gave employment on an average to 1,466 men. Compared with the biennial period ending June 30, 1910, it shows a decrease of production of 176,267 tons, and 272 in the number of men employed in and around the mines of the county. The largest decrease occurring during the year ending June 30, 1912, when about twelve mines were abandoned and only two shipping mines were opened.

The average number of days operated by the shipping mines of the county in the year ending June 30, 1911, was 240, and by local mines 143 days. During the year ending June 30, 1912, the shipping mines operated on an average 192 days, and the local mines 141 days.

Seven fatal and fourteen non-fatal accidents occurred in and around the mines of the county during the year ending June 30, 1911, and two fatal and twelve non-fatal for the year ending June 30, 1912. In the first year named 126,490 tons of coal were produced for every life lost, and in the second year named 339,680 tons were produced for every life lost. One life was lost for

every 224 men employed in the first year named, and one for every 683 men employed in the second year.

#### IOWA COAL WASHING COMPANY.

The above company has recently erected a Coal Washing Plant at Lakonta, on the C. & N. W. Ry. The officers of the company are: F. C. Lofland, President, Oskaloosa; J. M. Timbrell, Secretary-Treasurer, Lakonta. Mr. Timbrell is also the superintendent of the plant. To the above gentlemen, and their associates, belongs the credit of erecting the first complete coal washer plant in the state of Iowa.

The Washer is 125 feet long; 85 feet wide, and 65 feet high. It is equipped with "Lurie Gig" and revolving screens for grading coal, and sprinkling devices to help prepare the appearance of the coal. The plant is now in operation, and is washing from 600 to 1,000 tons of coal per day. Mixed with the small grades of coals, such as slack, nut, etc., are more or less impurities. The loss in gross tonnage as sent to the washer from the mines is about thirty-three per cent, this is composed of slate, sulphur, rock, fire clay, shoddy coal, false bottom and top. These impurities are detrimental to the sale of the coal, and at different times of the year these small grades become a drag on the market, and consequently have injurious effect on the coal trade in general. The washer was built with the view of overcoming the above difficulty, and I am pleased to report that it is accomplishing its purposes. The washed product is giving splendid satisfaction to the consumer, and the builders of the washer are also well pleased with the results obtained; for it has already demonstrated that their venture is a success, and that from now on their product will find ready and steady market.

#### MARION COUNTY.

With the completion of the Carlisle-Allerton branch of the Rock Island Railway, mining developments in this county will receive a new impetus. The above branch road traverses through a country rich in coal deposits, and it offers an attractive field for mining investors.

The first mining company to open mines in this new field is the Consolidated Indiana Coal Company, of which Mr. Carl

Scholtz, Chicago, is vice-president. This is the initial entrance of this company in the mining business in our state. We welcome them to our midst, for they will not only give employment to a large number of our mining people, but will bring with them stores of rich mining experiences, gathered from various sections of the country where they have mining interest, and are putting into effect practical and scientific ideas in the construction, equipment and the operation of their mines. Some of these are new and original not only in Iowa but in this country.

Their shaft No. 1 is located in Section 24, 74 N, Range 20 W, and is in the center of about 1,500 acres of coal, ranging in thickness from 3 feet to 6 feet 5 inches. Where the coal is thin it is generally clean, but where the greater thickness occurs, either bony coal, slate or boulders exist in the center of the vein. The shaft has a depth of 185 feet, and is lined with steel frame which will be concreted upon completion. The cost of the steel frame is about \$8.00 per foot, and the concrete required is one and one-half ( $1\frac{1}{2}$ ) yard per lineal foot. The shaft economies are accomplished by the economical use of steel and the elimination of false work for concrete lining, concreting being started at the bottom and carried up in rings, enabling the repeated use of the forms, which are in sections fitting the panels and are three feet high. The shaft bottom provides for caging from one side with gravity tracks and the elimination of any car handling machinery. The escapement and air way is driven on a slope of seventeen degrees, lined with steel timber and concreted through the soft portions. The object for this is increased safety in the mine and the ability to handle men and material without interfering with the hoisting. The air way parallels the escapement way only part of the distance, and is connected with the mine workings through a blind shaft forty-six feet deep. A high speed fan will be installed at the mouth of this airway to provide ventilation.

The surface plan consists of gravity yard, with the scales for empties and loads, and a sufficient number of loading tracks will be so arranged as to separate northbound from southbound loads to obviate switching. The tippie will be constructed of steel, and equipped with shaker screen and a picking table to remove slate and bony coal. Two box car loaders will be provided to load lump and egg coal in box cars at the same time. The fine coal will be elevated in a circular steel bin located directly in front

of the boiler room, so that the fuel will flow into the stokers without handling.

Electricity will be used for the handling of all machinery excepting the condenser pump and the fan, which will be driven by steam. A 600 KW turbine driven generator will furnish current to drive the electrical hoist, which will be operated from the top of the tower, and also run other machinery. It is contemplated to make this power house the central station for the other mines to be developed in the field, and it will be so arranged as to be increased in capacity as conditions warrant. As a beginning, two 300 HP boilers, operating under 150-pounds pressure will be installed.

The method of mining has not been finally determined, but it is likely that mining machines will be adopted in order to obtain the largest possible tonnage in the least time.

The company expects to erect miners' houses of a superior grade in the vicinity of the shaft, and provide them with modern conveniences, such as electric light and water supply. A bath house will be erected near the entrance of the mine, supplied with hot and cold water.

#### ANDERSON COAL COMPANY.

Another important mine opened in this county since the last report was issued, is that of the above company. The mine is situated at the end of a three mile switch off the Rock Island Railway, running in a southwesterly direction from Flagler. The shaft is sunk to a good field of coal, ranging in thickness from five to nine feet, and is reached at a depth of about ninety feet. This mine has a promising future.

#### EMPIRE MINING COMPANY.

Empire Mining Company mine No. 9, is a new slope, located less than a mile southwest of the town of Everist. The vein of coal is thick, but what has been developed of it so far, has considerable rock mixed with it. The mine is equipped with electric haulage, and the tippie with Jeffrey's cross-over dump.

The total coal production of the county for the last biennial period was 356,917 tons, and the average number of men employed in and around the mines for the same period was 517.

The average number of days operated by the shipping mines of the county for the year ending June 30, 1911, was 234, and

the local mines 122 days. For the year ending June 30, 1912, the shipping mines operated 193 days, and the local mines 160 days.

For the first year of the biennial period named, no lives were lost and no serious accidents were reported. For the second year of the biennial period named, one life was lost and eleven non-fatal accidents were reported.

#### JASPER COUNTY.

From the biennial period ending June 30, 1899, up to the beginning of the one ending June 30, 1912, this county was included in the third inspection district; but in order to more evenly divide the inspection service it was deemed best to place it back in this district.

The principal mines of the county are shafts No. 7 and 8, near Seevers, and are owned and operated by the Colfax Consolidated Coal Company. The average number of men employed in the above No. 8 mine, during the year ending June 30, 1912, was greater than in any one mine in this district, and it ranked third in the number of tons of coal produced for the same year.

The vein of coal in this field is of good quality, ranging in thickness from three and one-half to six feet, and is reached at a depth of about 170 feet. The roof is of a tender slate, necessitating close timbering and kept up well to the face. With all this to contend with, this company and their mine officials are entitled to much credit for their vigilance and care in preventing accidents. Although their No. 8 mine is one of the most extensive, and as already stated, employs the most men of any one mine in this district, not one life was lost, and very few accidents occurred in this mine in the last two years. Haulage is done in this mine by electric motors. The tippie is of wood and is equipped with shaker screens, and much of the out-put is carefully prepared for commercial trade.

No. 7 mine belonging to the same company has practically the same natural conditions as No. 8 mine. The basin of coal within reach of No. 7 mine will soon be exhausted; but before this is done their No. 9 mine, which is now in course of construction will more than make up for the loss of its out-put.

Few small local mines are operating in the vicinity of Colfax, and south of Prairie City, Monroe and Newton. The Newton Coal Company has now in course of construction, a mine two and one-

half miles south of Newton. The vein is of fair quality and thickness, and is reached at a depth of eighty-two feet. The roof is of a very tender slate. Arrangements are under way to build a railroad switch to it from the Rock Island Railway. Undoubtedly when this is accomplished, other mines will be opened in this field.

The total production of coal in this county for the biennial period ending June 30, 1912, was 577,690 tons, and gave employment on an average to 626 men. The mines of the county operated 249 days in the year ending June 30, 1911, and produced 317,606 tons of coal; and 222 days in the year ending June 30, 1912, and produced 257,884 tons. Four non-fatal accidents were reported for the first year named; and one fatal and two non-fatal for the last year named.

#### WAPELLO COUNTY.

No material change has taken place in the mining development of this county since the last report of this department was issued.

The total production of coal of this county for the last biennial period ending June 30, 1912, was 602,017 tons, and gave employment on an average to 602 men. This shows an increase in production of 154,299 tons over the biennial period ending June 30, 1910.

The shipping mines of the county operated on an average 276 days, and the local mines 154 days, in the year ending June 30, 1911; and 217 and 182 respectively in the year ending June 30, 1912. Eight non-fatal accidents were reported in the first year named above, and one fatal and four non-fatal in the last year.

#### VAN BUREN, JEFFERSON, DAVIS, KEOKUK AND WARREN.

In the counties of Van Buren, Jefferson, Davis, Keokuk and Warren, numerous small mines are in operation, all of which are doing good local business during the fall and winter season. Their number and ownership are practically the same as recorded in the last report issued by this department.

## OUR NEW MINING LAWS.

In our last biennial report this department recommended certain additions and changes in our mining laws. I am gratified that these recommendations received your approval, which resulted in giving us practically a complete revision of the same. It gives me great pleasure to report that these laws as revised, are well taken by both operators and miners. The fear expressed by some when they were presented to the last general assembly, that their passage would ruin the coal industry in our state, and cause many mines to be put out of operation, has ceased and has been replaced by a better understanding of their purposes and their reasonable requirements. The number of new mines opened in this district since the revised laws have become effective is sufficient proof that their passage has not scared nor checked capital to invest in the business. To see these new mines, and compare them with mines opened a few years ago, will convince any fair minded person, that the revision has helped to systematize some things and has elevated the standard of safety of our mines. Not only are these new mines arranged and constructed with greater safety in view than mines formerly were, but they are also better equipped with mechanical devices that will make the operation of the same more efficient and economical. This is progress along lines that will surely pay. If the operators of our state are to secure in the future enough market for their coal, against that of Illinois, and other competitive states, it needs no prophet to see that they must be able to put their product on the market at as low a price, and as well prepared as that of their competitors. How to do this and still make a reasonable profit on their investment will always be more or less of a problem for them to solve. It is not going to be solved by any material advantage they may gain over their competitors in the matter of wages paid to employees. They can never hope to escape the demands of the laborer for a just reward for his toil, and for the best possible protection for his life and health while he is at work. It should be very plain to every operator that the miner of today does not, and certainly the miner of tomorrow will not, live and labor under the same conditions and environments as our fathers did. That their new mines will always be expected to be an improvement over the ones they have just abandoned. That their "New Camps" be built a little better, and more convenient and attractive than

the old ones. That the long shift, child labor, and many other old slavish customs will not return to their mines again; and I hope no one claims that our present mining laws, even as revised, are perfect in all details and need never be changed or improved. Experience will teach us, and justice will demand of us, that we change some things and add to others from time to time; but when this is done, I dare say, the standard of safety of our mines and of mining life in general will not be lowered but made higher and better. Fortunate then is the operator who realizes that the solution of the above problem—that is, of meeting constant competition and being able to make fair returns on his investment—is not to be found in retrograde endeavors, nor, in unduly resisting the tendency of the times for modern improvements, but is to be found in concentrated efforts to correct wasteful methods of operation, and in installing equipment and system that will render greater efficiency in all parts and in every department of the industry.

## SIXTEENTH BIENNIAL REPORT OF THE

TABLE No. 1

SHOWING NUMBER OF MINES, OUTPUT OF COAL, NUMBER OF MINERS AND OTHER EMPLOYEES, IN DISTRICT NO. 2, FOR YEAR ENDING JUNE 30, 1911.

| County        | Number of mines | Tons of coal of all kinds produced | Number of miners employed | Number of other inside employees | Number of outside employees | Total number of employees |
|---------------|-----------------|------------------------------------|---------------------------|----------------------------------|-----------------------------|---------------------------|
| Mahaska       | 28              | 885,435                            | 1,024                     | 362                              | 179                         | 1,565                     |
| Monroe (part) | 10              | 809,526                            | 1,131                     | 530                              | 103                         | 1,764                     |
| Wapello       | 18              | 333,861                            | 443                       | 128                              | 60                          | 651                       |
| Jasper        | 4               | 317,606                            | 397                       | 166                              | 57                          | 620                       |
| Marion        | 17              | 222,268                            | 365                       | 126                              | 65                          | 556                       |
| Keokuk        | 5               | 14,978                             | 21                        | 8                                | 6                           | 30                        |
| Van Buren     | 8               | 13,154                             | 28                        | 8                                | 9                           | 45                        |
| Jefferson     | 2               | 4,996                              | 13                        | 1                                | 2                           | 16                        |
| Davis         | 2               | 1,120                              | 9                         |                                  | 2                           | 11                        |
| Total         | 94              | 2,602,944                          | 3,431                     | 1,324                            | 483                         | 5,258                     |

TABLE No. 2

SHOWING NUMBER OF MINES, OUTPUT OF COAL, NUMBER OF MINERS AND OTHER EMPLOYEES, IN DISTRICT NO. 2, FOR YEAR ENDING JUNE 30, 1912.

| County        | Number of mines | Tons of coal of all kinds produced | Number of miners employed | Number of other inside employees | Number of outside employees | Total number of employees |
|---------------|-----------------|------------------------------------|---------------------------|----------------------------------|-----------------------------|---------------------------|
| Monroe (part) | 13              | 913,983                            | 1,116                     | 477                              | 118                         | 1,711                     |
| Mahaska       | 28              | 679,860                            | 953                       | 272                              | 141                         | 1,366                     |
| Wapello       | 19              | 268,156                            | 370                       | 137                              | 66                          | 573                       |
| Jasper        | 12              | 260,084                            | 409                       | 163                              | 60                          | 632                       |
| Marion        | 17              | 134,649                            | 325                       | 86                               | 66                          | 477                       |
| Van Buren     | 7               | 13,327                             | 24                        | 8                                | 3                           | 34                        |
| Keokuk        | 4               | 11,820                             | 17                        | 6                                |                             | 23                        |
| Jefferson     | 2               | 4,051                              | 9                         |                                  |                             | 11                        |
| Warren        | 2               | 3,723                              | 11                        | 1                                |                             | 14                        |
| Davis         | 3               | 1,000                              | 8                         |                                  | 2                           | 10                        |
| Total         | 107             | 2,290,153                          | 3,242                     | 1,145                            | 469                         | 4,856                     |

TABLE No. 3

SHOWING NUMBER OF MINES, OUTPUT OF COAL, NUMBER OF MINERS AND OTHER EMPLOYEES, IN DISTRICT NO. 2, FOR THE YEAR ENDING JUNE 30th, 1911.

| Name of County | Number of mines | Amt. of coal of all kinds produced | Number of miners employed | Number of other inside employees | Number of outside employees | Total number of employees |
|----------------|-----------------|------------------------------------|---------------------------|----------------------------------|-----------------------------|---------------------------|
| Mahaska        | 28              | 885,435                            | 1,024                     | 362                              | 179                         | 1,565                     |
| Monroe (part)  | 10              | 809,526                            | 1,131                     | 530                              | 103                         | 1,764                     |
| Wapello        | 18              | 333,861                            | 443                       | 128                              | 60                          | 651                       |
| Jasper         | 4               | 317,606                            | 397                       | 166                              | 57                          | 620                       |
| Marion         | 17              | 222,268                            | 365                       | 126                              | 65                          | 556                       |
| Keokuk         | 5               | 14,978                             | 21                        | 8                                | 6                           | 30                        |
| Van Buren      | 8               | 13,154                             | 28                        | 8                                | 9                           | 45                        |
| Jefferson      | 2               | 4,996                              | 13                        | 1                                | 2                           | 16                        |
| Davis          | 2               | 1,120                              | 9                         |                                  | 2                           | 11                        |
| Total          | 84              | 2,602,944                          | 3,431                     | 1,344                            | 483                         | 5,258                     |

## STATE MINE INSPECTORS

TABLE No. 4

SHOWING NUMBER OF MINES, OUTPUT OF COAL, NUMBER OF MINERS AND OTHER EMPLOYEES, IN DISTRICT NO. 2, FOR THE YEAR ENDING JUNE 30th, 1912.

| Name of County | Number of miners | Amt. of coal of all kinds produced | Number of miners employed | Number of other inside employees | Number of outside employees | Total number of employees |
|----------------|------------------|------------------------------------|---------------------------|----------------------------------|-----------------------------|---------------------------|
| Monroe (part)  | 28               | 913,983                            | 1,116                     | 477                              | 118                         | 1,711                     |
| Mahaska        | 28               | 679,860                            | 953                       | 272                              | 141                         | 1,366                     |
| Wapello        | 19               | 268,156                            | 370                       | 137                              | 66                          | 573                       |
| Jasper         | 12               | 260,084                            | 409                       | 163                              | 60                          | 632                       |
| Marion         | 17               | 134,649                            | 325                       | 86                               | 66                          | 477                       |
| Van Buren      | 7                | 13,327                             | 24                        | 8                                | 3                           | 34                        |
| Keokuk         | 4                | 11,820                             | 17                        | 6                                |                             | 23                        |
| Jefferson      | 2                | 4,051                              | 9                         |                                  |                             | 11                        |
| Warren         | 2                | 3,723                              | 11                        | 1                                |                             | 14                        |
| Davis          | 3                | 1,000                              | 8                         |                                  | 2                           | 10                        |
| Total          | 107              | 2,290,153                          | 3,242                     | 1,145                            | 469                         | 4,856                     |

TABLE No. 5

SHOWING THE OUTPUT OF THE COAL PRODUCING COUNTIES OF DISTRICT NO. 2, FOR THE PAST SIX YEARS.

| Counties      | 1907      | 1908    | 1909    | 1910    | 1911    | 1912    |
|---------------|-----------|---------|---------|---------|---------|---------|
| Monroe (part) | 1,095,473 | 865,000 | 888,756 | 713,094 | 809,526 | 913,983 |
| Mahaska       | 689,870   | 772,468 | 883,643 | 907,417 | 851,435 | 679,860 |
| Marion        | 394,481   | 327,745 | 292,607 | 269,066 | 222,268 | 184,349 |
| Wapello       | 278,556   | 244,214 | 222,87  | 224,731 | 388,111 | 268,156 |
| Keokuk        | 15,000    | 11,900  | 13,884  | 17,800  | 24,474  | 11,820  |
| Van Buren     | 13,050    | 17,518  | 15,006  | 16,032  | 18,154  | 13,327  |
| Warren        | 2,565     | 5,950   | 4,474   | 5,200   |         | 3,723   |
| Davis         | 2,410     | 4,364   | 1,480   | 1,600   | 1,120   | 1,000   |
| Jefferson     | 1,900     | 2,000   | 2,100   | 3,181   | 4,996   | 4,051   |
| *Jasper       |           |         |         |         | 317,606 | 260,084 |

† See Third District for years 1907-8-9 and 10.

TABLE No. 6

SHOWING TONNAGE IN DISTRICT NO. 2, FOR PAST TWELVE YEARS, WITH NUMBER OF FATAL ACCIDENTS AND NUMBER OF EMPLOYEES WITH TON PER ACCIDENT, ETC.

| Year | Number of Fatal Accidents | Tons of Coal Mined Each Year | Number of Employees | Tons of Coal Mined per Accident | Number of Employees For Each Accident |
|------|---------------------------|------------------------------|---------------------|---------------------------------|---------------------------------------|
| 1901 | 13                        | 1,870,123                    | 3,999               | 143,856                         | 305                                   |
| 1902 | 31                        | 1,542,519                    | 3,187               | 49,758                          | 103                                   |
| 1903 | 5                         | 1,466,603                    | 3,142               | 293,320                         | 628                                   |
| 1904 | 8                         | 1,972,523                    | 4,530               | 246,565                         | 566                                   |
| 1905 | 6                         | 2,488,550                    | 4,994               | 414,758                         | 882                                   |
| 1906 | 13                        | 2,328,624                    | 4,184               | 179,125                         | 322                                   |
| 1907 | 12                        | 2,489,305                    | 4,526               | 207,442                         | 377                                   |
| 1908 | 9                         | 2,251,846                    | 4,679               | 250,205                         | 509                                   |
| 1909 | 9                         | 2,074,939                    | 4,275               | 230,543                         | 475                                   |
| 1910 | 11                        | 2,158,111                    | 4,827               | 166,009                         | 338                                   |
| 1911 | 12                        | 2,602,944                    | 5,258               | 216,912                         | 439                                   |
| 1912 | 11                        | 2,290,153                    | 4,856               | 208,186                         | 441                                   |

## FATAL ACCIDENTS IN DISTRICT No. TWO

| Date           | Name              | Occupation     | Cause of Death  |
|----------------|-------------------|----------------|---|
| 1910           |                   |                |   |
| August 20..    | Samuel White      | Driver         | Kicked by mule  |
| August 29..    | Pete Pevaglio     | Miner          | Fall of slate at face                                       |
| September 20.. | Frank E. Pearson  | Miner          | Fall of slate at face                                       |
| October 8..    | John Goranee      | Miner          | Fall of slate at face                                       |
| November 9..   | Mathew Taylor     | Miner          | Fall of slate at face                                       |
| December 7..   | Berkley Bannister | Driver         | Run over by pit car   |
| 1911           |                   |                |   |
| January 12..   | John Martin       | Miner          | Fall of slate at face                                       |
| February 2..   | Charles Rice      | Ass't pit boss | Run over by pit cars  |
| February 14..  | C. H. Cross       | Miner          | Fall of slate at face                                       |
| May 6..        | Geo. E. Woodford  | Miner          | Fall of slate at face                                       |
| May 12..       | Frank Carnego     | Miner          | Fall of slate on switch of room                             |
| May 27..       | Charles Furnald   | Miner          | Fall of slate—Pillar work                                   |
| July 28..      | Richard Owens     | Miner          | Fall of slate in cross-cut                                  |
| September 13.. | Noble Page        | Motor man      | Motor jumped the track                                      |
| September 26.. | John Melvin       | Miner          | Struck by trip of loaded cars                               |
| October 30..   | Frank Carter      | Trip rider     | Trip broke on slope and was caught between cars and timbers |
| November 4..   | Fred Danner       | Ass't pit boss | Fall of slate on entry                                      |
| December 14..  | Edwin Peterson    | Driver         | Run over by loaded car                                      |
| 1912           |                   |                |   |
| January 8..    | Lewis Ferguson    | Miner          | Fall of slate at face                                       |
| January 15..   | Thomas Bridges    | Shot frer      | Dust explosion  |
| January 15..   | George Mitchell   | Shot frer      | Dust explosion  |
| March 1..      | Helmford Larson   | Miner          | Fall of slate—Pillar work                                   |
| March 26..     | Thomas Hart       | Miner          | Explosion of mis-shot while cleaning it out                 |

## FOR TWO YEARS ENDING JUNE 30, 1912

| Employed by                        | County  | Married or Single | No. of Children | Time of Accident | Nationality |
|------------------------------------|---------|-------------------|-----------------|------------------|-------------|
| Cricket Coal Co.                   | Mahaska | wife              |                 | 10:30 a.m.       | Negro       |
| Rex Fuel Co. No. 2                 | Mahaska | single            |                 | 11:30 a.m.       | Italian     |
| Bolton-Hoover Coal Co. No. 2       | Mahaska | wife              | 6               | 11:45 a.m.       | American    |
| Crescent Coal Co. No. 6            | Monroe  | single            |                 | 11:30 a.m.       | Austrian    |
| Consolidation Coal Co. No. 14      | Mahaska | single            |                 | 1:30 p.m.        | Negro       |
| Consolidation Coal Co. No. 14      | Mahaska | single            |                 | 11:45 a.m.       | Negro       |
| Rex Fuel Co. No. 2                 | Mahaska | single            |                 | 10:00 a.m.       | American    |
| Consolidation Coal Co. No. 15      | Monroe  | single            |                 | 1:00 p.m.        | American    |
| Consolidation Coal Co. No. 12      | Monroe  | wife              | 6               | 8:30 a.m.        | Negro       |
| Consolidation Coal Co. No. 12      | Monroe  | single            |                 | 8:00 a.m.        | Negro       |
| Crescent Coal Co. No. 6            | Monroe  | single            |                 | 10:30 a.m.       | Italian     |
| Atwood Coal Co.                    | Mahaska | wife              | 2               | Noon             | Scotch      |
| Colfax Consolidated Coal Co. No. 7 | Jasper  | widower           | 8               | 2:50 p.m.        | Welsh       |
| Consolidation Coal Co. No. 15      | Monroe  | wife              | 2               |                  | American    |
| Bolton-Hoover Coal Co. No. 2       | Mahaska | wife              |                 | 7:30 a.m.        | Irish       |
| Central Coal Co. No. 3             | Monroe  | wife              | 6               | 4:15 p.m.        | American    |
| Lakonta Coal Co.                   | Mahaska | wife              | 8               | 11:00 a.m.       | American    |
| Phillips Fuel Co. No. 9            | Wapello | single            |                 | 7:30 a.m.        | American    |
| Consolidation Coal Co. No. 12      | Monroe  | single            |                 | 12:30 p.m.       | Negro       |
| Regal Coal Co. No. 3               | Monroe  | wife              |                 | 5:00 p.m.        | American    |
| Regal Coal Co. No. 3               | Monroe  | wife              | 1               | 5:00 p.m.        | American    |
| Larson Coal Co.                    | Wapello | single            |                 | 11:00 a.m.       | Swede       |
| Empire Mining Co. No. 11A          | Marion  | wife              | 1               | 2:00 p.m.        | English     |

## REPORT OF NON-FATAL ACCIDENTS IN DISTRICT No. 2 FROM JULY 1, 1910, TO JUNE 30, 1912

| Date         | Name               | Occupation    | Cause of Accident                        | Character of Injury                                     | Employed by                        | County  |
|--------------|--------------------|---------------|--|---|------------------------------------|---------|
| July 1910    | Thomas Carey       | Miner         | Fall of slate and coal                   | Shoulders and back injured                              | Phillips Fuel Co. No. 5            | Wapello |
| August 24    | Dominick Combruzzi | Miner         | Fall of slate                            | Compound fracture of left leg                           | Crescent Coal Co. No. 6            | Monroe  |
| August 29    | Joe Holdsworth     | Miner         | Caught in gear of gaso-<br>line engine   | Foot bruised  | Crescent Coal Co. No. 5            | Mahaska |
| September 18 | Geo. Stewick       | Miner         | Fall of slate                            | Bruiised shoulder and leg                               | Green Ridge Fuel Co.               | Mahaska |
| September 22 | Dennis McGee       | Driver        | Run over by pit car                      | Fractured shoulder bone                                 | Crescent Coal Co. No. 5            | Mahaska |
| September 22 | Michael Hassig     | Chucker       | Fell off railroad car                    | Wrist broken  | Crescent Coal Co. No. 5            | Mahaska |
| September 23 | Jas. Campbell, Jr. | Trapper       |  | Compound fracture of arm                                | Crescent Coal Co. No. 6            | Monroe  |
| September 29 | Pete Turno         | Coupler       | Hit by tail rope                         | Fracture of small bone above ankle                      | Crescent Coal Co. No. 6            | Monroe  |
| October 18   | Vic. Nicobatta     | Miner         | Fall of slate                            | Arm broken  | Green Ridge Fuel Co. No. 2         | Mahaska |
| November 2   | Joshua Willing     | Miner         | Run over by mine car                     | Tip of finger cut off and mashed                        | Colfax Consolidated Coal Co. No. 8 | Jasper  |
| November 15  | Alfred Williams    | Miner         | Fall of slate                            | Hand and head injured                                   | Anchor Coal Co.                    | Wapello |
| November 15  | Wm. Christy        | Miner         | Fall of slate                            | Leg broken  | Hastings Coal Co.                  | Davis   |
| November 20  | Earl Elliott       | Miner         | Fall of slate                            | Back broken   | Phillips Fuel Co. No. 8            | Wapello |
| December 8   | William Palmer     | Miner         | Fall of slate                            | Small bone broken in right leg                          | Colfax Consolidated Coal Co. No. 8 | Jasper  |
| December 23  | W. L. Woodward     | Engineer      | Caught in machinery                      | Bruiised limbs  | Coalfield Fuel Co.                 | Monroe  |
| January 7    | William Shortings  | Miner         | Run over by pit car                      | Tip of finger cut off and mashed                        | Colfax Consolidated Coal Co. No. 8 | Jasper  |
| January 12   | George West        | Tracklayer    | Riding between two pit cars              | Leg broken  | Trico Coal Co.                     | Wapello |
| January 12   | Chas. Talmeyer     | Miner         | Fall of slate                            | Leg broken  | Star Coal Co.                      | Wapello |
| February 2   | William Wesley     | Trapper       | Run over by pit cars                     | Leg broken and right leg bruised                        | Consolidated Coal Co. No. 15       | Monroe  |
| February 3   | Boland Woodcock    | Miner         | Fall of slate                            | Broken ankle and back bruised                           | Garfield Coal Co. No. 4            | Mahaska |
| February 21  | Gasper Schulentz   | Miner         | Fall of slate                            | Leg broken  | Green Ridge Fuel Co. No. 2         | Mahaska |
| February 24  | Joe Gordon         | Driver        | Fall of slate                            | Leg broken  | Atwood Coal Co.                    | Mahaska |
| March 11     | G. W. Jura         | Miner         | Fall of slate                            | Leg broken  | Colfax Consolidated Coal Co. No. 8 | Jasper  |
| March 29     | John Halfley       | Driver        | Squeezed by mule against rib             | Cap over collar bone broken                             | Anchor Coal Co.                    | Wapello |
| April 6      | Ardhie Hamill      | Trapper       |  | Leg broken  | Crescent Coal Co. No. 6            | Monroe  |
| April 10     | Dan Graves         | Driver        | Jumped off car while in motion           | Leg broken  | Bolton-Hoover Coal Co. No. 2       | Mahaska |
| May 3        | Emery Goodwin      | Engineer      | Clothes caught in set screw of fan shaft | Compound fracture of leg, three ribs and other injuries |                                    |         |
| May 3        | Jas. E. Chew       | Miner         | Fall of slate                            | Broken ankle and bruised back                           | Phillips Fuel Co. No. 2            | Wapello |
| May 15       | Robt. Sonthers     | Miner         | Fall of slate                            | Leg broken  | Garfield Coal Co. No. 4            | Mahaska |
| May 17       | D. E. Reed         | Pumpman       | Clothes caught in pump gear              | Ends of two fingers cut off                             | Consolidation Coal Co. No. 15      | Monroe  |
| May 26       | Scott Strubling    | Miner         | Fall of slate                            | Leg broken  | Rex Fuel Co.                       | Mahaska |
| June 13      | Wm. McLaughlin     | Pit boss      | Fall of slate                            | Leg broken  | Consolidation Coal Co. No. 14      | Mahaska |
| June 20      | Dan Portsoviech    | Miner         | Fall of slate                            | Leg broken  | Green Ridge Fuel Co. No. 2         | Mahaska |
| June 29      | Ben Gee            | Driver        | Fell under pit car                       | Three ribs broken                                       | Phillips Fuel Co. No. 9            | Wapello |
| August 7     | Phillip Mastiro    | Miner         | Fall of slate                            | Wrist of right hand broken                              | Consolidation Coal Co. No. 14      | Mahaska |
| August 8     | Jas. Thomas        | Driver        | Fall of slate                            | Foot and ankle mashed                                   | Crocket Coal Co.                   | Mahaska |
| August 16    | John Gillispie     | Trapper       | Fall of slate                            | Ribs broken   | Garfield Coal Co. No. 4            | Mahaska |
| August 17    | Clem Hammond       | Miner         | Fall of slate                            | Leg broken  | English Creek Coal Co.             | Marion  |
| August 21    | Joseph Hunter      | Truman helper | Fall of slate                            | Broke bone near instep                                  | Colfax Consolidated Coal Co. No. 7 | Jasper  |
| August 26    | Howard McCutthens  | Driver        | Fell off tail chain                      | Right leg broken  | Consolidation Coal Co. No. 15      | Monroe  |
| September 7  | George Gogo        | Miner         | Fall of coal                             | Right leg and left arm broken                           | Consolidation Coal Co. No. 14      | Mahaska |
| September 15 | Tom Ferguson       | Driver        | Caught between car and rib               | Hips injured  | Crescent Coal Co. No. 5            | Mahaska |
| September 22 | Cyrus Prothro      | Car dropper   | Overalls caught car bumper               | Arm broken  | Consolidation Coal Co. No. 15      | Monroe  |
| September 26 | Thos. Cowan        | Car dropper   | Fell off loaded flat                     | Arm broken  | Consolidation Coal Co. No. 16      | Monroe  |
| October 6    | Jake Madison       | Miner         | Fall of slate                            | Wrist fractured   | Colfax Consolidated Coal Co. No. 7 | Jasper  |
| October 23   | Geo. Patrick       | Miner         | Fall of slate                            | Ankle broken  | Crescent Coal Co. No. 6            | Monroe  |
| October 26   | Robert Strutchett  | Trapper       | Fell from car                            | Arm broken  | Consolidation Coal Co.             | Monroe  |
| November 4   | Ray Leach          | Driver        | Caught between car and timber            | Arm broken  | Phillips Fuel Co. No. 9            | Wapello |
| November 7   | Wm. Thomas         | Timberman     | Fell on foot                             | Bones in foot fractured                                 | Empire Mining Co. No. 11           | Monroe  |
| November 14  | Roy Preston        | Coupler       | Caught between cars                      | Leg broken  | Consolidation Coal Co. No. 16      | Monroe  |
| November 15  | Miles Brannen      | Miner         | Fall of slate                            | Collar bone broken                                      | Consolidation Coal Co. No. 16      | Monroe  |
| December 2   | Peter Mackdaff     | Miner         | Caught between loaded pit cars           | Back and hips injured                                   | Crescent Coal Co. No. 5            | Mahaska |
| December 14  | John Tomlin        | Miner         | Fall of slate and coal                   | Right shoulder badly bruised                            | Empire Mining Co. No. 11           | Marion  |
| December 14  | Tom Price          | Driver        | Caught between pit cars                  |   | Phillips Fuel Co. No. 9            | Wapello |

SIXTEENTH BIENNIAL REPORT OF THE

STATE MINE INSPECTORS

## REPORT OF NON-FATAL ACCIDENTS IN DISTRICT No. 2 FROM JULY 1, 1910, TO JUNE 30, 1912

CONTINUED

| Date               | Name               | Occupation | Cause of Accident                         | Character of Injury                    | Employed by                   | County  |
|--------------------|--------------------|------------|---|--|-------------------------------|---------|
| December 19.       | Dave Lewis         | Driver     | Car jumped track                          |  | Phillips Fuel Co. No. 2       | Wapello |
| December 21.       | Joe Adams          | Miner      | Fall of slate                             | Ribs dislocated                        | Bex Fuel Co. No. 2            | Mahaska |
| December 22.       | Joe Romans         | Miner      | Fall of slate                             | Back, side and left leg injured        | Empire Mining Co. No. 11A     | Marion  |
| December 15.       | James Cheaton      | Coupler    | Dropping cars to couple                   | Leg broken                             | Consolidation Coal Co. No. 12 | Monroe  |
| 1912<br>January 5. | Wm. Small          | Miner      | Fall of slate                             | Bad cuts and left leg broken           | Consolidation Coal Co. No. 16 | Monroe  |
| January 5.         | John Seales        | Miner      | Fall of slate                             | Foot mashed                            | Central Coal Co. No. 3        | Monroe  |
| January 22.        | Oscar Smith        | Miner      | Fall of slate                             | Foot and ankle bruised                 | Solomon Hoover Coal Co. No. 3 | Mahaska |
| January 26.        | Joe Morris         | Timberman  | Fall of slate                             | Left hip fractured                     | Empire Mining Co. No. 11      | Marion  |
| February 1.        | W. A. Cooper       | Shot firer | Flying coal from shot                     | Head, legs, and arms cut               | Consolidation Coal Co. No. 16 | Monroe  |
| February 16.       | Elmer Johnson      | Trapper    | Hit by pit car                            | Right leg broken                       | Consolidation Coal Co. No. 12 | Monroe  |
| March 3.           | Talmage Carey      | Driver     | Foot caught in switch                     | Foot and ankle injured                 | Consolidation Coal Co. No. 17 | Monroe  |
| March 9.           | George Ives        | Driver     | Run over by pit car                       | Finger cut off                         | Consolidation Coal Co. No. 12 | Monroe  |
| March 12.          | Charles Brinker    | Driver     | Collision                                 | Right leg and body injured             | Consolidation Coal Co. No. 17 | Monroe  |
| March 25.          | Geo. Smith         | Driver     | Fall of slate                             | Two ribs broken                        | Cricket Coal Co.              | Mahaska |
| March 25.          | Grant Muck         | Driver     | Run over by pit car                       | Leg broken                             | Empire Mining Co. No. 9       | Marion  |
| March 25.          | Wm. Hart           | Miner      | Premature explosion of mis-shot           | Hands and face burnt                   | Empire Mining Co. No. 11A     | Marion  |
| March 10.          | John Lewis         | Driver     | Tail-chain became loose                   | Leg broken                             | Green Ridge Fuel Co. No. 2    | Mahaska |
| June 4.            | Vic. C. Nicolletti | Miner      | Car door fell on hand                     | Hand badly bruised                     | Cricket Coal Co.              | Mahaska |
| June 6.            | Joe Stokes         | Driver     | Fell off tail chain                       | Right arm dislocated                   | Empire Mining Co. No. 11      | Marion  |
| June 7.            | John Orcutt        | Driver     | Kicked by mule                            | -bone fractured                        | Empire Mining Co. No. 11      | Marion  |
| June 7.            | Pete Chemic        | Miner      | Fall of slate                             | Badly bruised and three ribs fractured | Empire Mining Co. No. 11A     | Marion  |
| June 26.           | Jay Wagaman        | Miner      | Head of lighted match fell in powder jack | Right hand badly burnt                 | Empire Mining Co. No. 11A     | Marion  |
| June 26.           | Sanford Williams   | Timberman  | Fall of slate                             | Leg cut and badly bruised              | Cricket Coal Co.              | Mahaska |
| January            | Evan Price         | Miner      | Fall of slate                             | Left leg broken and shoulder bruised   | Phillips Fuel Co. No. 5       | Wapello |

## LIST OF COMPANIES, SUPERINTENDENTS, ETC. IN SECOND DISTRICT.

## MONROE COUNTY.

| Name of Company               | Superintendent    | Postoffice Address | Shaft or Slope |
|-------------------------------|-------------------|--------------------|----------------|
| Consolidation Coal Co. No. 12 | E. M. Baysoar     | Buxton             | Shaft          |
| Consolidation Coal Co. No. 13 | E. M. Baysoar     | Buxton             | Shaft          |
| Consolidation Coal Co. No. 14 | E. M. Baysoar     | Buxton             | Shaft          |
| Consolidation Coal Co. No. 17 | E. M. Baysoar     | Buxton             | Shaft          |
| Coalfield Fuel Co.            | W. F. Jamieson    | Coalfield          | Slope          |
| Central Coal Co. No. 2        | T. L. Evans       | Lockman            | Slope          |
| Central Coal Co. No. 3        | T. L. Evans       | Lockman            | Slope          |
| Legal Coal Co.                | Daniel Heggs      | Alpha              | Shaft          |
| Hoover Fuel Co.               | C. A. Hoover      | Lakonta            | Shaft          |
| Hildabiddle Coal Co.          | Abram Hildabiddle | Eddyville          | Slope          |
| Maple Coal Co.                | H. M. Shuler      | Des Moines         | Shaft          |
| Crescent Coal Co. No. 6       | C. C. Gelger      | White City         | Shaft          |
| Crescent Coal Co. No. 7       | C. C. Gelger      | White              | Shaft          |

## JASPER COUNTY.

|                                    |                  |              |       |
|------------------------------------|------------------|--------------|-------|
| Colfax Consolidated Coal Co. No. 7 | Wm. Abrams       | Colfax       | Shaft |
| Colfax Consolidated Coal Co. No. 8 | Wm. Abrams       | Colfax       | Shaft |
| Colfax Consolidated Coal Co. No. 9 | Wm. Abrams       | Colfax       | Shaft |
| Star Coal Co.                      | John Warrick     | Colfax No. 2 | Slope |
| Jas. Warrick Coal Co.              | Jas. Warrick     | Colfax       | Shaft |
| Newton Coal Co.                    | Jas. Graham      | Newton       | Shaft |
| O'Rourke Coal Co.                  | John O'Rourke    | Newton       | Shaft |
| D. McAllister Coal Co.             | D. McAllister    | Newton       | Shaft |
| Calvert Coal Co.                   | C. H. Calvert    | Prairie City | Shaft |
| Ledger Coal Co.                    | Isaac Ledger     | Prairie City | Shaft |
| Plummer Grove Coal Co.             | F. M. Bloomquist | Colfax       | Shaft |
| John Bruce Coal Co.                | John Bruce       | Monroe       | Shaft |

## WAPELO COUNTY.

|                                  |                |                 |       |
|----------------------------------|----------------|-----------------|-------|
| Star Coal Co.                    | J. B. Jones    | Ottumwa         | Slope |
| Ottumwa Brick & Construction Co. | Thos. Williams | Ottumwa         | Shaft |
| Trio Coal Co.                    | Howell Price   | Ottumwa         | Shaft |
| D. & H. Coal Co.                 | F. E. DeFord   | Ottumwa         | Shaft |
| Harvey Michael Coal Co.          | Harvey Michael | Ottumwa         | Shaft |
| Myers Coal Co.                   | W. M. Myers    | Eddyville No. 3 | Slope |
| Gulick & Johnson Coal Co.        | Ed. Gulick     | Kirkville       | Shaft |
| Ackers Coal Co.                  | L. H. Ackers   | Ottumwa         | Shaft |
| Anchor Coal Co.                  | W. B. Williams | Ladysdale       | Shaft |
| Phillips Fuel Co. No. 5          | A. J. Erskine  | Rutledge        | Shaft |
| Phillips Fuel Co. No. 9          | A. J. Erskine  | Rutledge        | Shaft |
| C. D. Sharp Coal Co.             | C. D. Sharp    | Eldon           | Shaft |
| Big Four Coal Co.                | J. W. Westland | Ottumwa         | Shaft |
| John Kelly & Sons Coal Co.       | John Kelly     | Eldon           | Shaft |
| Trott & Carter Coal Co.          | John Kelly     | Eldon           | Shaft |
| Stalner & Jeffrey Coal Co.       | Alf. Stalner   | Ottumwa         | Shaft |
| R. E. Cooper Coal Co.            | R. E. Cooper   | Ottumwa         | Shaft |
| Arundus Coal Co.                 | Manuel Arundus | Ottumwa         | Shaft |
| Kelly Bros. Coal Co.             | John Kelly     | Eldon           | Shaft |

## KEOKUK COUNTY.

|                          |                 |            |       |
|--------------------------|-----------------|------------|-------|
| Lee Bros. Coal Co.       | Bert Lee        | What Cheer | Shaft |
| Armstrong Bros. Coal Co. | Thos. Armstrong | What Cheer | Shaft |
| Crescent Coal Co.        | J. T. Holaday   | What Cheer | Shaft |
| Carson Bros. Coal Co.    | Thos. Carson    | What Cheer | Shaft |

## DENTS, ETC. IN SECOND DISTRICT.

## MONROE COUNTY.

| Plan of Working | How Ventilated | Power Used            | Shipping or Local | Railroad Connections |
|-----------------|----------------|-----------------------|-------------------|----------------------|
| Room and pillar | Two fans       | Steam and electricity | Shipping          | C. & N. W. Ry.       |
| Room and pillar | Fan            | Steam and electricity | Shipping          | C. & N. W. Ry.       |
| Room and pillar | Fan            | Steam and electricity | Shipping          | C. & N. W. Ry.       |
| Room and pillar | Fan            | Steam and electricity | Shipping          | C. & N. W. Ry.       |
| Room and pillar | Furnace        | Steam                 | Shipping          | C. & N. W. Ry.       |
| Room and pillar | Furnace        | Steam                 | Shipping          | C. & N. W. Ry.       |
| Room and pillar | Furnace        | Steam                 | Shipping          | C. & N. W. Ry.       |
| Room and pillar | Fan            | Steam                 | Shipping          | C. & N. W. Ry.       |
| Room and pillar | Fan            | Steam                 | Shipping          | C. & N. W. Ry.       |
| Room and pillar | Furnace        | Horse                 | Local             | C. & N. W. Ry.       |
| Room and pillar | Fan            | Steam                 | Shipping          | C. & N. W. Ry.       |

## JASPER COUNTY.

|                 |         |                       |          |                   |
|-----------------|---------|-----------------------|----------|-------------------|
| Room and pillar | Fan     | Steam                 | Shipping | Colfax N. Ry.     |
| Room and pillar | Fan     | Steam and electricity | Shipping | Colfax N. Ry.     |
| Room and pillar | Fan     | Steam                 | Shipping | Colfax N. Ry.     |
| Room and pillar | Fan     | Steam                 | Shipping | C. R. I. & P. Ry. |
| Room and pillar | Furnace | Steam                 | Shipping | C. R. I. & P. Ry. |
| Room and pillar | Fan     | Steam                 | Local    |                   |
| Room and pillar | Fan     | Steam                 | Local    |                   |
| Room and pillar | Slove   | Steam                 | Local    |                   |
| Room and pillar | Furnace | Steam                 | Local    |                   |
| Room and pillar | Furnace | Steam                 | Local    |                   |
| Room and pillar | Furnace | Horse                 | Local    |                   |

## WAPELO COUNTY.

|                 |         |       |          |                |
|-----------------|---------|-------|----------|----------------|
| Room and pillar | Fan     | Steam | Local    |                |
| Room and pillar | Fan     | Steam | Shipping | C. M. & St. P. |
| Room and pillar | Fan     | Steam | Local    |                |
| Room and pillar | Furnace | Horse | Local    |                |
| Room and pillar | Fan     | Horse | Local    |                |
| Room and pillar | Furnace | Horse | Local    |                |
| Room and pillar | Furnace | Horse | Local    |                |
| Room and pillar | Fan     | Steam | Local    |                |
| Room and pillar | Fan     | Steam | Shipping | C. R. I. & P.  |
| Room and pillar | Fan     | Steam | Shipping | C. M. & St. P. |
| Room and pillar | Furnace | Horse | Local    |                |
| Room and pillar | Furnace | Horse | Local    |                |
| Room and pillar | Furnace | Horse | Local    |                |
| Room and pillar | Furnace | Horse | Local    |                |
| Room and pillar | Furnace | Horse | Local    |                |
| Room and pillar | Furnace | Horse | Local    |                |

## KEOKUK COUNTY.

|                 |         |       |       |  |
|-----------------|---------|-------|-------|--|
| Room and pillar | Jet     | Steam | Local |  |
| Room and pillar | Furnace | Horse | Local |  |
| Room and pillar | Furnace | Horse | Local |  |
| Room and pillar | Fan     | Horse | Local |  |



## LIST OF COMPANIES, SUPERINTENDENTS

## DAVIS COUNTY.

| Name of Company       | Superintendent | Post Office Address | Shaft or Slope |
|-----------------------|----------------|---------------------|----------------|
| Fayne Coal Co.....    | Jas. Fayne     | Fidon               | Store ---      |
| Hastings Coal Co..... | Henry Hastings | Floris              | Slope ---      |
| Christy Coal Co.....  | Geo. Christy   | Floris              | Slope ---      |

## JEFFERSON COUNTY.

|                         |                |           |          |
|-------------------------|----------------|-----------|----------|
| Fairfield Coal Co. .... | C. S. Hennessy | Fairfield | Shaft... |
| Beckman Coal Co.....    | Lewis Beckman  | Fairfield | Shaft... |

## WARREN COUNTY.

|                       |             |          |          |
|-----------------------|-------------|----------|----------|
| Oakdale Coal Co.....  | T. T. Davis | Carlisle | Shaft... |
| Gideon & Cassidy..... |             | Carlisle | Shaft... |

## ETC. IN SECOND DISTRICT.

## DAVIS COUNTY.

| Plan of Working   | How ventilated | Power Used | Shipping or local | Railroad Connections |
|-------------------|----------------|------------|-------------------|----------------------|
| Room and pillar.. | Furnace --     | Horse      | Local ---         | ---                  |
| Room and pillar.. | Furnace --     | Horse      | Local ---         | ---                  |

## JEFFERSON COUNTY.

|                   |            |       |           |     |
|-------------------|------------|-------|-----------|-----|
| Room and pillar.. | Furnace -- | Horse | Local --- | --- |
| Room and pillar.. | Furnace -- | Horse | Local --- | --- |
| Room and pillar.. | Furnace -- | Horse | Local --- | --- |

## WARREN COUNTY.

|                   |            |       |           |     |
|-------------------|------------|-------|-----------|-----|
| Room and pillar.. | Furnace -- | Horse | Local --- | --- |
| Room and pillar.. | Furnace -- | Horse | Local --- | --- |

---

---

# THIRD DISTRICT

---

---

BIENNIAL REPORT OF THE  
THIRD DISTRICT.

---

EMBRACING THE FOLLOWING COUNTIES:

POLK  
WEBSTER  
GREENE  
SCOTT

BOONE  
GUTHRIE  
DALLAS

EDWARD SWEENEY, INSPECTOR,  
Des Moines, Iowa.

LETTER OF TRANSMITTAL.

---

HON. BERYL F. CARROLL, Governor of Iowa:

SIR:—I have the honor to submit herewith my report as Mine Inspector for the Third Inspection District of Iowa, covering the biennial period ending June 30, 1912.

Very respectfully submitted,

EDWARD SWEENEY,  
Inspector Third District.

## REPORT OF THIRD DISTRICT

---

There is nothing particularly new or startling to offer in the report of the Third Inspection District, for the biennial period ending June 30, 1912.

Two years ago Jasper County was taken from the Third District and placed in the Second Inspection District. In making the comparison regarding coal produced it must be borne in mind that the former biennial report included Jasper County in this district, while this report does not. Two years ago the Third District produced 5,181,847 tons of coal while for the biennial period just closed the production of the district was 4,301,708 tons. Jasper County for the period named produced 577,690 tons of coal, so that the loss in production in the Third District during the biennial period was 302,449 tons. It is quite likely that the loss in production occurred because of the long suspension in mining, (nearly sixty days), while the operators and miners of the state were perfecting a working agreement.

Polk county still continues to be the banner coal producing county in the district, and for the biennial period produced 3,009,832 tons of coal, giving employment to nearly three thousand men in and around the mines of the county.

During the biennial period 22 fatal and 126 non-fatal accidents occurred in the mines of the district. While the number of fatal accidents are five less than occurred in the former biennial period, the non-fatal accidents are far in excess of those occurring in the former biennial period. The statistics regarding these accidents given on another page shows how accidents occurred and the loss of time sustained by reason of the non-fatal accidents. The majority of these accidents occurred from falls of slate or roof in the rooms, and in many cases came from improper methods of timbering and in many cases from carelessness on the part of the miner injured in timbering his room.

The outlook for the coal mining industry for the Third District, as well as in the entire mining territory of the state is very encouraging for the coming two years. The only uncertain thing at

this writing is the possibility of a car shortage at the mines at just the time when coal is in most demand. The state of Iowa is happily blessed with a great harvest, and the great yield will tax the powers of the railroads to furnish cars and motive power to take to market the millions of bushels of grain produced. In the meantime our coal people will be anxiously watching for car service in the coal commerce of Iowa, and it is to be hoped that the railroads will be able to furnish cars when needed to the mines of the state that the coal industry may be carried on to the best interests of the industry.

The miners and operators of the state have a two year wage agreement which expires March 31, 1914. During the period of wage conference between the miners and operators relative to this agreement, there was more than the usual debate and controversy, and in fact it looked for a time as though our mining people would fail to agree, and that the coal industry would witness a protracted strike. Such a thing in our fair state would prove a calamity to all parties concerned and would have had a bad effect on all labor and general business throughout the state. Happily the sound good sense for which our coal operators and miners are noted came into play with a firmness that set the wheels of the mining industry into operation after being idle for a period of sixty days.

The results from our new mining laws prove the wisdom of their enactment. The general situation seems encouraging and prosperity seems to be with us. We therefore look for a larger tonnage of coal to be produced this coming year than has ever been produced before.

#### POLK COUNTY.

Polk County ranks as the second coal producing county in the state of Iowa, Monroe County being the first. For more than fifteen years Polk County has produced more than a million tons of coal per year.

For the biennial period ending with June 30, 1912, there was produced in Polk County 3,009,832 tons of coal. In the production of this tonnage, employment was given to an average of 2,874 men in and around the mines of the county. This number of employees does not include teamsters, but only those having a part in the production of the tonnage of coal.

Under the agreement between the miners and operators of the state, a little more than one dollar per ton is paid the miner for producing the screened lump coal. Of necessity there are others employed around the mines besides the regular miners, such as timbermen, cagers, drivers, top men, mine foremen, etc. This office does not collect statistics as to the wages paid these latter employes, but it is safe to assume that for the biennial period just closed that more than four million dollars in wages has been paid to all these employes of the mines in Polk County alone. Nearly every dollar of this money has been spent in Des Moines, going for rent, clothing, food, carfare and other necessities, so that considered in this way the coal mining industry of Polk County means much to Des Moines.

There are twenty-nine mines now in operation in Polk County, the larger of these with a producing capacity of five to one thousand tons per day. These larger mines do a shipping business, while the mines nearer Des Moines, and with a yearly tonnage of 30,000 tons or less, supply the greater part of the local trade of Des Moines.

Some coal is shipped into Des Moines from the eastern and southern coal fields, and by reason of the extra cost of shipping in, retails from one dollar to two and one-half dollars per ton more than is paid for the coal mined in Polk County. Many people buy this soft or bituminous coal paying these higher prices, and they are doing so under the impression that the coal purchased at the higher prices is cheaper fuel and makes less smoke than the Iowa coal. Repeated tests have shown that the Iowa coal makes no more smoke than other soft coals that are shipped in, while its value in heat units is equally as high. Then again the Polk County coal stores longer and with better results than any coal shipped into Des Moines, with the exception of the anthracite or hard coal which comes from the eastern states.

Owing to the fact that the Iowa coal can be stored for a long period to a better advantage than other bituminous coals gives an advantage to the buyer of the Polk County product, as he can store his winter's coal early in the fall with little loss in heat value.

Many of the mines of Polk County lie within a radius of six miles of the center of Des Moines, and several of them lie within the city limits. Many of these mines can be reached either by

street cars or on the railroad connections, so that but few mines in the county maintain camps, the most of the miners living in Des Moines and going to and from their work on the street cars, and on the special miners trains run by the railroads reaching the mines.

The increased growth of the manufacturing interests of Des Moines has much to do with the development of the coal industry of the county. Many manufacturing establishments are here and others will come because of nearness to cheap fuel and because of good railroad facilities.

Two of the mines of the Norwood-White Coal Company have been abandoned within the past year. Also the Beck Coal Company abandoned one shaft this past spring, but have already opened another, and will be ready for operations soon. The American Coal Company have also opened a new mine and expect to be producing coal soon. This latter mine when fully developed bids fair to be a large producer.

There was a slight falling off in the tonnage produced by the county in 1912 as compared with the production of 1911. This was in a measure due to the suspension of all the mines in the state from April first to about June first. Even after the agreement was entered into between the miners and operators relative to wages and labor, many of the mines did not resume operations until after the close of the fiscal year, June 30th. With the resumption of work under the new wage scale agreement it is quite probable that the coming year more coal will be produced in both the county and the district than was produced in 1912.

LIST OF COMPANIES, SUPERINTENDENTS, ETC., IN THIRD DISTRICT  
POLK COUNTY

| Name of Company               | Superintendent      | Postoffice Address | Shaft or Slope | Plan of Working | How ventilated | Power used  | Shipping or Local |
|-------------------------------|---------------------|--------------------|----------------|-----------------|----------------|-------------|-------------------|
| Norwood-White Coal Co., No. 3 | J. D. Phillips      | Des Moines         | Shaft          | Room and pillar | Fan            | Steam       | Shipping          |
| Norwood-White Coal Co., No. 4 | J. D. Phillips      | Des Moines         | Shaft          | Room and pillar | Fan            | Steam       | Shipping          |
| Eagle Coal Co., No. 2         | E. A. Sayre         | Des Moines         | Shaft          | Room and pillar | Fan            | Steam       | Local             |
| Eagle Coal Co., No. 3         | E. A. Sayre         | Des Moines         | Shaft          | Room and pillar | Fan            | Electricity | Shipping          |
| South Des Moines Coal Co.     | S. E. Wagner        | Des Moines         | Shaft          | Room and pillar | Fan            | Steam       | Local             |
| Clover Leaf Coal Co.          | T. H. Chance        | Des Moines         | Shaft          | Room and pillar | Fan            | Steam       | Shipping          |
| American Coal Co.             | Isaac Evans         | Des Moines         | Shaft          | Room and pillar | Fan            | Steam       | Local             |
| Avon Coal Co.                 | F. R. Shultz        | Avon               | Shaft          | Room and pillar | Natural        | Horse       | Local             |
| Hollingsworth Coal Co.        | H. E. Hollingsworth | Des Moines         | Shaft          | Room and pillar | Fan            | Steam       | Shipping          |
| Wright Coal Co.               | J. D. Owen          | Des Moines         | Shaft          | Room and pillar | Fan            | Steam       | Shipping          |
| Saylor Coal Co.               | J. D. Owen          | Des Moines         | Shaft          | Room and pillar | Fan            | Steam       | Shipping          |
| Blount & Evans Coal Co.       | Isaac Evans         | Des Moines         | Shaft          | Room and pillar | Fan            | Steam       | Shipping          |
| Walnut Creek Coal Co.         | L. B. Kirkpatrick   | Des Moines         | Shaft          | Room and pillar | Fan            | Steam       | Shipping          |
| Economy Coal Co.              | Peter Reynolds      | Des Moines         | Shaft          | Room and pillar | Fan            | Steam       | Shipping          |
| Valley Union Coal Co.         | B. J. Bosley        | Commerce           | Shaft          | Long wall       | Fan            | Steam       | Shipping          |
| Reck Coal Co.                 | Thos. Beck          | Des Moines         | Shaft          | Room and pillar | Fan            | Steam       | Local             |
| Keystone Coal Co.             | Thos. Carpenter     | Des Moines         | Shaft          | Room and pillar | Fan            | Steam       | Shipping          |
| Swanwood Coal Co.             | Fred Norwood        | Des Moines         | Shaft          | Room and pillar | Fan            | Steam       | Shipping          |
| Ray Coal Co.                  | T. A. Ray           | Des Moines         | Shaft          | Room and pillar | Fan            | Steam       | Local             |
| Madison Coal Co.              | W. F. Moore         | Des Moines         | Shaft          | Room and pillar | Fan            | Steam       | Local             |
| Caleb Johns Coal Co.          | Caleb Johns         | Des Moines         | Shaft          | Room and pillar | Fan            | Steam       | Local             |
| Glenwood Coal Co.             | Caleb Johns         | Des Moines         | Shaft          | Room and pillar | Fan            | Steam       | Local             |
| Des Moines Coal Co.           | Josh Norwood        | Des Moines         | Shaft          | Room and pillar | Fan            | Steam       | Shipping          |
| Bennett Bros. Coal Co.        | John Bennett        | Des Moines         | Shaft          | Room and pillar | Fan            | Steam       | Local             |
| Mayle Block Coal Co.          | H. M. Shuler        | Des Moines         | Shaft          | Room and pillar | Fan            | Steam       | Shipping          |
| Gibson Coal Co.               | Wm. R. Gibson       | Des Moines         | Shaft          | Room and pillar | Fan            | Steam       | Shipping          |
| West Riverside Coal Co.       | Geo. Simpson        | Des Moines         | Shaft          | Room and pillar | Fan            | Steam       | Shipping          |
| Enterprise Coal Co., No. 1    | C. W. Carpenter     | Des Moines         | Shaft          | Room and pillar | Fan            | Steam       | Shipping          |
| Enterprise Coal Co., No. 2    | C. W. Carpenter     | Des Moines         | Shaft          | Room and pillar | Fan            | Steam       | Shipping          |

## WEBSTER COUNTY.

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

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

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

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

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

For the biennial period ending June 30, 1912, this county produced 86,038 tons of coal. About two hundred men were employed in and around the mines of the county. But few accidents were reported from this county.

## BOONE COUNTY.

Boone County has long been known as a coal producer, coal having been mined in the county for a period of more than 40 years. The first shipping mines in the county were opened in the early seventies. Since that time profitable mining operations have been carried on in the county. The county, like others in the state, has had its reverses in mining operations, but Boone County was for many years the second producing county in the Third District, but with recent developments in Dallas County, Boone takes third rank in the district.

The largest operations in the county at the present time are in the vicinity of Boonesboro, Fraser and Ogden. At the latter place several shafts are in operation and this bids fair to be the leading coal producing section in the county. A large field has been prospected here with flattering prospects for successful mining operations.

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

For the biennial period ending June 30, 1912, Boone County produced 494,153 tons of coal, and in the production of this coal about eight hundred men were given employment in and around the mines of the county.

LIST OF COMPANIES, SUPERINTENDENTS, ETC., IN THIRD DISTRICT—CONTINUED  
WEBSTER COUNTY

| Name of Company                    | Superintendent | Post-office Address | Shaft or Slope | Plan of Working | How Ventilated | Power used | Shipping or Local |
|------------------------------------|----------------|---------------------|----------------|-----------------|----------------|------------|-------------------|
| Sunrise Coal Co., No. 1            | A. F. Schrader | Stratford           | Shaft          | Long wall       | Fan            | Steam      | Local             |
| Sam McCure Coal Co.                | Sam McCure     | Ft. Dodge           | Shaft          | Long wall       | Fan            | Steam      | Local             |
| Craig & Dawson Coal Co., No. 1     | J. L. Craig    | Kelo                | Shaft          | Long wall       | Fan            | Steam      | Shipping          |
| Western Coal & Mining Co., No. 2   | John Forgie    | Conkville           | Shaft          | Long wall       | Fan            | Steam      | Shipping          |
| BOONE COUNTY                       |                |                     |                |                 |                |            |                   |
| Big Five Coal Co., No. 1           | W. C. Bricker  | Moingona            | Shaft          | Long wall       | Fan            | Steam      | Shipping          |
| Smiley & Heaps Coal Co., No. 1     | Robert Heaps   | Boonesboro          | Shaft          | Long wall       | Fan            | Steam      | Shipping          |
| Smiley & Heaps Coal Co., No. 2     | Sam Smiley     | Boonesboro          | Shaft          | Long wall       | Fan            | Steam      | Shipping          |
| Zinselman Coal Co.                 | W. J. Conway   | Boonesboro          | Shaft          | Long wall       | Fan            | Steam      | Shipping          |
| W. D. Johnson Coal Co., No. 2      | H. H. Canfield | Boonesboro          | Shaft          | Long wall       | Fan            | Steam      | Shipping          |
| Heaps Coal Co.                     | Robert Heaps   | Boonesboro          | Shaft          | Long wall       | Fan            | Steam      | Shipping          |
| Ogden Consolidated Coal Co., No. 1 | E. M. Gray     | Ogden               | Shaft          | Long wall       | Fan            | Steam      | Shipping          |
| Ogden Consolidated Coal Co., No. 2 | E. M. Gray     | Ogden               | Shaft          | Long wall       | Fan            | Steam      | Shipping          |
| Ogden Consolidated Coal Co., No. 3 | E. M. Gray     | Ogden               | Shaft          | Long wall       | Fan            | Steam      | Shipping          |
| Ogden Consolidated Coal Co., No. 4 | E. M. Gray     | Ogden               | Shaft          | Long wall       | Fan            | Steam      | Shipping          |
|                                    | Fraser         | Fraser              | Shaft          | Room and pillar | Fan            | Steam      | Shipping          |

## GUTHRIE COUNTY.

But little that is new can be said of the coal industry of Guthrie County, since the last report was issued from this office. There is but little change in the number of mines and tonnage of coal produced each year in this county. The operations in the county are all small and the mines are small local mines, supplying the locality in which the mine is located with coal during the fall and winter months. Most of the mines of the county begin active operations in September of each year and are fairly active until the coming of the summer months, when operations are abandoned until fall again.

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

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

## GREENE COUNTY.

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

tion is not large. The mines here are operated only during the fall and winter months.

In the southeastern part of the county coal has been mined extensively near the town of Angus. There were at one time more than a dozen mines in operation in this part of the county. Some mining on a small scale is still done near here, but at the present time but few mines are operated in the entire county, and these are run as local mines. No shipping mines in this county.

#### SCOTT COUNTY.

Mining operations have been carried on in Scott county for nearly half a century, and yet at no time in the history of the county has the yearly production of coal been large. This is because the coal lies in swamps or pockets and the seams are not extensive enough to cause large mining operations to be carried on. The largest tonnage produced by this county in any one year since 1900 was mined in 1902 when the production reached 28,973 tons.

Scott county has no railroad mines and but few men are employed in the mines of the county. Small mining operations are carried on near Jamestown and Buffalo. Each year mines are abandoned and others opened to take their place, but there is a noticeable decrease in the production from year to year. The seam of coal worked by the Jamestown mines was in the form of a trough being about two hundred yards wide and two miles long. In the center of this trough the coal was from 4 to 6 feet thick, thinning towards the edges. The seam near Buffalo is said to be four feet thick in places in some of the pockets or swamps where coal is found.

Scott county is the only county in the central part of the state east of Jasper county in which coal is mined.

#### DALLAS COUNTY.

Prior to 1907 the coal tonnage produced by Dallas county never exceeded 40,000 tons in any one year. While a number of mines were in operation prior to this time, they were for the most part small local mines operated only during the fall and winter months

to meet the local demand for coal. The old mine at Van Meter and the old mine at Dawson were the only shipping mines in the county prior to 1907. In that year extensive prospecting was done and a shaft sunk by the Scandia Coal Company near Madrid. Former prospecting has been done at too shallow a depth. Coal was struck in the Scandia shaft at a depth of 170 feet. With the advent of the Scandia Coal Company in Dallas County other companies began prospecting for coal with the result that the High Bridge Coal Company and the Phillips Fuel Company have opened mines in the vicinity of the Scandia. Later the Scandia Company opened the second mine, so at present these four mines and the mine operated at Dawson by the Dawson Coal Company produce the bulk of the output of the county.

Nearly all of Dallas County is underlaid by the lower coal bed measures (Des Moines Formation), and extensive coal prospecting may result in other mines being opened in the county.

Prior to 1907 small mines operated near Madrid, Linden, and Van Meter. These were of shallow depth and probably operated in an entirely different seam from that at Scandia. It is hoped that prospecting will be continued in the county and the coal measures fully developed.

For the biennial period ending with June 30, 1912, the coal production of Dallas county amounted to 669,187 tons. 907 men were given employment in and around the mines of the county.

A number of fatal and non-fatal accidents occurred during the biennial period in the mines of this county. These accidents are listed elsewhere.

## LIST OF COMPANIES, SUPERINTENDENTS, ETC., IN THIRD DISTRICT—CONTINUED

## GUTHRIE COUNTY

| Name of Company              | Superintendent | Postoffice Address | Shaft or slope | Plan of Working | How ventilated | Power used | Shipping or local |
|------------------------------|----------------|--------------------|----------------|-----------------|----------------|------------|-------------------|
| Clipper Coal Co.             | Wm. Merchant   | Bagley             | Shaft          | Long wall       | Furnace        | Horse      | Local             |
| W. N. Thomas Coal Co., No. 1 | W. N. Thomas   | Stuart             | Shaft          | Long wall       | Natural        | Horse      | Local             |
| Scott Coal Co.               | W. H. Scott    | Guthrie Center RFD | Shaft          | Long wall       | Fan            | Horse      | Local             |
| Mansell Coal Co.             | John Mansell   | Guthrie Center RFD | Shaft          | Long wall       | Fan            | Horse      | Local             |
| W. B. Coe                    | W. B. Coe      | Guthrie Center RFD | Shaft          | Long wall       | Furnace        | Horse      | Local             |
| Sipe & Hughes, No. 1         | J. b. Sipe     | Yale               | Shaft          | Long wall       | Natural        | Horse      | Local             |
| J. J. Clark                  | J. J. Clark    | Guthrie Center RFD | Shaft          | Long wall       | Natural        | Horse      | Local             |
| Butler Coal Co.              | J. C. Butler   | Guthrie Center RFD | Shaft          | Long wall       | Natural        | Horse      | Local             |
| O. K. Coal Co.               | John Marchant  | Panora             | Shaft          | Long wall       | Natural        | Horse      | Local             |
| Cahill Coal Co.              | Jno. Cahill    | Stuart             | Shaft          | Long wall       | Natural        | Horse      | Local             |

## GREENE COUNTY

|                        |                 |            |       |                 |         |       |          |
|------------------------|-----------------|------------|-------|-----------------|---------|-------|----------|
| Buckeye Coal Co.       | Michael Feith   | Ripley     | Shaft | Room and pillar | Natural | Horse | Local    |
| Goodwin Coal Co.       | Thor. Goodwin   | Grand Jct. | Shaft | Long wall       | Fan     | Steam | Shipping |
| Keystone Coal Co.      | James Bennett   | Ripley     | Shaft | Long wall       | Furnace | Horse | Local    |
| Willow Groves Coal Co. | H. A. McElheney | Angus      | Shaft | Long wall       | Fan     | Steam | Local    |

## DALLAS COUNTY

|                          |                |          |       |                 |     |       |          |
|--------------------------|----------------|----------|-------|-----------------|-----|-------|----------|
| High Bridge Coal Co.     | H. Price       | Madrid   | Shaft | Room and pillar | Fan | Steam | Shipping |
| Scandia Coal Co., No. 1  | H. Zook        | Madrid   | Shaft | Room and pillar | Fan | Steam | Shipping |
| Scandia Coal Co., No. 2  | H. Zook        | Madrid   | Shaft | Room and pillar | Fan | Steam | Shipping |
| Philips Fuel Co., No. 10 | Wallace Convey | Woodward | Shaft | Room and pillar | Fan | Steam | Shipping |
| Dawson Coal Co., No. 2   | T. C. Thorpe   | Dawson   | Shaft | Room and pillar | Fan | Steam | Shipping |

## SCOTT COUNTY

|                       |               |           |       |                 |       |       |       |
|-----------------------|---------------|-----------|-------|-----------------|-------|-------|-------|
| Buckmeyer Coal Co.    | Jas Buckmeyer | Buffalo   | Shaft | Room and pillar | Grate | Steam | Local |
| Carl Henning Coal Co. | Carl Henning  | Davenport | Shaft | Room and pillar | Grate | Horse | Local |
| David Thomas Coal Co. | David Thomas  | Davenport | Shaft | Room and pillar | Grate | Horse | Local |

## FATAL ACCIDENTS IN DISTRICT No. 3

| Date          | Name of Deceased    | Name of Employer or Mine Where Accident Occurred | Age | Occupation     |
|---------------|---------------------|--|-----|----------------|
| July 1910     | 18 Mae Cunningham   | Wright Coal Co.                                  | 55  | Driver         |
| November      | 2 A. Olivo          | Wright Coal Co.                                  | 39  | Miner          |
| November      | 3 Judd Bendie       | Hydon Coal Co.                                   | 33  | Miner          |
| November      | 17 A. C. Harris     | Enterprise Coal Co.                              | 35  | Miner          |
| November      | 18 G. E. Walters    | Supt. Enterprise Coal Co.                        | 33  | Superintendent |
| December      | 2 David Hartshorn   | Maple Block Coal Co.                             | 68  | Miner          |
| February 1911 | 17 James Birmingham | Des Moines Coal Co.                              | 45  | Top man        |
| February      | 21 Henry Roberts    | Saylor Coal Co.                                  | 35  | Entryman       |
| April         | 7 Emerson W. Dawson | Craight & Dawson C. C.                           | 31  | Superintendent |
| April         | 7 Alcedo Cerye      | Swanwood Coal Co.                                | 31  | Miner          |
| April         | 9 J. Laurencini     | Wright Coal Co.                                  | 56  | Miner          |
| May           | 15 Enosh Merchem    | Scandia Coal Co.                                 | 29  | Driver         |
| May           | 23 John Jones       | Des Moines Coal Co.                              | 36  | Shot firer     |
| June          | 29 John Karalt      | Phillips Coal Co.                                | 33  | Miner          |
| July          | 15 Frank Delano     | Des Moines Coal Co.                              | 33  | Miner          |
| August        | 4 John Yanulionis   | Maple Block Coal Co.                             | 27  | Timber man     |
| August        | 14 Patrick Hughes   | Enterprise Coal Co.                              | 70  | Miner          |
| September     | 15 Fred Piffer      | Enterprise Coal Co.                              | 35  | Miner          |
| November      | 11 M. D. Reeves     | High Bridge Coal Co.                             | 32  | Miner          |
| November      | 2 Joe Bartalotti    | Des Moines Coal Co.                              | 22  | Driver         |
| February 1911 | 9 Peter Gidis       | Maple Block Coal Co.                             | 38  | Miner          |
| February      | 23 Angilo Mighon    | Saylor Coal Co.                                  | 31  | Miner          |

## FOR THE TWO YEARS ENDING JUNE 30, 1912.

| Married or Single | Wife | Number of Children | Nationality | Cause of Accident     | Time of Accident | County  |
|-------------------|------|--------------------|-------------|-----------------------|------------------|---------|
| Married           | wife | 1                  | Negro       | Fall of slate.        | 10:00 A. M.      | Polk    |
| Single            |      |                    | Italian     | Fall of slate.        | 10:30 A. M.      | Polk    |
| Married           | wife | 1                  | Italian     | Fall of slate.        | 12:30 P. M.      | Boone   |
| Married           | wife | 2                  | Negro       | Fall of slate.        | 8:00 A. M.       | Polk    |
| Married           | wife | 4                  | English     | Fell over steam pipe. | 10:00 A. M.      | Polk    |
| Married           | wife | 2                  | American    | Fall of slate.        | 8:00 A. M.       | Polk    |
| Married           | wife |                    | English     | Fell down shaft.      | 3:30 P. M.       | Polk    |
| Single            |      |                    | American    | Fall of slate.        | 2:00 P. M.       | Polk    |
| Married           | wife | 2                  | American    | Caught by cage.       | 3:15 P. M.       | Webster |
| Married           | wife | 4                  | Italian     | Fall of slate.        | 9:30 A. M.       | Polk    |
| Married           | wife |                    | Italian     | Fall of slate.        | 8:20 A. M.       | Polk    |
| Single            |      |                    | Croatian    | Run over by car.      | 10:00 A. M.      | Dallas  |
| Single            |      |                    | Hungarian   | Fall of slate.        | 2:00 P. M.       | Dallas  |
| Single            |      |                    | French      | Fall of slate.        | 8:20 A. M.       | Polk    |
| Widower           |      | 1                  | French      | Fall of slate.        | 8:20 A. M.       | Polk    |
| Married           | wife | 2                  | Irish       | Run over by car.      | 2:30 P. M.       | Polk    |
| Married           | wife | 2                  | Irish       | Premature explosion.  | 4:40 P. M.       | Polk    |
| Married           | wife | 2                  | Irish       | Run over by motor.    | 4:00 P. M.       | Polk    |
| Single            |      |                    | Scottish    | Fall of slate.        | 10:30 A. M.      | Dallas  |
| Single            |      |                    | Italian     | Run over by car.      | 1:30 P. M.       | Polk    |
| Single            |      |                    | Russian     | Fall of slate.        | 9:30 A. M.       | Polk    |
| Married           | wife | 1                  | Italian     | Fall of slate.        | 1:30 P. M.       | Polk    |

## REPORT OF NON-FATAL ACCIDENTS IN DISTRICT No. 3 FROM JULY 1, 1910. TO JUNE 30, 1912

| Date      | Name                  | Occupation   | Cause of Accident                            | Character of Injury         | Employed by                 | County  |
|-----------|-----------------------|--------------|--|-----------------------------|-----------------------------|---------|
| 1910      |                       |              |  |                             |                             |         |
| July      | 1 Alec Stanburg       | Miner        | Fall of slate                                | Leg broken, ankle crushed   | Saylor Coal Co.             | Polk    |
| July      | 2 E. Krasinski        | Miner        | Fall of coal                                 | Leg broken                  | Saylor Coal Co.             | Polk    |
| July      | 3 J. W. Lewis         | Sinker       | Fall of plank down shaft                     | Skull fractured             | Ogden Coal Co.              | Boone   |
| July      | 14 Gus. Shostrom      | Miner        | Fall of slate                                | Two ribs broken             | Maple Block Coal Co.        | Polk    |
| July      | 18 J. Cunningham      | Miner        | Fall of slate                                | Back broken                 | Wright Coal Co.             | Polk    |
| July      | 24 Robt. Robinson     | Miner        | Fall of cap rock                             | Leg broken                  | W. D. Johnson Coal Co.      | Boone   |
| July      | 27 Ed. Ash            | Driver       | Caught by car                                | Dislocated shoulder         | Economy Coal Co.            | Polk    |
| August    | 19 A. L. Davis        | Timberman    | Fall of slate                                | Ribs broken                 | Enterprise Coal Co.         | Polk    |
| October   | 2 A. J. Stewart       | Teamster     | Engine pulled onto foot                      | Bone in foot broken         | Wright Coal Co.             | Polk    |
| October   | John Hagberg          | Miner        | Fall of slate                                | Leg broken                  | Big Five Coal Co.           | Boone   |
| October   | 19 August Carlson     | Miner        | Fall of dirt                                 | Arm and 3 ribs broken       | W. D. Johnson Coal Co.      | Boone   |
| October   | 24 C. V. Barrow       | Topman       | Struck by coal                               | Thumb broken                | Smiley & Heaps Coal Co.     | Boone   |
| October   | 31 John Spence        | Miner        | Fall of coal                                 | Head badly cut              | Smiley & Heaps Coal Co.     | Boone   |
| November  | 1 John Bath           | Miner        | Fall of coal                                 | Leg broken                  | Smiley & Heaps Coal Co.     | Boone   |
| November  | 5 Hugh Allen          | Driver       | Caught between cars                          | Hand bruised                | Boone Block Coal Co.        | Boone   |
| November  | 18 Malcomb Steels     | Miner        | Fall of coal                                 | Muscles of leg torn         | Smiley & Heaps Coal Co.     | Boone   |
| November  | 21 Wm. Thomas         | Trapper      | Run over by car                              | Ankle broken                | Saylor Coal Co.             | Polk    |
| November  | 22 Richard Williams   | Driver       | Caught by car                                | Leg broken                  | Scandia Coal Co.            | Dallas  |
| November  | 23 Harry Spencer      | Miner        | Shot in face by tamping from blast hole      | Face burned, lost one eye   | Dawson Coal Co.             | Dallas  |
| December  | 8 John Seward         | Cager        | Struck by cage                               | Hip bruised                 | Madison Coal Co.            | Polk    |
| December  | 9 Thos. Pratt         | Miner        | Fall of slate                                | Shoulders bruised           | Gibson Coal Co.             | Polk    |
| December  | 10 Archie Clark       | Driver       | Caught by car                                | Foot mashed                 | Scandia Coal Co.            | Dallas  |
| December  | 12 Wm. L. Johnson     | Driver       | Caught by car                                | Finger cut off              | Scandia Coal Co.            | Dallas  |
| December  | 14 James Owen         | Cager        | Caught by car                                | Finger dislocated           | Saylor Coal Co.             | Polk    |
| December  | 19 Albert Sparler     | Driver       | Caught by car                                | Fingers mashed              | Scandia Coal Co.            | Dallas  |
| December  | 23 Frank Crum         | Cager        | Caught by car                                | Finger slightly mashed      | Scandia Coal Co.            | Dallas  |
| 1911      |                       |              |  |                             |                             |         |
| January   | 9 Joe Ford            | Driver       | Run over by car                              | Leg broken                  | Enterprise Coal Co.         | Polk    |
| January   | 16 Mat Walters        | Miner        | Stepped on nail sticking through wooden rail | Nail run through foot       | Blount-Evans Coal Co.       | Polk    |
| January   | 16 John Augustine     | Day man      | Fell against car                             | Shoulder dislocated         | Smiley & Heaps Coal Co.     | Boone   |
| January   | 19 Mike Bardick       | Miner        | Fall of slate                                | Bruised head & shoulders    | Phillips Coal Co.           | Dallas  |
| January   | 23 Anton Blosovick    | Entry driver | Fall of slate                                | Sprained back               | Phillips Coal Co.           | Dallas  |
| January   | 31 John Ferris        | Spragger     | Caught by car wheel                          | Finger mashed               | Scandia Coal Co.            | Dallas  |
| February  | 17 Geo. Hill          | Miner        | Fall of coal                                 | Ankle strained              | Smiley & Heaps Coal Co.     | Boone   |
| February  | 28 Joe Paskvan        | Driver       | Fell from car                                | Ankle bruised               | Phillips Coal Co.           | Dallas  |
| 1912      |                       |              |  |                             |                             |         |
| March     | 14 Andrew Harris      | Driver       | Struck back against roof                     | Back bruised                | Phillips Coal Co.           | Dallas  |
| March     | 15 E. L. Larson       | Miner        | Fall of slate                                | Bruised foot                | Smiley & Heaps Coal Co.     | Boone   |
| March     | 22 Jas. Bethel        | Miner        | Fall of slate                                | Bones in foot broken        | Sam McClure Coal Co.        | Western |
| March     | 23 Chas. Simonson     | Driver       | Caught by cars                               | Fingers mashed              | Maple Block Coal Co.        | Polk    |
| March     | 24 Wm. Money          | Miner        | Fall of slate                                | Leg and shoulder broken     | Wright Coal Co.             | Polk    |
| March     | 28 C. J. Frickson     | Miner        | Fall of slate                                | Bruised back                | Smiley & Heaps Coal Co.     | Boone   |
| March     | 31 Wm. Nobens         | Company man  | Hit by bucket                                | Toe broken                  | Smiley & Heaps Coal Co.     | Boone   |
| April     | 7 John Fedro          | Driver       | Run over by car                              | Leg broken                  | Maple Block Coal Co.        | Polk    |
| April     | 11 A. Barbieri        | Miner        | Fall of coal                                 | Leg broken                  | Gibson Coal Co.             | Polk    |
| April     | 18 Robt. Sately       | Miner        | Fall of slate                                | Ligaments of leg torn       | Gibson Coal Co.             | Polk    |
| April     | 28 Nich Vich          | Miner        | Fall of slate                                | Hand mashed, finger cut off | Wright Coal Co.             | Polk    |
| May       | 11 Archie Thomas      | Miner        | Fall of slate                                | Back injured                | W. N. Thomas Coal Co.       | Boone   |
| May       | 13 Paul Starovich     | Company man  | Struck by timbers                            | Stomach injured             | Scandia Coal Co.            | Dallas  |
| May       | 15 Solomon Carrington | Car man      | Struck by box car                            | One leg cut off             | Norwood-White Coal Co.      | Polk    |
| May       | 22 Tom Davenport      | Driver       | Caught by car                                | Arm broken                  | Enterprise Coal Co.         | Polk    |
| May       | 30 James Veitch       | Sinker       | Struck by falling rock                       | Cut on head                 | Smiley & Heaps Coal Co.     | Boone   |
| May       | 31 Frank Richardson   | Engineer     | Caught in shaft of fan engine                | Hand cut and torn           | Smiley & Heaps Coal Co.     | Boone   |
| June      | 5 David Loney         | Machinist    | Struck by cable                              | Arm and leg bruised         | Ogden Coal Co.              | Boone   |
| June      | 12 M. Berti           | Timberman    | Cut by axe                                   | Hand cut                    | Gibson Coal Co.             | Polk    |
| June      | 16 Elmer Parrish      | Sinker       | Struck by bucket                             | Bruised hand                | Smiley & Heaps Coal Co.     | Boone   |
| June      | 22 O. M. Healy        | Miner        | Fall of slate                                | Broken leg                  | Blount-Evans Coal Co.       | Polk    |
| 1911      |                       |              |  |                             |                             |         |
| July      | 5 Chas. Lambert       | Driver       | Thrown from car                              | Leg broken                  | Enterprise Coal Co.         | Polk    |
| July      | 10 John Williams      | Miner        | Fall of slate                                | Hip and thigh bruised       | Eagle Coal Co.              | Polk    |
| July      | 17 Kip Jewett         | Miner        | Fall of coal                                 | Leg broken                  | Smiley & Heaps Coal Co.     | Polk    |
| July      | 19 H. Leopold         | Timberman    | Fall of slate                                | Back bruised                | Des Moines Coal Co.         | Boone   |
| July      | 19 J. A. Lumley       | Timberman    | Fall of slate                                | Shoulder dislocated         | Ogden Cons. Coal Co.        | Boone   |
| July      | 24 Robt. Robinson     | Miner        | Fall of cap rock                             | Leg broken                  | W. D. Johnson Coal Co.      | Boone   |
| July      | 24 Chas. Woods        | Driver       | Fell off car                                 | Leg broken                  | Hollingsworth Coal Co.      | Polk    |
| August    | 1 H. E. Rumbaugh      | Miner        | Fall of slate                                | Leg broken                  | Keystone Coal Co.           | Polk    |
| August    | 2 John Fernie         | Miner        | Threw lighted fuse in powder can, explosion  | Face and head badly bruised | Scandia Coal Co.            | Dallas  |
| August    | 25 George Frazier     | Driver       | Kicked by mule                               | Head bruised                | Scandia Coal Co.            | Dallas  |
| August    | 8 E. Ellis            | Miner        | Struck by pick                               | Eye injured                 | Gibson Coal Co.             | Polk    |
| August    | 9 Joseph Reynolds     | Driver       | Caught by car                                | Collar bone broken          | Swanwood Coal Co.           | Polk    |
| August    | 26 D. Emonet          | Spragger     | Foot run over by car                         | Big toe mashed              | Phillips Coal Co.           | Dallas  |
| August    | 16 Geo. Davis         | Cager        | Electricity                                  | Hand burned                 | Ogden Consolidated Coal Co. | Boone   |
| August    | 23 Omelia Biondi      | Miner        | Fall of coal                                 | Leg and arm bruised         | Scandia Coal Co.            | Dallas  |
| August    | 16 Louis Fantana      | Driver       | Fall of slate                                | Two ribs broken             | Enterprise Coal Co.         | Polk    |
| August    | 21 Chas. Carlson      | Miner        | Fall of slate                                | One rib broken; foot burned | Saylor Coal Co.             | Polk    |
| September | 19 Pasco Ugolini      | Miner        | Fall of slate                                | One toe cut off             | Wright Coal Co.             | Polk    |
| September | 16 Mat Rupe           | Miner        | Fall of slate                                | Right arm broken            | Scandia Coal Co.            | Dallas  |
| October   | 13 Hugh Braniff       | Shot firer   | Fall of slate                                | Foot crushed                | Norwood White Coal Co.      | Polk    |
| October   | 16 John Cribbens      | Miner        | Fall of slate                                | Dislocated shoulder         | Boone Block Coal Co.        | Boone   |

# REPORT OF NON-FATAL ACCIDENTS IN DISTRICT NO. 3 FROM JULY 1, 1910, TO JUNE 30, 1911

CONTINUED

| Date     | Name                | Occupation  | Cause of Accident                   | Character of Injury                        | Employed by              | County  |
|----------|---------------------|-------------|-------------------------------------|--|--------------------------|---------|
| October  | 25 Joe Guigetti     | Miner       | Fall of slate                       | Fracture of spine                          | Enterprise Coal Co.      | Polk    |
| November | 2 Fred Loliss       | Driver      | Caught by car                       | Foot mashed                                | Wright Coal Co.          | Polk    |
| November | 14 Joe Cherrington  | Motorman    | Caught by loaded trip               | Three ribs broken                          | Wright Coal Co.          | Polk    |
| November | 22 Wesley Burrell   | Trailer     | Caught by motor                     | Hip dislocated and<br>bruised              | Wright Coal Co.          | Polk    |
| November | 22 Steve Ostevich   | Driver      | Caught by car                       | Bones of foot fractured                    | Norwood-White Coal Co.   | Polk    |
| November | 6 John Bonovich     | Dirtnan     | Fall of slate                       | Leg broken                                 | Norwood-White Coal Co.   | Polk    |
| November | 11 E. Giltenmeyer   | Driver      | Caught by car                       | One finger broken                          | Des Moines Coal Co.      | Polk    |
| November | 12 Tom Yusich       | Miner       | Fall of coal                        | Collar bone broken                         | Scandia Coal Co.         | Dallas  |
| November | 1 Frank Anderson    | Timberman   | Fall of slate                       | Leg broken                                 | Glenwood Coal Co.        | Polk    |
| November | 16 Art Dahout       | Miner       | Fall of slate                       | Arm broken                                 | Saylor Coal Co.          | Polk    |
| November | 23 Ed. Roach        | Driver      | Kicked by mule                      | Several teeth knocked out                  | Maple Block Coal Co.     | Polk    |
| November | 25 L. Pozzi         | Miner       | Fall of slate                       | Back sprained, leg<br>bruised              | Enterprise Coal Co.      | Polk    |
| December | 8 Steve Lepovitz    | Miner       | Caught by car                       | Leg sprained and bruised                   | Scandia Coal Co.         | Dallas  |
| December | 27 K. Blaskovich    | Timberman   | Fall of slate                       | One finger mashed off                      | Scandia Coal Co.         | Dallas  |
| December | 11 Ike Robinson     | Driver      | Caught by car                       | Ankle dislocated                           | Phillips Coal Co.        | Dallas  |
| December | 19 David Griggs     | Timberman   | Fall of slate                       | Back injured, foot<br>bruised              | Craig & Dawson Coal Co.  | Webster |
| December | 21 Andy Gray        | Company man | Fall of slate                       | Hip injured                                | The Sam McClure Coal Co. | Webster |
| December | 23 Harvey Fiel      | Driver      | Caught by car                       | Leg and arm bruised                        | Swanwood Coal Co.        | Polk    |
| 1913     |                     |             |                                     |  |                          |         |
| January  | 22 Wm. Herman       | Miner       | Fall of slate                       | Bruised leg                                | Saylor Coal Co.          | Polk    |
| January  | 4 W. M. Mael        | Miner       | Fall of slate                       | Dislocation of pelvis<br>bones             | Keystone Coal Co.        | Polk    |
| January  | 8 Harvey Seeley     | Miner       | Fall of coal                        | Ankle injured                              | Smiley & Heaps Coal Co.  | Boone   |
| January  | 11 Gus. Carlson     | Timberman   | Fall of slate                       | Hip dislocated                             | Norwood-White Coal Co.   | Polk    |
| January  | 12 A. Gustofson     | Miner       | Fall of slate                       | Ankle and foot bruised                     | Hollingsworth Coal Co.   | Polk    |
| January  | 17 John Owens       | Boss driver | Caught between cars                 | Leg injured                                | Phillips Coal Co.        | Dallas  |
| January  | 17 John Kirkwood    | Driver      | Kicked by mule                      | Arm broken                                 | W. D. Johnson Coal Co.   | Boone   |
| January  | 19 Chas. Skinner    | Driver      | Run over by car                     | Body badly bruised                         | Wright Coal Co.          | Polk    |
| January  | 23 Ora Kintz        | Driver      | Kicked by mule                      | Broken arm                                 | Economy Coal Co.         | Polk    |
| January  | 20 G. Pincintees    | Miner       | Fall of slate from gob              | Foot crushed                               | Norwood-White Coal Co.   | Polk    |
| January  | 27 Dan Lyons        | Day man     | Fall of slate                       | Cap bone ankle broken                      | Heaps Coal Co.           | Boone   |
| February | 6 H. Kirkendall     | Miner       | Fall of slate                       | Leg broken                                 | Norwood-White Coal Co.   | Polk    |
| February | 12 E. C. Ash        | Pumpman     | Stepped into barrel of<br>hot water | Right foot scalded                         | Wright Coal Co.          | Polk    |
| February | 14 L. Mullier       | Driver      | Caught by car                       | Arm broken                                 | Scandia Coal Co.         | Dallas  |
| February | 16 John Fernie      | Miner       | Fall of slate                       | Face and head hurt                         | Scandia Coal Co.         | Dallas  |
| February | 21 Emil Edgreen     | Miner       | Fall of slate                       | Lost left arm and fingers<br>on right hand | Scandia Coal Co.         | Dallas  |
| February | 29 James Dennis     | Driver      | Run over by car                     | Bones in foot broken                       | Ray Coal Co.             | Polk    |
| March    | 5 John Pollack      | Driver      | Jammed by car                       | Shoulders hurt                             | Scandia Coal Co.         | Dallas  |
| March    | 7 James Murry       | Driver      | Caught by car                       | One finger cut off                         | Norwood-White Coal Co.   | Polk    |
| March    | 19 John Taylor      | Miner       | Fall of slate                       | Head and shoulders in-<br>jured            | Caleb Johns Coal Co.     | Polk    |
| March    | 20 John Rojek       | Miner       | Cage landing on bottom              | Badly shaken up                            | Maple Block Coal Co.     | Polk    |
| March    | 13 Chas. Lamberti   | Trapper     | Fall of rock                        | Thumb and fingers<br>crushed               | Enterprise Coal Co.      | Polk    |
| March    | 11 Walter Rhoades   | Driver      | Cross bar fell on him               | Shoulder bruised                           | Enterprise Coal Co.      | Polk    |
| March    | 25 Earl Fredericks  | Miner       | Powder explosion                    | Face, breast and arm<br>burned             | Enterprise Coal Co.      | Polk    |
| March    | 21 Chas. Selzer     | Miner       | Fall of coal                        | Leg broken                                 | Boone Block Coal Co.     | Boone   |
| March    | 11 Jno. Birmingham  | Miner       | Fall of coal                        | Arm broken                                 | Boone Block Coal Co.     | Boone   |
| March    | 26 Jas. Egan, Jr.   | Miner       | Fall of coal                        | Leg broken                                 | Heaps Coal Co.           | Boone   |
| June     | 5 Albert Lewis      | Driver      | Kicked by mule                      | Lip cut, teeth knocked<br>out              | Blount Evans Coal Co.    | Polk    |
| June     | 13 Martin Argetti   | Timberman   | Fall of slate                       | Head cut; shoulder<br>bruised              | Wright Coal Co.          | Polk    |
| June     | 13 W. F. Roberts    | Driver      | Caught by car                       | Back hurt                                  | Saylor Coal Co.          | Polk    |
| June     | 17 Ed. Byes         | Miner       | Fall of coal                        | Ankle bruised                              | Economy Coal Co.         | Polk    |
| June     | 20 Fred Bredeseello | Timberman   | Fall of slate                       | Leg broken                                 | Scandia Coal Co.         | Dallas  |

SIXTEENTH BIENNIAL REPORT OF THE

STATE MINE INSPECTORS

TABLE NO. 11

SHOWING NUMBER OF MINES, OUTPUT OF COAL, NUMBER OF MINERS AND OTHER EMPLOYEES IN DISTRICT NO. 3, FOR YEAR ENDING JUNE 30, 1911.

| Name of County | Number of mines | Amount of coal of all kinds produced | Number of miners employed | Number of other inside employees | Number of outside employees | Total Number of employees |
|----------------|-----------------|--------------------------------------|---------------------------|----------------------------------|-----------------------------|---------------------------|
| Polk           | 27              | 1,663,291                            | 2,026                     | 674                              | 284                         | 2,984                     |
| Dallas         | 5               | 286,497                              | 435                       | 154                              | 56                          | 645                       |
| Boone          | 11              | 241,138                              | 512                       | 250                              | 90                          | 852                       |
| Webster        | 5               | 44,768                               | 139                       | 43                               | 15                          | 197                       |
| Guthrie        | 9               | 8,99                                 | 49                        | 7                                | 9                           | 58                        |
| Greene         | 4               | 10,128                               | 82                        | 7                                | 5                           | 44                        |
| Scott          | 3               | 3,500                                | 6                         | 1                                | 1                           | 8                         |
| Total          | 64              | 2,257,621                            | 3,199                     | 1,199                            | 460                         | 4,758                     |

TABLE NO. 12

SHOWING NUMBER OF MINES, OUTPUT OF COAL, NUMBER OF MINERS AND OTHER EMPLOYEES IN DISTRICT NO. 3, FOR YEAR ENDING JUNE 30, 1912.

| Name of County | Number of mines | Amount of coal of all kinds produced | Number of miners employed | Number of other inside employees | Number of outside employees | Total Number of employees |
|----------------|-----------------|--------------------------------------|---------------------------|----------------------------------|-----------------------------|---------------------------|
| Polk           | 27              | 1,346,541                            | 1,866                     | 627                              | 272                         | 2,765                     |
| Dallas         | 5               | 382,690                              | 589                       | 249                              | 69                          | 907                       |
| Boone          | 12              | 153,015                              | 514                       | 170                              | 85                          | 769                       |
| Webster        | 5               | 44,270                               | 118                       | 36                               | 14                          | 168                       |
| Greene         | 4               | 11,800                               | 39                        | 8                                | 5                           | 52                        |
| Guthrie        | 10              | 10,871                               | 59                        | 2                                | 10                          | 71                        |
| Scott          | 3               | 3,900                                | 14                        | 1                                | 3                           | 18                        |
| Total          | 66              | 2,044,087                            | 3,199                     | 1,093                            | 458                         | 4,750                     |

TABLE NO. 13

SHOWING THE OUTPUT OF THE COAL PRODUCING COUNTIES OF DISTRICT NO. 3, FOR THE PAST SIX YEARS.

| Counties | 1907      | 1908      | 1909      | 1910      | 1911      | 1912      |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Polk     | 1,425,876 | 1,358,097 | 1,647,133 | 1,736,692 | 1,663,291 | 1,346,541 |
| Boone    | 238,082   | 218,491   | 271,594   | 247,455   | 241,138   | 253,015   |
| *Jasper  | 885,298   | 467,552   | 333,340   | 334,186   |           |           |
| Webster  | 118,363   | 59,031    | 60,487    | 48,066    | 44,768    | 44,270    |
| Greene   | 22,305    | 22,226    | 13,240    | 15,700    | 10,128    | 11,800    |
| Guthrie  | 17,303    | 13,143    | 14,388    | 9,885     | 8,299     | 10,871    |
| Dallas   | 31,370    | 108,700   | 202,700   | 240,958   | 286,497   | 382,690   |
| Scott    | 2,500     | 2,750     | 2,960     | 2,600     | 3,500     | 3,900     |

\* Now in Second Inspection District.

TABLE NO. 14

SHOWING TONNAGE IN DISTRICT NO. 3, FOR PAST TWELVE YEARS, WITH NUMBER OF FATAL ACCIDENTS AND NUMBER OF EMPLOYEES, WITH TON PER ACCIDENT, ETC.

| Year | Number of fatal accidents | Tons of coal mined each year | Number of employees | Tons of coal mined per accident | Number of employees per accident |
|------|---------------------------|------------------------------|---------------------|---------------------------------|----------------------------------|
| 1901 | 7                         | 1,607,690                    | 3,904               | 229,670                         | 568                              |
| 1902 | 13                        | 1,653,152                    | 3,878               | 127,166                         | 298                              |
| 1903 | 5                         | 1,835,456                    | 3,691               | 367,091                         | 738                              |
| 1904 | 10                        | 1,846,386                    | 4,989               | 184,638                         | 490                              |
| 1905 | 11                        | 2,010,101                    | 5,380               | 182,736                         | 480                              |
| 1906 | 8                         | 2,040,342                    | 5,666               | 255,042                         | 695                              |
| 1907 | 14                        | 2,236,097                    | 5,430               | 159,721                         | 388                              |
| 1908 | 14                        | 2,249,990                    | 5,664               | 160,713                         | 404                              |
| 1909 | 11                        | 2,546,245                    | 6,514               | 231,476                         | 592                              |
| 1910 | 16                        | 2,635,602                    | 6,523               | 164,725                         | 407                              |
| 1911 | 14                        | 2,257,621                    | 4,788               | 161,268                         | 343                              |
| 1912 | 8                         | 2,044,087                    | 4,750               | 255,511                         | 598                              |

---

# **SUMMARY**

**Of the Mine Inspectors' Reports for the Two Years  
Ending June 30, 1912**

---

### SUMMARY OF THE MINE INSPECTORS' REPORTS FOR THE TWO YEARS ENDING JUNE 30, 1912.

---

The twenty-three coal producing counties of the state of Iowa for the year ending June 30, 1911, produced 7,729,674 tons of coal, and gave employment to an average of 16,890 men. For the year ending June 30, 1912, the production amounted to 6,820,828 tons, with the employment of 16,215 men in and around the mines. As will be seen this second year of the biennial period produced 908,846 less tons of coal than was produced in the first year of the period. The decrease in tonnage may be attributed to the mines of the state being under suspension for nearly sixty days during the spring of 1912, while the wage scale and working agreement was being perfected by the miners and operators of the state. Many of the mines did not resume work until after the close of the fiscal year of the biennial period, June 30th, so that it will be seen that in the last year of the biennial period the mines of the state worked but little more than ten months.

During the first year of the biennial period there were 243 mines in operation in the state, giving employment to an average of 16,890 men, while for the second year 260 mines were in operation, giving employment to an average of 16,215 men.

The year 1911 shows a decided increase in production over the years 1909 and 1910, but 1912 shows a slight decrease from the production of those years. It is safe to say that had the mines of the state been in active operation at the time the wage agreement was being perfected, that the coal production of 1912 would have equalled that of any former year.

An agreement between the miners and operators of the state as to wages and working conditions and extending until April 1, 1914, was entered into the latter part of May, giving assurance that the coal industry of Iowa will be free from serious disagreements between the contracting parties during the time covered by this agreement.

The following tables give the coal producing counties of the state, the number of mines, the coal output, number of persons employed in the coal industry and other information relative to the industry for the two years ending June 30, 1912.

## COAL PRODUCTION OF IOWA

FOR FISCAL YEAR ENDING WITH JUNE 30, 1911.

## FIRST DISTRICT.

| County        | Tons of coal produced | Average number of employees |
|---------------|-----------------------|-----------------------------|
| Appanoose     | 1,205,878             | 3,985                       |
| Monroe (part) | 1,480,333             | 2,281                       |
| Wayne         | 144,358               | 439                         |
| Lucas         | 10,895                | 24                          |
| Taylor        | 7,655                 | 44                          |
| Adams         | 6,490                 | 34                          |
| Page          | 4,500                 | 37                          |
| Total         | 2,869,109             | 6,844                       |

## SECOND DISTRICT.

|               |           |       |
|---------------|-----------|-------|
| Mahaska       | 885,435   | 1,565 |
| Monroe (part) | 809,526   | 1,764 |
| Wapello       | 333,861   | 651   |
| Jasper        | 317,606   | 620   |
| Marion        | 222,268   | 556   |
| Keokuk        | 14,978    | 30    |
| Van Buren     | 13,154    | 45    |
| Jefferson     | 4,096     | 16    |
| Davis         | 1,120     | 11    |
| Total         | 2,602,044 | 5,258 |

## THIRD DISTRICT.

|         |           |       |
|---------|-----------|-------|
| Polk    | 1,663,291 | 2,984 |
| Dallas  | 286,497   | 645   |
| Boone   | 241,138   | 852   |
| Webster | 44,768    | 197   |
| Guthrie | 8,299     | 58    |
| Greene  | 10,128    | 44    |
| Scott   | 3,500     | 8     |
| Total   | 2,257,621 | 4,788 |

## TOTAL COAL PRODUCTION OF STATE FOR FISCAL YEAR.

|                 |           |        |
|-----------------|-----------|--------|
| First District  | 2,869,109 | 6,844  |
| Second District | 2,602,044 | 5,258  |
| Third District  | 2,257,621 | 4,788  |
| Total           | 7,729,674 | 16,890 |

## COAL PRODUCTION OF IOWA

FOR FISCAL YEAR ENDING WITH JUNE 30, 1912.

## FIRST DISTRICT.

| County        | Tons of coal produced | Average number of employees |
|---------------|-----------------------|-----------------------------|
| Appanoose     | 1,059,290             | 3,975                       |
| Monroe (part) | 1,281,823             | 2,133                       |
| Wayne         | 106,616               | 376                         |
| Lucas         | 15,457                | 40                          |
| Page          | 10,762                | 25                          |
| Taylor        | 6,840                 | 35                          |
| Adams         | 5,800                 | 25                          |
| Total         | 2,486,588             | 6,609                       |

## SECOND DISTRICT.

|               |           |       |
|---------------|-----------|-------|
| Monroe (part) | 913,583   | 1,711 |
| Mahaska       | 670,300   | 1,366 |
| Wapello       | 268,156   | 573   |
| Jasper        | 260,084   | 632   |
| Marion        | 134,649   | 477   |
| Van Buren     | 13,329    | 34    |
| Keokuk        | 11,820    | 28    |
| Jefferson     | 4,051     | 11    |
| Warren        | 3,723     | 14    |
| Davis         | 1,000     | 10    |
| Total         | 2,290,153 | 4,856 |

## THIRD DISTRICT.

|         |           |       |
|---------|-----------|-------|
| Polk    | 1,346,541 | 2,765 |
| Dallas  | 382,690   | 907   |
| Boone   | 203,015   | 769   |
| Webster | 44,270    | 168   |
| Greene  | 11,800    | 52    |
| Guthrie | 10,871    | 71    |
| Scott   | 3,000     | 18    |
| Total   | 2,044,087 | 4,760 |

## TOTAL PRODUCTION OF STATE FOR FISCAL YEAR.

|                 |           |        |
|-----------------|-----------|--------|
| First District  | 2,486,588 | 6,609  |
| Second District | 2,290,153 | 4,856  |
| Third District  | 2,044,087 | 4,760  |
| Total           | 6,820,828 | 16,215 |

NUMBER OF MINES IN EACH COUNTY OF IOWA, THEIR COAL OUTPUT, NUMBER  
OF MINERS AND OTHER EMPLOYEES FOR YEAR  
ENDING JUNE 30, 1911.

| County       | Number of<br>mines | Tons of coal<br>of all grades<br>produced | Number of<br>miners em-<br>ployed | Number of<br>other inside<br>employees | Number of<br>outside em-<br>ployees | Total<br>number<br>employees |
|--------------|--------------------|---|-----------------------------------|--|-------------------------------------|------------------------------|
| 1 Monroe     | 20                 | 2,298,859                                 | 2,601                             | 1,101                                  | 343                                 | 4,045                        |
| 2 Polk       | 28                 | 1,663,291                                 | 2,026                             | 674                                    | 284                                 | 2,984                        |
| 3 Appanoose  | 60                 | 1,206,878                                 | 3,037                             | 570                                    | 378                                 | 3,985                        |
| 4 Mahaska    | 28                 | 885,435                                   | 1,024                             | 362                                    | 179                                 | 1,575                        |
| 5 Wapello    | 18                 | 333,861                                   | 443                               | 148                                    | 60                                  | 651                          |
| 6 Jasper     | 4                  | 317,606                                   | 397                               | 166                                    | 57                                  | 620                          |
| 7 Dallas     | 5                  | 280,497                                   | 435                               | 154                                    | 56                                  | 645                          |
| 8 Boone      | 11                 | 241,138                                   | 512                               | 250                                    | 90                                  | 852                          |
| 9 Marion     | 17                 | 222,268                                   | 365                               | 126                                    | 65                                  | 556                          |
| 10 Wayne     | 6                  | 144,358                                   | 303                               | 101                                    | 35                                  | 439                          |
| 11 Webster   | 5                  | 44,768                                    | 139                               | 48                                     | 15                                  | 197                          |
| 12 Keokuk    | 5                  | 14,978                                    | 21                                | 3                                      | 6                                   | 30                           |
| 13 Van Buren | 8                  | 13,154                                    | 28                                | 8                                      | 9                                   | 45                           |
| 14 Lucas     | 1                  | 10,895                                    | 13                                | 6                                      | 5                                   | 24                           |
| 15 Greene    | 4                  | 10,128                                    | 32                                | 7                                      | 5                                   | 44                           |
| 16 Guthrie   | 9                  | 8,299                                     | 49                                | 9                                      | 9                                   | 58                           |
| 17 Taylor    | 4                  | 7,655                                     | 33                                | 7                                      | 4                                   | 44                           |
| 18 Adams     | 2                  | 6,490                                     | 27                                | 4                                      | 3                                   | 34                           |
| 19 Jefferson | 2                  | 4,966                                     | 13                                | 1                                      | 2                                   | 16                           |
| 20 Page      | 2                  | 4,500                                     | 25                                | 6                                      | 6                                   | 37                           |
| 21 Scott     | 3                  | 3,500                                     | 6                                 | 1                                      | 1                                   | 8                            |
| 22 Davis     | 2                  | 1,120                                     | 9                                 |  | 2                                   | 11                           |
| Total        | 242                | 7,729,674                                 | 11,538                            | 3,738                                  | 1,614                               | 16,890                       |

NUMBER OF MINES IN EACH COUNTY OF IOWA, THEIR COAL OUTPUT, NUMBER  
OF MINERS AND OTHER EMPLOYEES FOR YEAR  
ENDING JUNE 30, 1912.

| County       | Number of<br>mines | Tons of coal<br>of all grades<br>produced | Number of<br>miners em-<br>ployed | Number of<br>other inside<br>employees | Number of<br>outside em-<br>ployees | Total<br>number<br>employees |
|--------------|--------------------|---|-----------------------------------|--|-------------------------------------|------------------------------|
| 1 Monroe     | 23                 | 2,195,806                                 | 2,565                             | 968                                    | 311                                 | 3,844                        |
| 2 Polk       | 27                 | 1,346,541                                 | 1,866                             | 627                                    | 272                                 | 2,765                        |
| 3 Appanoose  | 60                 | 1,059,290                                 | 3,113                             | 530                                    | 332                                 | 3,975                        |
| 4 Mahaska    | 28                 | 679,360                                   | 953                               | 272                                    | 141                                 | 1,366                        |
| 5 Wapello    | 5                  | 282,690                                   | 589                               | 249                                    | 69                                  | 907                          |
| 6 Jasper     | 19                 | 268,156                                   | 370                               | 137                                    | 66                                  | 573                          |
| 7 Dallas     | 12                 | 260,084                                   | 409                               | 163                                    | 60                                  | 632                          |
| 8 Boone      | 12                 | 253,015                                   | 514                               | 170                                    | 85                                  | 769                          |
| 9 Marion     | 17                 | 134,649                                   | 325                               | 86                                     | 66                                  | 477                          |
| 10 Wayne     | 7                  | 106,616                                   | 257                               | 84                                     | 35                                  | 376                          |
| 11 Webster   | 5                  | 44,270                                    | 118                               | 36                                     | 14                                  | 168                          |
| 12 Lucas     | 2                  | 15,457                                    | 25                                | 8                                      | 7                                   | 40                           |
| 13 Van Buren | 7                  | 13,327                                    | 24                                | 3                                      | 7                                   | 34                           |
| 14 Keokuk    | 4                  | 11,820                                    | 17                                | 6                                      | 5                                   | 28                           |
| 15 Greene    | 4                  | 11,800                                    | 39                                | 8                                      | 5                                   | 52                           |
| 16 Guthrie   | 10                 | 10,871                                    | 59                                | 2                                      | 10                                  | 71                           |
| 17 Page      | 2                  | 10,762                                    | 20                                | 3                                      | 2                                   | 25                           |
| 18 Taylor    | 4                  | 6,840                                     | 25                                | 7                                      | 3                                   | 35                           |
| 19 Adams     | 2                  | 5,800                                     | 22                                | 1                                      | 2                                   | 25                           |
| 20 Jefferson | 2                  | 4,051                                     | 9                                 |  | 2                                   | 11                           |
| 21 Warren    | 2                  | 3,723                                     | 11                                | 1                                      | 2                                   | 14                           |
| 22 Davis     | 3                  | 1,000                                     | 8                                 |  | 2                                   | 10                           |
| 23 Scott     | 3                  | 3,900                                     | 14                                | 1                                      | 8                                   | 18                           |
| Total        | 260                | 6,820,828                                 | 11,352                            | 3,362                                  | 1,501                               | 16,215                       |

NUMBER OF MINES IN EACH DISTRICT, THEIR COAL OUTPUT, NUMBER OF  
MINERS AND OTHER EMPLOYEES FOR THE YEAR  
ENDING JUNE 30, 1911.

| District | Number of<br>mines | Tons of coal<br>of all grades<br>produced | Number of<br>miners em-<br>ployed | Number of<br>other inside<br>employees | Number of<br>outside em-<br>ployees | Total<br>number<br>employees |
|----------|--------------------|---|-----------------------------------|--|-------------------------------------|------------------------------|
| Number 1 | 85                 | 2,869,109                                 | 4,908                             | 1,265                                  | 671                                 | 6,844                        |
| Number 2 | 94                 | 2,601,944                                 | 3,441                             | 1,344                                  | 483                                 | 5,268                        |
| Number 3 | 64                 | 2,257,621                                 | 3,199                             | 1,129                                  | 460                                 | 4,788                        |
| Total    | 243                | 7,729,674                                 | 11,548                            | 3,738                                  | 1,614                               | 16,890                       |

NUMBER OF MINES IN EACH DISTRICT, THEIR COAL OUTPUT, NUMBER OF  
MINERS AND OTHER EMPLOYEES FOR THE YEAR  
ENDING JUNE 30, 1912.

| District | Number of<br>mines | Tons of coal<br>of all grades<br>produced | Number of<br>miners em-<br>ployed | Number of<br>other inside<br>employees | Number of<br>outside em-<br>ployees | Total<br>number<br>employees |
|----------|--------------------|---|-----------------------------------|--|-------------------------------------|------------------------------|
| Number 1 | 87                 | 2,486,588                                 | 4,911                             | 1,124                                  | 574                                 | 6,600                        |
| Number 2 | 107                | 2,000,153                                 | 3,242                             | 1,145                                  | 469                                 | 4,856                        |
| Number 3 | 66                 | 2,044,087                                 | 3,199                             | 1,093                                  | 458                                 | 4,750                        |
| Total    | 260                | 6,820,828                                 | 11,352                            | 3,362                                  | 1,501                               | 16,215                       |

CAUSE OF FATAL MINE ACCIDENTS IN IOWA DURING THE YEAR ENDING JUNE  
30, 1911, AND COUNTIES IN WHICH ACCIDENT OCCURRED.

| Cause                            | Polk | Monroe | Mahaska | Dallas | Appanoose | Boone | Webster | Total |
|----------------------------------|------|--------|---------|--------|-----------|-------|---------|-------|
| Fall of slate, coal, bat or rock | 7    | 8      | 5       | 1      | 2         | 1     |         | 24    |
| Fell down shaft                  | 1    |        |         |        | 1         |       |         | 2     |
| Fell under or hit by mine cars   |      | 1      | 1       | 1      |           |       |         | 3     |
| Windy shot                       |      | 1      |         |        |           |       |         | 1     |
| Run over by railroad flat        |      | 1      |         |        |           |       |         | 1     |
| Explosion of powder              | 1    |        |         |        |           |       |         | 1     |
| Kicked by mule                   |      |        | 1       |        |           |       |         | 1     |
| Fell over steampipe              | 1    |        |         |        |           |       |         | 1     |
| Caught by cage                   |      |        |         |        |           |       | 1       | 1     |
| Caught by mining machine         |      |        |         |        | 1         |       |         | 1     |
| Total                            | 10   | 11     | 7       | 2      | 4         | 1     | 1       | 36    |

CAUSE OF FATAL MINE ACCIDENTS IN IOWA DURING THE YEAR ENDING JUNE 30, 1912, AND COUNTIES IN WHICH ACCIDENTS OCCURRED.

| Cause                                   |      |        |         |        |        |        |         |           |       | Total |
|---|------|--------|---------|--------|--------|--------|---------|-----------|-------|-------|
|   | Polk | Monroe | Mahaska | Marion | Jasper | Dallas | Wapello | Appanoose | Wayne |       |
| Fall of slate, coal, bat or rock        | 4    | 2      | 1       |        | 1      | 1      | 1       | 3         | 2     | 18    |
| Fell under or hit by mine cars          | 2    | 5      | 1       |        |        |        | 1       |           |       | 9     |
| Run over by motor                       | 1    |        |         |        |        |        |         |           |       | 1     |
| Explosion of misshot while cleaning out |      |        |         | 1      |        |        |         |           |       | 1     |
| Caught by mining machine                |      |        |         |        |        |        |         |           |       | 0     |
| Struck by rail-shaft accident           |      |        |         |        |        |        |         | 1         |       | 1     |
| Dust explosion                          |      | 2      |         |        |        |        |         |           |       | 2     |
| Total                                   | 7    | 10     | 2       | 1      | 1      | 1      | 2       | 4         | 2     | 30    |

CAUSE OF FATAL MINE ACCIDENTS IN IOWA DURING THE TWO YEARS ENDING JUNE 30, 1912, AND THE COUNTIES IN WHICH ACCIDENTS OCCURRED.

| Cause                                   | Polk | Monroe | Mahaska | Marion | Jasper | Dallas | Appanoose | Wapello | Boone | Webster | Wayne | Total |
|---|------|--------|---------|--------|--------|--------|-----------|---------|-------|---------|-------|-------|
| Fall of slate, coal, bat or rock        | 11   | 11     | 6       |        | 1      | 2      | 5         | 1       | 1     |         | 2     | 40    |
| Fell down shaft                         | 2    | 6      | 2       |        |        |        | 1         |         |       |         |       | 2     |
| Fell under or hit by mine cars          |      | 1      |         |        |        | 1      |           | 1       |       |         |       | 12    |
| Windy shot                              |      |        |         |        |        |        |           |         |       |         |       | 1     |
| Run over by railroad flat               |      | 1      |         |        |        |        |           |         |       |         |       | 1     |
| Explosion of powder                     | 1    |        |         |        |        |        |           |         |       |         |       | 1     |
| Kicked by mule                          |      |        | 1       |        |        |        |           |         |       |         |       | 1     |
| Fell over steam pipe                    |      |        |         |        |        |        |           |         |       |         |       | 1     |
| Caught by cage                          | 1    |        |         |        |        |        |           |         |       |         |       | 1     |
| Caught by mining machine                |      |        |         |        |        |        |           |         |       | 1       |       | 1     |
| Run over by motor                       | 1    |        |         |        |        |        | 1         |         |       |         |       | 1     |
| Explosion of misshot while cleaning out |      |        |         | 1      |        |        |           |         |       |         |       | 1     |
| Struck by rail-shaft accident           |      |        |         |        |        |        | 1         |         |       |         |       | 1     |
| Dust explosion                          |      | 2      |         |        |        |        |           |         |       |         |       | 1     |
| Total                                   | 17   | 21     | 9       | 1      | 1      | 3      | 8         | 2       | 1     | 1       | 2     | 66    |

FATAL AND NON-FATAL ACCIDENTS IN THE MINES OF THE STATE DURING THE YEAR ENDING JUNE 30, 1911, WITH RELATION TO COAL PRODUCED AND NUMBER OF ACCIDENTS.

| District | Number of Accidents |           | Number of tons of coal produced | Tons of Coal Produced for Each Accident |           | Number of Employees | Number of Employees for Each Accident |           |
|----------|---------------------|-----------|---------------------------------|---|-----------|---------------------|---------------------------------------|-----------|
|          | Fatal               | Non Fatal |                                 | Fatal                                   | Non Fatal |                     | Fatal                                 | Non Fatal |
| Number 1 | 10                  | 33        | 2,809,100                       | 286,910                                 | 86,943    | 6,844               | 684                                   | 207       |
| Number 2 | 12                  | 29        | 2,602,944                       | 216,912                                 | 89,756    | 5,258               | 439                                   | 181       |
| Number 3 | 14                  | 55        | 2,257,621                       | 161,258                                 | 41,047    | 4,788               | 342                                   | 85        |
| Total    | 36                  | 117       | 7,729,674                       | 214,713                                 | 66,065    | 16,890              | 460                                   | 144       |

FATAL AND NON-FATAL ACCIDENTS IN THE MINES OF THE STATE DURING THE YEAR ENDING JUNE 30, 1912, WITH RELATION TO COAL PRODUCED AND NUMBER OF EMPLOYEES.

| District | Number of Accidents |           | Number of tons of coal produced | Tons of Coal Produced for Each Accident |           | Number of Employees | Number of Employees for Each Accident |           |
|----------|---------------------|-----------|---------------------------------|---|-----------|---------------------|---------------------------------------|-----------|
|          | Fatal               | Non Fatal |                                 | Fatal                                   | Non Fatal |                     | Fatal                                 | Non Fatal |
| Number 1 | 11                  | 58        | 2,486,588                       | 226,053                                 | 42,872    | 6,600               | 601                                   | 114       |
| Number 2 | 11                  | 44        | 2,290,153                       | 208,166                                 | 52,048    | 4,856               | 441                                   | 110       |
| Number 3 | 8                   | 71        | 2,044,087                       | 255,511                                 | 28,780    | 4,750               | 593                                   | 67        |
| Total    | 30                  | 173       | 6,820,828                       | 227,361                                 | 79,426    | 16,215              | 540                                   | 93        |

TABLE SHOWING FATAL MINE ACCIDENTS IN IOWA FOR LAST SEVENTEEN YEARS, THEIR RELATION TO COAL TONNAGE AND EMPLOYES.

| Year | Number of Accidents | Tons of coal produced | Tons of coal per accident | Number of Employees | Fatality rate per 1,000 employees |
|------|---------------------|-----------------------|---------------------------|---------------------|-----------------------------------|
| 1896 | 23                  | 3,525,490             | 150,254                   | 11,451              | 2.1                               |
| 1897 | 21                  | 3,709,734             | 190,464                   | 11,678              | 1.8                               |
| 1898 | 26                  | 4,397,722             | 169,143                   | 10,550              | 2.5                               |
| 1899 | 29                  | 4,949,310             | 170,666                   | 11,029              | 1.6                               |
| 1900 | 29                  | 5,117,285             | 176,458                   | 13,041              | 2.2                               |
| 1901 | 27                  | 5,441,893             | 201,550                   | 13,175              | 2.2                               |
| 1902 | 55                  | 5,514,306             | 100,108                   | 13,602              | 4.2                               |
| 1903 | 21                  | 6,185,734             | 294,569                   | 13,192              | 1.6                               |
| 1904 | 31                  | 6,214,379             | 200,464                   | 16,315              | 1.9                               |
| 1905 | 24                  | 6,866,031             | 286,084                   | 17,624              | 1.4                               |
| 1906 | 37                  | 7,017,485             | 189,661                   | 16,825              | 2.2                               |
| 1907 | 35                  | 7,928,425             | 216,241                   | 17,045              | 2.05                              |
| 1908 | 48                  | 7,155,434             | 188,901                   | 17,312              | 2.2                               |
| 1909 | 38                  | 7,346,253             | 222,366                   | 18,002              | 1.5                               |
| 1910 | 39                  | 7,222,490             | 185,192                   | 18,005              | 2.1                               |
| 1911 | 36                  | 7,729,574             | 214,713                   | 16,800              | 2.1                               |
| 1912 | 30                  | 6,820,828             | 227,361                   | 16,215              | 1.8                               |

CAUSE OF NON-FATAL MINE ACCIDENTS IN IOWA DURING THE TWO YEARS ENDING JUNE 30, 1912, AND COUNTIES IN WHICH ACCIDENTS OCCURRED.

| Cause of Accident                 | Polk | Monroe | Mahaska | Marion | Wapello | Appanoose | Dallas | Webster | Wayne | Loras | Guthrie | Jasper | Davis | Total |
|-----------------------------------|------|--------|---------|--------|---------|-----------|--------|---------|-------|-------|---------|--------|-------|-------|
| Falls of slate, coal, bat or rock | 32   | 17     | 13      | 10     | 5       | 3         | 9      | 3       | 1     | 1     | 1       | 4      | 1     | 103   |
| Pell under or hit by car or motor | 21   | 13     | 1       | 1      | 1       | 1         | 1      | 1       | 1     | 1     | 1       | 1      | 1     | 37    |
| Hurt by cage                      | 1    | 1      | 1       | 1      | 1       | 1         | 1      | 1       | 1     | 1     | 1       | 1      | 1     | 14    |
| Kicked by mule                    | 1    | 1      | 1       | 1      | 1       | 1         | 1      | 1       | 1     | 1     | 1       | 1      | 1     | 14    |
| Windy shot                        | 1    | 1      | 1       | 1      | 1       | 1         | 1      | 1       | 1     | 1     | 1       | 1      | 1     | 14    |
| By gasoline engine                | 1    | 1      | 1       | 1      | 1       | 1         | 1      | 1       | 1     | 1     | 1       | 1      | 1     | 14    |
| Hit by tail rope                  | 1    | 1      | 1       | 1      | 1       | 1         | 1      | 1       | 1     | 1     | 1       | 1      | 1     | 14    |
| Premature explosion               | 1    | 1      | 1       | 1      | 1       | 1         | 1      | 1       | 1     | 1     | 1       | 1      | 1     | 14    |
| Explosion powder jack             | 1    | 1      | 1       | 1      | 1       | 1         | 1      | 1       | 1     | 1     | 1       | 1      | 1     | 14    |
| Electricity                       | 1    | 1      | 1       | 1      | 1       | 1         | 1      | 1       | 1     | 1     | 1       | 1      | 1     | 14    |
| Miscellaneous                     | 1    | 1      | 1       | 1      | 1       | 1         | 1      | 1       | 1     | 1     | 1       | 1      | 1     | 14    |
| Total                             | 97   | 60     | 35      | 11     | 13      | 40        | 23     | 9       | 39    | 4     | 1       | 1      | 6     | 1     |

## INDEX

|  |             |
|--|-------------|
| Accidents—   | Page        |
| Report of District No. 1   | 14-16-32    |
| Report of District No. 2   | 39-58-45-60 |
| Report of District No. 3   | 90-92-94    |
| Average time disability Non-Fatal Accident                             | 46          |
| Accident at Regal Mine—Dust Explosion                                  | 46          |
| Fatal Accidents and Tonnage (12 years)                                 | 57          |
| Accidents (Fatal) Cause of   | 105-106     |
| Accidents (Non-Fatal) Cause of   | 108         |
| Accidents, Fatal and Non-Fatal with tons of coal produced per accident | 107         |
| Accidents in Iowa (17 years)   | 108         |
| Board of Examiners—  |             |
| Members of   | 3           |
| Coal Producing Counties in First District—                             |             |
| Reports of   |             |
| Appanoose County   | 19-31       |
| Monroe County (Part)   | 24-31       |
| Lucas County   | 26-31       |
| Wayne County   | 27-31       |
| Page, Taylor and Adams   | 29-31       |
| Coal Producing Counties in Second District—                            |             |
| Reports of   |             |
| Monroe County (Part)   | 46-56-57    |
| Mahaska County   | 48-56-57    |
| Marion County  | 49-56-57    |
| Jasper County  | 52-56-57    |
| Wapello County   | 53-56-57    |
| Van Buren, Jefferson, Davis, Keokuk and Warren Counties                | 53-56-57    |
| Coal Producing Counties in Third District—                             |             |
| Reports of   |             |
| Polk County  | 78-96       |
| Webster County   | 82-96       |
| Boone County   | 83-96       |
| Guthrie County   | 85-96       |
| Greene County  | 85-96       |
| Scott County   | 86-96       |
| Dallas County  | 86-96       |

## Coal Companies in Iowa—

|                       |             |
|-----------------------|-------------|
| First District .....  | 25-28-30    |
| Second District ..... | 63-66-68    |
| Third District .....  | 81-84-88-89 |

## Coal Production in First District—

|                   |             |
|-------------------|-------------|
| See Summary ..... | 102-103-105 |
|-------------------|-------------|

## Coal Production in Second District—

|                   |             |
|-------------------|-------------|
| See Summary ..... | 102-103-105 |
|-------------------|-------------|

## Coal Production in Third District—

|                   |             |
|-------------------|-------------|
| See Summary ..... | 102-103-105 |
|-------------------|-------------|

## Coal Production in First District (12 years)—

|   |    |
|---|----|
| With number of fatal accidents and number of employees..... | 32 |
|---|----|

## Coal Production in Second District (12 years)—

|   |    |
|---|----|
| With number of fatal accidents and number of employees..... | 57 |
|---|----|

## Coal Production in Third District (12 years)—

|   |    |
|---|----|
| With number of fatal accidents and number of employees..... | 97 |
|---|----|

## Coal Production of State by Counties..... 104

## Dust Explosion, Regal Mine..... 41

## Explosion, Regal Coal Company..... 41

## Report of First District..... 11

## Report of Second District..... 39

## Report of Third District..... 77

## State Mine Inspectors..... 3

## Summary of Coal Production in Iowa..... 99