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# EIGHTEENTH ANNUAL COAL REPORT

PREPARED BY THE

35811

## Illinois Bureau of Labor Statistics

1899.

ALSO CONTAINING THE

FIRST ANNUAL REPORT

OF THE

## Illinois Free Employment Offices

AUGUST 2 TO OCTOBER 1, 1899.

DAVID ROSS, *Secretary*, Springfield.

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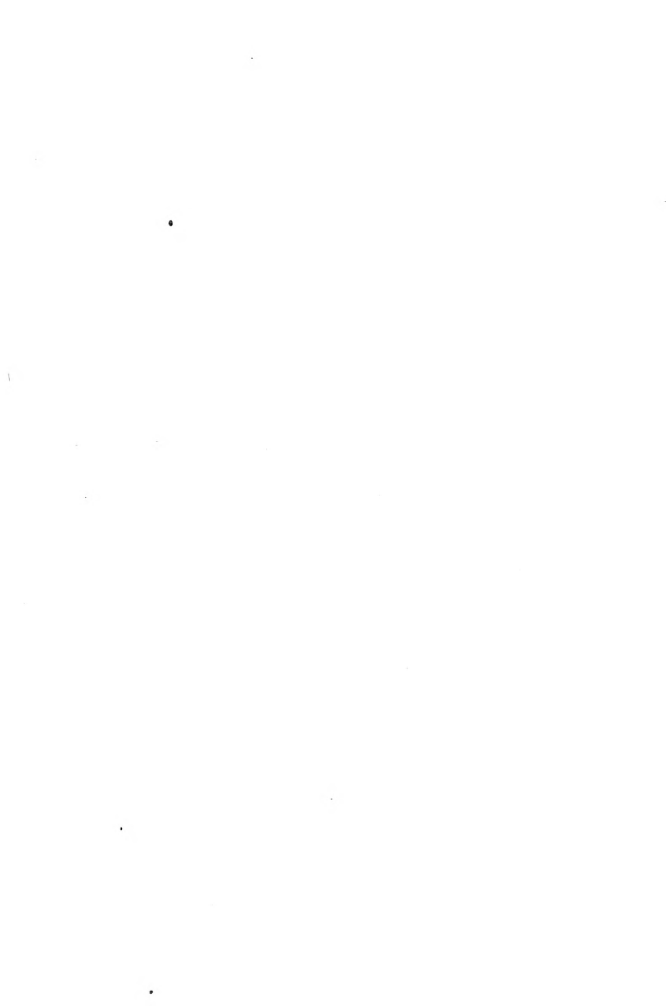
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1899.

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JOHN E. WILLIAMS, Fourth District, Danville.

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STATE OF ILLINOIS,  
OFFICE OF THE BUREAU OF LABOR STATISTICS,  
SPRINGFIELD, January 1, 1900.

HONORABLE JOHN R. TANNER. *Governor of Illinois.*

SIR:—On behalf of the Board of Labor Commissioners I have the honor to submit herewith the Eighteenth Annual Report of the coal industry of this State, together with the First Report of the Illinois Free Employment Offices.

DAVID ROSS, *Secretary.*



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INTRODUCTORY.  
EIGHTEENTH ANNUAL COAL REPORT.  
1899.

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An examination of the general summary prepared from the reports submitted to this office by the State Mine Inspectors, for the year ended June 30, 1899, show, notwithstanding the general adoption of the shorter work day, that the percentage of increase of production considerably exceeds that of any similar period in the mining history of the State.

This gratifying increase of production not only indicates a substantial improvement in the trade conditions of the country, but what is as much to be desired, a comparative absence of strikes, lockouts and suspensions. It is too much to expect that the mining industry could at any time be absolutely free from strife. Where local contests have occurred they were caused either by an effort to compel compliance with the mining rates agreed upon at the State or inter-state convention of miners and operators, or for the equally important question regarding the right to organize. In most instances both these issues were involved in the contention.

Of the strikes that have occurred in the State, that at Pana, now happily settled, was the most significant, on account of the number of men affected, its duration, and the methods adopted by the employers to defeat it. The lockout or suspension at that point began April 1, 1898, the date of the new contract year, and continued until October 10, 1899. The mine owners claimed that they were not represented at the inter-state convention, which fixed a forty-cent rate for these mines, and therefore felt that they were not bound by its action. From the report of the miners' committee selected to negotiate a settlement, the question of the forty-cent rate was not so much considered as the many other local demands which the miners then insisted should be included in the settlement. At the conclusion of

several interviews at which local matters alone were considered, the company officials surprised the committee with the declaration that they would not pay the price or thereafter treat with them as an organized body.

Aggravated by local demands, which, in addition to the proposed increased mining rate were considered oppressive, the mine owners resolved to repudiate the scale, defied the power of the inter-state convention, and declared war on all forms of organized effort. For years prior to that time the Pana mine owners were practically masters of the situation. They encountered no opposition from their employés, and substantially named the mining price. Exempt from the restrictions of the union, the privilege operated in a double direction—it gave them a decided advantage over their natural competitors in the market, while the additional employment furnished the men induced them to oppose affiliation with their brother craftsmen. In view of past immunities it was but natural that they should resent the interference of the union, supplemented as it was by the sympathy and support of outside employers.

Shortly after the company had signified its purpose to resist the organization, preparations were made to import colored labor from the South. This course was accompanied by expected resistance, and notwithstanding the military precautions taken by the companies, riots occurred from time to time, as a result of which many were injured and several lives sacrificed. While the operators considered they were imposed upon in being required to pay a mining rate very much in excess of former prices, and claimed the trouble there was the result of a conspiracy between outside miners and their employing competitors, their employés, from the origin of the difficulty repeatedly petitioned the mine owners to join with them in submitting their differences for adjustment to the State Board of Arbitration. These requests were rejected on the pretexts that the miners were not an incorporated and therefore not a responsible body; that under the provisions of the arbitration law the State could not enforce any award as against the employés, while they, as an incorporated body, might be held to answer in damages for a failure to abide by the board's decision. It was very apparent to those who endeavored to effect a settlement through such an agency, that the companies felt that in adopting such a course they would necessarily commit themselves to a recognition of the miners' union; which at that stage of the conflict would prove more obnoxious and disastrous to the com-



panies than to concede the rate contended for. After a stubborn conflict extending over eighteen months, the result at Pana was as complete and substantial a victory for the miners as that previously won at Virden. While the operators signed the forty-cent scale under protest, with the implied understanding and assurance that a more equitable price would be agreed to at future conventions, the most commendable feature of the settlement was the agreement on the part of the company to comply with all that the inter-state movement involved, the most important being the recognition of the union; the right of employes to consider and adjust terms of employment through regularly selected committees. The settlement also carried with it the adoption of the eight-hour work day, and in fact all the other conditions embodied in the Chicago agreement.

This gratifying conclusion of a protracted and regrettable conflict tends to demonstrate that, simple as the process of production has become, there is still a necessity for the services of men having experience and special training in that line of industry. Regardless of the color of the skin, men without a recognized occupation, who can be purchased at so much a car load, constitute a source of expense and danger to any community. Such investments are financially profitable only when their importation disintegrates the ranks of the older miner. This effected, they are usually cast adrift and open for similar engagements in the same disreputable service. Where continued organized resistance, however, is maintained, as was exhibited in the contest at Pana, their presence but adds to the expense and embarrassment of their employers.

The Pana experiment, like that at Virden, was costly beyond computation. Expensive to the mine owners, the miners, and to the State of Illinois. While all must and do regret the loss of life, property and business prestige, saying nothing of the bitterness such a contest engenders, the experience will not be without its value, if it burns the conscience with the fact that every species of wrong will inflict its certain and adequate punishment; that it is easier to deal with a friend than an enemy, and much better to furnish employment for our own citizens than to form questionable contracts with the riff-raff of the world.

While a great number of local strikes have been settled during the past year, on the terms demanded by the miners, that at Decatur was, next to Pana, the most important. Everything at one time in-

icated a desperate struggle, but after the lapse of several months, finding that the miners were still firm, the company capitulated and accepted all the conditions of the inter-state agreement.

The only contest still being waged in the State is that at Carterville, in Williamson county. With the exception of about fifty men, the old miners have secured employment elsewhere. Those left, acting under the direction of the organization, will continue the struggle. Unlike some of the other contests, the company has made no effort to conciliate or conceal the cause of the difficulty. The question of mining rates has been somewhat eliminated, owing to the company having advanced the price a fraction above that stipulated in the scale. The principal contention is the recognition of the union, a concession the company is not now disposed to make.

The period covered by this report is generally conceded to be the most prosperous the trade has for some time enjoyed. The general revival of industry throughout the country has made possible employment for all. In fact, in certain lines of production, there is and has been a visible shortage of labor. Particularly is this true in the mining regions where, for the first time in many years, the daily output of the mines proved insufficient to meet demands.

Prior to the year 1883 information concerning the coal industry of this State was supplied through reports made by the inspectors appointed by the county boards of supervisors, as provided for in the original act, in force July 1, 1872. This provision was not changed in the law as amended in 1877. From these sources, supplemented by the census reports, the data was collected from which the annual reports of the bureau were prepared. The development of the industry made necessary still further changes in the law, and the act was amended in 1883, which among other provisions, divided the State into five districts, and provided for the appointment by the Governor, of five State Inspectors of Mines. During the session of the General Assembly of 1895 this provision was further amended, and the State divided into seven inspection districts, and providing for the appointment of as many State Mine Inspectors, and also requiring the owners or operators of coal mines to pay a fee of not less than six dollars nor more than ten dollars for each inspection or investigation of a coal mine by a State Mine Inspector.

The numerous amendments added at every session of the legislature to the Act of 1883, resulted in such conflict and confusion as to

impair the force and efficacy of our mining laws. Many of these amendments were made without regard to their effect on former enactments; others were still further neutralized by the adverse opinion of the courts. In view of these contradictions, inconsistencies and ambiguities in the law, Gov. Tanner, in his message to the 41st General Assembly, recommended a general revision of our mining legislation. This work, involving nearly a year's labor, devolved upon this bureau. When the revision was completed it was submitted to representatives of the miners and operators, and, excepting a few minor changes, was approved substantially as prepared. It passed both branches of the General Assembly without a dissenting vote, and is admittedly one of the strongest and most consistent Acts that has found a place on our statute books. The Act took effect July 1, 1899, and appears as an appendix to this report, with a brief explanation of the essential features in which it differs from the Acts it supersedes.

The value of these reports from a statistical standpoint practically dates from the establishment of the State inspection system. From the report of 1883 to the present one, material changes have taken place in this industry, affecting not only the volume but the method of production. The annual output has increased from ten million tons in 1883, to nearly twenty-three and one-half million tons in 1899, an increase of 135 per cent. During this period the total number of all classes engaged in the production of coal has increased 45 per cent.

## STATISTICS OF COAL IN ILLINOIS.

FOR THE YEAR ENDED JUNE 30, 1899.

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The Commissioners of Labor, in presenting this, the Eighteenth Annual Report of the coal industry of Illinois, take this opportunity to congratulate all those engaged in the vocation, upon the completion of a great and successful year's work. For some time past the mining interests of the country have presented a most discouraging aspect. Industrial depressions affect no interests so readily as that of coal mining. The source of steam suffers the first shock. It is gratifying to note the present unusual activity accompanied by an upward tendency in prices. The year 1900 opens auspiciously. With a continuation of the present happy relations, fostered through the plan of inter-state agreements between miners and operators, the future is filled with promise for the industry.

The report contains the usual statistics of the coal production, together with all contingent experiences and facilities for placing the product on the market. The seven State Inspectors of Mines collect and report on uniform blanks, furnished from this office, a full record of the conditions and experience of every coal mine in each of their respective districts. The specific information as to the operating of each mining plant is furnished by the operators, on blanks sent out by the inspectors, and returned to them, thus giving the most reliable information of the industry possible to be obtained.

The main features of former reports have been followed in this, and furnishes a series of statistics uniform in all essential particulars. Some additional information concerning essential statistics of these industry are presented in this report, not heretofore collected. These relate (1) the nationality of the employés at the mines in the State; (2) the haulage of coal in the mines, and the number of horses or mules employed; (3) the total amount of wages paid all classes of employés, excepting office help. These features are tabulated in detail, and will be found in subsequent pages.

In the following summary will be found most of the important totals for the State for the year :

## SUMMARY 1899.

Number of counties producing coal.....	52
Number of mines and openings of all kinds.....	889
New mines or old mines re-opened during the year.....	131
Mines closed or abandoned since last report.....	123
Total output of all mines in tons of 2,000 pounds.....	23,434,445
Number of shipping mines.....	322
Total output of shipping mines, tons.....	22,531,356
Number of mines in local trade only.....	567
Output of local mines, tons.....	903,089
Total tons of lump coal.....	17,427,598
Total tons of other grades.....	6,006,847
Total tons shipped.....	20,019,147
Tons sold to local trade.....	2,321,040
Tons consumed (or wasted) at the plant.....	1,094,258
Average days of active operation for shipping mines.....	205.7
Average days of active operation for all mines.....	174.6
Average value per ton, all grades at the mines.....	\$0.7852
Average value per ton of all lump coal at the mines.....	\$0.9186
Average value per ton of other grades.....	\$0.4008
Aggregate home value of total product.....	\$18,408,470
Number of mines in which mining machines are used.....	64
Number of mining machines in use.....	440
Number of tons undercut by machines.....	6,085,312
Average number of miners employed during the year.....	26,449
Average number of other employés.....	10,542
Total employés.....	36,991
Total wages paid all employés, excepting office help.....	\$14,616,555
Number of men at work under ground.....	33,199
Number at work on surface.....	3,792
Number of horses and mules employed at the mines.....	3,529
Average price paid per gross ton for all hand mining.....	\$0.471
Average price paid per gross ton for machine mining.....	\$0.3134
Number of kegs of blasting powder used.....	423,483
Number of men accidentally killed.....	84
Number of wives made widows.....	46
Number of children left fatherless.....	155
Number of men injured so as to lose a week or more of time.....	597
Number of gross tons mined to each life lost.....	278,982
Number of employés to each life lost.....	440
Number of gross tons mined to each man injured.....	39,254
Number of employés to each man injured.....	62

A brief review of the totals here presented, compared with those of last year, will be of interest. Contrasted with last year, the number of mines and openings of every class is but eight more than in the preceding report, a variation somewhat less than that noted in former years. The number of shipping mines are less by six, while there has been an increase of fourteen in small or local mines, notwithstanding a reported reduction of 40,649 tons from the output of latter class of mines. The increase of nearly five million tons this year over last, was produced by the shipping mines. The number of counties from which coal was produced—fifty-two—remains unchanged.

The possible output of all the mines in the State, as estimated last year was 121 per cent more than the actual output; on the same basis this per cent has been reduced nearly one-half, showing the possible increase in the capacity of all existing mines to be only 75 per cent more than the output of this year.

Considered from a strictly commercial standpoint, the item of greatest interest attached to these returns is necessarily that affecting the annual production. In point of tonnage the year for which this report is made materially exceeds that of any former one. Compared with that of 1898, the increase represents 4,835,146 tons, or 25 per cent.

It would be manifestly misleading to figure the per cent of increase on the reported tonnage of last year, as the production for that period was nearly one and one-half million tons less than that of 1897, the shortage being explained and accounted for by the general suspension of mining operations, which reduced the tonnage for that year. Computed on the basis of the production for 1897, which, up to that time was the greatest in the history of the State, the percentage of increase is still much in excess of any former year. The output for 1897 was 20,072,758 tons—less by 3,361,687 tons, or 16 per cent than that for the present year. This increase is more notable when it is considered that it occurred during the first complete year when the mine operators were confined to the limitations of the eight-hour work-day, and is another evidence of the general improvement in the industrial conditions of the country.

The total number of employes this year shows an increase of 1,965 over last, the whole number being 36,991. This is a relatively greater increase than that formerly reported.

The most notable feature aside from the total annual production, is the increase in tonnage cut by machines. While the number of machines in use has increased by 47, the product has increased from

3,415,635 tons to 6,085,362, or 87½ per cent. The normal product of the machines was not fully represented last year, for the reason then assigned, that the suspension of 1897 was of longest duration at some of the largest machine mines. With all due allowance for this, the machine product has more than maintained the general ratio of increase throughout the State.

The reported number of fatal accidents during the year is 84, which is nine more than that recorded for last year. The number of fatal casualties, however, is relatively less when compared with the total tonnage. Last year the loss was one life for every 247,991 gross tons; this year the proportion is one to 278,982 gross tons. These figures indicate the hazardous character of the mining industry. The laws relating to mining, supplemented by the vigilance of the inspection corps, has materially reduced the number of accidents, which, without such precaution, would certainly have occurred. Beyond the general equipment of the mine, ventilation and the conditions of the haulage ways, the inspectors' jurisdiction does not extend. It is from falls of rock or coal at the working face that the major portion of accidents arise. Some are no doubt traceable to the carelessness of the individual workman, but most of them, it is fair to presume, are the result of secret dangers incident to the business, which can not be foreseen or guarded against. Losses sustained in battle are heralded the world over, and subscriptions frequently made for the support of the victim's widow and family. In the dark recesses of the coal mine the revelry of death goes constantly on, and practically unnoticed. Few there are indeed, who, while enjoying the light of their firesides, are ever disturbed by the thought that with the consumption of every quarter of a million tons of coal, there is burned the flesh and bones of some unfortunate man. This, too, in addition to the numerous accidents which have become almost a daily occurrence. The more salient features of the coal statistics for this year will be better understood by an examination and comparison of the tables here presented:

## CLASSIFICATION OF MINES.

TABLE I.—*Shipping and Local Mines, by Districts.*

DISTRICT.	TOTAL.			SHIPPING.			LOCAL.		
	Mines.	Men.	Tons.	Mines.	Men.	Tons.	Mines.	Men.	Tons.
First.....	84	7,498	3,535,316	37	7,125	3,349,173	47	373	186,143
Second.....	185	6,631	3,326,000	45	5,925	3,077,381	140	706	248,619
Third.....	211	1,799	729,132	23	1,178	582,795	188	621	146,337
Fourth.....	87	4,655	3,357,737	37	4,260	3,204,156	50	395	153,581
Fifth.....	87	6,401	4,810,626	51	6,163	4,753,508	36	238	57,118
Sixth.....	104	5,008	4,283,258	72	4,854	4,222,094	32	154	61,164
Seventh.....	131	4,999	3,392,376	57	4,763	3,342,249	74	236	50,127
The State...	889	36,991	23,434,445	323	34,307	22,531,356	566	2,684	903,089

Of the 889 mines in the State, 323 shipping mines produce 22,531,356 tons of the entire output. Notwithstanding there has been an increase during the year of 14 local mines, they report a reduced production of over 40,000 tons. An increase of six in the number of shipping mines compared with last year, return an increase of 4,575,795 tons. The product of the local mines is gradually disappearing as a factor in the industry. The percentages given in the the following table confirms this conclusion:

TABLE II.—*Percentages of Shipping and Local Mines, by Districts.*

DISTRICT.	SHIPPING.			LOCAL.		
	Mines.	Men.	Tons.	Mines.	Men.	Tons.
First.....	44.05	95.55	94.73	55.95	4.45	5.27
Second.....	24.32	89.35	92.53	75.68	10.65	7.47
Third.....	10.90	65.48	79.93	89.10	34.52	20.07
Fourth.....	42.53	91.51	95.43	57.47	8.49	4.57
Fifth.....	58.62	96.28	98.81	41.38	3.72	1.19
Sixth.....	69.23	96.92	98.57	30.77	3.07	1.43
Seventh.....	43.51	95.28	98.52	56.49	4.72	1.48
The State.....	36.33	92.74	96.15	63.67	7.26	3.85

It will be observed that the mines representing those of a local character, comprising 64 per cent of the whole, furnish but 4 per cent of the entire product, and give employment to but 7 per cent of the total employes. Of the entire number, the shipping mines, compris-



ing but 36 per cent, employ 93 per cent of the men, and produce 96 per cent of the annual output. The following table classifies the mines of the State according to their output :

TABLE III.—*Classification of Mines by Output and by Districts.*

DISTRICT.	MINES PRODUCING—											
	Under 1,000 tons.		1,000 and under 10,000 tons.		10,000 and under 50,000 tons.		50,000 and under 100,000 tons.		100,000 tons and over.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
First.....	25	11,774	30	86,270	9	237,998	7	548,678	13	2,650,596	84	3,535,316
Second .....	65	31,871	80	224,759	22	424,210	7	534,190	11	2,110,970	185	3,326,000
Third.....	151	50,508	45	110,926	11	232,008	3	187,772	1	147,918	211	729,132
Fourth.....	9	4,878	44	146,850	13	282,817	9	723,637	12	2,199,555	87	3,357,737
Fifth .....	20	9,814	18	72,563	10	212,119	18	1,339,936	21	3,176,194	87	4,510,626
Sixth.....	18	6,400	20	67,187	37	1,065,543	18	1,285,357	11	1,858,771	104	4,283,258
Seventh.....	58	22,337	24	82,393	21	422,422	15	999,354	13	1,865,870	131	3,392,376
The State.	346	137,582	261	790,948	123	2,877,117	77	5,618,924	82	14,009,874	889	23,434,445

Compared with a similar classification last year, the most notable distinction is presented in the group of mines producing 100,000 tons and over. The number in this class has increased from 49 reported in 1898, to 82 this year, and the production from 7,608,053 to 14,009,874 tons. This indicates an unparalleled increase of 67 per cent in the number and 84 per cent in the product, emphasizing the rapid concentration of capital, and incidentally, the enlargement of industrial plants. In the following table of percentages is shown the relation of each of these groups to the total number of mines and product of the State :

TABLE IV.—*Percentages of the total Number and Total Output of Specified Classes of Mines.*

MINES PRODUCING—	No.	Output.	PERCENTAGE OF—	
			No.	Output.
Less than 1,000 tons.....	346	137,582	38.92	0.58
One thousand and less than 10,000 tons.....	261	790,948	29.36	3.37
Ten thousand and less than 50,000 tons.....	123	2,877,117	13.84	12.28
Fifty thousand and less than 100,000 tons.....	77	5,618,924	8.66	23.98
One hundred thousand tons and over.....	82	14,009,874	9.22	59.79
Total.....	889	23,434,445	100.00	100.00

The following table indicates the number of mines in the State which have been found in each of these classes for a series of years :

TABLE V.—*Number of Mines in Specified Groups for a Series of Seventeen Years.*

YEAR.	NUMBER OF MINES PRODUCING—					Total mines.
	Under 1,000 tons.	1,000 and under 10,000 tons.	10,000 and under 50,000 tons.	50,000 and under 100,000 tons.	100,000 tons and over.	
1883.....	209	233	133	39	25	639
1884.....	262	273	148	38	20	741
1885.....	286	290	143	40	19	778
1886.....	316	280	135	44	14	789
1887.....	320	278	141	42	20	801
1888.....	327	272	151	47	25	822
1889.....	321	316	139	55	23	854
1890.....	398	301	155	54	28	936
1891.....	402	260	161	52	43	918
1892.....	332	239	151	65	52	839
1893.....	282	232	140	75	59	788
1894.....	312	252	161	61	50	836
1895.....	319	276	145	61	54	855
1896.....	330	280	128	63	61	862
1897.....	346	250	120	79	58	853
1898.....	351	244	151	86	49	881
1899.....	346	261	123	77	82	889
Averages.....	321	267	142.6	57.5	40	828
Percentages.....	38.77	32.24	17.22	6.94	4.83	100.00

In this division of mines according to the output, it will be noted that, as compared with last year, the increase is confined to the second and fifth groups, particularly the latter, which shows a material increase over that of any former year. Following is a list of fifty-six mines in the State producing more than 100,000 and less than 200,000 tons each:

*Mines from which more than 100,000 Tons of Coal and less than 200,000 Tons have been delivered during the year 1899.*

Rank.	Companies.	Location.	Tons.
1	Whitebreast Fuel Co. "B" .....	Ladd.....	195,904
2	Consolidated Coal Co. "Abbey" No. 3.....	Collinsville .....	188,415
3	Chicago, Wilmington and Vermilion Coal Co. No. 1..	Seatonville.....	188,682
4	Muddy Valley Mining and Manufacturing Co.....	Hallidayboro.....	172,381
5	Big Muddy Coal and Iron Co. No. 7 .....	Herrins.....	170,722
6	Coal Valley Mining Co. No. 2.....	Sherwood.....	167,089
7	Consolidated Coal Co. No. 7.....	Staunton .....	160,104
8	Catlin Coal Co. ....	Catlin.....	157,760
9	Consolidated Coal Co. "Heinz' Bluff.".....	Collinsville .....	154,294
10	Consolidated Coal Co. No. 10.....	Mt. Olive.....	150,934
11	Star Coal Co. No. 2.....	Streator.....	149,137
12	Big Muddy Coal and Iron Co. No. 5 .....	Murphysboro.....	148,744
13	Whitebreast Fuel Co. "C".....	Dunfermline. ....	147,918
14	LaSalle Co. Carbon Coal Co. No. 1.....	LaSalle. ....	147,210
15	Big Muddy Coal and Iron Co. No. 6.....	Murphysboro.....	146,346
16	LaSalle Co. Carbon Coal Co. "LaSalle.".....	LaSalle. ....	143,183
17	Odin Coal Co.....	Odin. ....	142,574
18	McLean Co. Coal Co. ....	Bloomington. ....	138,098
19	LaSalle Co. Carbon Coal Co. "Union.".....	LaSalle. ....	135,902
20	Penwell Coal Mining Co.....	Pana. ....	132,689
21	Western Coal and Coke Co. "Eden.".....	Sparta.....	132,245
22	Capital Coöperative Coal Co. No. 2.....	Springfield.....	131,752
23	Star Coal Co. No. 3.....	Carbon Hill.....	131,479
24	Starne Coal Co.....	Springfield.....	131,458
25	Big Muddy Coal and Iron Co. "Harrison".....	Murphysboro.....	127,854
26	Gardner and Wilmington Coal Co. "B".....	Clark City.....	127,322
27	Hillsboro Coal Co.....	Hillsboro.....	127,035
28	Sangamon Coal Co.....	Springfield.....	126,677
29	Alden Coal Co.....	Wanlock.....	125,664
30	Coffeen Coal and Coke Co.....	Coffeen.....	125,000
31	Marquette Coal Co.....	Marquette.....	124,629
32	Glenburn Coal Co.....	Glenburn.....	124,048
33	Horn Colliery Co.....	DuQuoin .....	123,829
34	Carterville Coal Co. "Bun." .....	Carterville .....	122,815
35	Oglesby Coal Co.....	Oglesby.....	122,543
36	Athens Mining Co. No. 2.....	Athens.....	121,593
37	Muren Coal and Ice Co.....	Belleville.....	120,000
38	Consolidated Coal Co.....	Missionfield.....	118,965

*List—Concluded.*

Rank.	Companies.	Location.	Tons.
39	Wabash Coal Co. No. 2 .....	Athens.....	117,069
40	Black Diamond Coal and Tile Co.....	Iles Junction.....	116,170
41	Consolidated Coal Co. "Gillespie.".....	Gillespie .....	113,907
42	Brookside Coal Co. No. 1.....	Grape Creek.....	112,958
43	Springfield Coal Mining and Tile Co.....	Springfield. ....	111,167
44	Ohio and Mississippi Valley Coal Co. No. 2.....	Marion.....	110,843
45	Illinois Central Coal and Salt Co. "St. John.".....	St. John.....	109,500
46	Newsam Bros. "Kingston.".....	Peoria.....	109,438
47	Springfield Iron Co.....	Ridgely.....	108,146
48	Wabash Coal Co .....	Dawson.....	107,631
49	Pittenger & Davis Mining and Mfg Co. "Big 4.".....	Centralia. ....	105,779
50	Chicago-Virden Coal Co.....	Auburn. ....	102,457
51	Chicago-Virden Coal Co. No. 1.....	Virden.....	101,422
52	Chicago and Minonk Coal Co.....	Minonk.....	101,000
53	Sorento Prospecting and Manufacturing Co.....	Sorento.....	100,955
54	Cantrall Coöperative Coal Co.....	Cantrall.....	100,916
55	DuQuoin Union Coal Co. "Browning.".....	DuQuoin.....	100,000
56	DuQuoin Union Coal Co. "Enterprise.".....	DuQuoin.....	100,000
	Total .....		7,331,752

The following list of twenty-five mines produced more than 200,000 tons during the year :

*Mines from which more than 200,000 Tons of Coal have been delivered during the year 1899.*

Rank.	Companies.	Location.	Depth of mine.	Thickness of seam.	Manner of working.	Tons.
1	Chicago, Wilmington and Ver. Coal Co. No. 1	Streator .....	96	8	P. R.	372,433
2	Spring Valley Coal Co. No. 1.....	Spring Valley....	345	3.6	L. W.	331,757
3	Chicago, Wilmington and Ver. Coal Co. No. 2	Streator .....	116	6	P. R.	329,069
4	Braceville Coal Co.....	Braceville .....	103	3.2	L. W.	316,353
5	Kelleyville Coal Co. No. 3.....	Westville.....	212	7	P. R.	303,089
6	St. Louis and Big Muddy Coal Co.....	Carterville .....	90	7	"	300,591
7	Madison Coal Co. No. 2 .....	Glen Carbon ....	110	6	"	293,559
8	Kelleyville Coal Co. No. 2 .....	Westville.....	200	7	"	288,035
9	Spring Valley Coal Co. No. 2.....	Spring Valley....	342	3.6	L. W.	284,892

*List—Concluded.*

Rank.	Companies.	Location.	Depth of mine.	Thickness of seam.	Manner of working.	Tons.
10	Consolidated Coal Co. No. 6.....	Staunton .....	322	5	P. R.	271,664
11	Madison Coal Co. No. 5.....	Mount Olive.....	435	5	"	268,077
12	Taylorville Coal Co.....	Taylorville .....	462	7.6	"	255,060
13	Spring Valley Coal Co. No. 3.....	Spring Valley....	481	3.6	L. W.	252,810
14	Westville Coal Co.....	Westville.....	210	7	P. R.	251,624
15	Himrod Coal Co. No. 1.....	Westville.....	90	8	"	250,440
16	Wilmington Coal Mining and Mfg Co.....	Diamond .....	105	3	L. W.	238,000
17	Big 4 Wilmington Coal Co.....	Coal City .....	90	3	"	230,232
18	Develin Coal Co. No. 1.....	Toluca. ....	512	2.8	"	229,705
19	Consolidated Coal Co. No. 8.....	Mount Olive.....	410	5	P. R.	225,419
20	Mt. Olive and Staunton Coal Co.....	Staunton.....	292	6	"	219,229
21	Madison Coal Co. No. 4.....	Glen Carbon.....	130	6	"	218,697
22	Himrod Coal Co. No. 1.....	Westville.....	200	7	"	215,876
23	Riverton Coal Co. No. 2.....	Riverton.....	232	5	"	208,569
24	Star Coal Co. 2.....	Carbon Hill.....	98	3	L. W.	207,733
25	Breese Coal Co.....	Breese.....	400	7.6	P. R.	203,998
	Total.....	.....	.....	.....	.....	6,566,851

Of the number here reported six produced over 300,000 tons. Last year only one mine in the State—the St. Louis & Big Muddy Coal Co., located at Carterville--returned a tonnage exceeding 300,000, and only six others whose output exceeded 200,000 tons each.

The reduction in this class of mines, compared with that reported in 1897, was due to the suspension. This year 25 mines report an output exceeding 200,000 tons.

Special interest attaches to the class of mines producing over 300,000 tons, not particularly on account of their number so much as the reduced time of operation caused by the observance of the eight-hour work-day. It is important in analyzing these returns, to consider the method of working, the depth of mine, and the thickness of the seam. The Chicago, Wilmington & Vermilion Coal Company's mine No. 1 stands at the head of the list, with a production of 372,433 tons. Following that is the Spring Valley Coal Company's mine No. 1, with an output of 331,757 tons. The widest differences as to depth and size of seam are here presented. The mine at Spring Valley is

nearly four times the depth of that at Streator, while the size of the seam is less by more than one-half.

This is by far the largest list of the kind ever reported. It conveys a strong suggestion of the great struggle for supremacy which is everywhere apparent, and defines the policy of economics as characterizing modern industrialism. It is gratifying to know that the adoption of the eight-hour work-day has not seriously interrupted the process of accomplishing the most within the shortest space of time.

The gains and losses in the number of mines in the several inspection districts during the year are shown in the following table :

TABLE VI.—*Gain and Loss in Number of Mines, by Districts.*

District.	Number of mines, 1898.	Number of new mines, 1899	Number of abandoned mines, 1899	Number of mines, 1899	Gain.	Loss.
First.....	86	11	13	84	.....	2
Second.....	184	25	24	185	1	.....
Third.....	217	53	59	211	.....	6
Fourth.....	94	2	9	87	.....	7
Fifth.....	79	10	2	87	8	.....
Sixth.....	98	13	7	104	6	.....
Seventh.....	123	15	7	131	8	.....
The State.....	881	129	121	889	23	15
Net gain.....					8	

The Third inspection district, which, in point of production, is the least important in the State, returns the greatest number of new and abandoned mines. Operations, as a rule, in that field are confined to local or drift mines. Comparatively little capital is required and many openings are made merely to supply the owner and his immediate neighbors with fuel for the season.

#### THE OUTPUT FOR THE YEAR.

The aggregate tonnage of the State, with the percentages of lump and other grades of coal, is given by districts in the following table :

TABLE VII.—*Output of the State, by Districts.*

DISTRICT.	Total output. Tons.	Tons of lump.	Tons of other grades.	PERCENTAGE OF—	
				Lump.	Other grades.
First.....	3,535,316	2,677,359	857,957	75.73	24.77
Second .....	3,326,000	2,669,631	656,369	80.27	19.73
Third.....	729,132	600,280	128,852	82.33	17.67
Fourth.....	3,357,737	2,404,385	953,352	71.9	28.1
Fifth.....	4,810,626	3,480,311	1,330,315	72.35	27.65
Sixth .....	4,283,258	3,294,077	989,181	76.91	23.09
Seventh.....	3,392,376	2,301,555	1,090,821	67.84	32.16
The State.....	23,434,445	17,427,598	6,006,847	74.37	25.63

Out of a total of 23,434,445 tons produced during the year ended June 30, 1899, 17,427,598 tons, or 74.37 per cent was lump coal, and the balance was coal of other grades. The Seventh district returns the smallest, and the third the largest percentage of lump coal. Aside from these the ratio for the State is substantially uniform. The First district shows the largest increase compared with the preceding year, while the Fifth district more than maintains its record in returning the greatest output.

In the table following the product of the districts and of the State for the present and preceding year is compared :

TABLE VIII.—*Output of 1898 and 1899 Compared, by Districts.*

District.	Output, 1898. Tons.	Output, 1899. Tons.	Gain.	Loss.
First.....	2,269,362	3,535,316	1,265,954	.....
Second.....	2,551,110	3,326,000	774,890	.....
Third.....	721,846	729,132	7,286	.....
Fourth .....	2,572,059	3,357,737	785,678	.....
Fifth .....	3,925,690	4,810,626	884,936	.....
Sixth.....	3,459,932	4,283,258	823,326	.....
Seventh.....	3,159,300	3,392,376	233,076	.....
The State.....	18,599,299	23,434,445	4,836,146	.....

The increase of nearly 5,000,000 tons over the preceding year is quite evenly distributed. For the first time in the history of the State, every district reports an increase nearly in proportion to its total output, excepting the first, where the increase amounts to over a million and a quarter tons. This general distribution of business would seem to indicate that, from a competitive standpoint, the several districts, so far as prices and labor conditions are concerned have now reached a basis of substantial uniformity.

A record of the total tons produced in the State for each of the years for which a report has been made by the bureau, is here presented.

TABLE IX.—*Output of the State for Eighteen Years.*

YEAR.	Total output. (Tons.)	Tons of lump.	Tons of other grades.	PERCENTAGE OF—	
				Lump.	Other grades.
1882.....	11,017,069	9,115,653	1,901,506	.....	.....
1883.....	12,123,456	10,030,991	2,092,465	.....	.....
1884.....	12,208,075	10,101,005	2,107,070	.....	.....
1885.....	11,834,459	9,791,874	2,402,585	.....	.....
1886.....	11,175,241	9,246,435	1,928,806	.....	.....
1887.....	12,423,066	10,278,890	2,144,176	.....	.....
1888.....	14,328,181	11,855,188	2,472,993	.....	.....
1889.....	14,017,298	11,597,963	2,419,335	.....	.....
1890.....	15,274,727	12,638,364	2,636,363	82.74	17.26
1891.....	15,660,698	12,960,224	2,700,474	82.76	17.24
1892.....	17,062,276	14,730,963	3,131,313	82.47	17.53
1893.....	19,949,564	16,112,899	3,836,655	80.77	19.23
1894.....	17,113,576	13,865,284	3,248,292	81.02	18.98
1895.....	17,735,864	14,045,962	3,689,902	79.25	20.75
1896.....	19,786,626	14,210,024	5,576,602	71.86	28.14
1897.....	20,072,758	14,672,241	5,400,517	73.10	26.90
1898.....	18,599,299	14,208,795	4,390,504	76.39	23.61
1899.....	23,434,445	17,427,598	6,006,847	74.37	25.63

Prior to the year 1891 the grades of coal were not separated, when this information was required and supplied in the reports of the inspectors for 1891, the ratio for the State was developed and applied to the product of the preceding nine years.



The quantity returned under the head of "other grades" has varied from 17 per cent in 1891, to 28 per cent in 1896. Last year it was 24 per cent, while this year shows a slight increase over that figure. Under the prevailing system of paying miners on the basis of gross weight, this fluctuation is not important, especially where it does not reduce the quantity of salable coal or increase the waste. Until quite recently the exactions of the ordinary market were of such a character as to necessitate the greatest care in the handling of coal, and at many points various sized screens were used in its preparation. Just what percentage of specially prepared coal is omitted or included under the miscellaneous designation of "other grades" is not apparent. It would seem from the above table that the adoption of the gross weight method has not, as some apprehended, resulted in an increased waste. In addition to the annual tonnage the following table indicates the number of men engaged in the industry for each of a series of years:

TABLE X.—*Output of the State for 18 Years, and the Mines and Men Producing it.*

Year.	Mines.	Men.	Tons.	Year.	Mines.	Men.	Tons.
1882.....	704	20,290	11,017,069	1892.....	839	33,632	17,662,276
1883.....	639	23,939	12,123,456	1893.....	788	35,390	19,949,564
1884.....	741	25,575	12,208,075	1894.....	836	38,477	17,113,576
1885.....	778	25,946	11,834,459	1895.....	874	38,630	17,735,864
1886.....	787	25,846	11,175,241	1896.....	901	37,057	19,786,626
1887.....	801	26,804	12,423,066	1897.....	853	33,788	20,072,758
1888.....	822	29,410	14,328,181	1898.....	881	35,026	18,599,299
1889.....	854	30,076	14,017,298	1899.....	889	36,991	23,434,445
1890.....	936	28,574	15,274,727	18 years.....			283,816,678
1891.....	918	32,951	15,660,698				

An inquiry concerning the agency employed in the transportation of coal in the mines developed the facts set out in the following table:

TABLE XI.—*Showing the Haulage of Coal in the Mines in the State, and the Number of Horses and Mules Employed, by Counties.*

## FIRST DISTRICT.

COUNTY.	BY ELECTRICITY		BY CABLE.		BY HORSE OR MULE.		BY HAND.		Number of horses and mules.
	No. of mines.	Tons.	No. of mines.	Tons.	No. of mines.	Tons.	No. of mines.	Tons.	
Grundy .....					9	1,255,787	13	24,545	209
Kankakee .....					1	127,322	1	1,696	42
*LaSalle .....	1	329,069			15	1,626,052	26	20,818	278
Livingston .....					4	90,663	11	26,585	30
Will.....					1	27,149	2	5,630	8
Total.....	1	329,069			30	3,126,973	53	79,274	567

\* Mules are used at the C., W. & V. Coal Co. No. 2 mine to deliver the coal to the parting, from thence it is hauled to the bottom by electric motor.

## SECOND DISTRICT.

COUNTY.	BY ELECTRICITY		BY CABLE.		BY HORSE OR MULE.		BY HAND.		Number of horses and mules.
	No. of mines.	Tons.	No. of mines.	Tons.	No. of mines.	Tons.	No. of mines.	Tons.	
Bureau .....					9	1,398,319	10	12,205	284
Henry .....					3	14,490	30	76,775	24
*Marshall.....			1	93,287	2	246,306	9	2,985	62
*Mercer.....			3	377,127	2	98,300	12	21,164	101
*Peoria .....			6	279,458	28	424,880	25	40,360	105
Rock Island.....					1	300	22	41,297	16
Stark .....							20	23,937	17
Woodford .....			1	101,000	1	73,750			36
Total.....			11	1,750,872	46	1,256,255	128	218,783	645

\* At ten mines in these counties the coal is hauled from the face to the parting by mules\* from thence to the shaft or tippie by cable.

Table XI.—Continued.

## THIRD DISTRICT.

COUNTY.	BY ELECTRICITY		BY CABLE.		BY HORSE OR MULE.		BY HAND.		Number of horses and mules.
	No. of mines.	Tons.	No. of mines.	Tons.	No. of mines.	Tons.	No. of mines.	Tons.	
Brown .....							15	2,630	.....
Fulton .....					26	562,488	52	38,598	153
Hancock .....							5	5,498	6
Knox.....							37	43,214	22
McDonough .....							50	51,494	11
Schuyler.....					3	4,212	8	6,920	3
Warren .....							15	14,080	3
Total.....					29	566,700	182	162,432	198

## FOURTH DISTRICT.

COUNTY.	BY ELECTRICITY		BY CABLE.		BY HORSE OR MULE.		BY HAND.		Number of horses and mules.
	No. of mines.	Tons.	No. of mines.	Tons.	No. of mines.	Tons.	No. of mines.	Tons.	
Cass .....							2	3,430	1
†Logan .....			1	99,962	2	86,019			33
Macon .....					3	197,048			34
†McLean .....			1	138,098	4	71,356			29
Menard .....					10	427,939			52
Tazewell.....					10	109,379	2	2,639	25
*Vermilion .....			2	237,006	45	1,863,296	1	1,200	252
Total.....			4	475,066	74	2,755,037	5	7,269	426

† Mules are used for gathering the coal from the working rooms.

\* Does not include 120,365 tons produced by four strip mines.

Table XI.—Continued.

## FIFTH DISTRICT.

COUNTY.	BY ELECTRICITY		BY CABLE.		BY HORSE OR MULE.		BY HAND.		Number of horses and mules.
	No. of mines.	Tons.	No. of mines.	Tons.	No. of mines.	Tons.	No. of mines.	Tons.	
Calhoun .....					1	4,118			4
*Christian .....			2	120,120	4	452,339			74
Greene .....							8	14,370	8
Jersey .....							6	4,050	3
*Macoupin .....	1	150,934	1	271,664	12	1,220,656	7	3,420	231
Montgomery.....					5	349,911	1	4,290	40
Morgan .....							2	4,800	2
*Sangamon .....			1	131,752	24	1,950,620	1	1,200	246
Scott .....							4	20,617	.....
Shelby .....					1	98,637	6	7,128	13
Total.....	1	150,934	4	523,536	47	4,076,281	35	59,875	621

\* At two mines in Christian county, two in Macoupin and one in Sangamon mules are used to haul the coal from the working rooms to places convenient to be hauled by cable or electric motor to the bottom of the shafts.

## SIXTH DISTRICT.

COUNTY.	BY ELECTRICITY		BY CABLE.		BY HORSE OR MULE.		BY HAND.		Number of horses and mules.
	No. of mines.	Tons.	No. of mines.	Tons.	No. of mines.	Tons.	No. of mines.	Tons.	
Bond .....					1	100,955			17
Clinton .....					4	433,378	2	1,357	34
Madison .....					13	1,392,072	13	11,905	140
Marion .....	1	111,271			5	382,846			117
St. Clair .....					65	1,849,474			204
Total.....	1	111,271			88	4,158,725	15	13,262	512

Table XI.—Concluded.

SEVENTH DISTRICT.

COUNTY.	BY ELECTRICITY		BY CABLE.		BY HORSE OR MULE.		BY HAND.		Number of horses and mules.
	No. of mines.	Tons.	No. of mines.	Tons.	No. of mines.	Tons.	No. of mines.	Tons.	
Gallatin .....							9	16,754	14
Hamilton .....							2	640	1
Jackson .....					18	870,763	9	4,948	146
Jefferson .....					2	33,207			8
Johnson .....					5	4,956			7
Perry .....					20	874,832	5	4,590	153
Randolph.....					13	374,323			41
Saline .....					12	91,588	6	2,560	23
Washington.....					4	34,460			8
Williamson.....					19	1,077,215	7	1,540	150
Total.....					93	3,361,344	35	31,032	557

Recapitulation of Haulage at Mines and Number of Horses and Mules Employed, by Districts.

DISTRICTS.	BY ELECTRICITY		BY CABLE.		BY HORSE OR MULE.		BY HAND.		Number of horses and mules.
	No. of mines	Tons.	No. of mines.	Tons.	No. of mines.	Tons.	No. of mines.	Tons.	
First.....	1	329,069			30	3,126,973	53	79,211	567
Second.....			11	850,872	46	2,256,345	128	218,783	645
Third.....					29	566,700	182	162,432	198
*Fourth.....			4	475,066	74	2,755,037	5	7,269	426
Fifth.....	1	150,934	4	523,536	47	4,076,281	35	59,875	621
Sixth.....	1	111,271			88	4,269,996	15	13,262	512
Seventh.....					93	4,158,725	38	31,032	557
The State.....	3	591,274	19	1,849,474	407	20,301,405	456	571,927	3,526

\* Four strip mines in Vermilion county, 120,365 tons, not included.

From the above figures it will be noted that of the total product, but 591,274 tons were moved by electric appliances. These were limited to LaSalle county in the First district, Macoupin county in the fifth, and Marion county in the Sixth. The amount hauled by the cable method was 1,849,474. Over 20,000,000 tons were hauled by horses and mules. The necessity for greater speed and economy in the transportation of coal will, to some extent, displace the old method of haulage. It cannot be entirely removed, however, the figures indicate that the services of the mule are as necessary in the mine as they used to be in the army.

#### OUTPUT BY COUNTIES.

While the entire coal production of the State comes from 52 counties, the principal portion is obtained from a fraction of this number. Selecting the counties which produced over half a million tons, in proportion to their out put for the two years, 1898-1899, affords the following table:

TABLE XII.—*Relative Rank of the Principal Coal Producing Counties, 1899 and 1898.*

Rank.	Counties—1899.	Tons.	Rank.	Counties—1898.	Tons.
1	Vermilion .....	2,221,867	1	Sangamon.....	1,763,863
2	Sangamon.....	2,083,572	2	St. Clair.....	1,600,752
3	LaSalle.....	1,975,939	3	Vermilion .....	1,520,699
4	St. Clair .....	1,849,474	4	Macoupin.....	1,264,926
5	Macoupin .....	1,646,674	5	LaSalle.....	1,165,490
6	Bureau.....	1,410,524	6	Williamson.....	915,108
7	Madison .....	1,403,977	7	Jackson.....	911,194
8	Grundy.....	1,280,332	8	Bureau.....	865,892
9	Williamson.....	1,078,755	9	Perry.....	845,329
10	Perry.....	879,422	10	Grundy.....	796,249
11	Jackson .....	875,711	11	Marion.....	714,513
12	Peoria.....	744,698	12	Peoria.....	640,193
13	Fulton.....	601,084	13	Madison .....	630,769
14	Christian.....	572,459	14	Fulton .....	563,397
	Total .....	18,624,488		Total.....	14,198,374

The general increase in production is observable in this table, from the manner in which it affects the number and rank of counties. Nine counties report over 1,000,000 tons, and two of them over 2,000,000 tons. Last year but five counties in the State produced over 1,000,000 tons. Vermilion county in the Fourth district leads, displacing Sangamon, while LaSalle county, in the First district, has gone from fifth to third rank. Fourteen counties in the State produced 18,624,488 tons, or 79 per cent of the entire output of the 52 counties. The following table presents in alphabetical order a list of the coal counties of the State, with the number of mines, men and tons reported for each:

TABLE XIII.—*Output of the State, by Counties.*

County.	Dist.	Mines.	Men.	Tons.	County.	Dist.	Mines.	Men.	Tons.
Bond.....	6	1	181	100,955	Marion.....	6	6	927	494,117
Brown.....	3	15	30	2,630	Marshall.....	2	12	681	342,578
Bureau.....	2	19	3,071	1,410,524	McDonough.....	3	50	281	51,494
Calhoun.....	5	1	20	4,118	McLean.....	4	5	386	209,454
Cass.....	4	2	19	3,430	Menard.....	4	10	570	427,939
Christian.....	5	6	879	572,459	Mercer.....	2	17	790	496,591
Clinton.....	6	6	482	434,735	Montgomery....	5	6	511	354,201
Fulton.....	3	78	1,200	601,084	Morgan.....	5	2	13	4,800
Gallatin.....	7	9	73	16,754	Peoria.....	2	59	1,133	744,698
Greene.....	5	8	50	14,370	Perry.....	7	25	1,335	879,422
Grundy.....	1	22	3,298	1,280,332	Randolph.....	7	13	486	374,323
Hamilton.....	7	2	11	640	Rock Island....	2	23	149	41,597
Hancock.....	3	5	26	5,498	Saline.....	7	18	173	94,148
Henry.....	2	33	283	91,265	Sangamon.....	5	26	2,507	2,083,572
Jackson.....	7	27	1,295	575,711	Schuyler.....	3	11	43	11,132
Jefferson.....	7	2	85	33,207	Scott.....	5	4	53	20,617
Jersey.....	5	6	20	4,050	Shelby.....	5	7	173	105,765
Johnson.....	7	5	25	4,956	Stark.....	2	20	82	23,997
Kaukaee.....	1	2	210	129,018	St. Clair.....	6	65	2,125	1,849,474
Knox.....	3	37	167	43,214	Tazewell.....	4	12	214	112,018
LaSalle.....	1	42	3,566	1,975,939	Vermilion.....	4	52	2,824	2,221,867
Livingston.....	1	15	314	117,248	Warren.....	3	15	52	14,080
Logan.....	4	3	261	185,981	Washington....	7	4	87	34,460
Macon.....	4	3	378	197,048	Will.....	1	3	100	32,777
Maconpin.....	5	21	2,175	1,646,674	Williamson....	7	26	1,427	1,078,755
Madison.....	6	26	1,295	1,403,977	Woodford.....	2	2	442	174,750

LaSalle county represents the greatest number of employés; 3,566 men are employed in 42 mines. The county employing the greatest number of men in proportion to the number of mines is Bureau in the Second district, nineteen mines furnish employment for 3,071 men. The next in this class is Grundy, in the First District, whose 22 mines give employment to 3,298 men.

#### DISPOSITION OF OUTPUT.

For the first time, in the report for last year, statistics were collected relative to the disposition of the output, representing the number of tons shipped, tons sold to local trade, and tons consumed and wasted at the plant. It has been deemed advisable to continue this record, and the following table indicates the manner in which this year's product was disposed of.

TABLE XIV.—*Disposition of Output, by Districts.*

District.	Total tons.	Tons shipped.	Tons sold to local trade.	Tons consumed (and wasted) at the plant.
First.....	3,535,316	2,999,604	438,152	97,560
Second.....	3,326,000	2,877,142	352,594	96,264
Third.....	729,132	561,664	149,971	17,497
Fourth.....	3,357,737	2,746,842	504,031	106,864
Fifth.....	4,810,626	4,095,235	439,937	275,454
Sixth.....	4,283,258	3,673,703	282,887	326,668
Seventh.....	3,392,376	3,064,957	153,468	173,951
The State.....	23,434,445	20,019,147	2,321,040	1,094,258

Compared with the preceding year the increase in the amount sold to local trade is but 171,232 tons, while the amount shipped has increased 4,422,259 tons, with an increase of 241,655 tons consumed and wasted at the plant, an amount relatively less than last year, when the increased production is considered. In the table of percentages given below, these facts are more distinctly set forth.



TABLE XV.—*Percentages of Disposition, by Districts.*

District.	Tons shipped.	Tons sold to local trade.	Tons consumed (and wasted) at the plant.
First.....	84.85	12.39	2.76
Second.....	86.50	10.60	2.90
Third.....	77.03	20.57	2.40
Fourth.....	81.81	15.01	3.18
Fifth.....	85.12	9.15	5.73
Sixth.....	85.77	6.60	7.63
Seventh.....	90.25	4.52	5.13
The State.....	85.42	9.90	4.68

According to this, 85 per cent of all coal is delivered on track for shipment, 10 per cent is disposed of at the mine, and 5 per cent consumed and wasted at the mine. The quantity reported in the last column has not, and possibly can not be separated, hence there is no means of determining what per cent of it is utilized and what represents loss. The per cent of absolute waste is exceedingly small, and illustrates the care exercised in the management of the industry. The table following shows the disposition of the product by counties :

TABLE XVI.—*Disposition of Output, by Counties.*

## FIRST DISTRICT.

County.	Total tons.	Tons shipped.	Tons sold to local trade.	Tons consumed (and wasted) at the plant.
Grundy.....	1,280,332	1,200,113	49,403	30,816
Kankakee.....	129,018	118,888	5,748	4,382
LaSalle.....	1,975,939	1,606,742	315,522	53,675
Livingston.....	117,248	52,812	58,121	6,315
Will.....	32,779	21,049	9,358	2,372
The district.....	3,535,316	2,999,604	438,152	97,560
Percentages.....	100.00	84.85	12.39	2.76

Table XVI.—Continued.

## SECOND DISTRICT.

County.	Total tons.	Tons shipped.	Tons sold to local trade.	Tons consumed (and wasted) at the plant.
Bureau.....	1,410,524	1,324,664	45,931	39,929
Henry.....	91,265	28,473	59,380	3,412
Marshall.....	342,578	317,060	18,242	7,276
Mercer.....	496,591	452,515	28,453	15,623
Peoria.....	744,698	606,047	120,552	18,099
Rock Island.....	41,597	2,633	37,799	1,165
Stark.....	23,997	.....	23,137	860
Woodford.....	174,750	145,750	19,100	9,900
The district.....	3,326,000	2,877,142	352,594	96,264
Percentages.....	100.00	86.50	10.60	2.90

## THIRD DISTRICT.

County.	Total tons.	Tons shipped.	Tons sold to local trade.	Tons consumed (and wasted) at the plant.
Brown.....	2,630	.....	2,630	.....
Fulton.....	601,084	523,256	62,871	14,957
Hancock.....	5,498	4,338	1,160	.....
Knox.....	43,214	.....	42,354	860
McDonough.....	51,494	33,120	17,174	1,200
Schuyler.....	11,132	950	10,002	180
Warren.....	14,080	.....	13,780	360
The district.....	729,132	561,664	149,971	17,457
Percentages.....	100.00	77.03	20.57	2.40

Table XVI.—Continued.

## FOURTH DISTRICT.

County.	Total tons.	Tons shipped.	Tons sold to local trade.	Tons consumed and wasted at the plant.
Cass.....	3,430		3,130	300
Logan.....	185,981	141,568	33,215	11,198
Macon.....	197,048	65,327	126,617	5,104
McLean.....	209,454	77,169	117,094	15,191
Menard.....	427,339	370,750	37,273	19,916
Tazewell.....	102,018	39,305	69,827	2,886
Vermilion.....	2,221,867	2,052,723	116,875	52,269
The district.....	3,357,737	2,746,842	504,031	106,864
Percentages.....	100.00	81.81	15.01	3.18

## FIFTH DISTRICT.

County.	Total tons.	Tons shipped.	Tons sold to local trade.	Tons consumed (and wasted) at the plant.
Calhoun.....	4,118		4,118	
Christian.....	572,459	483,760	50,370	38,329
Greene.....	14,370		14,370	
Jersey.....	4,050		4,050	
Macoupin.....	1,646,674	1,413,611	74,994	158,069
Montgomery.....	354,201	298,131	42,564	13,506
Morgan.....	4,800		4,800	
Sangamon.....	2,083,572	1,794,636	227,698	61,238
Scott.....	20,617	16,590	3,527	500
Shelby.....	105,765	88,507	13,446	3,812
The district.....	4,810,626	4,095,235	439,937	275,454
Percentages.....	100.00	85.12	9.15	5.73

Table XVI.—Concluded.

## SIXTH DISTRICT.

County.	Total tons.	Tons shipped.	Tons sold to local trade.	Tons consumed (and wasted) at the plant.
Bond.....	100,955	79,796	9,878	11,281
Clinton.....	434,735	380,700	25,437	28,598
Madison.....	1,403,977	1,165,977	73,817	164,183
Marion.....	494,117	448,753	27,324	18,040
St. Clair.....	1,849,474	1,598,477	146,431	104,566
The district.....	4,283,258	3,673,703	282,887	326,668
Percentages.....	100.00	85.77	6.60	7.63

## SEVENTH DISTRICT.

County.	Total tons.	Tons shipped.	Tons sold to local trade.	Tons consumed (and wasted) at the plant.
Gallatin.....	16,754	10,021	6,533	200
Hamilton.....	640	.....	640	.....
Jackson.....	875,711	783,258	32,825	59,628
Jefferson.....	33,207	22,407	8,400	2,400
Johnson.....	4,956	3,000	1,956	.....
Perry.....	879,422	801,694	33,764	43,964
Randolph.....	374,323	341,268	23,944	9,111
Saline.....	94,148	81,103	10,205	2,840
Washington.....	34,460	19,000	10,258	5,202
Williamson.....	1,078,755	1,003,206	24,943	50,606
The district.....	3,392,376	3,064,957	153,468	173,951
Percentages.....	100.00	90.35	4.52	5.13

Following is a recapitulation of totals of the foregoing tables:

TABLE XVII.—*Recapitulation of Disposition of Total Output of Shipping Mines, by Districts.*

District.	Total tons.	Tons shipping mines.	Tons shipped.	Tons to local trade.	Tons consumed (and wasted) at the plant.
First .....	3,535,316	3,349,173	2,999,604	253,509	96,060
Second .....	3,326,000	3,077,381	2,877,142	111,166	89,073
Third.....	729,132	582,795	561,664	6,304	14,827
Fourth .....	3,357,737	3,204,156	2,746,842	353,916	163,398
Fifth .....	4,810,626	4,753,508	4,095,235	383,409	271,864
Sixth .....	4,283,258	4,222,094	3,673,703	223,351	325,040
Seventh.....	3,392,376	3,342,249	3,064,957	104,305	172,987
The State .....	23,434,445	22,531,356	20,019,147	1,435,960	1,076,249

As the shipping mines contribute 96 per cent of the output, the disposition of their product is shown in the following table:

TABLE XVIII.—*Disposition of the Output of Shipping Mines only by Districts.*

DISTRICT.	Total output of shipping mines.	PERCENTAGE OF—		
		Tons shipped.	Tons sold to local trade.	Tons consumed (and wasted) at the plant.
First .....	3,349,173	89.56	7.57	2.87
Second .....	3,077,381	93.19	3.61	2.90
Third .....	582,795	96.38	1.08	2.54
Fourth .....	3,204,156	85.73	11.05	3.22
Fifth .....	4,753,508	86.15	8.07	5.78
Sixth.....	4,222,094	87.01	5.29	7.70
Seventh.....	3,342,249	91.70	3.12	5.18
The State.....	22,531,356	20,019,147	1,435,960	1,076,249
Percentages .....	100.00	88.85	6.37	4.78

## DISTRIBUTION OF COAL TO RAILROADS.

Following is a statement showing the number of tons of coal transported by the railroads of this State, and the number of coal producing counties through which they run:

TABLE XIX.—*Railroads which have hauled the Coal Output of the State, and the tonnage by Counties, contributed to each.*

Railroads and Counties.	Tons received by each road.	Total tons received.
<b>Illinois Central—</b>		
Williamson .....	705,102	
Perry .....	671,099	
Jackson .....	661,669	
St. Clair .....	463,874	
Sangamon .....	463,281	
LaSalle .....	435,542	
Marion .....	432,224	
Christian .....	228,223	
Shelby .....	88,507	
Marshall .....	83,524	
Randolph .....	73,662	
Logan .....	70,783	
Woodford .....	54,500	
Livingston .....	35,760	
Kankakee .....	27,014	
McLean .....	25,990	
Washington .....	8,000	
Macon .....	6,025	
		4,534,779
<b>Chicago &amp; Eastern Illinois—</b>		
Vermilion .....	1,691,742	
Williamson .....	298,104	
Jefferson .....	11,203	
		2,001,049
<b>Chicago, Burlington &amp; Quincy—</b>		
LaSalle .....	762,657	
Bureau .....	362,115	
Fulton .....	328,724	
Mercer .....	214,531	
Peoria .....	115,817	
McDonough .....	33,120	
Henry .....	17,303	
Scott .....	16,590	
Hancock .....	4,338	
Schuyler .....	950	
Livingston .....	61	
		1,856,206
<b>Wabash—</b>		
Macoupin .....	595,703	
Sangamon .....	579,102	
Christian .....	221,000	
Vermilion .....	187,132	
Macon .....	35,201	
Madison .....	32,330	
Montgomery .....	31,216	
Kankakee .....	30,471	
Livingston .....	533	
LaSalle .....	400	
		1,713,088
<b>Elgin, Joliet &amp; Eastern—</b>		
Grundy .....	1,033,916	
		1,033,916
<b>Chicago &amp; Alton—</b>		
Sangamon .....	356,240	
Macoupin .....	302,856	
Menard .....	152,729	
Grundy .....	101,481	
Logan .....	37,736	
LaSalle .....	33,504	
Will .....	21,049	
McLean .....	17,060	
Livingston .....	49	
		1,022,704

Table XIX.—Continued.

Railroads and Counties.	Tons received by each road.	Total tons received.
Chicago & Northwestern—		
Bureau .....	830,805	830,805
St. Louis, Peoria & Northern—		
Madison .....	440,404	
Macoupin .....	252,294	
Sangamon .....	17,624	710,322
Baltimore & Ohio Southwestern—		
Clinton .....	380,700	
St. Clair .....	207,696	
Sangamon .....	45,703	
Christian .....	15,988	
Marion .....	7,339	657,426
Chicago, Peoria & St. Louis—		
Madison .....	238,711	
Menard .....	218,021	
Sangamon .....	163,972	620,706
Cleveland, Cincinnati, Chicago & St. Louis—		
Vermilion .....	173,849	
Macoupin .....	155,617	
Montgomery .....	142,111	
Saline .....	81,103	
Christian .....	18,549	
McLean .....	17,060	
Johnson .....	3,060	
LaSalle .....	1,711	
Grundy .....	1,599	504,599
Louisville, Evansville & St. Louis—		
St. Clair .....	530,209	
Marion .....	7,180	537,389
Atchison, Topeka & Santa Fé—		
Marshall .....	191,700	
LaSalle .....	160,870	
Woodford .....	91,250	
Grundy .....	63,117	
Livingston .....	8,072	515,009
Terre Haute & Indianapolis—		
Madison .....	442,547	
Macon .....	6,025	448,572
Louisville & Nashville—		
St. Clair .....	387,861	
Jefferson .....	11,204	
Gallatin .....	10,021	
Washington .....	7,800	416,886
Mobile & Ohio—		
Randolph .....	262,729	
Jackson .....	121,589	
St. Clair .....	8,837	393,155
Chicago, Rock Island & Pacific—		
LaSalle .....	208,954	
Bureau .....	131,744	
Marshall .....	9,541	350,239
Toledo, Peoria & Western—		
Peoria .....	156,616	
Fulton .....	77,640	
Livingston .....	8,337	
Tazewell .....	1,000	243,593
Rock Island & Peoria—		
Mercer .....	237,954	
Rock Island .....	2,333	240,317

Table XIX.—Concluded.

Railroads and Counties.	Tons received by each road.	Total tons received.
Peoria & Pekin Union—		
Peoria .....	207,265	
Tazewell .....	28,705	235,970
Iowa Central—		
Peoria .....	122,349	
Fulton .....	90,392	212,741
St. Louis, Chicago & St. Paul—		
Sangamon .....	168,560	168,560
Toledo, St. Louis & Kansas City—		
Montgomery .....	117,000	
Bond .....	37,778	
Madison .....	11,985	166,763
Wabash, Chester & Western—		
Perry .....	130,595	
Randolph .....	4,877	135,472
Jacksonville & Southeastern—		
Macoupin .....	81,004	81,004
Jacksonville & St. Louis—		
Bond .....	42,018	
Macoupin .....	25,017	
Montgomery .....	7,804	
Marion .....	1,585	76,424
Indiana, Illinois & Iowa—		
Kankakee .....	61,403	
LaSalle .....	2,000	63,403
Peoria, Decatur & Evansville—		
Logan .....	33,049	33,049
Toluca & Eastern—		
Marshall .....	32,295	32,295
Lake Erie & Western—		
McLean .....	17,059	
Tazewell .....	9,600	26,659
Fulton County Narrow Gauge—		
Fulton .....	26,500	26,500
Indiana, Decatur & Western—		
Macon .....	18,076	18,076
Centralia & Chester—		
Washington .....	3,200	
Marion .....	425	3,625
Litchfield, Carrollton & Western—		
Macoupin .....	1,120	1,120
Pawnee—		
Sangamon .....	152	152
Total tons shipped by 35 railroads .....		20,002,573
SHIPPED BY WATER.		
Rock river, Henry county .....	11,170	
Illinois river, Peoria county .....	4,000	
Illinois and Michigan canal, LaSalle county .....	1,104	
Mississippi river, Rock Island county .....	300	
Total shipped .....		16,574
		20,019,147



This information was collected for the first time in the Coal Report for 1898, and is continued here. There is but little change from last year in the order of these carriers, except the increase incident to the enlarged production, and in this respect the principal coal roads have shared in nearly equal proportions. The first six roads carried 12,161,742 tons, more than half of all the product shipped. Of these the Illinois Central, extending through eighteen of the principal coal counties, conveyed over four and a half million tons. The tonnage contributed by each county to the different railroads will be found in the table given below, followed by a statement of the names of railroads, number of counties and tons transported :

TABLE XX.—Counties which have produced the Commercial Coal of the State and the tonnage delivered to the several Railroads in each.

Counties and Railroads.	Tons delivered to each railroad.	Total tons shipped.
<b>Vermilion—</b>		
Chicago & Eastern Illinois .....	1,691,742	
Wabash .....	187,132	
Cleveland, Cincinnati, Chicago & St. Louis .....	173,849	
		2,052,723
<b>Sangamon—</b>		
Wabash .....	579,102	
Illinois Central .....	463,281	
Chicago & Alton .....	356,240	
St. Louis, Chicago & St. Paul .....	168,560	
Chicago, Peoria & St. Louis .....	163,974	
Baltimore & Ohio Southwestern .....	45,703	
St. Louis, Peoria & Northern .....	17,624	
Pawnee .....	152	
		1,794,636
<b>LaSalle—</b>		
Chicago, Burlington & Quincy .....	762,657	
Illinois Central .....	435,542	
Chicago, Rock Island & Pacific .....	208,954	
Atchison, Topeka & Santa Fé .....	160,870	
Chicago & Alton .....	33,504	
Indiana, Illinois & Iowa .....	2,000	
Cleveland, Cincinnati, Chicago & St. Louis .....	1,711	
Illinois & Michigan Canal .....	1,104	
Wabash .....	400	
		1,606,742
<b>St. Clair—</b>		
Louisville, Evansville & St. Louis .....	530,209	
Illinois Central .....	463,874	
Louisville & Nashville .....	387,861	
Baltimore & Ohio Southwestern .....	207,696	
Mobile & Ohio .....	8,837	
		1,598,497
<b>Macoupin—</b>		
Wabash .....	595,703	
Chicago & Alton .....	302,856	
St. Louis, Peoria & Northern .....	252,294	
Cleveland, Chicago, Cincinnati & St. Louis .....	155,617	
Jacksonville Southeastern .....	81,004	
Jacksonville & St. Louis .....	25,017	
Litchfield, Carrollton & Western .....	1,120	
		1,413,611
<b>Bureau—</b>		
Chicago & Northwestern .....	830,805	
Chicago, Burlington & Quincy .....	362,115	
Chicago, Rock Island & Pacific .....	131,744	
		1,324,664

Table XX.—Continued.

Counties and Railroads.	Tons delivered to each railroad.	Total tons shipped.
<b>Grundy—</b>		
Elgin, Joliet & Eastern .....	1,033,916	
Chicago & Alton.....	101,481	
Achison, Topeka & Santa Fé .....	63,117	
Cleveland, Cincinnati, Chicago & St. Louis.....	1,599	1,200,113
<b>Madison—</b>		
Terre Haute & Indianapolis.....	442,547	
St. Louis, Peoria & Northern.....	440,404	
Chicago, Peoria & St. Louis .....	238,711	
Wabash .....	32,330	
Toledo, St. Louis & Kansas City.....	11,985	1,165,977
<b>Williamson—</b>		
Illinois Central.....	705,102	
Chicago & Eastern Illinois .....	298,104	1,003,206
<b>Perry—</b>		
Illinois Central .....	671,099	
Wabash, Chester & Western .....	130,595	801,694
<b>Jackson—</b>		
Illinois Central .....	661,669	
Mobile & Ohio.....	121,589	783,258
<b>Peoria—</b>		
Peoria & Pekin Union.....	207,265	
Toledo, Peoria & Western.....	156,616	
Iowa Central .....	122,349	
Chicago, Burlington & Quincy.....	115,817	
Illinois River .....	4,000	606,917
<b>Fulton—</b>		
Chicago, Burlington & Quincy .....	328,724	
Iowa Central.....	96,392	
Toledo, Peoria & Western .....	77,640	
Fulton County Narrow Gauge.....	26,500	523,256
<b>Christian—</b>		
Illinois Central .....	228,223	
Wabash .....	221,000	
Cleveland, Cincinnati, Chicago & St. Louis.....	18,549	
Baltimore & Ohio Southwestern.....	15,988	483,760
<b>Mercer—</b>		
Rock Island & Peoria .....	237,984	
Chicago, Burlington & Quincy.....	214,531	452,515
<b>Marion—</b>		
Illinois Central .....	432,224	
Baltimore & Ohio Southwestern .....	7,339	
Louisville, Evansville & St. Louis .....	7,180	
Jacksonville & St. Louis .....	1,585	
Centralia & Chester.....	425	448,753
<b>Cinton—</b>		
Baltimore & Ohio Southwestern .....	380,700	380,700
<b>Menard—</b>		
Chicago, Peoria & St. Louis .....	218,021	
Chicago & Alton.....	152,729	370,750
<b>Randolph—</b>		
Mobile & Ohio.....	262,729	
Illinois Central .....	73,662	
Wabash, Chester & Western .....	4,877	341,268
<b>Marshall—</b>		
Achison, Topeka & Santa Fé.....	191,700	
Illinois Central .....	83,524	
Toluca & Eastern .....	32,295	
Chicago, Rock Island & Pacific.....	9,541	317,060

Table XX.—Continued.

Counties and Railroads.	Tons delivered to each railroad.	Total tons shipped.
<b>Montgomery—</b>		
Cleveland, Cincinnati, Chicago & St. Louis.....	142, 111	
Toledo, St. Louis & Kansas City.....	117, 000	
Wabash.....	31, 216	
Jacksonville & St. Louis.....	7, 801	
<b>Woodford—</b>		259, 131
Atchison, Topeka & Santa Fé.....	91, 250	
Illinois Central.....	54, 500	
<b>Logan—</b>		145, 750
Illinois Central.....		
Chicago & Alton.....	70, 785	
Peoria, Decatur & Evansville.....	37, 736	
	33, 049	
<b>Kankakee—</b>		141, 568
Indiana, Illinois & Iowa.....		
Wabash.....	61, 403	
Illinois Central.....	30, 471	
	27, 014	
<b>Shelby—</b>		118, 888
Illinois Central.....		
	88, 507	
<b>Saline—</b>		88, 507
Cleveland, Cincinnati, Chicago & St. Louis.....		
	81, 103	
<b>Bond—</b>		79, 796
Jacksonville & St. Louis.....	42, 018	
Toledo, St. Louis & Kansas City.....	37, 778	
<b>McLean—</b>		77, 169
Illinois Central.....	25, 990	
Chicago & Alton.....	17, 060	
Cleveland, Cincinnati, Chicago & St. Louis.....	17, 060	
Lake Erie & Western.....	17, 059	
<b>Macon—</b>		65, 327
Wabash.....	35, 201	
Indiana, Decatur & Western.....	18, 076	
Illinois Central.....	6, 025	
Terre Haute & Indianapolis.....	6, 025	
<b>Livingston—</b>		52, 512
Illinois Central.....	35, 760	
Toledo, Peoria & Western.....	8, 337	
Atchison, Topeka & Santa Fé.....	8, 072	
Wabash.....	533	
Chicago, Burlington & Quincy.....	61	
Chicago & Alton.....	49	
<b>Tazewell—</b>		39, 305
Peoria & Pekin Union.....	28, 705	
Lake Erie & Western.....	9, 600	
Toledo, Peoria & Western.....	1, 000	
<b>McDonough—</b>		33, 120
Chicago, Burlington & Quincy.....	33, 120	
<b>Henry—</b>		28, 473
Chicago, Burlington & Quincy.....	17, 303	
Rock River.....	11, 170	
<b>Jefferson—</b>		22, 407
Louisville & Nashville.....	11, 204	
Chicago & Eastern Illinois.....	11, 203	
<b>Will—</b>		21, 049
Chicago & Alton.....	21, 049	
<b>Washington—</b>		19, 000
Illinois Central.....	8, 000	
Louisville & Nashville.....	7, 800	
Centralia & Chester.....	3, 200	
<b>Scott—</b>		16, 590
Chicago, Burlington & Quincy.....	16, 590	

Table XX.—Concluded.

Counties and Railroads.	Tons delivered to each railroad.	Total tons shipped.
Gallatin— Louisville & Nashville.....	10,021	10,021
Hancock— Chicago, Burlington & Quincy.....	4,338	4,338
Johnson— Cleveland, Cincinnati, Chicago & St. Louis.....	3,000	3,000
Rock Island— Rock Island & Peoria.....	2,333	2,633
Mississippi River.....	300	
Schuyler— Chicago, Burlington & Quincy.....	950	950
The State—42 counties.....		20,019,147

*Illinois Coal delivered to Illinois Railroads—1899. (On Cars for Transportation and to Locomotives for Consumption.)*

Railroads.	Number of counties.	Tons.
1 Illinois Central.....	18	4,534,779
2 Chicago & Eastern Illinois.....	3	2,001,049
3 Chicago, Burlington & Quincy.....	11	1,856,206
4 Wabash.....	10	1,713,088
5 Elgin, Joliet & Eastern.....	1	1,033,916
6 Chicago & Alton.....	9	1,022,704
7 Chicago & Northwestern.....	1	830,805
8 St. Louis, Peoria & Northern.....	3	710,322
9 Baltimore & Ohio Southwestern.....	5	657,426
10 Chicago, Peoria & St. Louis.....	3	620,706
11 Cleveland, Cincinnati, Chicago & St. Louis.....	9	594,599
12 Louisville, Evansville & St. Louis.....	2	587,389
13 Atchison, Topeka & Santa Fé.....	5	515,009
14 Terre Haute & Indianapolis.....	2	448,572
15 Louisville & Nashville.....	4	416,886
16 Mobile & Ohio.....	3	393,155
17 Chicago, Rock Island & Pacific.....	3	350,239
17 Toledo, Peoria & Western.....	4	243,593
19 Rock Island & Peoria.....	2	240,317
20 Peoria & Pekin Union.....	2	235,970
21 Iowa Central.....	2	212,741
22 St. Louis, Chicago & St. Paul.....	1	168,560
23 Toledo, St. Louis & Kansas City.....	3	166,763
24 Wabash, Chester & Western.....	2	135,472
25 Jacksonville & Southeastern.....	1	81,004
26 Jacksonville & St. Louis.....	4	76,424
27 Indiana, Illinois & Iowa.....	2	63,403
28 Peoria, Decatur & Evansville.....	1	33,049
29 Toluca & Eastern.....	1	32,295
30 Lake Erie & Western.....	2	26,659
31 Fulton County Narrow Gauge.....	1	26,500
32 Indiana, Decatur & Western.....	1	18,076
33 Centralia & Chester.....	2	3,625
34 Litchfield, Carrollton & Western.....	1	1,120
35 Pawnee.....	1	152
Total.....		20,002,573

#### THE POSSIBLE OUTPUT OF EXISTING MINES.

An inquiry addressed last year to the operators of mines, developed the fact that the capacity of the plants, equipped as they then

were, was more than double the actual output. The average computed at that time for the State, showed that the output of the plants if continuously operated, could be increased 121 per cent. Assuming that the possible output as then reported, remained unchanged the following table reveals how this margin has been effected by the business of the present year :

TABLE XXI—*Comparison of Actual Output with Possible Output of Existing Mines, by Districts.*

District.	Output—1899. (Tons.)	Possible output, 1998. (Tons.)	Per cent of possible increase.
First .....	3,535,316	5,121,710	44.87
Second.....	3,326,000	5,908,740	77.65
Third .....	729,132	1,272,500	74.52
Fourth.....	3,357,737	5,633,425	67.77
Fifth.....	4,810,626	9,537,550	98.26
Sixth.....	4,283,258	7,180,900	67.65
Seventh .....	3,392,376	6,428,100	89.49
* The State.....	23,434,445	41,082,925	74.88

Measured by the volume of this year's product, the estimated capacity is but 75 per cent in excess of the actual output.

DAYS OF ACTIVE OPERATION.

The days of active operation for the several districts and the State for the year, is here presented :

TABLE XXII—*Days of Active Operation, by Districts.*

District.	AVERAGE WORKING DAYS OF ALL MINES.			AVERAGE WORKING DAYS OF SHIPPING MINES ONLY.		
	Mines.	Men.	Days.	Mines.	Men.	Days.
First .....	84	7,498	188.2	37	7,125	208
Second.....	185	6,631	181.5	45	5,925	211
Third .....	211	1,799	146.3	23	1,176	185
Fourth.....	87	4,655	199	37	4,260	221.6
Fifth.....	87	6,401	190	50	6,151	201.6
Sixth.....	104	5,008	196.8	72	4,854	201
Seventh .....	131	4,999	159	57	4,762	206.6
The State.....	889	36,991	174.6	321	34,253	205.7

Taking all classes of mines, the average for the State is 175 days each; that for shipping mines is 206 days each. The days of operation; like the increase in production, is more evenly distributed among the several districts than formerly. The lowest average is found in the Third district, accounted for in a measure by its numerous small mines, and the greatest in the Fourth. The other five districts are practically uniform, with an average for the State of over 200 days. An opportunity of comparing the average days of operation for a series of years is afforded in the following table :

TABLE XXIII—*Days of Active Operation, of Shipping Mines for a Series of Seven Years, by Districts.*

District.	1893.		1894.		1895.		1896.		1897.		1898.		1899.	
	Mines..	Days...	Mines..	Days...	Mines..	Days...	Mines..	Days...	Mines..	Days...	Mines..	Days...	Mines..	Days...
First.....	38	220	35	161.5	26	159.4	38	166	35	166.9	39	144.5	37	208
Second.....	26	228	26	171	28	176.1	46	198	46	183.2	48	171.1	45	211
Third.....	80	215	81	182.9	66	173	27	157	19	158.6	21	187.5	23	185
Fourth.....	56	251	63	194.7	64	188.5	40	210	36	207.7	39	190	37	221.6
Fifth.....	101	233	90	186.9	94	192.6	50	197	50	202.1	51	172.3	50	201.6
Sixth.....	.....	.....	.....	.....	.....	.....	72	196	73	194.8	72	170.6	72	201
Seventh.....	.....	.....	.....	.....	.....	.....	49	164	51	165.5	59	186.8	57	206.6
The State.....	301	229.6	295	183.1	278	182.2	322	186	310	185.5	329	174.7	321	205.7

This table is confined to the shipping mines, and gives the number on which each average is based. Everything being equal, the number of days of active operation would increase in proportion to the total production. A reduction of two-tenths in the length of the working day has not materially affected this ratio. It is ascertained that the average number of working days for this class of mines, was for the present year, 206 each, an increase over that of last year, of 31 days. The addition of more than one month to the working time of this class of employes is reflected in the augmented production and the increased pay roll. For the first time since the panic of 1893, the days of active operation exceed 200 for each of the mines included in the group here considered.

The following list indicates the number of days lost in the several districts on account of local strikes. The protracted suspension at Pana, involving three large mines, explains the loss reported from the Fifth district :

First District, days lost by strike .....	none
Second District, days lost by strike.....	157
Third District, days lost by strike.....	90
Fourth District, days lost by strike.....	587
Fifth District, days lost by strike.....	1972
Sixth District, days lost by strike.....	469
Seventh District, days lost by strike.....	502
Total.....	3,777

AVERAGE VALUE OF COAL.

Owners of coal mines who make returns to this office of the prices received for coal, report the average of all sales, which represents the actual price obtained for all coal sold. The prices thus reported are combined into averages, for counties, for districts and for the State. The following table exhibits the averages for the year for the districts and State:

TABLE XXIV—Average Value of Coal Per Ton at the Mine, by Districts.

District.	Total tons.	Av. value per ton.	Tons of lump coal.	Av. value per ton.	Tons of other grades.	Av. value per ton.
First .....	3,535,316	\$0.9532	2,677,359	\$1.139	857,957	\$0.401
Second .....	3,326,000	1.0427	2,669,631	1.191	656,369	.44
Third .....	729,132	.9553	600,280	1.07	128,852	.413
Fourth.....	3,357,737	.7664	2,404,385	.8513	953,352	.5509
Fifth.....	4,810,626	.69	3,480,311	.8215	1,330,315	.3456
Sixth .....	4,283,358	.8057	3,294,077	.7169	989,181	.295
Seventh .....	3,392,376	.6972	2,301,555	.8224	1,090,821	.3935
The State.....	23,434,445	\$0.7852	17,427,598	\$0.9186	5,968,862	\$0.4008

The average value of lump coal per ton for the State, is found to be 91.86, and that for other grades 40.08. The former rate varies from 71.69 in the Sixth, to 1.191 in the Second district, and the latter, from 29.5 in the Sixth, to 55.09 in the Fourth district. The value of lump coal per ton is but a fraction of one per cent over that of last year. The value of other grades shows an increase of nearly 5 per cent. Only in this unimportant particular, is there a difference between this and the preceding report. Fully 75 per cent of lump coal is contracted for the general trade. Most of these contracts were

taken in the early portion of the year, at rates, it is fair to presume, much less than might now be obtained. Gains resulting from increased prices have been confined principally to that portion disposed of to the local trade. Competition for contract business tends to keep prices to a minimum. Local consumers have no protection from the fluctuation of the markets, while the great corporate bidders for coal, who could and should pay a higher rate, have fuel furnished at the lowest possible price. From an ethical standpoint, this arrangement conflicts with every known law of justice. In the table following, the average value of lump coal for a number of years is presented :

TABLE XXV—*Average Value of Lump Coal Per Ton at the Mine for a Series of Eighteen Years, 1882-1899.*

Year.	Tons of lump coal produced.	Average value per ton.	Year.	Tons of lump coal produced.	Average value per ton.
1882.....	9, 115, 653	\$1.51	1891.....	12, 900, 224	\$1.008
1883.....	10, 030, 991	1.48	1892.....	14, 736, 963	1.029
1884.....	10, 101, 005	1.26	1893.....	16, 112, 899	1.025
1885.....	9, 791, 874	1.17	1894.....	13, 865, 284	1.009
1886.....	9, 246, 435	1.10	1895.....	14, 045, 962	.932
1887.....	10, 278, 890	1.085	1896.....	13, 990, 924	.899
1888.....	11, 855, 188	1.123	1897.....	14, 672, 241	.852
1889.....	11, 597, 963	1.078	1898.....	14, 208, 795	.918
1890.....	12, 638, 364	1.019	1899.....	16, 008, 109	.9186

It is encourrging to note, in the return for this and last year, a reaction from the constant downward tendency in prices.

#### MINE EMPLOYÉS

The following table shows the total number of all classes of mine employés for districts and the State:



TABLE XXVI.—*Analysis of Employés, by Districts.*

DISTRICTS.	ALL EMPLOYÉS.					
	UNDERGROUND.				Above ground.	Aggregate
	Miners.	Day men.	Boys.	Total.		
First .....	5,688	913	425	7,026	472	7,498
Second .....	4,920	867	207	5,994	637	6,631
Third .....	1,415	178	49	1,642	157	1,799
Fourth.....	3,056	801	144	4,001	654	4,655
Fifth.....	4,421	1,099	168	5,688	713	6,401
Sixth .....	3,583	698	165	4,446	562	5,008
Seventh .....	3,366	899	137	4,402	597	4,999
The State.....	26,449	5,455	1,295	33,199	3,792	36,991

Compared with a similar enumeration last year, the total number of employés has increased by nearly two thousand. Notwithstanding the reduced production of last year, the number employed in and about the mines exceeded by 1,238 those employed in 1897. This unexpected increase was explained as resulting from the unusual demand for coal and men following the termination of the suspension. The number of employés reported for each of seventeen years is given in the table below, by districts.

TABLE XXVII.—*Employés for Seventeen Years.*

Year.	First District.	Second District.	Third District.	Fourth District.	Fifth District.	Sixth District.	Seventh District.	The State.
1883.....	7,566	3,211	4,070	4,417	4,675	.....	.....	23,939
1884.....	8,013	3,616	5,018	4,781	4,147	.....	.....	25,575
1885.....	7,463	3,391	5,213	4,950	4,429	.....	.....	25,446
1886.....	7,613	3,599	4,870	5,197	4,567	.....	.....	25,846
1887.....	7,915	4,068	4,903	4,934	4,984	.....	.....	26,804
1888.....	8,623	4,914	5,250	5,086	5,537	.....	.....	29,410
1889.....	9,014	4,498	5,117	5,679	5,764	.....	.....	30,076
1890.....	8,258	4,099	5,171	5,685	5,361	.....	.....	28,574
1891.....	9,128	5,089	6,458	5,881	6,395	.....	.....	32,951
1892.....	9,572	4,865	6,453	6,542	6,200	.....	.....	33,632
1893.....	8,831	5,974	6,964	7,021	6,780	.....	.....	35,390
1894.....	10,280	6,714	7,112	7,750	6,621	.....	.....	38,477

Table XXVII.—Concluded.

Year.	First District.	Second District.	Third District.	Fourth District.	Fifth District.	Sixth District.	Seventh District.	The State.
1895.....	9,644	7,184	6,607	8,005	7,190	.....	.....	38,630
1896.....	9,380	7,103	2,134	4,467	5,758	4,374	3,816	37,032
1897.....	7,632	6,872	1,635	4,021	5,672	4,100	3,856	33,788
1898.....	7,377	6,799	1,800	4,030	6,093	4,662	4,265	35,026
1899.....	7,498	6,631	1,799	4,655	6,401	5,008	4,999	36,991

Prior to 1896 the average number of employés was based upon the highest number employed at any one time, and from this it would appear that the number employed had diminished since 1896. Taking the level average for the past six years, including the present, a material increase is manifest, as appears from the following statement:

*Average Number of Employés for Years 1894, 1895, 1896, 1897, 1898, 1899.*

1894.....	32,635	1897.....	33,788
1895.....	31,962	1898.....	35,026
1896.....	33,054	1899.....	36,991

PRICES PAID FOR MINING.

In the preparation of tables reporting prices paid for mining, prior to the adoption of the present gross weight system, more or less confusion arose on account of the various methods applied in different parts of the State. This was the result of paying miners on the basis of the screened ton. Fortunately, the mutual adoption by the operators and miners, of the present practice of paying for all coal mined on the gross basis, removed not only the necessity for numerous tables on this question, but makes more clear and simple the presentation of this important phase of the industry.

TABLE XXVIII.—Average Prices Paid for Mining by Hand and with Machines, by Districts.

DISTRICT.	Total tons.	MINING BY HAND.				MINING WITH MACHINES	
		GROSS-TON BASIS.		SCREENED-TON BASIS		Tons on which average is based.	Average price per ton.
		Tons on which average is based.	Average price per ton.	Tons on which average is based.	Average price per ton.		
First .....	3,535,316	3,493,240	\$0.596	.....	.....	42,076	\$0.37
Second.....	3,326,000	3,059,818	.577	201,464	\$0.849	64,718	.27
Third .....	729,132	556,454	.475	147,207	.894	25,471	.275
Fourth .....	*3,357,737	2,135,401	.431	†18,610	.727	1,083,361	.291
Fifth .....	4,810,626	2,918,586	.403	.....	.....	1,802,040	.324
Sixth .....	4,283,258	2,113,304	.40	.....	.....	2,169,954	.329
Seventh.....	3,392,376	2,584,684	.345	.....	.....	807,692	.281
The State.....	23,434,445	*16,861,487	\$0.471	367,281	\$0.861	6,085,312	\$0.3134

\* 120,365 tons mined and paid for at \$1.50 per day.

† Forked coal.

Of the entire output of 23,434,445 tons, 71.9 per cent was paid for on the basis of gross weight; 1.6 per cent on the basis of screened tons, and 5 tenths per cent was mined and paid for by the day, leaving 26 per cent as the product of machines, and paid for on the basis of gross weight. The per cent of screened coal and that paid for by the day is so small that it could safely be omitted in computing the average price paid for mining, and confirms the conclusion that the provisions of the agreement made between the miners and operators two years ago are being generally complied with. It will be observed that the rate for machine mining remains the same as last year, while the rate for hand mining has advanced from 44 to 47 cents per ton. As a matter of fact there has been no change in the price paid for hand mining during the present year. At the joint convention held in February last, the mining scale of 1898 was continued. This seeming discrepancy is accounted for in the difficulty experienced last year in arriving at a correct average rate for hand mining, consequent on changing from the screened to the gross weight basis.

## AGGREGATE WAGES OF MINE EMPLOYÉS.

For the first time in these reports the operators of mines were asked to furnish the total amount of wages paid all classes of employés except office help. With the exception of some local mines whose imperfect records would not permit of it, the request was promptly complied with. The following table shows the total number of employés, average number of days worked, aggregate amount paid, and average wages per day and per year for all employés, excepting office help.

TABLE XXIX.—*Showing the total number of employés, the average number of days worked, the aggregate amount paid for wages, and the average wages per day and per year for all employés, excepting office help.*

## FIRST DISTRICT.

COUNTY.	EMPLOYÉS.				Average number of days.	Total wages paid all classes of employés, excepting office help.	Average wages per day all employés.	Average wages per year all employés.
	Miners	Day men.	Boys	Total.				
Grundy .....	2,601	448	249	3,298	215	\$1,119,500	\$1 58	\$339 45
Kankakee .....	89	115	6	210	198	100,787	2 42	479 94
LaSalle .....	2,715	706	155	3,576	181	1,470,138	2 27	411 11
Livingston.....	208	93	13	314	167	111,458	2 23	354 96
Will .....	75	23	2	100	187	33,294	1 78	332 94
Totals and averages....	5,688	1,385	425	7,498	188	\$2,835,177	\$2 01	\$378 00

Table XXIX.—Continued.

## SECOND DISTRICT.

COUNTY.	EMPLOYEES.				Average number of days.	Total wages paid all classes of employes, excepting office help.	Average wages per day all employes.	Average wages per year all employes.
	Miners	Day men.	Boys	Total.				
Bureau <i>a</i> .....	2,271	670	96	3,037	192	\$1,224,778	\$2 10	\$403 21
Henry <i>b</i> .....	181	40	6	227	196	79,111	1 78	404 00
Marshall <i>c</i> .....	524	134	13	671	289	250,668	1 29	373 57
Mercer <i>d</i> .....	440	262	56	758	192	364,045	2 51	450 27
Peoria <i>e</i> .....	633	170	24	827	214	404,010	2 28	488 52
Rock Island <i>f</i> .....	56	13	.....	69	184	20,824	1 64	301 80
Stark <i>g</i> .....	10	3	.....	13	191	1,696	68	130 46
Woodford.....	330	108	4	442	237	163,327	1 60	369 52
Totals and averages....	4,445	1,400	199	6,044	212	\$2,508,459	\$1 96	\$415 31

*a* Eight mines employing 34 men, with an average of 145 days; amount of wages paid not reported.

*b* Thirteen mines employing 56 men, with an average of 149 days; amount of wages paid not reported.

*c* Eight mines employing 10 men, with an average of 113 days; amount of wages paid not reported.

*d* Seven mines employing 32 men, with an average of 185 days; amount of wages paid not reported.

*e* Thirty-six mines employing 306 men, with an average of 173 days; amount of wages paid not reported.

*f* Sixteen mines employing 80 men, with an average of 135 days; amount of wages paid not reported.

*g* Seventeen mines employing 69 men, with an average of 184 days; amount of wages paid not reported.

## THIRD DISTRICT.

COUNTY.	EMPLOYEES.				Average number of days.	Total wages paid all classes of employes, excepting office help.	Average wages per day all employes.	Average wages per year all employes.
	Miners	Day men.	Boys	Total.				
Brown.....	30	.....	.....	30	91	\$2,665	\$0 98	\$88 83
Fulton.....	881	281	38	1,200	145	398,032	2 23	331 69
Hancock.....	22	4	.....	26	161	5,740	1 37	221 00
Knox.....	141	24	2	167	167	33,980	1 22	203 47
McDonough.....	257	15	9	281	127	55,471	1 60	197 40
Schuyler.....	37	6	.....	43	199	10,015	1 17	233 00
Warren.....	47	5	.....	52	174	13,980	1 54	269 00
Totals and averages....	1,415	335	49	1,799	152	519,883	1 90	\$288 96

Table XXIX—Continued.

## FOURTH DISTRICT.

COUNTY.	EMPLOYES.				Average number of days.	Total wages paid all classes of employes, excepting office help.	Average wages per day all employes.	Average wages per year all employes.
	Miners	Day men.	Boys	Total.				
Cass.....	15	4	1	20	190	\$3,945	\$1 04	\$197 25
Logan <i>a</i> .....	85	37	1	123	176	67,121	3 10	545 70
Macon .....	268	84	26	378	224	247,901	2 93	655 82
Menard .....	397	167	6	570	208	264,732	2 23	464 44
McLean .....	279	91	17	387	233	163,273	1 81	421 89
Tazewell .....	150	50	14	214	187	72,774	1 82	340 06
Vermilion <i>b</i> .....	1,766	982	69	2,817	193	1,264,361	2 35	439 09
Totals and averages....	2,960	1,415	134	4,509	201	\$2,084,107	\$2 31	\$465 06

*a* The Lincoln Coal Company's mine, employing 138 men, working 265 days, makes no report of wages paid.

*b* One mine employing eight men, working 150 days; amount of wages paid not reported.

## FIFTH DISTRICT.

COUNTY.	EMPLOYES.				Average number of days.	Total wages paid all classes of employes, excepting office help.	Average wages per day all employes.	Average wages per year all employes.
	Miners	Day men.	Boys	Total.				
Calhoun.....	8	12	.....	20	201	\$6,177	\$1 54	\$308 85
Christian .....	570	277	32	879	183	306,820	1 91	349 06
Greene .....	43	7	.....	50	183	14,370	1 57	287 40
Jersey.....	18	2	.....	20	150	4,850	1 62	242 50
Macoupin .....	1,401	707	67	2,175	157	849,621	2 48	390 63
Montgomery .....	345	155	11	511	213	207,871	1 91	404 84
Morgan.....	11	2	.....	13	218	5,700	2 01	438 46
Sangamon .....	1,874	582	51	2,507	210	1,174,119	2 23	468 34
Scott .....	44	9	.....	53	222	22,429	1 91	423 19
Shelby .....	107	59	7	173	205	74,008	2 08	427 79
Totals and averages....	4,421	1,812	168	6,401	194	\$2,665,965	\$2 15	\$416 49

Table XXXIX.—Continued.

## SIXTH DISTRICT.

COUNTY.	EMPLOYES.				Average number of days.	Total wages paid all classes of employes, excepting office help.	Average wages per day all employes.	Average wages per year all employes.
	Miners	Day men.	Boys	Total.				
Bond .....	128	48	5	181	178	\$60,503	\$1 88	\$334 25
Clinton <i>a</i> .....	349	101	26	476	187	251,051	2 82	527 42
Madison .....	897	348	50	1,295	181	678,933	2 90	524 27
Marion .....	600	291	36	927	198	271,620	1 42	293 01
St. Clair .....	1,605	470	48	2,123	207	920,640	2 09	433 65
Totals and averages....	3,579	1,258	165	5,002	190	\$2,152,747	\$2 30	\$436 37

*a* One new mine employing 6 men working 20 days not included.

## SEVENTH DISTRICT.

COUNTY.	EMPLOYES.				Average number of days.	Total wages paid all classes of employes, excepting office help.	Average wages per day all employes.	Average wages per year all employes.
	Miners	Day men.	Boys	Total.				
Gallatin .....	52	19	2	73	142	\$15,760	\$1 52	\$215 93
Hamilton .....	11	.....	.....	11	68	900	1 20	\$2 00
Jackson <i>a</i> .....	824	419	50	1,293	190	508,493	2 07	393 31
Jefferson .....	53	29	3	85	220	30,707	1 60	361 26
Johnson .....	19	6	1	26	121	1,970	62	72 69
Perry <i>b</i> .....	910	399	18	1,327	196	491,481	1 50	370 38
Randolph <i>c</i> .....	355	113	13	481	202	200,151	1 90	418 19
Saline <i>d</i> .....	107	44	2	153	147	18,173	88	118 77
Washington .....	61	26	.....	87	181	19,435	1 23	223 39
Williamson <i>e</i> .....	938	436	48	1,422	151	533,149	2 91	449 51
Totals and averages....	3,330	1,491	137	4,958	162	\$1,820,219	\$2 40	\$388 64

*a* Two mines employing 2 men, with an average of 170 days; amount of wages paid not reported.

*b* Four mines employing 9 men, with an average of 126 days; amount of wages paid not reported.

*c* Two mines employing 5 men, with an average of 110 days; amount of wages paid not reported.

*d* Ten mines employing 20 men, with an average of 64 days; amount of wages paid not reported.

*e* Three mines employing 5 men, with an average of 28 days; amount of wages paid not reported.

Table XXIX.—Concluded.

## THE STATE.

DISTRICTS.	EMPLOYEES.				Average number of days.	Total wages paid all classes of employes, excepting office help.	Average wages per day all employes.	Average wages per year all employes.
	Miners	Day men.	Boys	Total.				
First .....	5,688	1,385	425	7,498	188	\$2,835,177	\$2 01	\$378 00
Second <i>a</i> .....	4,445	1,400	199	6,044	212	2,508,459	1 96	415 31
Third.....	1,415	335	49	1,799	152	519,853	1 90	288 96
Fourth <i>b</i> .....	2,960	1,415	134	4,509	201	2,096,671	2 31	465 06
Fifth .....	4,421	1,812	168	6,401	194	2,665,968	2 15	416 49
Sixth <i>c</i> .....	3,579	1,258	165	5,002	190	2,182,747	2 30	436 37
Seventh <i>d</i> .....	3,330	1,491	137	4,958	162	1,927,274	2 40	388 98
Totals.....	25,838	9,096	1,277	36,211	186	\$14,616,555	\$2 20	\$406 98

*a* One hundred and five mines out of 185 in the district, employing 587 men, with an average of 165 days, did not report the amount of wages paid.

*b* Two mines out of 87 in the district, employing 142 men, with an average of 206 days, did not report the amount of wages paid.

*c* One mine out of 104 in the district, employine 6 men, with an average of 20 days, not included.

*d* Twenty-one mines out of 131 in the district, employing 41 men, with an average of 88 days, did not report the amount of wages paid.

In the foregoing table the employes have been divided into three classes, as returned by the operators, viz: miners, day men, and boys. The average number of days is obtained by adding all of the days returned for each county, and dividing the result by the number of mines in each. In arriving at the average wages per day, the total number of employes was considered per day and per year. From the returns made, only the aggregate wages paid all classes was given, and the total sums paid the respective classes could not be separated. Therefore the ascertained averages per day and per year, as reported, does not represent the actual wages received by either class. Taking the figures returned for the First district, and estimating the 1,385 day men as receiving \$1.90 per day, and the 425 boys as receiving 75 cents per day on the average of 188 days for the year gives \$554,647 as their aggregate earnings. Deducting this sum from the total wages paid leaves \$2,280,530 as representing the total wages paid to the 5,688 miners, or an average of \$2.13 per day, or \$400.44 for the estimated number of days. Similar estimates may be made for each of the other districts and the State. The difficulty of attempting to separate the earnings of the respective classes is still



further increased by the various and uncertain amounts paid to boys, the assumed average is probably too small to cover all grades of juvenile labor. Besides, a certain per cent of those returned as day men are employed constantly through the year, while others engaged as day men are employed in making repairs during the interval when the plant is not operated. It will be observed that the average number of days in the foregoing table varies from the average number in the district and other tables, and is accounted for from the fact that several mines in the different parts of the State, neglected to make any return of the total wages paid, so that the figures here given can be considered only as an approximation to the actual earnings of the miners and other employes. Following the rate paid for mining, and the total yearly earnings, it is important to know at what intervals wages are paid. The table following supplies this data:

TABLE XXX.—*Frequency of Wage Payments, by Districts.*

DISTRICT.	WAGES PAID WEEKLY.			WAGES PAID SEMI-MONTHLY.			WAGES PAID MONTHLY.		
	Mines.	Men.	Tons.	Mines.	Men.	Tons.	Mines.	Men.	Tons.
First.....	49	347	157,285	35	7,151	3,378,031	.....	.....	.....
Second.....	59	241	64,533	110	5,728	2,824,323	16	662	437,144
Third.....	8	24	5,190	201	1,762	720,335	2	13	3,607
Fourth.....	37	882	433,060	48	3,761	2,916,718	2	12	7,929
Fifth.....	1	20	4,118	86	6,381	4,806,508	.....	.....	.....
Sixth.....	19	76	21,340	79	4,900	4,245,001	6	32	16,917
Seventh.....	47	138	27,637	77	4,727	3,312,853	7	134	51,886
The State ...	220	1,728	713,163	636	34,410	22,203,769	33	853	517,483

From the inception of united action among coal miners, next in importance to the demand for the abolition of the "Truck Store," was the necessity for shorter intervals between pay days. Like the other conditions surrounding the mining industry years ago, there was a general lack of uniformity in this particular, the time varying from two weeks to, in some rare cases, over two months. The agitation for this reform was pressed, and partly through the influence of the union, succeeded in securing the enactment of a law stipulating the periods within which wages should be paid. The corporations that resisted this action on the part of the General Assembly, procured a

hearing before the supreme court, which declared the law void, on the alleged grounds that it violated the sacred right of private contract. The sentiment in support of such a measure had, however, gone beyond the reach of the courts. Those who formerly opposed, it, became convinced that its concession would not, as some represented, destroy the industry or demoralize their employés. This preliminary work in a measure prepared the mine owners for the demand that wages should be paid at least twice a month, and it became a part of the contract made at the interstate convention of miners and operators. It appears from this table that, with the exception of 853 men, all the employés in and about the coal mines of Illinois received their wages twice a month or oftener, and of the entire number, 1,728 were paid weekly. The extent of this practice is more clearly outlined in the following table of percentages for a series of years:

TABLE XXXI.—*Percentages of Mines, Men and Tons Affected by Specified Intervals of Wage Payments for a Series of Years.*

YEAR.	WAGES PAID WEEKLY.			WAGES PAID SEMI-MONTHLY.			WAGES PAID MONTHLY.		
	Mines.	Men.	Tons.	Mines.	Men.	Tons.	Mines.	Men.	Tons.
1893.....	67	27.6	26.2	25	56	50.4	8	16.4	23.4
1894.....	43	11.7	9.7	46	66.6	67.2	11	21.7	23.1
1895.....	31	6.5	4.2	57	78.3	74.4	12	15.2	21.4
1896.....	49	7.8	5.3	37.5	74.6	73.5	12	17.6	21.2
1897.....	46.78	6.91	4.34	39.04	74.69	73.71	14.18	18.4	21.9
1898.....	32.23	5.36	4.99	62.32	90.25	89.78	5.45	4.39	5.23
1899.....	24.75	4.67	3.04	71.54	93.02	94.75	3.71	2.31	2.21

From the above it will appear that 93 per cent of the men who produce 95 per cent of the annual output, receive their wages semi-monthly. Those paid monthly represent but two per cent of the total employés, while five per cent are paid weekly.

#### MACHINE MINING.

The following table shows the number of mines in which machines were employed during the year, exclusively or in part, and the tons, mined in the several districts and the State:

TABLE XXXII.—*Number and Tonnage of Mining Machines, by Districts.*

DISTRICT.	MINES IN WHICH MACHINES ARE USED.								
	EXCLUSIVELY.			IN PART.			TOTAL.		
	Mines.	Ma- chines.	Tons.	Mines.	Ma- chines.	Tons.	Mines.	Ma- chines.	Tons.
First.....				1	9	42,076	1	9	42,076
Second.....				2	9	64,718	2	9	64,718
Third.....				2	4	25,471	2	4	25,471
Fourth.....	1	7	251,624	8	59	831,737	9	66	1,083,361
Fifth.....	14	138	1,842,959	1	6	49,081	15	144	1,892,040
Sixth.....	21	136	2,050,006	2	8	119,948	23	144	2,169,954
Seventh.....	3	19	323,115	9	45	484,577	12	64	807,692
The State.....	39	300	4,467,704	25	140	1,617,608	64	440	6,085,312

Mines in which machines are used exclusively are confined to the central and southern districts. Compared with last year, there has been an increase of five in the number of mines using machines exclusively, and an increase of fifty-four in the number of machines. The number of mines in which machines are used in part has increased by four, while the number of machines used is less by six. The tons delivered from the former class of mines has more than doubled, having increased during the year from 2,140,337 tons to 4,467,604 tons. Mines using machines exclusively and in part have increased by 9, and machines by 48 over those reported for the preceding year, and the product of such mines has increased from 3,415,635 tons, to 6,085,312 tons. This remarkable increase in the mechanical product for the year is somewhat explained by the fact that a large number of machines reported last year had at that time been but recently introduced, and their influence on the tonnage is more apparent in this report.

TABLE XXXIII.—*Name and Number of Mining Machines in Use, by Districts.*

DISTRICT.	Harrison.	Ingersoll-Sergeant	Jeffrey...	Sullivan..	Link-Belt	Morgan-Gardner.	Yock.....	Chouteau	Total.....
First .....		9							9
Second.....			1		8				9
Third .....				2	2				4
Fourth.....	12	8	18	18		8	2		66
Fifth.....	97	27		3	8	5	4		144
Sixth.....	48	64	12	1	5	2	6	6	144
Seventh .....	23	22	8	11					64
The State.....	180	130	39	35	23	15	12	6	440

The above indicates the kind and number of machines in use, by districts. There are eight less Harrison machines in use this year than last. The Ingersoll-Sergeant machines have increased from 107 to 130; Jeffrey, from 27 to 39; Sullivan, from 16 to 35; Morgan-Gardner, from 6 to 15. In the preparation of a similar table last year, the number of Link-belt machines was given as 20; those of the General-Electric, as 7. It was subsequently discovered that this was an erroneous classification, as there is no such machine as the "General-Electric." The number reported last year under this head should have been credited to the Link-belt, making the correct number 27. Eight machines of this make reported at Streator last year, and two at Reed City, are not included in the returns for this year. Of this class of machines, one has been added at Odin, three at Wolcott, and two at Farmington, making 23 in all, or a reduction of four from the number returned last year. The number of Yock machines has decreased from 16 to 12. The following is a list of the mines in which machines are used exclusively, the kind of machine operated, and the number of tons mined, followed by a list of the mines in which a part only of the output is mined by machines:

*Mines in Which Machines Are Used Exclusively.*

COMPANY.	Location.	MACHINES.		Tons.
		No.	Names.	
Madison Coal Co., No. 2 .....	Glen Carbon .....	14	Ingersoll-Serg'nt.	293,559
Consolidated Coal Co., No. 6.....	Staunton .....	{ 13	Harrison .....	} 271,664
		4	Yock .....	
Madison Coal Co., No. 5.....	Mt. Olive .....	16	Ingersoll-Serg'nt.	268,077
Taylorville Coal Co.....	Taylorville .....	14	Harrison .....	255,000
Westville Coal Co .....	Westville.....	7	Jeffrey.....	251,624
Consolidated Coal Co., No. 8.....	Mt. Olive.....	16	Harrison .....	225,419
Mt. Olive & Staunton Coal Co.....	Staunton .....	5	Jeffrey.....	219,229
Madison Coal Co., No. 4.....	Glen Carbon .....	12	Ingersoll-Serg'nt.	218,697
Consolidated Coal Co., Abbey, No. 3	Collins.....	11	Harrison .....	188,415
"    "    No. 7.....	Staunton .....	15	" .....	160,104
"    "    Heinz Bluff	Collinsville.....	10	" .....	154,294
"    "    No. 10.....	Mt. Olive.....	12	" .....	150,934
Big Muddy Coal & Iron Co., No. 6..	Murphysboro .....	8	" .....	146,346
Odin Coal Co.....	Odin .....	5	Link-Belt.....	142,574
Hillsboro Coal Co.....	Hillsboro .....	5	Morgan-Gardner.	127,035
Consolidated Coal Co., Gillespie....	Gillespie .....	12	Harrison .....	113,907
Centralia Mining & Mfg Co.....	Centralia .....	6	Jeffrey.....	111,271
O. & M. Valley Coal & M. Co., No. 2	Marion.....	5	" .....	110,843
Chicago-Virden Coal Co., No. 1.....	Virden.....	8	Link-Belt.....	101,422
Girard Coal Co.....	Girard .....	8	Ingersoll-Serg'nt.	83,425
Consolidated Coal Co., Trenton....	Trenton .....	12	" .....	80,048
"    "    White Oak..	Marrissa.....	4	Harrison .....	76,040
Trenton Coal & Light Power Co....	Trenton .....	8	Ingersoll Serg'nt.	75,658
Glendale Coal Co., No. 1 .....	Belleville.....	{ 6	Chouteau .....	} 74,400
		1	Sullivan .....	
Consolidated Coal Co., Hornsby....	Hornsby.....	10	Harrison .....	70,344
Ohio Valley Coal & Coke Co.....	Spillertown .....	6	Sullivan.....	65,926
Madison Coal Co., No. 3.....	Edwardsville .....	7	Ingersoll-Serg'nt.	56,778
Oakland Coal Co.....	Belleville.....	4	" .....	51,406
Lebanon Coal & Mining Assn .....	Lebanon .....	6	Yock.....	49,177
Consolidated Coal Co., No. 4 .....	Belleville.....	5	Harrison .....	43,741
"    "    Schurman..	" .....	4	" .....	41,750
"    "    Troy .....	Troy .....	6	" .....	39,708
"    "    Green Mt...	Belleville.....	4	" .....	37,445
"    "    Richland ...	" .....	2	" .....	31,756
Henrietta Coal Co .....	Edwardsville .....	2	Morgan-Gardner.	34,015
Consolidated Coal Co., Rose Hill...	Belleville.....	2	Harrison .....	21,015
William McNeil & Co .....	Bunker Hill.....	1	" .....	7,220

*Mines in Which Machines Are Used Exclusively.—Concluded.*

COMPANY.	Location.	MACHINES.		Tons.
		No.	Name.	
William Jamieson & Co.....	Raymond.....	{ 1	Ingersoll-Serg'nt.	} 4,290
		1	Sullivan .....	
Thomas Pressed Brick Co.....	Golden Eagle .....	2	Ingersoll-Serg'nt.	4,118
Total—39 mines .....	.....	300	.....	4,467,704

*Mines in Which Only Part of the Output is Cut by Machines.*

COMPANY.	Location.	MACHINES.		Tons.
		No.	Name.	
Himrod Coal Co., No. 2.....	Westville.....	12	Sullivan .....	215,876
Kelleyville Coal Co., No. 3 .....	" .....	7	Jeffrey .....	} 178,956
		6	Harrison .....	
Himrod Coal Co., No. 1.....	" .....	{ 2	Yoek .....	} 175,132
		6	Sullivan .....	
Big Muddy C. & Iron Co., No. 1....	Murphysboro .....	7	Harrison .....	107,921
" " Harrison	" .....	8	" .....	97,557
Sorento Prospecting & Mining Co..	Sorento .....	7	Ingersoll-Serg'nt.	94,455
Kelleyville Coal Co., No. 2.....	Westville.....	4	Jeffrey .....	72,102
Athens Mining Co .....	Athens .....	8	Ingersoll-Serg'nt.	71,471
Gartside Coal Co., No. 4.....	Murphysboro .....	5	" .....	60,000
Willis Coal & Mining Co.....	Willisville.....	4	" .....	56,666
Newsam Brothers .....	Peoria .....	{ 5	Link-Belt.....	} 54,718
		1	Jeffrey .....	
Gartside Coal Co.....	Murphysboro .....	6	Ingersoll-Serg'nt.	53,335
Brookside Coal Co., No. 1 .....	Grape Creek .....	4	Morgan Gardner..	50,000
Moweaqua Coal Mining Co.....	Moweaqua.....	{ 4	Harrison .....	} 49,081
		2	Sullivan .....	
Gardner-Wilmington Coal Co.....	Clark City.....	9	Ingersoll-Serg'nt.	42,076
Brookside Coal Co., No. 2 .....	Grape Creek.....	4	Morgan-Gardner.	40,000
Gartside Coal Co., No. 1.....	Murphysborol.....	2	Ingersoll-Serg'nt.	33,053
Big Muddy Coal & Iron Co., No. 7..	Herrins.....	3	Jeffrey.....	28,305
Glenburn Coal Co .....	Glenburn .....	6	Harrison .....	28,200
Consolidated Coal Co., Reineke ...	Belleville.....	1	Jeffrey.....	25,543
Mt. Vernon Coal Co .....	Mt. Vernon.....	5	Sullivan .....	24,307
Muddy Valley Mining & Mfg Co....	Hallidayboro.....	5	Ingersoll-Serg'nt.	23,433
Whitebreast Fuel Co .....	Dunfermline.....	2	Sullivan .....	18,321
Reed City Coal Co .....	Wolcott.....	3	Link-Belt.....	10,000
Farmington Coal Co.....	Farmington .....	2	" .....	7,150
Total—25 mines .....	.....	140	.....	1,617,658

The former list contains five and the latter four more mines than reported last year, and evidences the gradual encroachment of this agency as a factor in production.

CONSUMPTION OF POWDER.

TABLE XXXIV.—*Distribution of Powder to Long-wall and Pillar-and-room mines, by Districts.*

DISTRICT.	Tons produced without powder.	LONG-WALL MINES.		PILLAR-AND-ROOM MINES.		ALL MINES.	
		Kegs.	Tons.	Kegs.	Tons.	Kegs.	Tons.
First .....	1,076,333	2,305	2,238,640	22,397	1,296,676	24,702	3,535,316
Second .....	1,786,211	615	1,980,029	51,822	1,345,971	52,437	3,326,000
Third.....	103,846	.....	4,338	22,945	724,794	22,945	729,132
Fourth* .....	178,810	1,007	160,573	69,308	2,896,864	70,315	3,357,737
Fifth .....	40,458	100	61,020	100,637	4,749,606	100,737	4,810,626
Sixth .....	25,983	.....	.....	68,860	4,283,258	68,860	4,283,258
Seventh.....	.....	7	Strip 640	79,260	3,391,736	79,267	3,392,376
The State .....	3,211,641	4,034	4,745,540	415,229	18,688,905	419,263	23,434,445

\* 1,007 kegs of powder were used at 4 strip mines in Vermilion county. The product of these mines are classed long-wall.

It will be observed that but a very small percentage of the total tonnage is reduced without explosives. In the three tables following will be found the average amount of powder used by the miners where the coal is mined before blasting, and where it is blasted from the solid, and the average number of tons produced by each method, for each keg of powder consumed:

TABLE XXXV.—*Powder Used in Mines Where the Coal is Undercut Before Blasting.*

District.	Kegs consumed.	Miners employed.	Tons produced.	Kegs per man.	Tons per keg.
First .....	7,392	3,668	1,683,086	2.01	227.70
Second.....	813	659	306,714	1.23	377.26
Third .....	.....	.....	.....	.....	.....
Fourth .....	17,591	1,403	1,259,483	12.54	71.59
Fifth .....	14,212	2,902	2,233,068	4.90	157.12
Sixth.....	17,980	2,351	2,191,949	7.60	121.91
Seventh.....	25,059	2,101	1,415,201	11.93	56.47
The State.....	83,047	13,084	9,089,451	6.34	109.45

TABLE XXXVI.—*Powder Used in Mines Where the Coal is Blasted Without Undercutting.*

District.	Kegs consumed.	Miners employed.	Tons produced.	Kegs per man.	Tons per keg.
First.....	15,389	936	648,575	16.44	42.14
Second.....	46,482	1,722	1,069,558	27.00	23.01
Third.....	22,945	1,248	625,286	18.38	27.25
Fourth.....	45,920	2,427	1,509,866	18.92	32.88
Fifth.....	83,725	3,195	2,438,463	26.21	29.11
Sixth.....	50,880	2,581	2,065,326	19.71	40.58
Seventh.....	54,208	2,398	1,977,175	22.60	36.47
The State.....	319,549	14,507	10,334,249	22.03	32.34

TABLE XXXVII.—*Powder Used in Mines Where the Coal is Both Blasted from the Solid and Undercut Before Blasting.*

District.	Kegs consumed.	Miners employed.	Tons produced.	Kegs per man.	Tons per keg.
First.....	1,921	202	127,322	9.51	66.28
Second.....	5,142	261	163,517	19.70	31.80
Fourth.....	6,804	413	409,628	16.47	60.20
Fifth.....	2,800	141	98,637	19.86	35.23
Total.....	16,667	1,017	799,104	16.39	47.95

Aside from the increase resulting from greater production, the only important difference from a similar table published last year, is in the number of kegs consumed and tons produced in mines where the coal is undercut before blasting. Last year the report for this class of mines showed that 41,495 kegs of powder produced 3,729,183 tons of coal, an average of 89.87 tons per keg. This year 83,047 kegs were consumed, and 9,089,451 tons were produced, or an average of 109.45 tons per keg.



## FATAL ACCIDENTS IN MINES.

No question connected with the mining industry excites so much interest and sympathy as that relating to the number of men whose lives are sacrificed in the prosecution of the business. The loss is continuous, and, as the record shows, varies substantially with the extent of operations. Only at rare intervals, like the awful catastrophe at Braidwood in 1883, where 69 miners were drowned, is the ratio materially disturbed. In point of production the present year eclipses that of any other in the history of the State. It also returns the largest death list, excepting the year of the Diamond disaster here noted. The number of fatal casualties that have occurred during the year, and their relation to the number of men employed and the number of tons produced, by districts, and for the State, is here presented:

TABLE XXXVIII.—*Fatal Casualties, by Districts, 1899.*

District.	Number killed.	Number of employés.	Number of tons of coal mined	Number of employés to each death.	Number of tons of coal mined to each death
First.....	7	7,498	3,535,316	1,071	505,045
Second.....	12	6,631	3,326,000	553	277,167
Third.....	4	1,799	729,132	450	182,285
Fourth.....	11	4,655	3,357,737	423	305,249
Fifth.....	14	6,401	4,810,626	457	343,616
Sixth.....	22	5,008	4,283,258	228	194,694
Seventh.....	14	4,991	3,392,376	357	242,313
The State.....	84	36,991	23,434,445	440	278,982

While the number of fatal accidents would seem to sustain a certain relation to the output for the State, the rule, however, does not hold good for the districts, as the number killed in the several districts has no apparent connection with the number of employés, or between the number employed and the tons produced. The total number of fatal accidents for the year is 84, an increase of nine over those reported for 1898. An examination of the following table will show that, as compared with last year, the number of employés to each death is less, while the number of tons of coal mined to each life

lost is somewhat more. Considered from the standpoint of total tonnage for the State, the proportion of fatal accidents is less than last year, while the number of days of active operation, which to some extent measured the dangers, exceeds those of any year subsequent to 1893.

TABLE XXXIX—*Fatal Accidents for 17 years.*

Year.	Number killed.	Total number of employés.	Total number of tons of coal mined.	Number of employés to each life lost.	Number of tons of coal produced to each life lost.
1883 .....	*134	23,939	12,123,456	179.6	90,474
1884 .....	46	25,575	12,208,075	566	265,393
1885 .....	39	25,436	11,834,459	652.4	303,448
1886 .....	52	25,846	11,175,241	497	214,909
1887 .....	41	26,804	12,423,066	654	303,002
1888 .....	55	29,410	14,328,181	534.7	260,512
1889 .....	42	30,076	14,017,298	716.1	333,745
1890 .....	53	28,574	15,274,727	539.1	286,316
1891 .....	60	32,951	15,660,698	549	261,012
1892 .....	57	33,632	17,062,276	580	313,372
1893 .....	69	35,390	19,949,564	513	289,124
1894 .....	72	32,635	17,113,576	453.3	237,688
1895 .....	75	31,962	17,735,864	426.2	236,478
1896 .....	77	33,054	19,786,626	429.2	256,969
1897 .....	69	33,788	20,072,758	489.7	290,910
1898 .....	75	35,026	18,599,299	467	247,991
1899 .....	84	36,991	23,434,445	440	278,982
Average 17 years .....	64.7	30,653	16,047,036	473.7	248,000

\*69 men drowned by the flooding of the Diamond mine. Braidwood, and 10 men killed by an explosion at Coulterville.

The two tables following represent the number of fatal accidents for the year and for a series of years, and the causes producing them:

TABLE XL—*Fatal Accidents, by Causes, 1899, with Totals and Averages for Ten Years.*

CAUSE.	Totals.	DISTRICT.							Percentages.
		First.	Second.	Third.	Fourth.	Fifth.	Sixth.	Seventh.	
Black damp .....	2					2			2.35
Cages .....	5	1	2				1	1	5.95
Explosion of powder .....	1		1						1.19
Falling coal and rock .....	51	6	4	2	9	7	14	9	60.72
Falling down shaft .....	3				1		2		3.57
Falling from cage .....	1							1	1.19
Flying coal .....	3		2	1					3.57
Gas .....	1				1				1.19
Machines .....	3						3		3.57
Pit cars .....	6		2			2	1	1	7.15
Premature blast .....	3					2		1	3.57
Railroad cars .....	1						1		1.19
Scalded in sump .....	1							1	1.19
Trap door .....	1		1						1.19
White damp .....	1			1					1.19
Unknown .....	1					1			1.19
<b>Totals, 1899.....</b>	<b>84</b>	<b>7</b>	<b>12</b>	<b>4</b>	<b>11</b>	<b>14</b>	<b>22</b>	<b>14</b>	<b>100.00</b>
“ 1898.....	75	12	10	4	19	5	8	17	.....
“ 1897.....	69	11	9	4	10	19	11	5	.....
“ 1896.....	77	18	11	4	14	16	4	10	.....
“ 1895.....	75	16	12	16	15	16			.....
“ 1894.....	72	19	9	10	19	15			.....
“ 1893.....	69	17	5	12	10	25			.....
“ 1892.....	57	10	1	11	24	11			.....
“ 1891.....	60	15	4	9	12	20			.....
“ 1890.....	53	16	5	10	11	11			.....
<b>Aggregates.....</b>	<b>691</b>	<b>141</b>	<b>78</b>	<b>84</b>	<b>145</b>	<b>152</b>	<b>45</b>	<b>46</b>	<b>.....</b>
<b>Averages .....</b>	<b>69.1</b>	<b>14.1</b>	<b>7.8</b>	<b>8.4</b>	<b>14.5</b>	<b>15.2</b>	<b>4.5</b>	<b>4.6</b>	<b>.....</b>

TABLE XLI—*Fatal Accidents for Twelve Years, by Leading Causes.*

Cause.	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	Totals.	Percent-ages for 12 years.
Blaak damp.....													2	0.25
Blasts, explosions, etc.....	9	3	4	11	4	6	8	12	9	11	11	4	92	11.67
Cages.....	2	4	4	4	4	4	8	4	5	....	2	5	46	5.84
Coal and other things falling down shaft.....		1	....	2	1	....	....	1	....	....	....	....	5	0.64
Falling coal, rock, etc.....	33	26	36	33	28	48	43	38	41	46	43	51	466	59.14
Falling down shaft.....	4	2	....	1	8	3	5	4	6	5	4	4	46	5.84
Falling props, etc.....		1	....	1	3	2	....	1	1	....	1	....	10	1.27
Fire-damp and gas.....			5	4	2	3	....	5	2	2	7	1	31	3.92
Pit-cars.....	6	5	3	2	6	2	6	5	7	1	2	6	51	6.48
Railroad cars.....	1	....	1	2	1	1	2	1	1	1	1	1	13	1.65
White damp.....													1	0.13
Other causes.....								4	5	3	4	9	25	3.17
Totals.....	55	42	53	60	57	69	72	75	77	69	74	84	788	100.00

As noted in former reports, the majority of fatal accidents are caused by falling coal and rock at the face of the workings, a source of danger to which the average workman is constantly exposed. While association with the ordinary risks which all miners assume, may, in time, develop a degree of indifference, the sources of danger are so numerous and uncertain, that most of the fatal accidents may safely be ascribed to causes unseen and therefore unpreventable.

TABLE XLII.—*Percentages of Fatal Accidents Caused by Falling Roof or Sides, for Seventeen Years, by Districts.*

YEAR.	DISTRICT.							THE STATE.	
	First.	Second.	Third.	Fourth.	Fifth.	Sixth.	Seventh.	Total deaths.	Per cent.
1883.....	8.9	100	82.4	62.5	40	.....	.....	134	30
1881.....	27.3	83.3	66.7	44.4	75	.....	.....	46	56.5
1885.....	60	.....	33.3	69.2	43	.....	.....	39	51.3
1886.....	64.3	50	45.5	89	58.3	.....	.....	52	61.5
1887.....	71.4	60	60	66	71.4	.....	.....	41	68.3
1888.....	84.2	20	50	62.5	46.2	.....	.....	55	60
1889.....	57.1	33.3	50	75	72.7	.....	.....	42	62
1890.....	93.8	20	50	45.5	63.6	.....	.....	53	67.9
1891.....	66.7	50	44.4	50	55	.....	.....	60	55
1892.....	80	100	45.5	33.3	54.5	.....	.....	57	49.1
1893.....	88.2	60	66.6	60	64	.....	.....	69	69.6
1894.....	68.4	44.4	50	52.6	66.6	.....	.....	72	58.3
1895.....	50	58.3	43.75	46.67	56.3	.....	.....	75	50.7
1896.....	77.8	36.4	75	57.1	18.8	100	50	77	53.3
1897.....	72.7	44.4	75	100	57.9	72.7	40	69	66.7
1898.....	66.7	50	25	79	60	50	41.2	75	58.1
1899.....	85.7	33.3	50	81.8	50	63.6	64.3	84	60.7
17 years.	55.3	46.7	56	61.1	55.3	65.5	50	1,100	55.9

The above presents a record for a period of seventeen years, of the percentages of all deaths which have befallen miners in this State, from falling coal in each of the several districts, and the table following shows the occupation and conjugal relation of the killed:

TABLE XLIII.—*Occupation and Conjugal Relation of Killed.*

OCCUPATION.	DISTRICTS AND NUMBER OF FATAL CASUALTIES IN EACH							Total number of killed.	CONJUGAL RELATION.				Number of dependents.	
	First.	Second.	Third.	Fourth.	Fifth.	Sixth.	Seventh.		Married.	Single.	Widows.	Children.		
Cagers .....		7					1	2		2				
Check weighman .....							1	1	1		1	1	2	
Drivers .....					1		1	2	1	1	1	1	2	
Engineers .....					1			1		1				
Laborers .....					2	1	2	5	5		5	8	13	
Loaders .....							2	2	2		2	5	7	
Machine helpers .....					1	2	1	4	2	2	2	4	6	
Miners .....	7	10	4	10	9	13	9	62	36	26	32	128	148	
Mine managers .....							1	1	1		1	3	4	
Stable boss .....				1				1	1		1	5	6	
Top boss .....							1	1		1				
Trapper .....		1						1		1				
Trip rider .....							1	1	1		1		1	
Totals .....	7	12	4	11	14	22	14	84	50	34	46	150	189	

Of the 84 killed, 50 were married and 34 single. The former left 46 widows and 150 children. We have here a total of 84 lives lost, and 189 persons left dependent, as a partial result of the years operations—a loss not much less than that sustained by the government in its war to destroy Spanish domination in the western hemisphere. The following table, which concludes this branch of the subject, sets forth the essential details for each district, for the past seventeen years:

TABLE XLIV.—*Fatal Accidents from Falls in Mines and from Other Causes, with Averages and Percentages for Seventeen Years.*

YEAR.	DISTRICT.														Total from falls in mines.	Total from other causes.	Total deaths .....
	First		Second		Third.		Fourth.		Fifth.		Sixth.		Sev-enth.				
	Falls.	Other causes.	Falls.	Other causes.	Falls.	Other causes.	Falls.	Other causes.	Falls.	Other causes.	Falls.	Other causes.	Falls.	Other causes.			
1883.....	7	72	1	....	13	5	11	5	8	12	....	....	....	....	40	94	134
1884.....	6	5	5	1	8	4	4	5	6	2	....	....	....	....	29	17	46
1885.....	6	4	....	3	2	4	9	4	3	4	....	....	....	....	20	19	39
1886.....	9	5	3	3	5	6	8	1	7	5	....	....	....	....	32	20	52
1887.....	10	4	3	2	3	2	2	1	10	4	....	....	....	....	28	13	41
1888.....	16	3	1	4	5	5	5	3	6	7	....	....	....	....	33	22	55
1889.....	8	6	1	2	3	3	6	2	8	3	....	....	....	....	26	16	42
1890.....	15	1	1	4	8	2	5	6	7	4	....	....	....	....	36	17	53
1891.....	10	5	2	2	4	5	6	6	11	9	....	....	....	....	33	27	60
1892.....	8	2	1	....	5	6	8	16	6	5	....	....	....	....	28	29	57
1893.....	15	2	3	2	8	4	6	4	16	9	....	....	....	....	48	21	69
1894.....	13	6	5	4	5	5	10	9	10	5	....	....	....	....	43	29	72
1895.....	8	8	7	5	7	9	7	8	9	7	....	....	....	....	38	37	75
1896.....	14	4	4	7	3	1	8	6	3	13	4	....	5	5	41	36	77
1897.....	8	3	4	5	3	1	10	....	11	8	8	3	2	3	46	23	69
1898.....	8	4	5	5	1	3	15	4	3	2	4	4	7	10	43	32	75
1899.....	6	1	4	8	2	2	9	2	7	7	14	8	9	5	51	33	84
17 years...	167	135	50	57	85	67	129	82	131	106	30	15	23	23	615	485	1,100
Averages .....	9.8	8	3	3.4	5	4	7.6	4.8	7.7	6.2	1.8	0.9	1.4	1.4	36.2	28.5	64.7
Percentages..	55.3	44.7	46.7	53.3	56	44	61.1	38.9	55.3	44.7	65.5	34.5	50	50	55.9	44.1	.....

NON-FATAL ACCIDENTS.

The tables following contain statistics relative to accidents of this class, showing the number by districts for the present year, for a series of years, particular occupations of those injured, conjugal relation of the injured, and the causes of accidents and time lost; also the percentages from year to year of men employed, tons produced, men killed and men injured:

TABLE XLV — *Non-Fatal Accidents, by Districts, 1899.*

District.	Number of men injured.	Total number of employés.	Total number of tons of coal mined.	Number of employés to one man injured.	Number of tons of coal mined to one man injured
First.....	148	7,498	3,535,316	51	23,887
Second .....	93	6,631	3,326,000	71	35,763
Third. ....	17	1,799	729,132	106	42,890
Fourth.....	119	4,655	3,357,737	39	28,216
Fifth .....	68	6,401	4,810,626	94	70,745
Sixth.....	92	5,008	4,283,258	54	46,557
Seventh.....	60	4,999	3,392,376	83	56,540
The State.....	597	36,991	23,434,445	62	39,254

TABLE XLVI.—*Non-Fatal Accidents for Seventeen Years.*

Year.	Number of men injured.	Total number of employés.	Total number of tons of coal mined.	Number of employés to one man injured.	Number of tons of coal produced to one man injured.
1883.....	231	23,939	12,123,456	104	52,482
1884.....	197	25,575	12,208,075	130	61,970
1885.....	176	25,446	11,834,459	145	67,241
1886.....	171	25,846	11,175,241	151	66,126
1887.....	180	26,804	12,423,066	149	69,017
1888.....	179	29,410	14,328,181	164	80,046
1889.....	201	30,076	14,017,298	150	69,738
1890.....	294	28,574	15,274,727	97	51,955
1891.....	367	32,951	15,660,698	90	42,672
1892.....	370	33,632	17,062,276	91	46,114
1893.....	403	35,390	19,949,564	88	49,503
1894.....	521	32,635	17,113,576	63	32,848
1895.....	605	31,962	17,735,864	53	29,315
1896.....	672	33,054	19,786,626	49	29,444
1897.....	518	33,788	20,072,758	65	38,751
1898.....	438	35,026	18,599,299	80	42,464
1899.....	597	36,991	23,434,445	62	39,254
Averages, 17 years...	360	30,653	16,047,036	85	44,575

Total injured.....	6,120
Total employés .....	521,089
Total tons 17 years.....	272,799,609
Average.....	524 tons



TABLE XLVII.—*Non-Fatal Accidents by Occupation and Districts, with Totals and Percentages.*

OCCUPATION.	DISTRICT.							Totals.	Per- cent- ages.
	First	Second	Third	Fourth	Fifth	Sixth	Sev- enth.		
Blacksmith .....	1						1	2	0.33
Cagers.....	2	1	1	1	1	1	1	8	1.34
Carpenters .....		1		1			1	3	.50
Dirtman .....				1				1	.17
Drillers.....						2		2	.33
Drivers .....	33	10	4	17	24	24	19	131	21.94
Fire boss .....	1							1	.17
Firemen .....						1		1	.17
Gripper.....					1			1	.17
Laborers .....		3		31	4	3	4	45	7.54
Leverman .....				1				1	.17
Loaders .....				1	7	7	6	21	3.52
Machine men.....		1		5	5	8	5	24	4.02
Miners.....	102	66	11	53	20	38	20	310	51.93
Mine examiner.....					1			1	.17
Mine manager.....						1		1	.17
Pickers .....	1				1			2	.33
Pumpmen .....							1	1	.17
Roadmen .....	2						1	3	.50
Shooters .....						2		2	.33
Shovelers .....						4		4	.67
Spraggers .....		2						2	.33
Stable boss.....				1				1	.17
Superintendent.....		1						1	.17
Timbermen .....	2	5		1	1	1	1	11	1.85
Topmen .....	1			3				4	.67
Trackman .....		1						1	.17
Trappers .....	2			1	1			4	.67
Trimmers .....	1		1		2			4	.67
Trip riders .....		2						2	.33
Trolleyman.....				1				1	.17
Truckman .....				1				1	.17
Totals .....	148	93	17	119	68	92	60	597	100.00

TABLE XLVIII.—*Conjugal Relation of the Injured and the Time Lost from Injuries.*

District.	Total.	Married.	Single.	Children	Depend- ents.	No. of men reported as losing time.	Total days lost.	Average days lost per man.
First .....	148	82	66	142	201	137	5,831	42.6
Second .....	93	48	45	134	182	83	3,661	44.1
Third.....	17	11	6	31	42	17	1,108	65
Fourth .....	119	66	53	143	213	118	5,324	44.7
Fifth .....	68	27	41	72	73	63	2,792	44.3
Sixth .....	92	60	32	178	238	90	3,147	35
Seventh .....	60	35	25	82	112	47	1,460	31
The State....	597	329	268	782	1,061	555	23,223	42

TABLE XLIX.—*Causes of Non-Fatal Accidents, by Districts.*

CAUSE.	DISTRICT.							The State.	Per- cent- ages.
	First	Second	Third	Fourth	Fifth	Sixth	Sev- enth.		
Cages .....	4	1	.....	1	2	1	1	10	1.68
Explosion of powder....	2	.....	1	2	2	6	.....	13	2.18
Falling coal and rock....	93	60	6	81	24	51	20	335	56.12
Falling down shaft .....	.....	.....	.....	.....	1	.....	.....	1	.17
Falling timber .....	1	.....	.....	1	.....	1	2	5	.84
Fire damp.....	.....	1	.....	.....	4	.....	.....	5	.84
Flying coal.....	.....	.....	2	4	1	4	.....	11	1.84
Gas explosion.....	2	.....	.....	.....	.....	.....	.....	2	.33
Machines .....	.....	.....	.....	.....	2	3	1	6	1.00
Pit cars.....	40	25	7	21	22	19	25	159	26.63
Premature blasts.....	.....	1	.....	1	3	.....	3	8	1.34
Railroad cars.....	2	.....	1	.....	.....	1	.....	4	.67
Miscellaneous.....	4	5	.....	8	7	6	8	38	6.36
Totals .....	148	93	17	119	68	92	60	597	100.00

TABLE L—Percentages of Non-Fatal Accidents Caused by Falling Roof and Sides—Seventeen Years.

YEAR.	NON-FATAL ACCIDENTS.				YEAR.	NON-FATAL ACCIDENTS.			
	Total.	Falling roof and sides.	All other causes.	Per cent caused by falling roof or sides.		Total.	Falling roof and sides.	All other causes.	Per cent caused by falling roof or sides.
1883.....	231	130	101	56.28	1892.....	370	234	136	63.25
1884.....	197	135	62	68.53	1893.....	403	254	149	63.03
1885.....	176	118	58	67.00	1894.....	521	294	227	56.43
1886.....	171	109	62	63.74	1895.....	605	398	267	55.87
1887.....	180	124	56	68.88	1896.....	672	373	299	55.51
1888.....	179	112	67	62.58	1897.....	518	310	208	59.85
1889.....	201	129	72	64.17	1898.....	438	252	186	60.87
1890.....	294	196	98	66.66	1899.....	597	335	262	56.12
1891.....	367	227	140	61.85	Total....	6,120	3,670	2,450	60.00

TABLE LI—Total Number Killed and Injured, with Percentages of all Accidents Occasioned by Falling Roof or Sides During Seventeen Years—1883-1899.

YEAR.	NUMBER.			PER CENT.		
	Killed.	Injured.	Total.	Killed.	Injured.	Total.
1883.....	134	231	365	30	56.28	47.7
1884.....	46	197	243	56.5	68.53	66.25
1885.....	39	176	215	51.3	67	64.18
1886.....	52	171	223	61.5	63.74	63.23
1887.....	41	180	221	68.3	68.88	68.77
1888.....	55	179	234	60	62.58	61.97
1889.....	42	201	243	61.9	64.17	63.78
1890.....	53	294	347	67.9	66.66	66.86
1891.....	60	367	427	55	61.85	60.88
1892.....	57	370	427	49.1	63.25	61.36
1893.....	69	403	472	69.6	63.03	63.98
1894.....	72	521	593	58.3	56.43	56.82
1895.....	75	605	680	50.7	55.87	55.59
1896.....	77	672	749	53.3	55.51	55.27
1897.....	69	518	587	66.7	59.85	60.65
1898.....	75	438	513	57.33	60.87	60.34
1899.....	84	597	681	60.71	56.12	56.68
17 years.....	1,100	6,120	7,220	55.91	59.97	59.35

TABLE LII—Percentages of Increase and Decrease from Year to Year of Men Employed, Tons Produced, Men Killed and Men Injured.

YEAR.	MEN EMPLOYED.		TONS PRODUCED.		KILLED.		INJURED.		
	Increase	D'crease	Increase	D'crease	Increase	D'crease	Increase	D'crease	
1883 to 1884 .....	6.83	.....	0.7	.....	.....	.....	65.67	.....	14.72
1885.....	.....	0.5	.....	3.06	.....	.....	15.22	.....	10.66
1886.....	1.57	.....	.....	5.57	33.33	.....	.....	.....	2.84
1887.....	3.71	.....	11.17	.....	.....	.....	21.15	5.26	.....
1888.....	9.72	.....	15.34	.....	.....	.....	34.15	.....	0.56
1889.....	2.26	.....	.....	2.17	.....	.....	23.64	12.29	.....
1890.....	.....	5.00	8.97	.....	26.2	.....	.....	46.27	.....
1891.....	15.31	.....	2.53	.....	13.2	.....	.....	24.83	.....
1892.....	2.07	.....	8.95	.....	.....	.....	5.00	0.82	.....
1893.....	5.23	.....	16.92	.....	21.05	.....	.....	8.92	.....
1894.....	.....	7.78	.....	14.22	4.35	.....	.....	29.28	.....
1895.....	.....	2.06	3.64	.....	4.17	.....	.....	16.12	.....
1896.....	3.42	.....	11.56	.....	2.67	.....	.....	11.07	.....
1897.....	2.22	.....	1.45	.....	.....	.....	10.4	.....	8.04
1898.....	3.66	.....	.....	7.34	8.7	.....	.....	.....	15.44
1899.....	5.61	.....	26.00	.....	12.00	.....	.....	36.3	.....

#### NATIONALITY OF COAL MINERS AND COAL MINE EMPLOYÉS.

In the preparation of this year's report, the Mine Inspectors were requested to furnish this office with a list, showing the nationality of all classes of employés engaged in the coal industry. It will be observed that, of the total employés reported, 43 per cent are natives. Americans, English, Scotch and Irish comprise 62 per cent of all employés. Of the foreignspeaking element, the German predominates, representing 11 per cent of the employés. Of the entire number, 861, or 2 per cent were returned as unknown. The table following presents the number and nationality of each in the several districts:



TABLE LIII.—*Showing the Nationality*

Counties and Districts.	American.	English.	Scotch.	Irish.	Welsh.	German.	French.	Italian.
Grundy.....	211	553	329	254	126	156	36	1,020
Kankakee.....	69	25	23	6	11	3	.....	61
LaSalle.....	468	553	230	305	89	298	67	161
Livingston.....	90	70	23	19	18	18	6	30
Will.....	4	17	16	22	.....	1	.....	11
First District.....	842	1,218	621	606	244	476	109	1,283
Bureau.....	258	291	162	194	47	167	11	780
Henry.....	86	32	6	18	1	39	.....	.....
Marshall.....	142	24	28	50	8	63	15	57
Mercer.....	380	150	37	29	25	27	.....	.....
Peoria.....	817	77	22	14	5	176	17	2
Rock Island.....	79	24	3	2	3	30	.....	.....
Stark.....	63	11	2	4	.....	.....	.....	.....
Woodford.....	49	31	19	16	2	33	18	40
Second District.....	1,874	640	279	327	91	535	61	879
Brown.....	22	3	.....	5	.....	.....	.....	.....
Fulton.....	875	145	37	24	41	31	1	5
Hancock.....	25	1	.....	.....	.....	.....	.....	.....
Knox.....	104	14	7	3	1	.....	1	.....
McDonough.....	146	99	8	16	5	.....	.....	.....
Schuyler.....	35	2	2	.....	.....	4	.....	.....
Warren.....	47	.....	.....	5	.....	.....	.....	.....
Third District.....	1,254	264	54	53	47	35	2	5
Cass.....	9	1	.....	5	.....	.....	.....	.....
Logan.....	110	30	7	11	3	86	4	.....
Macon.....	36	19	14	26	2	34	3	30
McLean.....	58	20	15	30	4	37	4	4
Menard.....	294	51	5	58	5	52	1	4
Tazewell.....	95	37	8	16	2	51	.....	.....
Vermilion.....	1,181	143	79	154	41	217	68	102
Fourth District.....	1,783	301	128	300	57	477	80	140
Calhoun.....	9	2	.....	3	.....	6	.....	.....
Christian.....	739	20	16	31	3	34	6	12
Greene.....	32	15	.....	2	.....	1	.....	.....
Jersey.....	6	1	2	6	.....	5	.....	.....
Macoupin.....	831	107	64	118	32	674	17	50
Montgomery.....	361	14	13	20	12	30	5	37
Morgan.....	8	3	.....	1	.....	.....	.....	.....
Sangamon.....	1,252	185	76	341	55	339	20	69
Scott.....	38	7	.....	3	5	.....	.....	.....
Shelby.....	94	10	3	12	.....	6	3	11
Fifth District.....	3,370	364	174	537	107	1,095	51	179

*of all Employés at the Mines in the State.*

Counties and Districts.	Austrian and Bohemians.	Hungarians.	Poles.	Belgian.	Russian.	Danes, Swedes and Norwegians.	Unknown.	Total.
Grundy.....	151	118	114	60	42		128	3,298
Kankakee.....	10			2				210
LaSalle.....	262	534	497	17	45	20		3,576
Livingston.....	12	12	15		1			314
Will.....			10	3			16	100
First District.....	435	664	636	112	88	36	128	7,498
Bureau.....	11		504	100	42	116	388	3,071
Henry.....				5		96		253
Marshall.....	113		109	22	50			681
Mercer.....	10	9		4		119		790
Peoria.....			2				1	1,133
Rock Island.....	1					7		149
Stark.....						2		82
Woodford.....			192	42				412
Second District.....	135	9	807	173	92	341	388	6,631
Brown.....								30
Fulton.....	21						20	1,200
Hancock.....								26
Knox.....						33	4	167
McDonough.....						7		281
Schuyler.....								43
Warren.....								52
Third District.....	21					40	24	1,799
Cass.....							5	20
Logan.....			10					261
Macon.....			189	2			23	378
McLean.....	2		19			141	53	387
Menard.....			20		3	42	35	570
Tazewell.....							5	214
Vermilion.....	48	73	145	180	181	19	194	2,825
Fourth District.....	50	73	383	182	184	202	315	4,655
Calhoun.....								20
Christian.....	4		14					879
Greene.....								50
Jersey.....								20
Macoupin.....	207		36	1	37		1	2,175
Montgomery.....	3		7		9			511
Morgan.....							1	13
Sangamon.....	32	6	116	4	8		4	2,507
Scott.....								53
Shelby.....	4		29		1			173
Fifth District.....	250	6	202	5	55		6	6,401

*Nationality of Employés**Table LIII.*

Counties and Districts.	American.	English.	Scotch.	Irish.	Welsh.	German.	French.	Italian.
Bond .....	156	5	3	4	1	10	2	4
Clinton .....	182	12	8	25	.....	249	.....	124
Madison .....	485	87	20	72	32	226	21	24
Marion .....	659	19	20	16	3	162	9	43
St. Clair .....	974	250	45	46	34	684	19	.....
Sixth District.....	2,456	373	96	163	70	1,331	51	195
Gallatin .....	68	2	.....	1	.....	2	.....	.....
Hamilton .....	11	.....	.....	.....	.....	.....	.....	.....
Jackson .....	1,080	31	7	13	9	27	.....	128
Jefferson .....	67	4	4	5	.....	4	.....	1
Johnson .....	20	2	.....	4	.....	.....	.....	.....
Perry .....	1,016	100	11	29	10	77	12	68
Randolph .....	359	43	14	25	4	32	6	.....
Saline .....	159	4	.....	6	1	3	.....	.....
Washington .....	43	3	1	.....	.....	29	.....	.....
Williamson .....	1,178	45	23	17	5	15	1	138
Seventh District.....	4,001	234	60	100	29	189	19	335
The State .....	15,580	3,394	1,412	2,086	645	4,138	373	3,016
Percentages .....	43.12	9.40	3.91	5.77	1.79	11.45	1.03	8.35

A general recapitulation of all the principal totals presented by the returns from the seven inspection districts will be found in the following table. Succeeding this appears the reports of the State Inspectors for the several districts of the State, followed by an



*at the Mines.*

—Concluded.

Counties and Districts.	Austrian and Bohemians.	Hungarian.	Poles.	Belgian.	Russian.	Danes, Swedes and Norwegians.	Unknown.	Total.
Bond .....	2							181
Clinton .....	79	8	66	12	63			482
Madison .....			12		3			1,295
Marion .....	1	13	4	3	7			927
St. Clair .....								2,123
Sixth District .....	82	21	82	15	73			5,005
Gallatin .....								73
Hamilton .....								11
Jackson .....								1,295
Jefferson .....								85
Johnson .....								26
Perry .....	1		12					1,336
Randolph .....	1	1			1			486
Saline .....								173
Washington .....			11					57
Williamson .....					5			1,427
Seventh District .....	2	1	23		6			4,999
The State.....	975	774	2,133	487	498	619	861	36,991
Percentages.....	2.70	2.14	5.9	1.35	1.38	1.71		

appendix containing the register of certificated mine managers; hoisting engineers; mine examiners; inspection fee accounts; the revised mining law and other acts relating to mining, also the reports of the Superintendents of the Free Employment Offices for a period of nine weeks to October 1, 1899.

TABLE LIV.—*Recapitulation*

## STATISTICS OF COAL MINING IN ILLINOIS

DISTRICTS.	MINES.						PRODUCT.				VALUES.	
	Number of counties.	Number of mines.	Shipping mines.	Mines in local trade.	New mines.	Abandoned mines.	Total tons produced.	Tons of lump coal.	Tons of other grades.	Tons shipped.	Aggregate value of total product.	Average value of lump at the mine.
First.....	5	84	37	47	11	13	3,535,316	2,677,359	857,957	2,999,604	\$3,368,762	\$1.139
Second .....	8	185	45	140	25	24	3,326,000	2,669,631	656,369	2,877,142	3,475,973	1.191
Third .....	7	211	23	188	53	59	729,132	600,280	128,852	561,664	696,505	1.07
Fourth.....	7	87	37	50	3	10	3,357,737	2,404,385	953,352	2,746,842	2,573,100	.8513
Fifth.....	10	87	51	36	11	3	4,810,626	3,480,311	1,330,315	4,095,235	3,318,120	.8215
Sixth .....	5	104	72	32	13	7	4,283,258	3,294,077	989,181	3,673,707	2,653,912	.7169
Seventh .....	10	131	57	74	15	7	3,392,376	2,301,555	1,090,821	3,064,957	2,322,098	.8224
Totals ....	52	889	322	567	131	123	23,434,445	17,427,598	6,006,847	20,019,147	18,408,470	.....
Averages..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	*\$0.9186

\* Average value of other grades, per ton: First district, 59.6 cents; second district, 44 cents; third district, 41.3 cents; fourth district, 55.09 cents; fifth district, 34.56 cents; sixth district, 29.5 cents; seventh district, 39.35 cents.

by Districts.

FOR THE YEAR ENDED JUNE 30, 1899.

EMPLOYEES.			Average number of days of active operation—all mines.	Number of horses or mules employed in or about the mines.	WAGES.			Number of kegs of powder used.	MACHINES.			CASUALTIES.			
Number of miners.	Number of other employes.	Total number of employes.			Average price paid per gross ton.		Total amount of wages paid during the year to all employes, excepting office help.		No. of mines using.	Number in use.	Total tons cut by machines.	Killed.	Injured.	Widows.	Children.
					For hand mining.	For machine mining.									
5,688	1,810	87,498	188	567	\$0.596	\$0.37	\$2,835,177	27,002	1	9	42,076	7	148	3	18
4,920	1,711	6,631	181.5	645	.577	.27	2,508,457	53,458	2	9	64,718	12	93	3	12
1,415	384	1,799	146.3	198	.475	.275	519,883	23,112	2	4	25,471	4	17	3	5
3,056	1,599	4,655	199	426	.431	.291	2,084,107	70,924	9	66	1,083,361	11	119	5	23
4,421	1,980	6,401	190	621	.403	.324	2,655,965	100,756	15	144	1,822,040	14	68	9	33
3,583	1,425	5,008	196.8	512	.40	.329	2,182,747	68,883	23	144	2,169,954	22	92	14	38
3,366	1,633	4,999	159	557	.345	.281	1,820,219	79,348	12	64	807,692	14	60	9	23
26,449	10,542	36,991	.....	3,526	.....	.....	\$14,616,555	423,483	64	440	6,085,312	84	597	46	155
.....	.....	.....	174.6	.....	*\$0.471	†\$0.3134	.....	.....	.....	.....	.....	.....	.....	.....	.....

\*Average price for 16,861,487 gross tons; average price for mining 367,281 screened tons, 86.1 cents per ton.

† Average price for 6,085,312 tons mined by machine. 120,365 tons mined in the fourth district and paid for at \$1.50 per day.



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ANNUAL REPORTS

OF THE SEVERAL

State Inspectors of Coal Mines

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## FIRST INSPECTION DISTRICT—1899.

Counties: Grundy, Kankakee, LaSalle, Livingston, Will.

HECTOR McALLISTER, *Inspector, Streator.*

HON. DAVID ROSS, *Secretary.*

*State Bureau of Labor Statistics, Springfield, Illinois:*

SIR:—In compliance with section 12 of the mining law of this State, I herewith submit the sixteenth annual report of the coal mines in the First Inspection District, for the year ending June 30, 1899. This report presents tabulated statements showing the number of mines in operation, both shipping and local; the depth of coal below the surface; the geological number and thickness of the various seams; the number of new and abandoned mines; the total number of persons employed at each mine; the number of tons of lump coal, and of other grades, with the average value of both at the mines; the aggregate value of the total product; the number of kegs of powder used; the casualties in and around the mines; the number of widows and orphans, and the number of days of active operation in all mines in the district.

The following is a summary of the statistics for the year:

Total number of mines.....	84
Number of shipping mines.....	37
Number of local mines.....	47
Number of new mines.....	11
Number of abandoned mines.....	13
Number of miners.....	5,688
Number of other employes.....	1,810
Total number of employes.....	7,498
Number of fatal accidents.....	7
Number of non-fatal accidents.....	148
Number of wives made widows.....	3
Number of children made fatherless.....	18
Total tons of coal produced.....	3,535,316
Tons of lump.....	2,677,359
Tons of other grades.....	857,957
Average value per ton of lump coal at the mine.....	\$1.139
Average value of other grades per ton.....	80.401
Aggregate value of total product.....	\$3,368,762
Average price paid per gross ton for hand mining.....	80.596
Average price paid per gross ton for machine mining.....	80.37
Average number of days of active operation.....	188.2
Number of mines operated by hand mining.....	83
Mines using machines.....	1
Number of kegs of powder used.....	27,002
Tons of coal cut by machines.....	42,076
Number of machines in use.....	9
Number of tons of coal shipped.....	2,999,604
Tons sold to local trade.....	438,152
Tons consumed at the plant.....	97,560
Tons of coal mined to each fatal accident.....	505,045
Tons of coal mined to each non-fatal accident.....	23,887
Number of employes per fatal accident.....	1,071
Number of employes per non-fatal accident.....	51

Coal production by counties in the First District, with increase or decrease in each, for the years ended June 30, 1898, and 1899:

COUNTIES.	Total Output of all Grades of Coal in Tons.		Increase.	Decrease.
	1898.	1899.		
Grundy .....	796,249	1,280,332	484,083	.....
Kankakee.....	84,632	129,018	44,386	.....
LaSalle .....	1,165,490	1,975,939	810,449	.....
Livingston .....	122,087	117,248	.....	4,839
Will .....	40,904	32,779	.....	8,125
Total .....	2,209,362	3,535,316	1,338,918	12,964
Increase .....				1,338,918
Decrease .....				12,964
Net increase.....				1,325,954

The district shows an increase in output over that of 1898 of 1,325,954 tons, or 60.6 per cent. The largest increase is in LaSalle county, which is 810,449 tons, or 69.5 per cent. Grundy county comes next with an increase of 484,093 tons, or 60.8 per cent, and Kankakee shows an increase of 44,386 tons, or 52.4 per cent. Will county shows a decrease of 8,125 tons and Livingston county 4,839 tons.

*New Mines.*—Grundy county.—The Chicago, Wilmington & Vermilion Coal Co. has opened a new mine in Grundy county, three and a half miles from Gardner. A town site has been located, which will bear the name of South Wilmington. About twenty houses have been built and many others are in course of construction. The shaft is 189 feet to the coal, which is No. 2 of the geological section; a new steel tower has been erected; the engine and boiler houses are covered with galvanized corrugated iron; a shaker screen has been put in, and the plant is in every way first class and intended for a large output.

The Star Coal Co. has reopened its No. 1 mine at Carbon Hill, Grundy county. This mine was destroyed by fire two years ago. The company has erected a new tower, engine house, and all necessary out-buildings, and the plant has been put in first class condition.

James Heather has opened a new mine near Morris.

Tasdal Bros. have opened a new mine at Nettle Creek, about nine and a half miles northwest of Morris.

John Telfer has opened a new mine near Morris.

George R. Blair has reopened his No. 4 mine near Morris.

William Wood has abandoned his mine at Morris and sunk a new shaft about 400 feet west of the old one.

Milo E. Howe purchased the mine formerly operated by Charles Heather, but abandoned the same after operating it a short time.

Thomas Fleming & Co. have purchased the mine formerly operated by William Laherty, near Morris.



La Salle county.—Price, Jones & Co., have opened a new mine one mile north-west of Streator.

Bargreen Bros., have opened a new mine one mile south-west of Streator.

James Penman has opened a new mine one mile southwest of Streator.

Dawson & Gray have opened a new mine near Streator.

J. C. Dawson & Co., have opened a new mine at Deer Park.

Livingston county.—A. W. Pank & Co., have opened a new mine two miles south of Streator.

*Abandoned mines.*—A. M. Barackman has abandoned his mine at Coalville, Livingston county, and purchased the mine formerly operated by Oscar Kimes, of the same place. He has put in a switch from the Santa Fe railroad to the mine, and has also erected a new tower, put in a pair of hoisting engines and a fan, and now has the mine in first class condition.

L. A. Munts & Sons have abandoned their mine at Streator and opened a new mine about one mile northwest of Streator, in Livingston county.

Joseph Kilburn has abandoned his mine near Streator, in Livingston county.

Edgar Hamilton has abandoned his mine near Streator, in Livingston county.

The Kimes Cooperative Co., opened a new mine in Coalville, but abandoned the same after operating about six months.

The Chicago, Wilmington & Vermilion Coal Co., has abandoned its "R" shaft near Braidwood, Grundy county.

The Gardner Wilmington Coal Co., has abandoned its mine at Gardner, Kankakee county.

The Pontiac Coal Co., Pontiac, Livingston county, has abandoned the No. 2 seam; there being so many faults and slips in the coal, it would not pay to operate it, and have commenced developing seam No. 5 of the geological section.

William Thomas & Co., have leased the mine formerly operated by D. W. Thorne, one-half mile west of Streator.

Henry Wonders has leased the mine formerly operated by C. G. Darm, one mile south of Streator.

Charles Kain has abandoned his mine at Deer Park, La Salle county.

*Prospective Mines.*—The Campus Coal Co., has sunk a new shaft two miles north of Campus, Livingston county, on the Wabash railroad; the shaft is 255 feet deep to No. 2 seam of the geological section; the coal is 3½ feet thick. In sinking the company passed through a seam of coal 12 feet thick, 4 feet above the 3½ foot seam. At the present time the company is developing the thicker seam.

The Star Coal Co., of Streator, is now sinking a shaft near its No. 2 mine at Kangley, La Salle county, to the No. 2 seam, which is 210 feet below the surface.

The Big Four Wilmington Coal Co., has sunk a slope at its "Marie" mine as a traveling way for the employes; there is also a good escape shaft at this mine. This company is now sinking a slope, dipping about 25 degrees, one

mile from this mine. This will be a new departure from hoisting coal out of a vertical shaft in this district and the result will be looked upon with much interest.

*Improvements.*—The Star Coal Co., at its No. 2 mine at Kangley, La Salle county, has sunk an air shaft at the face of the north workings, and has also made connections with an old shaft on the west side, which has greatly improved the ventilation of the mine.

The Chicago, Wilmington & Vermilion Coal Co., at Streator, has put in an electric haulage plant at its No. 2 mine. One locomotive is already in operation, and the second one will be put in operation in a short time.

The La Salle Carbon Coal Co., La Salle, has erected a new 14 foot fan of their own design, to take the place of the 10 foot fan formerly in operation at its Union mine, which has greatly improved the ventilation. A shaker screen has also been put in at this mine.

*Fatal Accidents.*—September 16, 1898, John Robinson, a miner, aged 49 years, married, was fatally injured by a fall of rock at the face of his room in the Star Coal Company's mine No. 3, Carbon Hill, Grundy county. Deceased had cut up one side of the brushing and entered a wedge over the top, intending to take it down, but, it being quitting time, he went home, intending to take it down in the morning. However, he neglected to do so, and commenced to load coal without examining the rock. About 10 a. m. the rock fell on him, crushing him so that he died about 3 p. m. He leaves a widow and six children, of whom two are dependent.

This accident was due to his own negligence. With proper care in taking the rock down, or putting a prop under it, the accident would have been avoided.

September 27, 1898, James Fairley, a miner, aged 22 years, single, was instantly killed by a fall of rock in the Star Coal Company's mine No. 3, Carbon Hill, Grundy county. Deceased and his partner had been taking down some rock at the face, and were in the act of cleaning it away, when, without any warning, a great mass of rock fell on him, resulting as stated.

October 27, 1898, Gus Downey, miner aged 45 years, single, was instantly killed by a fall of rock at the face of his room in the sixth right, northeast entry in the Chicago, Wilmington & Vermilion Coal Company's mine No. 1, at Heenanville, La Salle county. Deceased and his partner had been notified that morning to put more props in their room, as there was a fault or slip in the roof, running diagonally across the face of the room, which they did before commencing work. About 2 p. m. they fired a blast in the coal, returning immediately before the smoke had cleared away, when a stone fell on him, resulting as stated.

January 16, 1899, Edward Wheelwright, miner, aged 60 years, single, was fatally injured by a fall of rock in his roadway about thirty feet from the face of his room in the Star Coal Company's No. 2. mine at Carbon Hill, Grundy county. Deceased was eating dinner at the time of the accident. A piece of rock fell on him, breaking one of his legs and seriously injuring him about the back. He died two days after receiving his injuries.

January 24, 1899, Otto Gribkos, miner, aged 30 years, single, was instantly killed by a fall of rock at the face of his room, in the No. 1 mine of the La Salle County Carbon Coal Co., at La Salle. Deceased had taken off a break of coal, and instead of propping up his place where he had taken the coal out, which is customary in long-wall workings, the props being about six feet from the face, he commenced mining again, and just as he had got down to work, a large rock, weighing about 3,500 pounds, fell on him, killing him instantly.

January 26, 1899, Peter Herman, miner, aged 48 years, married, was instantly killed by the ascending cage, about 3:30 p. m., in the Chicago, Wilmington & Vermilion Coal Company's mine No. 1, at Heenanville, La Salle county. It appears from the evidence, that deceased, with fifty or sixty others was at the bottom of the shaft, waiting to go out at quitting time. The mine manager, Robert Jordan, gave the signal to the cage to quit, as they do not blow the whistle until four o'clock. The cage pulled the empty car off the cage and told the men to stand back; he then commenced to ring three bells, and while in the act of ringing, the men in the rear pushed the men in front onto the cage, when the cage was suddenly started and caught deceased between the cage and door head, killing him instantly. He leaves a widow and six children, all dependent.

March 16, 1899, John Crossen, miner, aged 50 years, married, was instantly killed by a fall of rock at the face of his room in the Chicago, Wilmington & Vermilion Coal Company's mine No. 1, at Heenanville, La Salle county. Deceased and his son had put off two blasts, and after waiting a reasonable time for the powder smoke to clear away, they returned to the face of the room. The son sounded the roof and thought there was no danger; but there was a slip running diagonally across the room at the face. The son told his father to stand back and he would take down the loose coal, but before he could do so, a large rock fell from the slip in the roof, killing the father instantly. Deceased leaves a widow and six children, two of whom are dependent.

The tables of casualties follow, also the statistical tables by counties, giving in detail all information regarding the industry in the district.

Respectfully submitted,

HECTOR McALLISTER,

*State Inspector of Mines, First District.*

Streator, Illinois.

## Fatal Casualties—First District, 1899.

Date.	Name.	Age.	Occupation.	Residence.	Married.	Widow.	Children.	Single.	Dependents.	Cause of Accident.
1898.										
Sept. 16	John Robinson	49	Miner	Carbon Hill.	1	1	6	..	3	Falling rock
27	James Fairley	33	"	"	..	..	..	1	..	"
Oct. 27	Gus Downey	45	"	Streator	..	..	..	1	..	"
1899.										
Jan. 16	Edward Wheelright	60	"	Carbon Hill.	..	..	..	1	..	"
" 24	Otto Gribkos	30	"	LaSalle	..	..	..	1	..	"
" 26	Peter Herman	48	"	Streator	1	1	6	..	7	Ascending cage
Mar. 16	John Crossen	50	"	"	1	1	6	..	3	Falling rock
	Total—7				3	3	18	4	13	

## Recapitulation of Fatal Casualties—First District, 1899.

Residence.	No.	Occupation.	No.	Nature of Casualty	No.	Colliery.	No.
Carbon Hill..	3	Miner	7	Ascending cage	1	Chi., W. & V. C. Co.,	3
LaSalle.....	1			Falling rock	6	LaSalle Co. Coal Co.,	1
Streator.....	3					Star Coal Co.	3
Totals.....	7		7		7		7

## Non-Fatal Casualties—First District—July 1, 1899.

Date.	Name.	Age.	Residence.	Married.	Single.	Children.	Dependents.	Character of Injury.	Time lost— days.
1898.									
July 1	P. Amote	25	Carbon Hill.	..	1	..	..	Leg sprained	21
" 2	John Smith	72	Streator	..	1	..	..	Shoulder injured	14
" 3	J. Asmort	27	Carbon Hill.	1	..	..	1	"	21
" 6	Alix Kinkin	50	Braidwood.	1	..	6	..	Eye injured	77
" 7	Eli Williams	46	Kangley	1	..	..	..	Leg injured	49
" 9	George Stofan	46	Heenanville	..	1	..	..	Ribs broken	56
" 11	Mike Imro	21	Braceville.	..	1	..	..	Leg injured	42
" 11	Andrew Zunch	23	Streator.	..	1	..	..	"	28
" 16	Con Hartnett	29	LaSalle.	..	1	..	..	Thigh broken	207
" 23	Andrew Loukath	19	Streator	..	1	..	..	Leg injured	18
" 23	James George	42	"	1	..	4	5	Foot injured	14
Aug. 10	George Tomasko	23	"	..	1	..	..	Leg broken	90
" 10	John Kolorti	27	Kangley	1	..	..	..	Hand injured	30
" 18	Wm. McLuckie	35	Carbon Hill.	1	..	..	..	Foot injured	21
" 19	John Gasper	42	Kangley	..	1	..	..	Leg broken	96
" 23	Chas. Pihira	35	Braidwood.	1	..	..	..	Back injured	19
" 27	Albert Johnson	15	Oglesby	..	1	..	..	Arm injured	45
" 29	Chas. Anderson	15	Braidwood.	..	1	..	..	Leg injured	49
" 29	Martin Cugnot	40	"	1	..	6	7	Head and back injured	30
Sept. 2	Dan Davis	28	Rockwell	..	1	..	..	Leg injured	14
" 7	William Beard	36	Streator	1	..	2	2	Foot injured	94
" 8	Wm. Kunieiah	20	LaSalle	..	1	..	..	Leg broken	120
" 13	James Dunn	54	"	1	..	2	1	Face cut	14
" 13	William Jaeski	34	"	..	1	..	4	Foot injured	27
" 14	John Klousa	42	Streator	1	..	5	6	Hip injured	24
" 14	John Klousa, Jr.	20	"	..	1	..	..	"	18

*Non-Fatal Casualties—First District—Continued.*

Date.	Name.	Age.	Residence.	Married.	Single.	Children.	Dependents.	Character of Injury.	Time lost days.
1898.									
Sept 21	John Jones	28	Streator	1		1		Hand injured.	16
" 24	Walter Hyson	39	LaSalle	1		6		Fingers crushed	32
" 24	Andrew Hudak	24	Streator		1			Foot crushed	30
" 26	John Clark	58	Diamond	1		2		Thumb injured	28
" 26	A. Komera	42	Carbon Hill		1			Back injured	21
" 29	Geo. Hepplewhite	55	Braidwood	1				Knee injured	24
Oct. 12	John Murphy	60	Oglesby	1		1		Foot injured	22
" 17	Thos. Olver	23	LaSalle	1		2		Leg broken	142
" 18	Mike Peters	38	Kangley	1				Hip injured	28
" 26	Mike Jennings	35	Pontiac	1				Leg broken	160
" 26	James Mulligan	35	"	1		4		Hip injured	20
Nov. 3	Chas. Thorne	30	Streator	1				Hand injured	12
" 3	George Biros	17	"		1			Face and hands burned	25
" 9	John Shema	34	"	1		4		Head and shoulder bruised	15
" 14	Frank Hula	45	Coal City		1			Foot crushed	98
" 14	Gasperdino Rolla	30	Braidwood	1				Hand crushed	23
" 19	Alex Oyes	24	Kangley	1				Foot crushed	28
" 23	John Gardner	40	"	1				Leg broken	90
" 25	Mike Paek	53	Braceville		1			Leg and thigh broken	182
" 25	A. A. Brown	40	Fairbury	1		4		Face and hands burned	12
" 27	David Johnson	30	Oglesby	1		2		Leg broken	60
" 29	Jerome Stamful	30	Kangley	1				Finger smashed	28
" 29	A. Balzarma	35	Carbon Hill	1				Foot injured	14
Dec. 1	Anton Cisgnik	30	LaSalle		1			Skull fractured, eye put out	14
" 5	James Feeny	22	"		1			Legs injured	14
" 5	James Morison	30	Carbon Hill		1			Foot bruised	21
" 6	Anton Nicholetta	43	Diamond	1				Finger injured	35
" 6	Chris White	25	LaSalle	1				Ribs broken	34
" 6	Fred Hardman	24	"	1				Bones in hand broken	42
" 7	Nat Offergelt	41	"	1		5		Both legs cut off	7
" 7	Barney Gado	29	Braceville		1			Arm broken	182
" 8	Alex Gilmour	58	Diamond	1				Back injured	42
" 8	William Walker	25	Braidwood	1		1		Body injured	38
" 10	M. Ferme	42	Carbon Hill		1			"	14
" 12	John Ratkey	32	Streator	1				Collar bone broken	50
" 12	Pat Woods	66	LaSalle	1				Wrist fractured	29
" 13	B. Berno	35	Carbod Hill	1				Leg broken	70
" 15	P. Ledger	22	"		1			Foot injured	28
" 15	F. Marietta	32	Braidwood	1				Thumb broken	63
" 19	J. Borilla	25	Carbou Hill		1			Leg broken	63
" 20	John Fisher	44	Streator	1		2		Hip injured	60
" 21	Paul Filnito	26	Carbon Hill		1			Back bruised	35
" 22	Allen Hill	26	Coal City	1				Side bruised	64
" 29	John McLean	17	"		1			Foot injured	35
" 30	Peter Martin	40	C. B. June	1		3		Side bruised	18
" 31	Joe Barto	46	Braidwood	1				Back injured	42
" 31	Isaac Painter	23	Streator		1			Foot crushed	28
1899.									
Jan. 3	Luis Bertino	52	Braceville		1			Leg broken	112
" 4	A. Perona	34	Braidwood	1				Hand injured	50
" 7	Lawrence Dropuh	18	LaSalle		1			Hand bruised	16
" 10	Joe Sinkula	38	Braidwood	1				Collar bone broken	112
" 15	M. Famborine	40	Carbon Hill	1				Finger crushed	42
" 16	Thos. Mulligan	48	Braidwood	1				Side injured	42
" 16	Geo. Ledger	26	Carbon Hill		1			"	14
" 18	J. Holden	22	"		1			Foot injured	14
" 19	Wm. Murray	16	"		1			Leg injured	14
" 20	William Gaede	33	LaSalle	1		3		Leg and ribs fractured	160
" 23	John Bidner	35	Streator	1		3		Thumb crushed	14
" 24	Frank Delancy	28	LaSalle		1			Foot bruised	21
" 25	Sam Monahan	56	Braidwood	1				Knee injured	35
" 25	A. Holden	40	Coal City	1		2		Body scalded	21
" 25	A. Schorper	35	Carbon Hill		1			"	14
" 30	Mathew Reid	24	Streator	1		1		Leg injured	18
" 31	Mike Bognett	24	Kangley		1			Back injured	14
Feb. 2	John Chrischoure	45	LaSalle	1		2		Side bruised	18
" 7	Anton Vedech	23	"		1			Back injured	22
" 8	J. Pallerson	21	Carbon Hill		1			Knee dislocated	49

\*Still idle.

† Not returned to work at this date.

## Non Fatal Casualties—First District.—Concluded.

Date.	Name.	Age.	Residence.	Married	Single.	Children.	Dependent.	Character of Injury.	Time lost— days.
1899									
Feb. 16	Peter Rolando....	16	Diamond....		1			Back injured.....	35
" 18	Matis Spans....	35	Streator....		1			Hand injured.....	41
" 18	George Gordon....	46	".....	1		4	1	Collar bone broken.....	66
" 18	John Cockburn....	36	".....		1			Shoulder injured.....	54
" 25	Thos. Holliday....	28	".....	1		2	3	Leg injured.....	48
" 25	Henry Anderson....	44	Braidwood....	1		4	5	Foot injured.....	63
" 27	Chas. Rose.....	45	La Salle....	1		6	7	Finger crushed.....	†
" 27	D. Gilchrist....	28	Carbon Hill....		1			Shoulder broken.....	59
Mar. 5	Peter Barto.....	40	Oglesby....	1			1	Leg bruised.....	24
" 8	Henry Pasko.....	30	".....	1		3	4	Foot injured.....	22
" 8	A. Dolinski....	26	Carbon Hill....		1			Back injured.....	28
" 8	Joseph Defash....	29	La Salle....		1			Foot injured.....	15
" 13	R. Shorley.....	26	Carbon Hill....		1			Back injured.....	28
" 13	Geo. Lisko.....	35	Kangley.....	1		1	2	Collar bone broken.....	48
" 15	Anton Sanmski....	44	Coal City....	1		3	4	Eye injured.....	42
" 16	Mat Molinski....	35	Braidwood....	1		3	4	Foot injured.....	35
" 17	A'd'w Merenshok	25	Streator....	1		1	2	Foot injured.....	30
" 20	David M. Jones....	25	Braceville....	1			2	Leg broken.....	91
" 20	Marco Vaserilo....	43	Clark City....		1			Leg broken.....	92
" 21	Andrew Sivan....	40	".....	1		5	6	Knee cap broken.....	101
" 21	J. Mollin.....	35	Coal City....	1		1	2	Arm bruised.....	14
" 23	M. Koskoski....	19	La Salle....		1			Foot and back bruised.....	15
" 27	Lawrence Urlaw....	45	".....	1		2	2	Shoulder and side bruised.....	24
" 29	John B. Puella....	48	Braceville....	1		5	6	Back bruised.....	28
" 30	Joseph Komp....	52	La Salle....	1		4	1	Leg bruised.....	24
" 31	John Mulligan....	34	Braceville....	1		6	7	Head and chest injured.....	42
" 31	J. Belario.....	27	Carbon Hill....		1			Leg bruised.....	21
April 4	Luke Freme.....	40	La Salle....	1			1	Foot bruised.....	66
" 6	Wm. Smedley....	28	Streator....		1			Leg broken.....	52
" 6	Joe Mashoda....	40	Diamond....	1		2	3	Leg broken.....	*
" 10	Joe Sokup.....	23	Braidwood....		1			Leg injured.....	42
" 15	Thos. Alderson....	17	".....		1			Leg injured.....	56
" 18	J. Hugno.....	41	Carbon Hill....	1				Back injured.....	28
" 20	Jacob Kreniski....	60	Peru.....	1		2	3	Back injured.....	12
" 21	Jas. McVey....	53	La Salle....	1		4	5	Leg broke.....	*
May 6	John Poot.....	23	Rutland....	1		1	1	Spine injured.....	*
" 8	A. Schoml.....	43	Coal City....	1		1	2	Leg bruised.....	21
" 11	M. Tervo.....	38	Carbon Hill....	1			1	Arm burned.....	14
" 11	Joe Cimera....	25	C. B. June....		1			Arm broken.....	61
" 12	C. Franzkewith....	27	Braceville....		1			Arm broken.....	49
" 13	Wm. Robinson....	30	La Salle....		1			Thumb crushed.....	38
" 31	Thos. Mortimer....	15	Braidwood....		1			Finger injured.....	*
June 2	John Stewart....	22	Diamond....	1		1	2	Hand injured.....	*
" 8	Mike Leonard....	22	Streator....		1			Ribs fractured.....	21
" 8	John Gilderman....	42	Carbon Hill....	1		1	2	Side injured.....	21
" 9	Wm. Poppleton....	22	".....		1			Leg injured.....	21
" 9	Henry Sheur....	48	Peru.....		1			Back injured.....	12
" 10	John Moseley....	16	Streator....		1			Hip injured.....	18
" 12	Wm. Moran....	22	Fairbury....		1			Back injured.....	*
" 17	August Belat....	35	Clark City....	1		1	2	Eye injured.....	12
" 20	Thos. Sheradon....	21	Carbon Hill....		1			Shoulder injured.....	*
" 20	James Cassett....	23	La Salle....		1			Back and leg injured.....	10
" 22	Ed. Smith.....	30	".....	1		3	4	Back injured.....	12
" 22	John Aehuster....	31	".....		1			Foot injured.....	*
" 26	John Ponk.....	30	Streator....	1			1	Leg injured.....	14
	Totals.....			81	67	142	201		5831

† Not returned to work.

\* Still idle.

Total men injured.....	148
Not recovered July 1, 1899.....	11
Number recovered.....	137
Time lost by men recovered.....	531 days
Average time lost by men recovered.....	42.6

*Recapitulation of Non-Fatal Casualties—First District—1899.*

Residence.	No.	Occupation.	No.	Nature of Casualty	No.	Colliery.	No.
Braceville.....	8	Blacksmiths..	1	Cage.....	4	Acme Coal Co.....	2
Braidwood...	18	Cagers.....	2	Falling coal.....	33	Braceville Coal Co...	8
Carbon Hill..	26	Car trimmers..	1	Falling rock.....	60	Big A.....	3
Clark City....	3	Drivers.....	33	Falling timber....	1	Cahill, James.....	2
Coal City.....	7	Fire Boss.....	1	Fan belt.....	1	C. W. & V. Coal Co..	24
Coal Br. Je....	2	Miners.....	102	Gas explosion....	2	Gardner & W. C. Co.	3
Diamond.....	6	Pickers.....	1	Kicked by mule....	1	La Salle Coal Co....	24
Fairbury.....	2	Roadman.....	2	Pit cars.....	40	M. & H. Zinc Co....	5
Heenanville..	1	Timbermen...	2	Powder explosion.	1	Oglesby Coal Co....	5
Kangley.....	9	Top man.....	1	Railroad cars.....	12	Pontiac Coal Co....	12
La Salle.....	26	Trappers.....	2	Steam.....	12	Rutland Coal Co....	1
Oglesby.....	5					Star Coal Co.....	38
Pontiac.....	2					Walton Bros.....	12
Peru.....	2					Wilm. M. & Mfg Co..	22
Rockwell.....	1					William Howe & Co.	12
Rutland.....	1					William Maltby.....	5
Streator.....	29						
Total.....	148		148		148		148

*Table showing the Nature of Injuries, Number of Persons Injured, Dependents, Time Lost, with Average and Percentage—First District.*

NATURE OF INJURIES.	Number.	Married.	Single.	Dependents.	TIME LOST		Per cent of injuries.
					Total days.	Average days.	
Arm broken.....	3		3		292	97.3	2.03
Arm injured.....	3	3		3	53	17.6	2.03
Back injured.....	18	7	11	16	413	23	12.16
Body injured.....	4	2	2	5	87	21.7	2.7
Collar bone broken.....	5	4	1	5	326	65.2	3.38
Eye injured.....	3	3		10	131	43.6	2.63
Face injured.....	2	1	1	5	39	19.5	1.35
Feet injured.....	21	11	10	29	726	34.6	13.18
Foot and back injured.....	1		1		15	15	.68
Fingers injured.....	7	4	3	16	157	22.4	4.72
Hand injured.....	9	6	3	4	239	25.5	6.08
Head and chest injured.....	1	1		7	42	42	.68
Head and back injured.....	1	1			30	30	.68
Head and shoulders injured.....	1	1		5	15	15	.68
Hip injured.....	6	1	2	15	168	28	4.05
Knee injured.....	4	3	1	8	209	52.2	2.7
Legs injured.....	21	8	13	21	538	25.2	14.18
Legs broken.....	17	8	9	21	1,567	95.7	11.48
Legs amputated.....	1	1		6			.68
Leg and ribs fractured.....	1	1		1	160	160	.68
Ribs injured.....	2	1	1		77	38.5	1.35
Ribs broken.....	1	1		1	34	34	.68
Shoulder injured.....	5	2	3	3	113	22.5	3.38
Side injured.....	6	4	2	11	177	29.5	4.05
Spine injured.....	1	1		1			.68
Thumb injured.....	2	2		6	80	40	1.35
Thumb broken.....	1	1		1	63	63	.68
Wrist injured.....	1	1		1	29	29	.68
Total averages and percentages.....	148	82	66	201	5,831	39.04	100.00

## Grundy County—First District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	Braceville Coal Co., No. 4	Braceville.....	103	3.2		Sh.	S.	M.	316,353	260,353	56,000
2	Frederick Schultz.....	"	77	2.9		"	H.	"	2,000	1,890	110
3	Wil. Star Coal Co., No. 5.	Coal City.....	115	3		"	"	"	71,680	57,757	13,923
4	Star Coal Co., No. 1.....	Carbon Hill.....	113	3		"	S.	"	12,596	10,122	2,474
5	" No. 2.....	"	98	3		"	"	"	207,733	173,418	34,314
6	" No. 3.....	"	99	3		"	"	"	131,479	110,164	21,315
7	C., W. & V. Coal Co., "R."	Braidwood ...	99	3		"	"	"	35,781	27,672	8,109
8	Wil. C. M. & Mfg Co., No. 4	Diamond.....	105	3		"	"	"	238,000	200,000	38,000
9	Big 4 Wilmington Coal Co	Coal City.....	90	3		"	"	"	230,232	187,163	43,069
10	Gard. & Wil. C. Co., No. 1	Gardner.....	210	3		"	"	"	11,933	9,582	2,351
11	J. T. Espley & Co.....	Morris.....	60	3		"	H.	"	4,413	4,113	300
12	James Heather.....	"	40	2.8		"	"	"	2,340	1,876	464
13	A. W. Telfer & Son.....	"	66	2.8		"	S.	"	1,300	900	400
14	Griffith & Wren.....	"	24	2.6		"	H.	"	1,319	1,018	301
15	James Bell.....	"	41	2.6		"	"	"	1,220	1,020	200
16	William Wood.....	"	70	2.4		"	"	"	3,000	2,500	500
17	Harry Kay.....	"	62	2.9		"	"	"	1,300	1,200	100
18	Frank Gilbride.....	"	80	3.2		"	"	"	2,700	2,580	120
19	William Laherty.....	"	60	3		"	"	"	3,000	2,800	200
20	John Telfer.....	"	20	2.5		"	"	"	450	375	75
21	George R. Blair.....	"	28	2.7		"	"	"	642	552	90
22	Tasdal Bros.....	"	97	2.9		"	"	"	861	741	120
Totals.....									1,280,332	1,057,796	222,536
Averages.....											

Whole number of openings reported in 1898, 20.

Number of new mines or places opened during the year, 4.

Number of mines exhausted or abandoned during the year, 2.

Whole number of openings reported for 1899, 22.

## Kankakee County—First District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	Gard. & Wil. Coal Co. "B"	Clark City....	106	4.8	7	Sh.	S.	*	† 127,322	78,361	48,961
2	William Treasure.....	Essex.....	63	2.8	2	"	H.	M.	1,696	1,546	150
Totals.....									129,018	79,907	49,111
Averages.....											

\* Mined by machine, 42,076 tons at 37 cents per ton.

Whole number of openings reported in 1898, 2.

Whole number of openings reported in 1899, 2.



Grundy County, 1899—Concluded.

Number.	VALUES.			EMPLOYES.			Price paid per gross ton—hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	ACCIDENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Number of horses or mules employed in or about the mine.	Fatal.
1	\$1 04	\$0 25	\$284,767	460	140	600	80 68	S. M.	269	\$272,253		40	8
2	1 75	50	3,363	5	1	6	8	.....	200	1,660	.....	1	.....
3	1 13	64	74,176	110	61	171	68	.....	298	71,918	342	8	.....
4	1 04	18	10,972	65	21	86	68	.....	102	12,696	375	10	5
5	1 04	18	186,471	360	66	426	68	.....	269	177,687	1,085	23	13
6	1 04	18	118,408	325	41	377	68	.....	251	110,514	715	18	11
7	1 25	28	36,617	28	69	357	68	.....	62	31,864	.....	22	.....
8	1 04	20	215,600	475	175	650	68	.....	245	191,264	395	49	22
9	1 04	25	205,417	430	90	520	68	.....	236	207,208	144	30	3
10	1 61	49	16,579	24	8	32	68	.....	225	11,626	.....	6	.....
11	1 95	70	8,230	12	3	15	1 07	W. ....	262	7,150	.....	1	.....
12	2 25	70	4,546	5	1	6	1 20	.....	257	3,468	.....	1	.....
13	2 00	70	2,080	2	2	2	1 20	.....	300	2,000	25	.....	.....
14	2 00	60	12,217	3	3	3	1 20	.....	270	1,643	.....	1	.....
15	2 15	70	2,333	3	3	3	1 20	.....	175	1,800	.....	1	.....
16	2 00	80	5,400	1	1	1	1 20	.....	200	3,960	.....	1	.....
17	2 25	80	2,780	1	1	1	1 20	.....	150	1,700	.....	1	.....
18	2 25	80	5,901	1	1	1	1 20	.....	220	3,000	.....	1	.....
19	2 25	80	6,460	1	1	1	1 20	.....	200	3,900	.....	1	.....
20	2 25	80	904	1	1	1	1 20	.....	150	400	.....	1	.....
21	2 25	80	1,314	1	.....	1	1 20	.....	270	960	.....	1	.....
22	2 25	80	1,763	4	1	5	1 20	.....	128	889	.....	1	.....
.....	.....	.....	81,196,549	2,601	697	3,298	.....	.....	.....	\$1,119,500	3,076	209	3
.....	\$1.077	\$0.2575	.....	.....	.....	.....	\$0.68.56	.....	.....	.....	.....	.....	.....

Kankakee County, 1899—Concluded.

Number.	VALUES.			EMPLOYES.			Price paid per gross ton—hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	ACCIDENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Number of horses or mules employed in or about the mine.	Fatal.
1	\$1 47	\$0 56	\$142,509	83	119	202	80 47	S. M.	196	\$98,787	2,081	41	3
2	2 00	50	3,167	6	.....	.....	1 00	.....	200	2,000	.....	1	.....
.....	.....	.....	\$145,676	89	121	210	.....	.....	.....	\$100,787	2,081	42	3
.....	\$1 48	\$0.5577	.....	.....	.....	.....	\$0 4803	.....	.....	.....	.....	.....	.....

## LaSalle County—First District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.			
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades	
1	James Cahill.....	Peru.....	350 3			2	Sh.	St.	M.	81,000	68,028	12,972
2	LaSalle C. C. Co., No. 1.....	LaSalle.....	440 3.6			2				147,210	122,588	24,622
3	" " LaSalle.....	".....	392 3.6			2				143,183	118,444	24,739
4	" " Rockwell.....	".....	390 3.6			2				135,902	111,796	24,106
5	" " Union.....	".....	375 3.6			2				89,752	70,608	19,144
6	C., W. & V. Coal Co., No. 1	Streator.....	96 8			7			B.	372,433	178,768	193,665
7	" " No. 2.....	".....	116 6			7			M.	329,069	213,895	115,174
8	Star Coal Co., No. 2.....	".....	86 5			7			B.	149,137	98,308	50,829
9	" " No. 3.....	".....	125 3			2			M.	36,977	30,690	6,287
10	Acme Coal Co.....	".....	110 6.6			2				86,166	59,499	26,667
11	William Howe & Co.....	".....	50 5			2			*	55,686	55,686	.....
12	Price & Jones.....	".....	20 4.8			7		H.		1,782	1,564	218
13	Nelson & Westerlund.....	".....	20 4.8			7				2,500	2,000	500
14	William Thomas Coal Co.....	".....	50 4.6			7				535	485	50
15	J. E. Buchanan & Sons.....	".....	40 4.6			7		Sl.		1,034	834	200
16	Thos. Sowerby & Co.....	".....	55 4.6			7		Sh.		4,146	3,194	952
17	Benjamin Davis.....	".....	35 4.6			7				860	740	120
18	L. A. Munts & Sons.....	".....	35 5			7				1,641	1,130	511
19	Robert Fairbairn.....	".....	20 4			7				950	790	160
20	Alloway & Rushton.....	".....	35 5			7		D.		650	500	150
21	Bargreen Bros.....	".....	55 5			7		Sh.		448	448	.....
22	James Penman.....	".....	20 4.8			7				200	200	.....
23	Dawson & Gray.....	".....	50 4.8			7				200	150	50
24	Piny Coal Co.....	".....	65 4			7				275	200	75
25	E. Hakes.....	Ratland.....	500 2.10			2		St.		81,260	67,532	16,728
26	Oglesby Coal Co.....	Oglesby.....	464.....			2				122,543	102,119	20,424
27	Standard Coal Co.....	Seneca.....	100 2.9			2				8,044	6,979	1,065
28	Marseilles L. & W. P. Co.	Marseilles.....	120 2.10			2				† 30,000	30,000	.....
29	Chas. Scott.....	Kangley.....	75 8.6	6&7		7			B.	500	400	100
30	John McNeil.....	".....	75 8.6	6&7		7		H.		350	300	50
31	Wilsman Coal Co.....	Wilsman.....	73 3.2			7		St.	M.	1,387	1,040	347
32	M. & H. Zinc Co.....	LaSalle.....	310 4.6			2			B.	† 80,134	80,134	.....
33	U. S. Silica Co.....	Ottawa.....	45 2.4			2		Dr.	Ha.	125	125	.....
34	John Taylor.....	".....	50 2			2				200	200	.....
35	James Planger.....	".....	60 2			2				100	100	.....
36	James McCullough.....	".....	60 2.4			2				700	650	50
37	Daniel Vazain.....	".....	60 2.4			2				360	300	60
38	F. M. Fishburn.....	".....	60 2.4			2				325	300	25
39	John Delbridge.....	".....	45 2.4			2				575	500	75
40	G. H. Tisler.....	".....	50 2.4			2				675	600	75
41	W. A. Brown.....	".....	55 2.4			2				300	250	50
42	J. C. Dawson & Co.....	Deer Park.....	125 4			2			B.	3,625	3,625	.....
Totals.....										1,975,939	1,435,699	540,240
Averages.....												

\* Mine run.

† Mine run consumed by the company.

Whole number of openings reported in 1898, 44.

Number of new mines or places opened during the year, 4.

Number of new mines exhausted or abandoned during the year, 6.

Whole number of openings reported for 1899, 42.

LaSalle County, 1899—Concluded.

Number.	VALUES.			EMPLOYES.			Price paid per gross ton hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	Number of horses or mules employed in or about the mine.		ACCI-DENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.		
1	\$1 30	\$0 35	\$92,976	150	38	188	\$0 63	S. M.	280	\$75,879		17		2	
2	1 26	39	164,063	220	88	308	63	..	245	130,592		30	1	2	
3	1 26	39	158,888	184	62	246	63	..	266	115,299		26		2	
4	1 26	39	150,264	210	63	273	63	..	247	116,793		27		6	
5	1 26	39	96,432	111	43	154	63	..	217	75,010		13		7	
6	99	45	264,130	400	102	502	47	..	273	224,055	5,754	25	3	9	
7	99	45	263,584	440	124	564	47	..	250	219,099	3,315	25		15	
8	98	30	115,591	215	50	265	47	..	265	108,008	5,050	15		7	
9	1 04	28	33,678	85	21	106	68	..	275	41,228	445	8		12	
10	1 04	18	66,679	123	55	178	47	..	229	60,902	882	13		12	
11	1 00	..	55,685	54	19	73	47	..	296	36,071	550	6		12	
12	1 00	40	2,436	2	2	10	47	..	107	1,470		1		..	
13	1 50	55	3,425	4	1	5	60	W.	250	1,675		1		..	
14	1 25	40	626	6	1	7	47	..	100	401		1		..	
15	1 25	40	1,123	8	1	9	47	..	144	709		1		..	
16	1 40	40	4,852	8	1	9	47	..	150	1,990	80	1		..	
17	1 30	30	998	2	2	3	47	..	200	404		1		..	
18	1 35	35	1,704	4	1	5	47	..	130	800		1		..	
19	1 00	25	830	2	..	2	47	..	300	600		..		..	
20	1 50	50	825	2	..	2	47	..	125	462		1		..	
21	1 00	..	448	4	2	6	47	..	40	278		2		..	
22	1 50	..	300	2	..	2	47	..	50	150		1		..	
23	1 50	50	325	2	..	3	47	..	60	150		1		..	
24	1 50	50	337	4	1	5	47	..	40	170		1		..	
25	1 30	40	94,482	140	36	176	63	S. M.	210	78,326	10	10		1	
26	1 22	35	131,734	187	93	280	63	..	250	113,729	10	26		5	
27	1 65	50	8,593	21	11	32	70	..	240	8,593		3		..	
28	1 50	..	45,000	38	7	45	77	..	300	2,500		3		..	
29	1 50	50	650	3	1	4	47	W.	200	400	20	..		..	
30	1 50	50	475	2	..	2	47	..	250	300	12	1		..	
31	1 50	50	1,733	3	1	4	75	..	200	1,300	30	..		..	
32	1 00	..	80,134	45	29	74	40	..	264	46,900	2,692	13		5	
33	1 00	..	125	3	1	4	75	..	30	100	4	..		..	
34	1 50	..	300	2	..	2	87	..	80	150	6	..		..	
35	1 50	..	150	2	..	2	88	..	40	95	4	..		..	
36	1 50	60	1,005	3	1	4	87.5	..	200	685	10	..		..	
37	1 50	60	486	2	..	2	1 00	..	150	340	..	..		..	
38	1 50	60	465	2	..	2	1 00	..	120	400	4	..		..	
39	1 50	60	795	2	..	2	1 00	..	150	600	6	..		..	
40	1 50	60	945	4	..	4	1 00	..	150	700	12	..		..	
41	1 50	60	405	2	..	2	1 00	..	100	325	4	..		..	
42	85	..	3,081	6	4	10	53	..	150	2,500	80	4		..	
..	..	..	\$1,850,758	2,715	861	3,576	..	..	..	\$1,470,138	18,980	278	4	74	
..	\$1.101	\$0.4028	..	..	..	..	\$0 54.3	..	181	..	..	..	..	..	

## Livingston County—First District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades.
1	Pontiac Coal Co.....	Pontiac.....	464	2.8	2	Sh	S.	M.	45,915	30,837	15,078
2	Diamond Coal Co.....	.....	200	5	2	.....	.....	B.	7,101	4,007	3,094
3	Walton Bros.....	Fairbury.....	180	5	2	.....	.....	.....	25,849	17,233	8,616
4	Coöperative Coal Co.....	.....	165	5	2	.....	.....	.....	11,798	8,600	3,198
5	A. M. Barackman.....	Streator.....	57	4	2	.....	.....	.....	6,168	5,022	1,146
6	Streator Clay Mfg Co.....	.....	75	4.6	2	.....	.....	M.	* 7,371	7,371	.....
7	R. Evans, Jr., & Bros.....	.....	40	4	2	.....	.....	H.	5,240	3,704	1,716
8	Thos. Edwards & Son.....	.....	64	4	2	.....	.....	.....	800	763	37
9	Oscar Kimes.....	.....	35	4.6	2	.....	.....	.....	393	303	90
10	Kimes Coöperative Coal Co	.....	60	4	2	.....	.....	Sl.	1,000	800	200
11	Burrell & Massy.....	.....	60	4.10	2	.....	.....	Sh	1,560	1,360	200
12	C. G. Darm.....	.....	34	4.6	2	.....	.....	H.	1,000	840	160
13	Henry Singer.....	Cornell.....	150	3.6	2	.....	.....	.....	1,273	900	373
14	A. W. Pauk & Co.....	Streator.....	50	4	2	.....	.....	B.	1,300	900	400
15	Evans Bros.....	.....	60	4.8	7	Sl	.....	M.	300	300	.....
Totals.....									117,248	82,940	34,308
Averages.....									.....	.....	.....

\*Mine run consumed by the company.

Whole number of openings reported in 1898, 17.

Number of new mines or places opened during the year, 2.

Number of mines exhausted or abandoned during the year, 4.

Whole number of openings reported for 1899, 15.

## Will County—First District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades.
1	William Maltby.....	Braidwood....	69	3	2	Sh	St.	M.	27,149	16,876	10,273
2	Coöperative Coal Co.....	.....	55	2.10	2	.....	.....	H.	4,000	3,000	1,000
3	Murphy, Keenan & Co....	.....	63	2.8	2	.....	.....	St.	1,630	1,141	489
Totals.....									32,779	21,017	11,762
Averages.....									.....	.....	.....

Whole number of openings reported in 1898, 3.

Number of new places opened during the year, 1.

Number of mines exhausted or abandoned during the year, 1.

Whole number of openings reported for 1899, 3.

*Livingston County, 1899—Concluded.*

Number.	VALUES.			EMPLOYES.			Price paid per gross ton hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employees excepting office help.	Kegs of powder used.	ACCIDENTS.	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.
1	\$1 05	\$1 05	\$18,211	85	41	126	\$0 65	S. M.	295	\$53,423	350		2
2	1 45	53	8,378	4	5	9	50	W.	240	5,816	110	1	1
3	1 13	66	25,160	25	17	42	45	W. M.	192	19,593	1,491	1	2
4	1 40	95	15,078	12	11	23	50	W.	230	10,125	445	3	1
5	1 11	50	6,147	23	11	34	47	S. M.	168	5,293	78	1	1
6	1 25	.....	9,213	10	4	14	47	.....	276	7,235	255	.....	.....
7	1 40	50	6,041	12	4	16	60	W.	156	4,000	.....	1	.....
8	1 60	50	1,239	3	1	4	47	.....	60	610	16	1	.....
9	1 20	40	4,000	3	1	4	47	.....	50	300	6	1	.....
10	1 50	50	1,300	4	1	5	47	.....	130	1,700	30	1	.....
11	1 40	1 00	2,104	5	3	8	47	.....	125	1,203	30	.....	.....
12	1 50	50	1,340	3	1	4	47	.....	160	750	.....	1	.....
13	1 50	1 25	1,817	3	2	5	60	.....	300	1,100	24	3	.....
14	1 25	30	1,245	14	4	18	65	.....	50	1,210	.....	1	.....
15	1 50	.....	450	2	.....	2	60	.....	75	250	.....	1	.....
.....	.....	.....	\$131,726	208	106	314	.....	.....	.....	\$111,458	2,865	30	4
.....	\$1 21	\$0 86.2	.....	.....	.....	.....	\$0 56.23	.....	167	.....	.....	.....	.....

*Will County, 1899—Concluded.*

Number.	VALUES.			EMPLOYES.			Price paid per gross ton hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employees excepting office help.	Kegs of powder used.	ACCIDENTS.	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.
1	\$1 10	\$1 10	\$36,614	54	18	72	\$0 68	S. M.	275	\$2,236	.....	6	5
2	2 00	50	6,500	15	4	19	1 00	.....	160	3,300	.....	2	.....
3	1 75	50	2,241	6	3	9	65	.....	125	1,855	.....	.....	.....
.....	.....	.....	845,355	75	25	100	.....	.....	.....	\$33,294	.....	8	5
.....	\$1 58.5	\$1 02.4	.....	.....	.....	.....	\$0 71.9	.....	187	.....	.....	.....	.....

## Recapitulation by Counties—

COUNTIES.	MINES.				PRODUCTS.					VALUES.		
	Number of mines.	Shipping mines.	Mines in local trade.	New mines.	Abandoned mines	Total tons produced.	Tons of lump coal.	Tons of other grades.	Tons shipped.	Tons consumed or wasted at the mines.	Average value per ton of lump at the mines	Average value of other grades per ton at the mines.
Grundy. ....	22	9	13	4	2	1,280,332	1,057,796	222,536	1,200,113	30,816	\$1.077	\$0.2575
Kankakee .....	2	1	1	..	..	129,018	79,907	49,111	118,888	4,382	1.48	0.5577
LaSalle.....	42	19	3	4	6	1,975,939	1,435,699	540,240	1,606,742	53,675	1.13	0.4028
Livingston. ....	15	7	8	2	4	117,248	82,940	34,308	52,812	6,315	1.21	0.862
Will.....	3	1	2	1	1	32,779	21,017	11,762	21,049	2,372	1.58.5	1.024
Totals.....	84	37	47	11	13	3,535,316	2,677,359	857,957	2,999,604	97,560	.....	.....
Averages. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	\$1.139	\$0.40.1

Whole number of openings reported in 1898, 86.

Number of new mines or places opened during the year, 11.

Number of mines exhausted or abandoned during the year, 13.

Whole number of openings reported for 1899, 84.

First District—1899.

Aggregate value of total product.....	EMPLOYEES.			Average number of days of active operation.	Average price paid per gross ton for hand mining	Total wages paid during the year to all employes excepting office help.	Number of kegs of powder used.	Number of horses and mules employed in and about the mines.	CASUALTIES		MACHINES.		
	Number of miners.	Number of other employes.	Total employes.						Killed.	Injured.	Number of mines using machines.	Number of machines in use.	Total tons cut by machines.
1,196,549	2,601	697	3,298	215	\$0.6856	\$1,119,500	3,076	209	3	62			
145,676	89	121	210	198	0.4803	100,787	2,081	42	.....	3	1	9 * 42,076	
1,849,456	2,715	861	3,576	182	0.543	1,470,138	18,980	278	4	74			
131,726	208	106	314	167	0.562	111,458	2,865	30	.....	4			
45,355	75	25	100	187	0.719	33,294	.....	5	.....	5			
83,368,762	5,688	1,810	7,498	.....	.....	\$2,835,177	27,602	567	7	148	1	9	42,076
.....	.....	.....	.....	188	\$0.59.6	.....	.....	.....	.....	.....	.....	.....	.....

\* Price paid for machine mining, 37 cents per ton.





## SECOND INSPECTION DISTRICT—1899.

Counties: Bureau, Henry, Marshall, Mercer, Peoria, Rock Island,  
Stark, Woodford.

THOMAS HUDSON, *Inspector*, Galva.

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HON. DAVID ROSS, *Secretary*,

*State Bureau of Labor Statistics, Springfield, Illinois:*

SIR:—In compliance with section 12 of an act of the General Assembly, of the State of Illinois, defining the duties of State Inspectors of coal mines, and providing for the better preservation of the health and safety of persons employed in the coal mines of the State, I have the honor to herewith submit to you the sixteenth annual report of the coal mines located in the Second Inspection District, comprising the coal producing counties of Bureau, Henry, Marshall, Mercer, Peoria, Rock Island, Stark and Woodford, for the year ended June 30, 1899.

The tables accompanying this report contain the number of mines in the district, both local and those of the shipping class; the depth at which the coal is found in the various shafts and slopes; the thickness and the geological number of the seams; the number of miners and other employes above and below the ground, engaged in the coal mining industry of the district; the amount of powder consumed at each mine is given, with the number of days each mine has been in active operation during the year; the number of tons of coal produced is also given, with the selling price of the same, and the price paid per ton for mining; the number of fatal and non-fatal accidents that have taken place during the year are also given. In short, the tabular statements of this report contain about everything that can be of interest to the general reader, and valuable to the statistician.

The following table gives a summary of the number of mines, the number of miners and other employes, tons of coal produced, accidents and ratios for the year:

Number of shipping mines.....	45
Number of mines in local trade.....	140
Total number of mines.....	185
Number of miners employed.....	4,920
Number of all other employes (not including boys).....	1,504
Number of boys employed underground.....	297
Total number of employes.....	6,631
Total number of kegs of powder consumed.....	53,458
Tons of lump coal produced.....	2,669,631
Tons of other grades of coal produced.....	656,369
Total product, tons.....	3,326,000
Tons of coal shipped.....	2,877,142
Tons of coal sold to local consumers.....	352,594
Tons of coal consumed, or wasted, at the mines.....	96,264
Average value of lump coal per ton at the mine.....	\$1.191
Average value of other grades per ton at the mine.....	80.44
Aggregate value of total product.....	\$3,475,973
Average number of days of active operation.....	181.5
Number of fatal accidents.....	12
Number of non-fatal accidents.....	93
Total number of accidents.....	105
Number of employes to each fatal accident.....	553
Number of employes to each non-fatal accident.....	71
Tons of coal produced to each fatal accident.....	277,167
Tons of coal produced to each non-fatal accident.....	35,763
Tons of coal produced to each miner employed.....	674
Tons of coal produced to each employe (all classes).....	502

A table is also submitted giving the different nationalities and number of each employed at the various mines in the district. The table presented is approximately correct, absolute accuracy being well nigh an impossibility.

## NATIONALITIES.

*American.....	1,916
English.....	671
Scotch.....	312
Irish.....	386
Welsh.....	98
German.....	578
French.....	70
Italians.....	927
Austrians.....	170
Hungarians.....	9
Polanders.....	852
Belgians.....	181
Russians.....	94
Swedes.....	345
Danes and Norwegians.....	22
Total.....	6,631

A comparative table of the coal production by counties, in the district, with the increase or decrease in each, for the years ending June 30, 1898 and 1899, all grades, is here presented:

COUNTY.	TOTAL OUTPUT OF ALL GRADES OF COAL—IN TONS.		Increase.	Decrease.
	1898.	1899.		
Bureau.....	865,892	1,410,524	544,632	
Henry.....	159,049	91,265		67,784
Marshall.....	286,365	342,578	56,213	
Mercer.....	384,345	496,591	112,246	
Peoria.....	640,193	744,698	104,505	
Rock Island.....	47,490	41,597		5,893
Stark.....	21,936	23,997	2,061	
Woodford.....	145,840	174,750	28,910	
Total.....	2,551,110	3,326,000	848,567	73,677

\*Negroes 184.

Increase .....	848,567
Decrease.....	73,677
Net increase.....	774,890

The counties of Bureau, Marshall, Mercer, Peoria, Stark and Woodford show a combined increase of 848,567 tons, and the counties of Henry and Rock Island a combined decrease of 73,677 tons, leaving a net increase for the district of 774,890 tons, or 33.1 per cent.

*New Mines.*—No new mines of the shipping class have been opened, nor have any of the same class been worked out or abandoned during the year. Many new local mines are opened up and others worked out during each year, but these changes are not thought to be of sufficient importance to note in this report.

*Fires.*—A fire broke out at the top works of the Camp Creek Coal Company's mine, operated by Hill Bros., at Cable, Mercer county, on the night of October 25, 1898, by which the engine room and boiler house were totally destroyed. From the fact that the workable coal in the mine was nearly exhausted the destroyed buildings have not been rebuilt.

*Scales.*—Requisition has been made on the State Inspector to test the scales at three mines only during the year.

December 27, 1898, the scales at Reed City mine, operated by the Reed City Coal Co., located at Wolcott, Peoria county, were tested and found approximately correct. The scales weighed correctly up to 2,600 pounds, but at 3,000 pounds they were found to be 8 pounds light.

February 27, 1899, the scales at Siebold Reent's mine, located at Kramm Station, Peoria county, were tested and found correct.

May 16, 1899, the scales at shaft "B," operated by the Whitebreast Fuel Co., located at Ladd, Bureau county, were tested and found correct.

At the Reed City and Ladd mines 100 pounds in U. S. standard weights were used; at Reent's mine no standard weights were available. To overcome this difficulty, miners, who knew their personal weight exactly, were used. This method of using the miners as standard weights to test the scales on which their product is weighed, is, to say the least, unique, but it was the best that could be done under the circumstances. In all cases the weighman and check-weighman were present when the scales were being tested.

*Improvements.*—Many minor improvements are made at the various mines in the district each year, of which no note is taken, as it is not thought to be necessary to record such in a report of this kind.

The most costly and substantial improvements made during the year are those made by the Spring Valley Coal Co., at their mines located at Spring Valley, Bureau county. This company has, during the year, erected a Capell fan at No. 3 mine. All their three mines are now ventilated by Capell fans. The large volume of air created by fans of this type, combined with the large water gauge produced, goes far to solve the vexatious problem of ventilation in long-wall mines having long and contracted air courses, and in which a large number of men and animals are employed. The same company is also

erecting a steel tower at No. 2 mine; they expect to have it completed about October 1, 1899. In the meantime the coal from No. 2 mine is being hoisted through No. 4 shaft.

The Marquette Coal Co., of Marquette, Bureau county, has also made some very substantial improvements during the year. The main or hoisting shaft has been enlarged so that a larger mine car can be used, a new and more powerful winding engine and three new boilers are being set up, so that it is quite natural to expect a very respectable increase in the output of this mine in the very near future. An overcast has also been erected below, for the purpose of increasing and obtaining a better distribution of the ventilating current.

The Devlin Coal Co., at Toluca, Marshall County, has put in double-decked cages during the year, and erected a new ventilating fan 20 feet in diameter to take the place of the smaller one in use heretofore.

*New Mines in Prospective.*—The Alden Coal Co., located at Wanlock, Mercer county, has just completed the sinking of a new shaft. It is located about two miles south of the present Alden mine. A good seam of coal 4 feet 3 inches thick was pierced at a depth of 140 feet, good machinery will be erected at once, and in all probability the mine will go into active operation about October 1, 1899.

The sinking of a new shaft is also contemplated by the Spring Valley Coal Co., at Spring Valley, Bureau county. The new shaft will be located about one mile north of the present No. 2 mine; the tower will be steel, and the mine will be equipped with all the modern improvements known to the mining engineers of the present day. The ever increasing demand for coal made on this company has made the sinking of this shaft a necessity.

*Fatal Accidents*—The following is a statement of fatal accidents that have taken place in the Second Inspection District during the year ending July 1, 1899:

July 12, 1898, Jonathan James, a miner, aged 63 years, widower, leaves two minor children, was killed almost instantly by being run over by a loaded pit car in shaft No. 1, operated by the Spring Valley Coal Company, at Spring Valley, Bureau county. Deceased, with two other miners, was riding on a loaded trip, contrary to the general orders of the mine manager, when he suddenly fell off the loaded car of rock on which he was riding, and a loaded car of coal passed over him, crushing him severely on the body and neck. He died before he could be removed from the mine.

July 13, 1898, Frank Samuelson, a miner, aged 16 years, single, was severely crushed by being caught under a fall of coal at the face of his working place in the Empire Coal company's mine, located at Gilchrist, Mercer county. Deceased was working with his father, drawing a pillar or "stump." He was in the act of shoveling loose coal from under some top coal that was hanging back, when about two tons fell off at a "water slip," striking the deceased, breaking his thigh and otherwise injuring him, from the effects of which he died before he could be removed from the mine.

August 23, 1898, William Noble, acting as trapper, aged 26 years, single, was killed by having his head crushed between the trap door and door post in the Alden Coal Company's mine at Wanlock, Mercer county. The driver

was up the entry, at the bottom of which the trap door was located, gathering a trip; he had left a loaded car standing at a switch and gone into the room to pull out another one; while the driver was gone, the loaded car that had been left started down the slight grade. Noble heard it coming, and supposing it to be the driver, opened the door just sufficient to put his head through, for the purpose, it is supposed, of telling the driver to hold up. The runaway came on, however, striking the slightly open door, and crushing the head of deceased between the door and door post. He died one and a half hours after the accident.

October 4, 1898, John Wilkes, a miner, age 50 years, single, was injured by a fall of roof at the face of his working room in L. Potter & Sons' local mine, located near Orchard Mines, Peoria county. Deceased had just set up his drilling machine and was in the act of drilling a hole, when a slab of slate fell from the roof, striking him on the back. It was not thought at first that he was seriously hurt, but later developments proved that his spine had been injured, and he died from the effects of the injury January 16th, 1899, one hundred and days after the accident.

October 6, 1898, Mathias Sherra, a miner, aged 42 years, single, was crushed by a fall of roof while in the act of brushing the roof of his working place in the Whitebreast Fuel Company's mine, located at Ladd, Bureau county. The piece of coal that fell on Sherra would weigh about 600 pounds, was cone shaped, about one foot thick at the center and perfectly smooth all around the cone except one side, which was formed by the natural break in the roof, which takes place every two or three feet in long-wall mines. This might be justly termed an accident, as, according to the evidence, there was nothing prior to the casualty to indicate the dangerous condition of the roof. Sherra died about one hour after being injured.

November 22, 1898, Andrew Cushman, a cager, aged 21 years, single, was killed instantly by being caught between the cage and side of the shaft, in shaft No. 1, operated by the Devlin Coal company, at Toluca, Marshall county. Deceased was employed as bottom cager. He had sent all the miners up, it being just after quitting time; himself and three company men were on the shaft bottom, ready to come up; deceased gave the proper signals and got the return signal back, the three company men got on the cage, deceased gave the final or starting bell and got on the cage also. When about 25 feet up the shaft he leaned too far out and was caught by a bunton in the northeast corner of the south cage-way, and drawn from the cage, falling back to the bottom of the shaft. When taken up he was dead, his jaw and neck being broken.

December 5, 1898, August Carlson, a miner, aged 36 years, married, leaves a widow and one child, was killed instantly by being caught between the cage and side of the shaft in J. J. Flemming's local mine, at Kewanee, Henry county. From the evidence given before the coroner's jury, an employe of the operator got on the cage at the top of the shaft to go below, it being about quitting time and nearly all of the fifteen miners were out of the mine, he called down the shaft, which is only 56 feet deep, and asked if all was clear below. Getting no response, he assumed that no one was at the bottom

of the shaft and told the engineer to lower him down, and the cage was started; when the person on the descending cage got to the bottom he found deceased lying in the opposite cage seat dead, his skull being crushed and a leg broken. It is assumed, for it must rest on assumption, that the deceased, on reaching the bottom of the shaft, found the cage just moving away, and thinking he had time enough to get on, the cages run very slowly, made the attempt, and was caught between the bottom of the cage and door-heads, and drawn up a short distance to a wider part, falling from thence to the bottom of the shaft, as the person on the descending cage testified that he heard something fall to the bottom when he was a short distance down.

January 2, 1899, Joseph Converso, a miner, aged 43 years, married, family supposed to be in Italy, was severely crushed about the head and body by being run over by a mule and two loaded pit cars in shaft No. 1, operated by the Devlin Coal Company, at Toluca, Marshall county. Deceased, in company with two other miners, were coming from the working face to the shaft, a driver with two loaded pit cars was coming down the entry behind them, the driver whistled for them to get off the track. Two of them did so, stepping to one side to let the cars pass. Deceased kept on, however, expecting, it is thought, to reach an opening to another entry a short distance ahead of him, when his light suddenly went out, he turned around in front of the mule and threw up his hands; the mule became frightened and jumped forward, knocking deceased down and dragging the two loaded pit cars over him. He died from his injuries 30 hours after the accident.

January 14, 1899, John O'Shaughnessy, a miner, aged 42 years, single, was severely crushed about the head and body by being struck with coal flying from a shot in Kingston mine, operated by Newsam Bros., at Kingston, Peoria county. Deceased was working in a room, which was driven in about 35 feet from the entry, his partner had gone home and left him to fire three shots at quitting time; he had fired two shots and went back to light a third, and did so, but before he could get back to a safe place on the entry, the blast went off and coal flying therefrom struck deceased, causing the injuries from which he died about one hour after the accident.

February 6, 1899, Abel Andreas, a miner, aged 20 years, single, was fatally burned by exploding a keg of powder in Collier's Coöperative Coal Mine at at Bartonville, Peoria county. Deceased, in opening a new keg of powder at the mouth of his room in the above mine, struck the top of the keg a heavy blow with a pick; the pick struck the edge or chime of the keg, and glancing down, a spark was generated, exploding the powder with above results. Deceased was so severely burned that he died February 9, three days after the accident.

March 2, 1899, Joseph Dailey, a miner, aged 60 years, single, was killed instantly by being struck with coal flying from a premature blast in Sholl Bros., No. 3 mine, located near Bartonville, Peoria county. Deceased was in the act of lighting a shot, blasting off the solid; the miner in the adjoining room was sitting in the cross-cut not more than twenty feet from Dailey, for the purpose of showing, or lighting him to a place of safety. The deceased

lighted the squib and had scarcely turned around when the blast exploded, and the coal flying from the blast struck deceased, crushing his head and body, killing him instantly.

April 24, 1899, Andrew Ketchmark, a miner, aged 47 years, leaves a widow and nine children, was killed instantly by being caught under a heavy fall of roof, at the face of his working room in the Minonk Coal Company's mine, located at Minoak, Woodford county. Deceased had fired a blast in the brushing Saturday evening previous. The powder had struck a "smooth", and spread along the face, on the right hand side of the room; when he came to work on Monday morning he neglected to secure properly the powder shaken roof, there was only one prop under it; shortly after he commenced work the weight of the roof seemed to have swung the prop, and the mass fell, crushing deceased under it.

Following are the tables of fatal and non-fatal accidents, their causes and the nature of the injuries sustained; also, the regular county schedules of the second district.

Respectfully submitted,

THOMAS HUDSON,

State Inspector of Mines, Second District.

GALVA, ILL.

*Fatal Casualties—Second District, 1899.*

Date.	Name.	Age.	Occupation.	Residence.	Married.	Widow.	Children.	Single.	Dependent.	Cause of Accident.
1898.										
July 12	Jonathan James.....	63	Miner.....	Spr.g Valley	..	..	2	1	2	Pit car.....
July 13	Frank Samuelson.....	16	.....	Gilchrist.....	..	..	1	..	..	Falling of coal.....
Aug. 23	William Noble.....	26	Trapper.....	Wanlock.....	..	..	1	..	..	Trap door.....
Oct. 4	John Wilkes.....	50	Miner.....	Orch. Mines	..	..	1	..	..	Falling of roof.....
Oct. 6	Mathias Sherra.....	47	.....	Ladd.....	..	..	1	..	..	.....
Nov. 22	Andrew Cushman.....	21	Cager.....	Toluca.....	..	..	1	..	..	Ascending cage.....
Dec. 5	August Carlson.....	36	Miner.....	Kewanee....	1	1	1	..	2	Descending cage.....
1899.										
Jan. 2	Joseph Converso.....	43	**.....	Toluca.....	1	1	..	..	1	Pit cars.....
Jan. 14	John O'Shaughnessy.	42	**.....	Kingston...	..	..	1	..	..	Flying coal.....
Feb. 6	Abel Andreas.....	20	**.....	Bartonville.	..	..	1	..	..	Powder explosion...
Mar. 2	Joseph Dailey.....	60	**.....	.....	..	..	1	..	..	Flying coal.....
Apr. 24	Andrew Ketchmark..	47	**.....	Minonk.....	1	1	9	..	10	Falling roof.....
	Totals.....		.....	.....	3	3	12	9	15	

Total fatal casualties, 12.

## Recapitulation of Fatal Casualties—Second District, 1899.

Residence.	No.	Occupation.	No.	Nature of Casualty	No.	Colliery.	No.
Bartonville ..	2	Cager.....	1	Coal flying.....	2	Alden Coal Co.....	1
Gilchrist.....	1	Miners.....	10	Crushed by cage....	2	Chicago Minonk C. C.	1
Kewanee.....	1	Trapper.....	1	Crushed by pit cars	2	Colliers Coöperative	1
Kingston.....	1			Crushed by trap d r	1	Devlin Coal Co.....	2
Ladd.....	1			Exploding powder..	1	Empire Coal Co.....	1
Minonk.....	1			Falling coal.....	1	J. J. Fleming.....	1
Orch. Mines..	1			Falling roof.....	3	Newsam Bros.....	1
Spr'g Valley..	1					Potter & Sons.....	1
Toluca.....	2					Scholl Bros.....	1
Wanlocki.....	1					Spr'g Valley Coal Co	1
						Whitebreast Fuel Co.	1
Totals.....	12		12		12		12

## Non-Fatal Casualties—Second District, 1899.

Date.	Name.	Age.	Residence.	Married.	Single.	Children.	Dependent.	Character of Injury.	Time lost— days.
1898.									
July 18	Michael Smith	38	Wenona		1			Foot bruised	29
Aug. 1	Peter Rica	37	Toluca	1		3		Ankle sprained	24
" 1	Mike Latz	48	"			1	2	Ankle bruised	25
" 2	F. Feraro	41	"		1			Shoulder bruised	20
" 17	E. D. Mormon	35	Kingston	1			1	Head bruised	12
" 17	Ed. Selburg	18	Wolcott		1			Leg broken	60
Sept. 7	Adam Bulkofskie	62	Spr'g Valley	1		1	2	Leg bruised	15
" 14	Elmer Japper	27	Sherrard		1			Finger crushed	26
" 14	Lars Hansen	39	Sheffield	1		6	7	Eye destroyed	50
" 16	John Raisbeck	60	Spr'g Valley	1		1	2	Ankle bruised	18
" 16	Andrew Hagman	32	Cable		1			Collar bone broken	60
" 17	William McGary	17	Ladd		1			Ankle bruised	30
" 18	Henry Crone	18	Minonk		1			Foot crushed (amputated)	200
" 19	J. A. Hoard	36	Toluca	1		5	6	Leg broken	65
" 24	Wm. Townsley	32	Spr'g Valley	1			1	Head bruised	20
" 27	Val. Macloski	45	"	1		7	8	Collar bone broken	35
Oct. 1	H. Howard	35	Wolcott		1			Leg broken	60
" 7	Sam Shoppell	30	Sherrard		1			Leg broken	60
" 10	Phillip Smith	39	Minonk		1			Collar bone broken	90
" 14	Joseph Arnold	17	Seatonville		1			Leg broken	95
" 15	Joseph Feraro	50	Spr'g Valley		1			Shoulder bruised	20
" 19	John Simpson	27	Seatonville		1			Leg bruised	24
Nov. 9	John Richards	14	Spr'g Valley		1			Leg bruised	12
" 15	J. Manda	38	Toluca		1			Leg broken	60
" 18	Wm. Burdett	26	Pottstown	1		3	4	Leg broken	120
" 19	P. Buttner	23	Wenona		1			Leg broken	60
" 20	Ralph Colver	30	Ladd		1			Body bruised	35
" 25	James Rowe	42	Toluca	1		5	6	Leg broken	60
" 29	O. Weissenb'gger	23	Ladd	1		1	2	Foot crushed	60
Dec. 5	John O'Rourke	32	"		1			Hand crushed	50
" 5	John Ruszkuski	30	Minonk		1			Head cut	30
" 6	A. Elline	54	Toluca	1		5	6	Shoulder blade broken	60
" 14	Val. Beauhart	15	Roanoke		1			Knee crushed	180
" 16	Wallace Hoadley	51	Sparland	1		4	5	Body bruised	20
" 17	Wm. Essley	50	Gilchrist	1		2	3	Hips bruised	20
" 17	John Liddle	19	Spr'g Valley		1			Foot bruised	20
" 23	James Hooks	27	"	1		2	3	Arm bruised	24
" 23	J. Belsomine	33	Toluca		1			Leg broken	90
" 28	Ole Olson	70	Coal Valley		1			Leg broken	125
1899.									
Jan. 4	Joseph Brocitus	35	Spr'g Valley	1		4	5	Leg bruised	25
" 9	Al. Telerir	45	Toluca		1			Finger crushed	23
" 10	Wm. Brutcavage	40	Minonk	1		3	4	Foot bruised	30
" 13	Martin Blum	39	Spr'g Valley	1		6	7	Ankle crushed	60
" 15	Thos. McCall	43	Ladd		1			Finger cut off	50
" 16	D. R. Evans	38	Ladd		1			Hand crushed	60
" 21	Joseph Reodo	30	Marquette	1		1	1	Jaw broken	30



## Non-Fatal Casualties—Second District—Concluded.

Date.	Name.	Age.	Residence.	Married.	Single.	Children.	Dependent.	Character of Injury.	Time Lost Days.
Jan. 21	John Liski.....	40	Minonk.....	1	.....	4	5	Body bruised.....	90
" 28	Charles Stank....	32	Spr'g Valley	1	.....	4	5	Leg broken.....	70
Feb. 6	John Coughlin...	24	Minonk.....	1	.....	1	2	Hand cut.....	30
" 8	Joseph Minnett..	43	Spr'g Valley	.....	1	.....	.....	Ankle bruised.....	14
" 11	Fred. Capitani...	30	Ladd.....	.....	1	.....	.....	Leg broken.....	.....
" 13	John Gough.....	37	Ladd.....	.....	1	.....	.....	Arm broken.....	60
" 17	John Rogatti.....	27	Elmwood.....	.....	1	.....	.....	Hands and neck burned.....	45
" 17	J. Pryimski.....	39	Toluca.....	1	.....	3	4	Arm broken.....	30
" 22	George Tackes....	34	Bartonville..	1	.....	4	5	Leg broken.....	80
" 24	Wm. Knappe.....	45	Ladd.....	.....	1	.....	.....	Leg crushed (amputated).....	.....
" 28	George Stocune..	34	Spr'g Valley	.....	1	.....	.....	Foot bruised.....	70
Mar. 3	Hen'y Kolmorgan	44	Sherrard....	1	.....	3	4	Leg broken.....	60
" 9	John Crane.....	23	Spr'g Valley	1	.....	1	2	Leg bruised.....	11
" 9	Louis Tesiro.....	37	".....	1	.....	3	4	Back bruised.....	45
" 10	Thos. Barrowman	20	".....	.....	1	.....	.....	Foot bruised.....	26
" 14	Alex. Malovich..	54	".....	.....	1	.....	.....	Body bruised.....	43
" 16	Edward Price....	46	Kewanee.....	1	.....	4	5	Body bruised.....	30
" 21	John Rowatt.....	23	Spr'g Valley	.....	1	.....	.....	Body severely injured.....	.....
" 24	A. Deol.....	40	Toluca.....	.....	1	.....	.....	Finger broken.....	21
" 25	Bart. Biami.....	29	Spr'g Valley	1	.....	1	2	Body bruised.....	.....
" 29	J. Andrews.....	40	Toluca.....	1	.....	5	6	Leg bruised.....	20
" 29	And'w Hamilton..	16	Spr'g Valley	.....	1	.....	.....	Ankle broken.....	.....
" 31	Joseph Miller...	30	Marquette..	1	.....	2	3	Arm cut.....	18
April 6	John Gribbin....	34	Wenona.....	1	.....	1	2	Leg broken.....	50
" 8	G. Battistello...	60	Toluca.....	.....	1	.....	.....	Body bruised.....	32
" 8	Chas. Swarting..	15	Spr'g Valley	.....	1	.....	.....	Hand bruised.....	30
" 11	Peter Peach.....	32	".....	.....	1	.....	.....	Thumb crushed.....	40
" 18	Wm. McMullen...	33	Elmwood....	1	.....	3	4	Thigh bruised.....	36
" 19	George Winchell..	26	".....	1	.....	.....	1	Thigh cut.....	23
" 19	Frank Shumulski	35	Spr'g Valley	.....	1	.....	.....	Body bruised.....	12
" 27	And'w Peterson..	35	".....	.....	1	.....	.....	Leg cut.....	17
" 28	Mike Levloski..	28	".....	1	.....	2	3	Leg broken.....	.....
May 5	Julius Fancour..	28	Roanoke....	1	.....	1	2	Shoulder bruised.....	24
" 8	Joseph Erbland..	52	Minonk.....	1	.....	5	6	Head cut.....	27
" 9	Joseph McKay...	28	Wanlock....	1	.....	3	4	Back severely injured.....	.....
" 12	Emil Lebeau.....	22	Spr'g Valley	1	.....	.....	1	Knee bruised.....	30
" 16	Rich'd Albertson.	24	Sherrard....	.....	1	.....	.....	Toe crushed.....	30
" 20	E. T. Trego.....	36	".....	.....	1	.....	.....	Leg bruised.....	38
" 20	Thos. Lancaster.	34	Pekin.....	1	.....	3	4	Back bruised.....	35
" 24	Chas. Vickery...	18	Seatonville.	.....	1	.....	.....	Leg broken.....	.....
" 25	J. Higgins.....	50	Toluca.....	1	.....	7	8	Ankle sprained.....	40
" 26	B. Franklin.....	23	".....	.....	1	.....	.....	Hand cut.....	30
" 27	W. Newburn.....	20	Marquette..	1	.....	.....	1	Finger crushed.....	15
" 31	Wm. Dunaway....	45	Carbon Cliff	1	.....	6	7	Collar bone broken.....	35
June 7	Jas. Gerard.....	32	Spr'g Valley	1	.....	3	4	Arms bruised.....	20
" 20	Chris. Carson....	30	Minonk.....	1	.....	3	4	Collar bone broken.....	.....
" 26	J. Pirlilas.....	32	Spr'g Valley	1	.....	3	4	Finger cut off.....	.....
	Totals.....			48	45	134	182		

\* Still disabled.

Total men injured.....	93
Not recovered June 30, 1899.....	10
Number recovered.....	83
Total time lost.....	3,661 days.
Average time lost per man recovered.....	44.1

## Recapitulation of Non-Fatal Casualties—Second District, 1899.

Residence.	No.	Occupation.	No.	Cause of Accident.	No.	Colliery.	No.
Bartonville...	1	Cagers.....	1	Fire-damp.....	1	Alden Coal Co.....	1
Cable.....	1	Carpenters....	1	Cage.....	1	Beharelle & Co.....	1
Carbon Cliff..	1	Drivers.....	10	Rope.....	1	Chicago & Minonk	
Coal Valley...	1	Laborers.....	3	Tipple.....	1	Coal Co.....	8
Elmwood.....	3	Machine men.	1	Falling coal.....	37	C. W. & V. Coal Co..	4
Gilchrist.....	1	Miners.....	66	Falling rock.....	23	Coal Valley Mining	
Kewanee.....	1	Spraggers....	2	Fell from shaft		Co.....	5
Kingston.....	1	Supt., outside	1	tower.....	1	Devlin Coal Co.....	15
Ladd.....	9	Timbermen....	5	Pit cars.....	25	Elmwood Coal Co....	3
Marquette....	3	Trackmen.....	1	Premature blast		Empire Coal Co....	1
Minonk.....	8	Trip riders ...	2	(dynamite).....	1	Bates Bros.' mine...	1
Pekin.....	1			Rock car (on sur-		Marquette Coal Co.	4
Pottstown....	1			face).....	1	Newsam Bros.' mine	1
Roanoke.....	2			Unloading machin		Patterson's mine....	1
Spring Valley	28			ery (on surface)..	1	Reed City Coal Co..	2
Seatonville...	3					Roanoke Mining Co.	2
Sheffield....	1					Sheffield Mining Co.	1
Sherrard.....	5					Silvis' mine.....	1
Sparland.....	1					Spr'g Valley Coal Co	28
Toluca.....	15					Wanting & Sons....	1
Wanlock.....	1					Wenona Coal Co....	3
Wenona.....	3					Whitebreast Fuel Co	9
Wolcott.....	2					Wolschlag's mine...	1
Totals.....	93		93		93		93

Table Showing the Nature of Injuries, Number of Persons Injured, Dependents, Time Lost, with averages and Percentages—Second District, 1899.

NATURE OF INJURY.	Number.	Married.	Single.	Depend- ents.	TIME LOST.		Per cent of injuries.
					Total days.	Average days.	
Ankles broken.....	1		1				1.07
Ankles injured.....	7	5	2	23	211	31.14	7.52
Arms broken.....	2	1	1	4	90	45	2.15
Arms injured.....	3	3		10	62	20.66	3.23
Backs injured.....	3	3		12	80	26.66	3.23
Bodies injured.....	9	4	5	17	262	29	9.70
Collar bones broken.....	5	3	2	19	220	44	5.38
Eye destroyed.....	1	1		7	50	50	1.07
Feet injured.....	6	2	4	6	230	38.33	6.45
Fingers cut off.....	3	1	2	4	80	26.66	3.23
Fingers injured.....	4	1	3	1	85	21.25	4.30
Foot cut off.....	1		1		200	200	1.07
Hands injured.....	4	2	2	3	170	42.50	4.30
Hands and neck burned.....	1		1		45	45	1.07
Heads injured.....	4	3	1	8	89	22.25	4.30
Hips injured.....	1	1		3	20	20	1.07
Jaw broken.....	1	1		1	30	30	1.07
Knees injured.....	2	1	1	1	210	105	2.15
Legs broken.....	18	8	10	35	1,115	62	19.35
Legs cut off.....	1		1				1.08
Legs injured.....	8	4	4	15	162	20.25	8.60
Shoulders injured.....	4	2	2	8	121	30.25	4.30
Thighs injured.....	2	2		5	59	29.50	2.15
Thumb injured.....	1		1		40	40	1.08
Toe injured.....	1		1		30	30	1.08
Totals.....	53	48	45	182	3,661	43.89	100.00



## Bureau County—Second District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.							OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam.	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades.	
1	Spring V. Coal Co., No. 1	Spring Valley	345	3.6	2	Sh.	S.	M.	331,757	271,232	60,525	
2	" " " " No. 2	" "	312	3.6	2	"	"	"	284,832	227,914	56,918	
3	" " " " No. 3	" "	481	3.6	2	"	"	"	252,810	202,248	50,562	
4	Whitebrast Fuel Co., "B"	Ladd .....	465	3.6	2	"	"	"	195,904	157,138	38,766	
5	C. W. & V. Coal Co., No. 1	Seatonville ...	410	3.6	2	"	"	"	188,082	152,508	35,574	
6	Marquette Coal Co. ....	Marquette.....	302	3.6	2	"	"	"	124,629	110,929	13,700	
7	Sheffield Mining Co. ....	Sheffield.....	45	4.6	6	Sl.	Ho.	"	18,230	18,230	.....	
8	A. J. Higby .....	" .....	25	4.6	6	Sh.	"	"	827	827	.....	
9	Y. E. Williamson .....	" .....	80	4.6	6	Sl.	"	B.	650	650	.....	
10	John V. Duncan .....	" .....	22	4.6	6	Sh.	"	M.	540	540	.....	
11	John Paul .....	" .....	40	4.6	6	"	"	"	460	460	.....	
12	Peter Duncan .....	" .....	40	4.6	6	Sl.	"	"	360	360	.....	
13	Wm. Smith & Son .....	Princeton ....	147	4.6	6	Sh.	"	B.	2,276	2,276	.....	
14	A. W. Walton .....	" .....	150	4.6	6	"	"	"	2,234	2,234	.....	
15	George Heatheock .....	" .....	200	4.6	6	"	"	"	1,365	1,365	.....	
16	Thos. Herrington .....	" .....	148	4.6	6	"	"	"	992	992	.....	
17	Wm. Brandt .....	Mineral .....	15	4.6	6	"	"	M.	1,992	1,992	.....	
18	Tucker & McFall .....	" .....	20	4.6	6	"	"	"	1,610	1,610	.....	
19	Cyrus Riley .....	Neponset.....	64	4	6	"	"	"	914	914	.....	
Totals .....									1,410,524	1,154,419	256,105	
Averages .....									.....	.....	.....	

Whole number of openings reported in 1898, 17.

Number of new mines or places opened during the year, 2.

Whole number of openings reported for 1899, 19.

Bureau County, 1899—Concluded.

Number.	VALUES.			EMPLOYES.			Price paid per gross ton—hand-mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employees excepting office help.	Keels of powder used.	Number of horses or mules employed in or about the mine.	ACCIDENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.							Fatal.	Non-fatal.
1	\$1 25	\$0 40	\$363,250	490	141	631	80 63	S-M	270	\$266,341		53	1	15
2	1 25	40	307,683	454	149	603	63	..	271	242,798		51		5
3	1 25	40	273,034	433	112	545	63	..	242	212,251		49		5
4	1 11	39	180,541	302	100	402	63	..	293	174,682		37	1	9
5	1 03	20	164,198	300	92	392	63	..	229	156,746		25		3
6	1 35	41	155,371	237	151	388	63	..	215	137,387		40		3
7	1 75	.....	31,902	40	14	53	53	M	300	24,782	24	12		1
8	1 50	.....	1,240	3	1	4	4	..	150	.....		1		.....
9	1 75	.....	1,137	4	1	6	6	W	100	.....	25	1		.....
10	1 65.5	.....	877	1	1	3	3	S-M	180	.....		1		.....
11	1 50	.....	690	3	1	4	4	..	100	.....	3	1		.....
12	1 62.5	.....	585	.....	.....	2	2	..	120	.....		1		.....
13	1 75	.....	3,983	1	1	6	1 00	..	160	.....		2		.....
14	1 75	.....	3,909	1	1	6	1 00	..	170	2,743	80	1		.....
15	1 60	.....	2,184	4	4	6	80	..	155	1,680	100	4		.....
16	1 75	.....	1,736	3	3	6	1 00	W	108	4,000	64	2		.....
17	1 50	.....	2,988	4	1	5	75	..	240	1,426	.....	1		.....
18	1 50	.....	2,415	4	1	5	75	S-M	200	.....	.....	1		.....
19	1 50	.....	1,371	3	1	4	75	..	150	.....	.....	1		.....
.....	.....	.....	\$1,507,768	2,298	773	3,071	.....	.....	.....	\$1,224,779	368	24	2	44
.....	\$1 22.4	\$0 37	.....	.....	.....	.....	80 63.5	.....	192	.....	.....	.....	.....	.....

## Henry County—Second District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Stream, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	Herdien Coal Co., No. 14	Galva	68	4	6	Sh.	S.	M.	19,693	18,593	1,100
2	No. 12	"	52	4	6	"	"	"	7,795	7,445	350
3	Jas. H. Murray	"	37	4	6	"	"	"	6,289	6,069	260
4	McKane & Reed	"	25	3.6	6	"	"	"	1,153	1,053	100
5	A. W. Murphy	"	29	4	6	"	Ho.	"	222	222	.....
6	Philip Henry	Kewanee	72	4	6	Sh.	S.	"	6,480	6,280	200
7	Bernard Kirley	"	62	4	6	Sh.	S.	"	5,060	4,866	200
8	J. J. Fleming	"	56	4	6	"	"	"	4,448	4,298	150
9	Bates Bros.	"	68	4	6	"	Ho.	"	3,330	3,330	.....
10	W. H. Lyle	"	70	4	6	"	"	"	2,556	2,500	56
11	Mat Atkinson	"	4	4	6	D.	Hd.	"	1,782	1,782	.....
12	Samuel Garland	"	66	4	6	Sh.	Ho.	"	1,400	1,400	.....
13	Joseph Dixon	"	40	4	6	"	"	"	1,200	1,200	.....
14	H. Kempin	"	32	4	6	"	"	"	880	880	.....
15	Herman Henry	"	55	4	6	"	"	"	630	630	.....
16	Ralph Todd	"	35	4	6	"	"	"	600	600	.....
17	Gray & Son	"	40	4	6	Sh.	"	"	420	420	.....
18	Gus T. Schulz	"	30	4	6	Sl.	"	"	608	608	.....
19	Joseph Pyle	"	20	4	6	"	"	"	400	400	.....
20	P. Malone & Son	"	25	4	6	"	"	"	240	240	.....
21	Thos. Carter & Son	"	60	4	6	Sh.	"	"	165	165	.....
22	James Kay	Atkinson	30	3	3	"	"	"	2,266	1,746	520
23	D. O. Loy	"	40	3	3	"	S.	"	1,750	1,400	350
24	James Waine	"	30	3	3	Sl.	Hc.	"	1,308	1,308	.....
25	Donald & Flynn	Briar Bluff	3.6	1	1	D.	Hd.	B.	1,650	1,650	.....
26	Jeff Glenn	"	3.6	1	1	"	"	M.	970	970	.....
27	Timothy Downing	"	3	1	1	"	"	"	320	320	.....
28	Stoddard & Summerson, Blossomburg.	Coal Valley	45	4.6	1	Sl.	Ho.	B.	9,250	9,250	.....
29	John Summerson, Blossomburg	"	4	1	1	D.	"	"	1,920	1,920	.....
30	Fred A. Kenady	Cambridge	130	2.8	3	Sh.	S.	"	3,320	2,502	818
31	James Irvin	Green River	32	3.4	1	"	Ho.	"	1,820	1,820	.....
32	M. Aldrich	Geneseo	30	4	1	"	"	"	1,200	1,200	.....
33	John Rochford	Hawley	30	4	6	Sl.	"	M.	160	160	.....
Totals									91,265	87,161	4,104
Averages											

Whole number of openings reported in 1898, 30.

Number of new mines or places opened during the year, 7.

Number of mines exhausted or abandoned during the year, 4.

Whole number of openings reported for 1899, 33.

Henry County, 1899 -Concluded.

Number.	VALUES.			EMPLOYES.			Price paid per screened ton—hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	ACCIDENTS		
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Number of horses or mules employed in or about the mine.	Fatal.	Non-fatal.
1	\$1 20	\$0 40	\$22,751	38	7	45	\$0 80	M.	275	\$17,400				
2	1 50	25	11,254	17	5	22	80	M.	300	6,200				
3	1 63	25	9,859	14	2	16	80	S.M.	300	6,000				
4	1 50	15	1,604	3	1	4	80	S.M.	130	1,153				
5	1 50		333	2	1	3	75	"	100		1			
6	1 75	25	11,040	16	4	20	1 00	"	175	8,510				
7	1 75	25	8,555	12	3	15	1 00	"	253	7,182				
8	1 75	25	7,558	11	1	12	1 00	"	250	4,760		1		
9	1 75		5,867	10	1	11	1 00	"	220		1		1	
10	1 75	25	4,389	5	1	6	1 00	"	250	3,457				
11	1 75		3,118	4	1	5	1 00	"	240	2,100				
12	1 75		2,450	4	1	5	1 00	"	200		1			
13	1 75		2,100	4	1	5	1 00	"	170	1,300		1		
14	1 75		1,540	3	1	4	1 00	"	180			1		
15	1 40		882	5	1	6	75	W.	70	473		1		
16	1 75		1,050	2	1	3	1 00	"	150			1		
17	1 50		630	3	1	4	87.5	"	100			1		
18	1 50		912	2		2	1 00	"	200			1		
19	1 50		600		1	2	75	"	120			1		
20	1 75		420	2	1	3	1 00	"	85	250		1		
21	1 75		288	1	1	2	1 00	"	85			1		
22	2 00	50	3,752	6	1	7	1 25	"	200	2,200		1		
23	2 00	50	2,975	5	1	6	1 25	"	180	2,300				
24	2 00		2,616	5	1	6	1 25	S.M.	220	1,807		1		
25	1 50		2,475	5		5	75	"	175		72			
26	1 50		1,455	3		3	75	"	165					
27	1 50		480	2		2	75	W.	90					
28														
29	1 25		11,562	18	10	28	* 55	S.M.	175	7,750	415	5		
	1 25		2,400	7	2	9	* 55	"	150		50	1		
30	1 87.5	90	5,427	8	3	11	1 12.5	"	240	3,793	143	1		
31	1 62.5		2,957	4	1	5	87.5	W.	140	1,120	36	1		
32	1 50		1,800	3	1	4	75	M.	175	1,200	24	1		
33	1 25		200	1		1	75	W.	85	126		1		
			\$135,284	227	56	283				\$79,111	734	24	1	1
	\$1 53	\$0 47					†\$0 91		177					

\* Gross weight.  
† Per screened ton.

## Marshall County—Second District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	Devlin Coal Co.....No. 1	Toluca.....	512	2.8	2	Sh.	S.	M.	229,705	194,332	35,373
2	Wenona Coal Co.....	Wenona.....	555	2.10	2	..	..	..	93,287	70,170	23,117
3	Marquette Coal Co.....	Sparland.....	164	2.6	2	..	..	..	16,601	14,879	1,722
4	Bennett Bros.....	Chillicothe.....	3.8	7	1	D.	Hd	B.	1,252	940	312
5	Robert Ingram.....	Sparland.....	3.10	7	..	..	..	..	288	288	.....
6	George Chrisman.....	..	3.10	7	..	..	..	..	200	200	.....
7	George Near.....	..	3.10	7	..	..	..	..	150	150	.....
8	Bernard Lanning.....	..	3.10	7	..	..	..	..	125	125	.....
9	James Medearis.....	Henry.....	4	..	..	..	..	..	420	420	.....
10	William Horrocks.....	..	3.10	7	..	..	..	..	250	250	.....
11	William Bough.....	..	3.10	7	..	..	..	..	200	200	.....
12	Joseph Caley.....	..	3.08	6	..	..	..	M.	100	100	.....
	Totals.....	.....	.....	.....	.....	.....	.....	.....	342,578	282,051	60,524
	Averages.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Whole number of openings reported in 1898, 14.

Number of new mines or places opened during the year, 1.

Number of mines exhausted or abandoned during the year, 3.

Whole number of openings reported for 1899, 12.



Marshall County, 1899—Concluded.

Number.	VALUES.			EMPLOYES.			Price paid per gross ton—hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	ACCIDENTS		
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.	
1	\$1 25	\$0 40	\$257,064	346	57	433	\$0 63	S-M.	303	204,631	453	40	2	15
2	1 25	46	100,451	140	50	190	63	..	257	29,416	.....	18	..	3
3	1 30	43	20,038	35	10	45	63	..	295	15,917	.....	4	..	1
4	1 20	50	1,284	3	.....	3	75	W.	300	704	52	.....	.....	.....
5	1 25	.....	360	2	.....	2	75	..	180	.....	10	.....	.....	.....
6	1 25	.....	250	1	.....	1	75	..	120	.....	3	.....	.....	.....
7	1 25	.....	187	1	.....	1	75	..	100	.....	3	.....	.....	.....
8	1 25	.....	156	1	.....	1	75	..	100	.....	1	.....	.....	.....
9	1 25	.....	525	2	.....	2	75	..	150	.....	7	.....	.....	.....
10	1 25	.....	312	1	.....	1	75	..	100	.....	6	.....	.....	.....
11	1 25	.....	250	1	.....	1	75	..	100	.....	7	.....	.....	.....
12	1 50	.....	125	1	.....	1	75	..	50	.....	.....	.....	.....	.....
.....	.....	.....	\$380,808	534	147	681	.....	.....	.....	\$250,668	544	62	2	19
.....	\$1 26	\$0 42	.....	.....	.....	.....	\$0 63	.....	171	.....	.....	.....	.....	.....

## Mercer County—Second District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	Coal Valley.....No. 1	Sherrard.....	203	4	1	Sh.	S.	B.	167,089	113,376	53,713
2	Coal Val'y Min'g Co., No. 2	Cable.....	60	4	1	..	..	..	84,374	57,784	26,590
3	Camp Creek Coal Co.....	..	70	3.5	1	..	..	..	1,670	1,160	510
4	Lilliman Bros.....	..	37	3	1	..	Ho.	..	1,540	1,540	..
5	B. B. Peterson.....	..	36	3	1	..	..	..	1,294	1,294	..
6	M. A. Beers.....	..	..	2.6	1	D.	Hd.	..	472	472	..
7	Alden Coal Co.....	Wanlock.....	135	4.6	1	Sh.	St.	..	125,664	82,002	43,662
8	Empire Coal Co.....	Gilchrist.....	100	4	1	..	..	..	96,630	68,370	28,260
9	Edward Boden.....	Preemption ..	60	4	1	..	..	..	3,270	3,270	..
10	Peter Docherty.....	..	60	4	1	..	H.	..	2,450	2,400	50
11	William Penman.....	..	48	4	1	..	..	..	2,000	2,000	..
12	W. P. Williams.....	Laoc.....	60	4	1	..	..	..	3,242	3,242	..
13	G. W. Martin.....	Laoc.....	40	4	1	..	..	..	2,026	2,026	..
14	Griffin Clay Mfg Co.....	Griffin.....	35	2.6	1	..	..	M.	2,960	2,960	..
15	Peterson & Young.....	..	..	2.6	1	D.	Hd.	B.	630	590	40
16	Henry Cameron.....	Violla.....	30	4	1	Sl	H.	..	1,000	1,000	..
17	George Morris.....	Millersburg ..	..	2.6	1	D.	Hd.	M.	280	280	..
Totals.....									496,591	343,766	152,825
Averages.....									..	..	..

Whole number of openings reported in 1898, 17.

Number of new mines or places opened during the year, 2.

Number of mines exhausted or abandoned during the year, 2.

Whole number of openings reported for 1899, 17.

## Peoria County—Second District, 1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	Newsam Bros., Kingston.	Peoria.....	180	4.4	5	Sl.	S.	B.	109,438	72,958	36,480
2	Star.....	Plona.....	130	4.2	5	Sh.	S.	..	41,226	29,484	11,742
3	Newsam Bros., Hanna City	Peoria.....	250	4.2	5	..	..	..	30,708	21,472	9,236
4	Scholl Bros., No. 3.....	..	80	4.4	5	..	..	..	76,300	57,200	19,100
5	No. 1.....	..	100	4.4	5	Sl.	..	..	24,081	22,800	1,281
6	Wolschlag Coö. Coal Co	..	150	4.4	5	..	..	..	56,667	42,936	13,731
7	Peter Grant, Jr.....	..	105	4.2	5	Sh.	..	..	30,172	21,057	9,115
8	Royster & Zeigler.....	..	75	4.2	5	..	..	..	25,865	19,325	6,540
9	Vicary Bros.....	..	..	4.2	5	D.	Ho.	..	17,580	17,580	..
10	F. P. Schmidt & Sons.....	..	..	4.2	5	..	..	..	7,260	7,260	..
11	Ed. Mohn & Bro.....	..	130	4.2	5	Sh.	..	..	2,620	2,620	..

\* Both.

Mercer County, 1899—Concluded.

Number.	VALUES.			EMPLOYES.			Price paid per gross ton—hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	Number of horses or mules employed in or about the mine.		ACCIDENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.		
1	\$01 50	\$0 87.5	217,063	125	103	228	\$0 50*	M.	156	\$135,489	6,924	25	5		
2	1 50	1 00	113,266	68	92	160	60*	..	175	69,372	2,216	14	1		
3	1 20	50	1,647	12	6	18	55*	..	55	1,509	80	3	1		
4	1 50	.....	2,310	4	1	5	75	..	195	1,455	65	1	.....		
5	1 50	.....	1,941	3	1	4	75	..	210	1,362	69	1	.....		
6	1 50	.....	708	1	.....	1	75	..	220	.....	15	.....	.....		
7	1 10	50	112,033	125	39	164	45*	S.M.	275	78,913	6,288	29	1		
8	1 10	50	89,337	90	73	163	45*	..	246	71,359	4,037	39	1		
9	1 00	.....	3,270	5	2	7	75	..	250	.....	200	.....	.....		
10	1 00	50	2,425	5	1	6	65	..	189	.....	100	1	.....		
11	1 00	.....	2,000	4	1	5	65	..	229	.....	100	1	.....		
12	1 25	.....	4,052	6	1	7	75	..	200	.....	170	1	.....		
13	1 25	.....	2,532	4	1	5	75	W.	250	1,334	102	1	.....		
14	1 50	.....	4,410	6	1	7	90	M.	250	2,661	.....	1	.....		
15	1 50	25	895	3	1	4	1 00	W.	106	637	15	1	.....		
16	1 00	.....	1,000	3	1	4	65	..	125	.....	25	1	.....		
16	1 50	.....	420	2	.....	1	1 00	..	100	.....	.....	.....	.....		
.....	.....	.....	\$58,839	466	324	790	.....	.....	.....	\$361,012	29,397	101	2		
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
.....	\$1 31	\$0 71	.....	.....	.....	.....	\$0 47 7	.....	189	.....	.....	.....	.....		

\* Gross weight.  
 † Average for 475,427 gross tons.  
 Average for 21,164 screened tons, 74 cents per ton.

Peoria County, 1899.—Continued.

Number.	VALUES.			EMPLOYES.			Price paid per gross ton—hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	Number of horses or mules employed in or about the mine.		ACCIDENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.		
1	\$0 90	\$0 25	\$74,782	100	30	130	\$0 45	S.M.	275	\$69,924	2,864	6	1		
2	1 00	35	33,593	45	13	58	45	..	206	28,608	1,557	4	.....		
3	1 00	35	24,704	32	10	42	45	..	200	22,203	1,400	4	.....		
4	85	30	54,350	63	13	76	45	..	236	41,965	3,084	5	1		
5	85	30	19,764	27	11	38	45	..	189	14,836	935	5	.....		
6	75	30	36,321	38	11	49	45	S.M.	300	36,041	2,870	4	1		
7	85	20	19,721	25	10	35	45	S.M.	221	14,400	1,251	5	.....		
8	80	20	16,768	39	9	39	45	..	186	14,807	1,000	4	.....		
9	90	.....	16,701	18	7	25	45	..	235	11,950	700	4	.....		
10	1 00	.....	7,260	10	2	12	69	..	180	5,133	418	1	.....		
11	1 00	.....	2,620	4	4	8	69	..	185	.....	145	1	.....		

## Peoria County, 1899—Concluded.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam.	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
12	Martin & Lane.....	Peoria.....	42	5	D.	Hd	B.	1,820	1,820	.....	
13	Richard Cody.....	".....	55	42	5	Sh.	Ho.	1,600	1,600	.....	
14	John Birdois.....	".....	42	5	D.	Hd	"	1,464	1,464	.....	
15	Dan Birdois.....	".....	42	5	"	"	"	1,402	1,402	.....	
16	Joos & Rumpel.....	".....	42	5	"	"	"	1,284	1,284	.....	
17	Fred Martin.....	".....	42	5	"	"	"	1,274	1,274	.....	
18	Schneider & Ennis.....	".....	42	5	"	"	"	1,200	1,200	.....	
19	Cook Bros.....	".....	42	5	"	"	"	850	850	.....	
20	James Laue.....	".....	42	5	"	"	"	720	720	.....	
21	John J. Saupé.....	".....	42	5	"	"	"	702	702	.....	
22	Collier Coöps. Coal Co.....	Bartonville.....	180	4.4	5	Sl.	S.	35,892	35,192	700	
23	Bartonville Coal Co.....	".....	100	4.4	5	"	"	16,984	16,984	.....	
24	Ball Coal Co.....	".....	96	4.4	"	Sh.	"	12,894	12,174	720	
25	Wolland Bros.....	".....	4.4	"	"	D.	M.	8,390	7,940	450	
26	Joseph Scholl & Sons.....	".....	120	4.4	5	Sl.	S.	6,164	5,624	540	
27	White Coal Co.....	".....	4.2	"	"	D.	Ho.	5,666	5,666	.....	
28	Geo. Keller & Sons.....	".....	65	4.4	5	Sh.	S.	3,468	3,218	250	
29	Ed. Brown.....	".....	4.2	"	"	D.	Hd	1,120	1,120	.....	
30	Lot Hurst.....	".....	4.4	"	"	"	"	1,000	1,000	.....	
31	Elmwood Coal Co.....	Elmwood.....	215	2.8	"	Sh.	S.	53,182	48,760	4,422	
32	Reed City Coal Co.....	Wolcott.....	90	4.6	5	Sl.	"	36,396	26,300	10,096	
33	Wantling & Son.....	Pottstown.....	112	2.6	"	Sh.	"	34,430	32,120	2,310	
34	Harry Vicary.....	".....	4.3	"	"	D.	Hd	720	720	.....	
35	James Sleith.....	".....	4.3	"	"	"	"	660	660	.....	
36	W. E. Foley.....	Mapleton.....	80	4.6	5	Sl.	S.	14,000	8,000	6,000	
37	German Coöps. Coal Co.....	".....	100	4.6	5	"	"	13,858	10,666	3,192	
38	L. Potter & Son.....	".....	32	4.3	"	Sh.	"	1,700	1,700	.....	
39	R. Shreffler.....	".....	4.3	"	"	D.	Hd	1,000	1,000	.....	
40	A. Beharelle & Co.....	".....	160	2.6	"	Sh.	S.	640	640	.....	
41	".....	".....	4.3	"	"	D.	Ho.	615	615	.....	
42	D. B. Roberts.....	".....	4.6	"	"	D.	Hd	700	700	.....	
43	Thos. Goodwin.....	".....	4.6	"	"	"	"	480	480	.....	
44	C. B. Kramm & Son.....	Edwards.....	4.2	"	"	Ho.	"	25,600	20,600	5,000	
45	Howarth & Taylor Bros.....	".....	4.2	"	"	"	"	10,000	6,332	3,668	
46	Mike Cusack.....	".....	4.2	"	"	"	"	2,290	2,290	.....	
47	Siebold Reents.....	Kramm.....	4.2	"	"	"	"	8,365	8,165	200	
48	Jefford Bros.....	Kingston.....	4.6	"	"	"	"	4,095	4,095	.....	
49	F. H. Cutler.....	Princeville.....	70	4.6	6	Sh.	S.	1,084	1,084	.....	
50	Robert Taylor & Sons.....	".....	20	4.6	"	"	"	600	600	.....	
51	W. G. Saunders.....	Monica.....	70	4.6	"	Ho.	"	600	600	.....	
52	Charles Berry.....	".....	35	4.6	6	"	"	500	500	.....	
53	Martin Armentrout.....	Duncan.....	30	4.6	6	"	"	2,512	2,512	.....	
54	Joseph Crew.....	Chillicothe.....	30	3.6	7	"	Ho.	1,800	1,800	.....	
55	Phillip Tully.....	Brimfield.....	40	4.2	6	"	"	1,000	1,000	.....	
56	J. I. Aby.....	Laura.....	20	4.6	6	"	"	640	640	.....	
57	John Jurdon.....	Trivoli.....	40	4.3	6	"	"	620	620	.....	
58	W. H. Poole.....	Kickapoc.....	22	4.6	6	"	"	600	600	.....	
59	Wm. Vaughan.....	Jubilee.....	50	3	5	"	"	200	200	.....	
Totals.....								744,698	599,925	144,773	
Averages.....								.....	.....	.....	

Whole number of openings reported in 1898, 61.

Number of new mines or places opened during the year, 6.

Number of mines exhausted or abandoned during the year, 8.

Whole number of openings reported for 1899, 59.

\*Both.

Peoria County, 1899.—Concluded.

Number.	VALUES.			EMPLOYEES.			Price paid per gross ton—hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	ACCIDENTS		
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Number of horses or mules employed in or about the mine.	Fatal.	Non-fatal.
12	\$1 00		\$1,820	3		3	\$0 69	S-M	220		112			
13	1 00		1,600	4		5	69		180		83	1		
14	1 00		1,464	4		4	69		200		70	1		
15	1 00		1,402	3		3	69		200		65	1		
16	1 60		1,284	3		3	69		200		60	1		
17	1 00		1,271	2		2	69		220		55	1		
18	1 00		1,200	2		2	69		200		50	1		
19	1 00		850	2		2	69		180		45	1		
20	1 00		720	2		2	69		150		34			
21	1 00		702	3		3	69		160		35			
22	85	\$0 25	30,088	25		33	45	M	268		1,754	12	1	
23	1 00		16,984	14		16	62.5		290	\$13,500	1,000			
24	1 00	30	12,386	8	1	9	45		280	6,081	615			
25	1 00	15	8,007	5	3	8	62.5		250	4,270	400			
26	85	30	4,942	8	4	12	45	S-M	210		342	1		
27	1 00		5,666	5	5	5	69		280		328	1		
28	1 00	25	3,280	5	12	7	69	W	230		120			
29	1 00		1,120	2		2	69		190		55			
30	1 00		1,000	3		3	69		140		40			
31	1 30	45	65,377	95	29	124	63	S-M	265	54,233		10	3	
32	85	50	27,403	50	12	72	45		200	40,138	2,010	4	2	
33	1 10	45	36,371	60	25	85	63		220		160	5	1	
34	1 00		720	12		12	65	W	130		38			
35	1 00		660	12		12	65		140		35			
36	90	30	9,000	18	4	22	45	S-M	200	6,300	2,000			
37	85	20	9,704	19	4	23	45		182	7,485	523	3		
38	1 00		1,700	6	1	7	60		120		80	1		
39	1 00		1,000	4	1	5	65	W	150		45	1		
40	1 10		704	5	2	7	89	S-M	70	1,345	23		1	
41	85		522	5	1	6	45		57	476	41	1		
42	1 00		700	3		3	65	W	180		25			
43	1 00		480	3		3	65		100		20			
44	85	10	18,010	25	5	30	45	S-M	190		90	4		
45	1 00	45	7,982	20	6	26	45		180		579	3		
46	85		1,916	6	1	7	60		100		130	1		
47	80	15	6,562	15	7	22	60		180	5,500	150	3		
48	1 25		5,118	10	4	14	45		135		248	2		
49	1 50		1,626	5	2	7	75	W	180	1,200	40			
50	1 50		900	3	1	4	75		145					
51	1 00		600	2	1	3	62.5		160			1		
52	1 00		500	2	1	3	62.5		126		8	1		
53	1 50		3,768	3	1	4	75		300	2,540	6			
54	1 00		1,800	3		3	60		240	1,080	60	1		
55	1 50		1,500	3	1	4	75		165		12	1		
56	1 50		960	1	1	3	75		170			1		
57	1 50		930	2	1	3	75		166		6	1		
58	1 25		750	3	1	4	75		150			1		
59	1 25		250	1		1	75		100		10	1		
			\$609,929	873	260	1,133				\$404,010	29,045	105	4	9
	\$0 94.5	\$0 30					*\$0 48.6		189					

\* Average for gross tons; average price paid for 41,346 screened tons, 70 cents per ton; price paid for 64,718 tons cut by machine, 27 cents per ton.

## Rock Island County—Second District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	John J. Pryce, Old Mine, No. 1.....	Coal Valley...	40	3.6	1	Sl.	S.	B.	4,970	4,970	.....
2	John J. Pryce, New Mine, No. 2.....	" "	25	4	1	Sh.	"	"	4,065	4,065	.....
3	Black Diamond Coal Co., Black Diamond.....	" "	50	3.6	1	"	"	"	2,580	2,240	340
4	James Sackville.....	" "	80	3.6	1	"	Ho.	"	1,298	1,298	.....
5	W. E. Wynn & Co.....	" "	85	3.6	1	"	"	"	1,040	1,040	.....
6	Robert Summerson.....	" "	4	4	1	D.	Hd	"	720	720	.....
7	John T. Patterson.....	" "	35	4	1	Sh.	Ho.	M.	520	520	.....
8	Douglas Gregg.....	" "	30	3.6	1	Sl.	"	"	440	440	.....
9	John Carlson.....	" "	30	3.6	1	"	"	"	260	260	.....
10	Jonathan Linsley.....	" "	50	4	1	Sh.	"	"	160	160	.....
11	John Hynd.....	Loding.....	50	4	1	"	"	B.	6,502	6,214	288
12	Jamieson & Allison.....	" "	40	3.6	1	"	"	"	2,650	2,500	150
12	Loding Bros.....	" "	67	4	1	"	"	"	1,496	1,096	400
14	E. G. Jamieson.....	" "	3.6	1	D.	Hd	"	"	160	160	.....
15	Sharp Silvis.....	Carbon Cliff..	35	3.8	1	Sl.	Ho.	"	6,570	5,070	1,500
16	Stone Bros.....	" "	60	3	1	Sh.	"	"	1,120	1,120	.....
17	Frothe Bros.....	" "	3	1	D.	Hd	"	"	480	480	.....
18	William Parker.....	Milam.....	53	3.6	1	Sh.	S.	"	2,960	2,820	140
19	David Walsh.....	" "	48	3.6	1	"	Ho.	"	1,200	1,200	.....
20	Guckert Bros.....	Hamptom.....	56	3.6	1	"	"	M.	1,156	1,156	.....
21	Fred Vonach.....	" "	70	3.6	1	"	"	B.	500	500	.....
22	Chas. Kleaver.....	" "	40	3.6	1	Sl.	"	M.	450	450	.....
23	Hayes Coal Co.....	Muscatine, Ia. ....	1.8	1	D.	"	"	"	300	300	100
	Totals.....	.....	.....	.....	.....	.....	.....	.....	41,597	38,679	2,918
	Averages.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Whole number of openings reported in 1898, 20.

Number of new mines or places opened during the year, 6.

Number of mines exhausted or abandoned during the year, 3.

Whole number of openings reported for 1899, 23.

Rock Island County, 1899—Concluded.

Number.	VALUES.			EMPLOYES.			Price paid per gross ton—hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	Number of horses or mules employed in or about the mine.	ACCIDENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.							Fatal.	Non-fatal.
1	\$1 50		7,455	13	3	16	\$0 75	W.	200	5,400	200			
2	1 50		6,097	12	3	15	75	"	144	4,651	180			
3	1 50	\$0 50	3,530	6	1	7	75	S.M.	150	3,146	85			
4	1 50		1,947	5	1	6	75	"	158		75	1		
5	1 50		1,560	4	1	5	75	"	155		50	1		
6	1 50		1,080	2		2	75	"	190		37			
7	1 50		780	4	1	5	75	"	70			1		1
8	1 50		660	2		2	75	"	140			1		
9	1 50		380	2		2	75	"	80		12	1		
10	1 50		240	1		1	75	"	120		6	1		
11	1 50	.60	9,493	15	1	16	87.5	W.	208		320	1		
12	1 50	.75	3,862	5	2	7	87.5	"	150		100	1		
13	1 50	.40	1,804	6	1	7	87.5	"	120	1,126	109			
14	1 50		240	3		3	87.5	"	40		6			
15	1 40	.40	7,698	13	3	16	75	S.M.	275	4,861	195	2		1
16	1 50		1,680	4	1	5	87.5	"	165		32	1		
17	1 50		720	5		5	87.5	"	100		18			
18	1 50	no val.	4,230	7	1	8	75	"	210		185			
19	1 50		1,800	5	1	6	75	"	200		50	1		
20	1 50		1,734	3	1	4	87.5	"	140	1,140	1	1		
21	1 50		750	3	1	4	87.5	"	180	500	16	1		
22	1 50		675	2	1	3	87.5	"	120			1		
23	1 75	1.00	450	3	1	4	87.5	"	50		36	1		
			859,032	125	24	149				820,824	1,707	16		2
	\$1 49	\$0 48					\$0 79		151					

## Stark County—Second District—1899.

Number	Name of Operator.	Postoffice.	DESCRIPTION.							OUTFIT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift...	Steam, horse or hand power.....	Mined or blasted.....	Total tons produced.	Tons of lump coal.	Ton of other grades	
1	George R. Watson.....	Wyoming.....	73	4.6	6	Sh.	Ho.	*	2,922	2,722	200	
2	James Higbie.....	".....	45	4	6	"	"	*	2,446	2,446	.....	
3	Higbie & Robinson.....	".....	70	4	6	"	"	*	1,534	1,334	200	
4	John Price.....	".....	26	4	6	Sl.	"	*	460	460	.....	
5	John Thurston.....	".....	4	4	6	D.	Hd.	M.	320	320	.....	
6	Stephenson & Watson...	".....	56	4	6	Sh.	Ho.	*	240	240	.....	
7	Jesse Saville.....	Modena.....	65	4.6	6	"	"	B.	1,200	1,000	200	
8	John Scott.....	".....	60	1.6	6	"	"	*	950	950	.....	
9	Benjamin Smith.....	".....	40	4.8	6	"	"	*	436	436	.....	
10	William Rennie.....	".....	50	4.6	6	"	"	*	295	295	.....	
11	French & Peterson.....	Bradford.....	104	4.8	6	"	"	B.	1,814	1,814	.....	
12	Charles Montooth.....	".....	138	5	6	"	"	"	900	900	.....	
13	William Jones.....	".....	117	5	6	"	"	"	880	880	.....	
14	Henry Storey.....	Toulon.....	60	4.3	6	"	"	*	1,800	1,800	.....	
15	Henry Newton.....	".....	60	4	6	D.	Hd.	*	80	80	.....	
16	J. M. Robinson.....	Elmira.....	45	4	6	Sh.	Ho.	*	2,680	2,480	200	
17	John Catton.....	West Jersey.....	5	4	4	D.	Hd.	*	1,558	1,558	.....	
18	Joseph Goode.....	Lombardville.....	130	4.6	6	Sh.	Ho.	*	1,272	1,272	.....	
19	John Leitch.....	Lafayette.....	30	3.6	6	"	"	M.	1,200	1,200	.....	
20	Bever Bros.....	Castleton.....	82	5	6	"	"	*	1,010	960	50	
	Totals ..	.....	.....	.....	.....	.....	.....	.....	23,997	23,147	850	
	Averages.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	

\* Both.

Whole number of openings reported in 1898, 23.

Number of new mines opened during the year, 1.

Number of mines exhausted or abandoned during the year, 4.

Whole number of openings reported for 1899, 20.



Stark County, 1899--Concluded.

Number.	VALUES.			EMPLOYES.			Price paid per gross ton— hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	ACCIDENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.
1	\$1 25		\$3,402	5	1	6	\$0 75	S.M.	220		15	1	..
2	1 25		3,057	6	1	7	75	..	210		30	1	..
3	1 50		2,001	5	1	6	75	..	160		27	1	..
4	1 25		575	3	..	3	75	..	125		3	1	..
5	1 25		400	1	..	1	75	..	155		..	..	..
6	1 50		360	1	..	3	75	..	100		3	..	..
7	1 25		1,250	3	1	4	75	..	240		75	1	..
8	1 25		1,187	4	1	5	75	W.	170	\$825	17	1	..
9	1 25		545	3	1	4	75	W.	120	325	15	1	..
10	1 25		368	2	..	2	75	..	100		5	1	..
11	1 50		2,721	4	1	5	\$7.5	..	230		120	1	..
12	1 50		1,350	3	1	4	\$7.5	..	190		56	1	..
13	1 50		1,320	3	1	4	\$7.5	..	180		77	1	..
14	1 25		2,250	4	1	5	75	S.M.	200		25	1	..
15	1 25		100	1	..	1	75	..	70		3	..	..
16	1 25		3,100	5	1	6	75	..	300		15	1	..
18	1 50		2,337	3	..	3	75	..	265		30	..	..
17	1 75		2,226	5	1	6	1 00	..	165		80	2	..
19	1 25		1,500	2	1	3	75	..	260		..	1	..
20	1 50	\$0 50	1,465	3	1	4	75	..	254	544	10	1	..
			\$31,905	67	15	82				\$1,696	606	17	..
	\$1 36	\$0 50					\$0 78		185				..

## Woodford County—Second District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.					OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.
1	Chicago & Minonk Coal and Tile Works.....	Minonk .....	552	2.8	S.	S.	M.	101,000	80,000	21,000
2	Roanoke Mining Co.....	Roanoke.....	480	2.6	S.	S.	M.	73,750	60,480	13,270
	Totals .....	.....	.....	.....	.....	.....	.....	174,750	140,480	34,270
	Averages.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Whole number of openings reported in 1898, 2.

Whole number of openings reported for 1899, 2.

Woodford County, 1899—Concluded.

Number.	VALUES.			EMPLOYES.			Price paid per gross ton— hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	ACCIDENTS		
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.	
1	\$1 20	\$0 50	\$106,500	175	78	253	\$0 63	N.M.	265	\$99,600	50	25	1	8
2	1 35	20	75,854	155	31	189	63		212	63,727	7	11		2
.....	.....	.....	\$184,408	330	112	442	.....	.....	.....	\$163,327	57	36	1	10
	\$1 22	\$0 38	.....	.....	.....	.....	\$0 63	.....	238	.....	.....	.....	.....	.....

## Recapitulation by Counties—

COUNTIES.	MINES.					PRODUCTS.					VALUES.	
	Number of mines.	Shipping mines.	Mines in local trade.	New mines.	Abandoned mines.	Total tons produced.	Tons of lump coal.	Tons of other grades.	Tons shipped.	Tons consumed or wasted at the mines.	Average value per ton of lump at the mines.	Average value of other grades per ton at the mines.
Bureau .....	19	7	12	2	..	1,410,524	1,154,419	256,105	1,324,664	39,929	\$1 22.4	\$0 37
Henry .....	33	3	30	7	4	91,265	87,161	4,104	28,473	3,412	1 53	47
Marshall.....	12	3	9	1	3	342,578	282,054	60,524	317,060	7,276	1 26	42
Mercer.....	17	5	12	2	2	496,591	343,766	152,825	452,515	15,623	1 31	71
Peoria .....	59	23	36	6	8	744,698	599,925	144,773	606,047	18,099	94.5	30
Rock Island..	23	2	21	6	3	41,597	38,679	2,918	2,633	1,165	1 49	48
Stark .....	20	..	20	1	4	23,997	23,147	850	.....	860	1 36	50
Woodford ....	2	2	..	..	..	174,750	140,480	34,270	145,750	9,900	1 22	38
Totals .....	185	45	140	25	24	3,326,000	2,669,631	656,369	2,877,142	96,264	.....	.....
Averages.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	\$1 19.1	\$0 44

Whole number of openings reported in 1898, 184.

Number of new mines or places opened during the year, 25.

Number of mines exhausted or abandoned during the year, 24.

Whole number of openings reported for 1899, 185.

Second District, 1899.

Aggregate value of total product.....	EMPLOYEES.				Average price paid per gross ton for hand mining	Total wages paid during the year to all employes excepting office help.	Number of kegs of powder used.	Number of horses and mules employed in and about the mines.	CASUALTIES		MACHINERY	
	Number of miners.	Number of other employes.	Total employes.	Average number of days of active operation.					Killed.	Injured.	Number of mines using machines.	Number of machines in use.
\$1,507,768	2,298	773	3,071	192	\$0 63.5	a 81,224,779	368	284	2	44		
135,284	227	56	283	177	0 91	b 79,111	734	24	1	1		
388,808	534	147	681	171	0 63	c 250,668	514	62	2	19		
558,839	466	324	790	189	0 47.68	d 361,042	20,397	101	2	8		
609,929	573	260	1,133	189	0 48.6	e 401,010	29,045	105	4	9	2	9 364,718
59,032	125	24	149	151	0 79	f 20,824	1,707	16		2		
31,905	67	15	82	185	0 78	g 1,696	609	17				
184,408	330	112	442	238	0 63	163,327	57	36	1	10		
\$3,475,973	4,920	1,711	6,631	.....	.....	\$2,568,457	53,158	615	12	36	2	9 64,718
				181.5	†\$0 57.7							

\* Screened tons; gross tons, 55 cents per ton.  
 † Gross tons.  
 ‡ Price paid for machine mining, 27 cents per ton.  
 a No report from 8 mines.  
 b No report from 12 mines.  
 c No report from 8 mines.  
 d No report from 7 mines.  
 e No report from 36 mines.  
 f No report from 16 mines.  
 g No report from 17 mines.



## THIRD INSPECTION DISTRICT—1899.

Counties: Brown, Fulton, Hancock, Knox, McDonough, Schuyler, Warren.

JOHN W. GRAHAM, *Inspector*, Canton.

HON. DAVID ROSS, *Secretary*,

*State Bureau of Labor Statistics, Springfield, Illinois.*

SIR:—In compliance with section 12 of the mining law of the State of Illinois, I have the honor to submit the sixteenth annual report of the Third Inspection District for the year ended June 30, 1899.

The following is a summary of the report as taken from the statistical tables:

Counties producing coal .....	7
Total number of mines.....	211
Number of shipping mines.....	23
Number of local mines.....	188
Total tons of coal produced .....	729,132
Total tons of lump .....	600,280
Total tons of other grades .....	128,852
Total tons shipped.....	561,664
Total tons consumed at mine.....	17,497
Total tons sold to local trade .....	149,911
Average value of lump at mine .....	\$1.072
Average value of other grades .....	0.413
Aggregate value of total product .....	\$696,505
Number of miners.....	1,415
Number of other employés, including boys .....	384
Total number of employés.....	1,799
Average number of days of active operation .....	146.3
Number of kegs of powder used.....	23,112
Average price paid for hand mining, gross.....	\$0.475
Average price paid for hand mining screened.....	0.894
Number of fatal accidents.....	4
Number of non-fatal accidents.....	17
Tons of coal produced to each fatal accident.....	182,283
Tons of coal produced to each non-fatal accident .....	42,890
Number of employés to each fatal accident.....	450
Number of employés to each non-fatal accident .....	106

This report shows a small increase in tonnage over last year; Fulton county has an increase of 37,687 tons; also, Brown and Warren counties have a slight

increase; the counties of Hancock, Knox, McDonough and Schuyler show a combined loss of 32,926 tons. The increase and decrease, by counties, is shown in the following table:

COUNTY.	TOTAL OUTPUT, ALL GRADES—TONS.		Increase.	Decrease.
	1898.	1899.		
Brown.....	1,940	2,630	690	
Fulton.....	563,397	601,084	37,687	
Hancock.....	5,600	5,498		102
Knox.....	49,819	43,214		6,605
McDonough.....	77,636	51,494		26,202
Schuyler.....	11,149	11,132		17
Warren.....	12,245	14,080	1,835	
Totals.....	721,846	729,132	40,212	32,926
Increase.....				40,212
Decrease.....				32,926
Net increase.....				7,286

*New Mines.*—The Jarvis Coal Co., of Astoria, Fulton county, has sunk a new mine at that place for shipping purposes. The coal is about 6 feet in thickness and of the No. 5 seam; the company now employ about 30 men, but will employ more as soon as the mine gets opened up.

J. M. Laws, of Cuba, Fulton county, is opening a new mine three miles east of Canton, on the T., P. & W. R. R., and will ship coal this fall. This is the No. 5 seam and the coal is about 4 feet 6 inches thick.

Howat Bros., Canton, Fulton county, have sunk a new shaft at that place to supply the local trade.

The Quincy Coal Co., Colchester, McDonough county, has sunk a new shaft at that place, which is now in operation.

The Colchester Coal and Mining Co., Colchester, McDonough county, is also sinking a new shaft to replace the old one, which is worked out.

*Abandoned Mines.*—There are a great many small mines abandoned in this district every year, and new ones opened. The Carbon Coal Company's mine, St. David, Fulton county, is now abandoned, and the company has gone out of the coal business. The Norris Coal Co., Fulton county, has also abandoned its mine and gone out of the business. The mine at Bryant, Fulton county, still remains closed. It has not been worked for over four years. The company keeps the water pumped out and the mine otherwise in repair.

*Labor Troubles.*—There has been very little trouble between the miners and operators in this district during the year. The only trouble that caused a loss of time was at Breeds, in Fulton county. The miners working for P. W. Meehan, on the 5th of March, made a demand to be paid by gross weight. Mr. Meehan stated that he could not do so unless he could get a new lease from the owner of the land and build a new dump. The men still demanded gross weight; in consequence the mine was shut down and remained closed until July. Since then a new dump has been built and the mine opened up, and gross weight paid for mining. About 25 men were idle 90 days.



*Mine Fires.*—On the morning of August 20, 1898, the boiler house at the Whitebreast Fuel Company's mine, Dunfermline, Fulton county, was discovered to be on fire. With hard fighting the fire was confined to the boiler room, which was entirely destroyed, together with the boiler fittings. A new boiler room has been built of fire proof material.

*Improvements.*—The Farmington Coal Company, Farmington, Fulton county, has put in an electric plant at its mine to run two mining machines, also to light up their shaft bottom and entry roads. The company also put in two new boilers to run their electric plant. The machines in use at their mine are the Link-belt chain-cutter, and appear to give good satisfaction.

*Accidents.*—The following is a detailed account of the fatal accidents that have taken place in this district during the year:

August 8, 1898, John DeBow, miner, aged 34 years, married, leaves a widow, was found dead in C. P. Wager's mine, three miles west of Etherley, Knox county, on the morning of the above date. Andrew DeBow, a brother, and the deceased worked together in the mine. The deceased went to work in the morning and was followed by his brother about thirty minutes afterwards. When the brother went to the mine he could not find the deceased, and after looking for some time, returned to the house and got more help to look for him. After searching for some time they discovered an opening into an old mine that had been closed up because it was on fire. He was found in this mine dead. Apparently he had opened up this old mine to see if the fire was out, and had gone in and was smothered by the gas before he could get out. This mine had been closed since last April.

September 15, 1898, George Wynn, a miner, aged 46 years, married, leaves a widow and five children. While working in the Sunday Creek Coal Company's mine, Middle Grove, was injured by a fall of slate, from the effects of which he died in about two hours. The deceased, with his son, went to work at the usual time, 7 o'clock a. m. There was about 6 inches of draw slate in his room that he wanted to take down, but wanted to load his car before taking it down. The mine manager had told him to take it down the day before but he had not done so. This morning David McKinley, a miner, who worked in the next place, was there and wanted him to take the slate down, but he said he would load his car first. McKinley went to his own room and in a short time heard the deceased's son call out. On going to see what was the trouble, he found Wynn under the slate, which had fallen on him. He was taken out as soon as possible and was found to be hurt internally, from the effects of which he died about two hours afterward.

September 20, 1898, John Flanagan, a miner, aged 55 years, married, leaves a widow and three children, was fatally injured by flying coal from a shot in the Norris Coal Company's mine, Norris, Fulton county, from the effects of which he died in one and a half hours after the accident. The deceased was working with his son in a room in the northwest entry. They had two shots to fire at noon. The son went down the roadway, when the father lighted one of the shots and followed him; when the shot went off, deceased returned and lighted the other one. His son, who was near, says that just as soon as the other shot was lighted it went off, the flying coal crushing his head.

February 8, 1899, John Crawford, a miner, aged 24 years, single, was killed while working in W. Sherwood's mine, two miles east from Marietta, Fulton county. In the forenoon W. Sherwood, John Crawford and Richard Snyder were all working together in a room close to the mouth of the mine. The room was worked in about 25 feet, and was about 16 feet wide. There were three props in the room, but the roof being soft near the crop of the coal, these props were not sufficient to hold it up and the roof fell on all of them, pinning the three men fast in a short time. One of the miners outside hearing their cries, brought assistance, but it was about two hours before they were all gotten out. Crawford was the last to be brought out and was found to be dead; the other two men were not seriously injured. When I visited the mine and made an examination I considered it unsafe and had it closed down, and it has remained closed to the present time.

Following are the tables of fatal and non-fatal accidents, their causes and the nature of the injuries sustained, also the county schedules of the district.

Respectfully submitted,

JOHN W. GRAHAM,

State Inspector of Mines, Third District.

Canton.

*Fatal Casualties—Third District, 1899.*

Date.	Name.	Age.	Occupation.	Residence.	Married.	Widow.	Children.	Single.	Dependents.	Cause of Accident.
1898										
Aug. 8	John DeBow .....	34	Miner. ....	Etherley....	1	1	..	..	1	White damp.
Sept 15	George Wynn.....	46	.. ..	Middle Gr'v	1	1	5	..	6	Falling roof.....
.. 20	John Flannagan....	55	.. ..	Norris.....	1	1	3	..	4	Flying coal.....
Feb. 8	John Crawford.....	24	.. ..	Marietta....	..	..	..	1	..	Falling roof.....
	Totals.....				3	3	8	1	11	

*Recapitulation of Fatal Casualties—Third District, 1899.*

Residence.	No.	Occupation.	No.	Nature of Casualty.	No.	Colliery.	No.
Etherley.....	1	Miner. ....	4	Falling roof.....	1	Norris Coal Co.....	1
Marietta.....	1			Falling slate.....	1	Sherwood, William.....	1
Middle Grove.	1			Flying coal.....	1	Sunday Creek Coal Co..	1
Norris .....	1			White damp.....	1	Wagers, C. P.....	1
Totals.....	4		4		4		4

*Non-Fatal Casualties—Third District, 1899.*

Date.	Name.	Age.	Residence.	Married.	Single.	Children.	Dependents.	Character of Injury.	Time lost—days.
1898									
July 7	Rugno Stiglich...	32	Dunfermline..	.....	1	.....	.....	Foot injured.....	100
Aug. 9	Scott Vaughn ....	38	Middle Grove.	.....	1	.....	.....	Leg broken.....	110
Oct. 5	Frank Deshane... 22	Dunfermline..	.....	1	.....	.....	.....	Wrist broken.....	36
29	Ivan Bollinger... 26	Astoria.....	.....	1	.....	4	.....	5 Leg broken.....	125
Nov. 3	Joseph Horr..... 65	Dunfermline..	.....	1	.....	.....	.....	1 Hand crushed.....	87
9	W. F. Cadle..... 42	.....	.....	1	.....	5	.....	6 Finger cut.....	23
Dec. 1	Wm. Peters..... 40	Frederick....	.....	1	.....	.....	.....	1 Back injured.....	100
4	John Clayburg... 35	Dunfermline..	.....	1	.....	5	.....	6 Face and arms burned.....	48
29	John Challoren... 65	.....	.....	1	.....	.....	.....	1 Body injured.....	59
1899									
Jan. 13	Wm. Kesnert..... 47	Colchester ...	.....	1	.....	5	.....	6 Back hurt.....	140
24	John Hoar..... 42	.....	.....	1	.....	4	.....	.....	24
Feb. 15	Larrie Anderson. 16	Middle Grove.	.....	1	.....	.....	.....	Leg broken.....	90
Mar. 9	D. Sherbine.... 43	Colchester ...	.....	1	.....	4	.....	5 Shoulder injured .....	24
31	Noah Gragg..... 30	Dunfermline..	.....	1	.....	.....	.....	Hand injured .....	39
Apr. 20	William Lewis ... 57	Middle Grove.	.....	1	.....	1	.....	.....	75
May 3	H. N. Smith..... 23	Bryant.....	.....	1	.....	.....	.....	Foot injured.....	13
June 16	J. E. Bemley.... 32	Dunfermline..	.....	1	.....	3	.....	4 Body injured.....	15
	Totals.....				11	6	31	42	

Total men injured.....	17
Total time lost.....	1,108 days
Average time lost per man.....	65

*Recapitulation of Non-Fatal Casualties—Third District, 1899.*

Residence.	No.	Occupation.	No.	Cause of Accident.	No.	Colliery.	No.
Astoria.....	1	Cager.....	1	Falling coal.....	2	Astoria Coal Co.....	1
Bryant.....	1	Drivers.....	4	Falling rock.....	4	Colchester Coal Co.....	1
Colchester ...	3	Miners.....	11	Flying coal.....	2	Curry, A. L.....	1
Dunfermline..	8	Trimmer.....	1	Pit-cars.....	7	Quincy Coal Co.....	2
Frederick....	1			Powder explosion...	1	Sunday Creek Coal Co...	3
Middle Grove.	3			Railroad car.....	1	Whitebreast Coal Co....	9
Totals.....	17		17		17		17

*Table Showing the Nature of Injuries, Number of Persons Injured, Dependents, Time Lost, with Averages and Percentages.—Third District.*

NATURE OF INJURIES.	Number.	Married.	Single.	Dependents.	TIME LOST.		Per cent of injuries.
					Total days.	Average days.	
Backs injured.....	3	3	.....	12	264	88	17.6
Bodies injured.....	2	2	.....	5	74	37	11.8
Face injured.....	1	1	.....	6	48	48	5.9
Feet injured.....	2	.....	2	.....	113	57	11.8
Fingers injured.....	1	1	.....	6	23	23	5.9
Hands injured.....	3	2	1	3	201	67	17.6
Legs broken.....	3	1	2	5	325	108	17.6
Shoulder injured.....	1	1	.....	5	24	24	5.9
Wrist injured.....	1	.....	1	.....	36	36	5.9
Totals, averages and percentages.....	17	11	6	42	1,108	65	100.00



## Brown County—Third District, 1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	H. Cronicle.....	Ripley .....	30	2	2	D.	Hd	M.	280	280	.....
2	Douglas McClure.....	" .....	30	2	2	"	"	"	220	220	.....
3	Job Adams.....	" .....	30	2	2	"	"	"	190	190	.....
4	Otis Staffer.....	" .....	30	2	2	"	"	"	190	190	.....
5	Huff & Hendricks.....	" .....	30	2	2	"	"	"	160	160	.....
6	George Dunlop.....	Mt. Sterling..	30	2	2	"	"	"	200	200	.....
7	George Ashbacker.....	" .....	30	2	2	"	"	"	70	70	.....
8	Samuel Bailey.....	" .....	30	2	2	"	"	"	200	200	.....
9	Charles Fredlin.....	" .....	30	2	2	"	"	"	120	120	.....
10	Shinnerfield & Price.....	" .....	30	2	2	"	"	"	160	160	.....
11	Thomas Brady.....	Damon.....	30	2	2	"	"	"	180	180	.....
12	Barney Ridder.....	" .....	30	2	2	"	"	"	170	170	.....
13	Thos. Redmond & Bro....	" .....	30	2	2	"	"	"	170	170	.....
14	Julius Gross.....	Clayton.....	30	2	2	"	"	"	120	120	.....
15	John Gross.....	" .....	30	2	2	"	"	"	200	200	.....
Totals .....									2,630	2,630	.....
Averages .....											.....

Whole number of openings reported in 1898, 16.

Number of mines or places opened during the year, 5

Number of mines exhausted or abandoned during the year, 6.

Whole number of openings reported for 1899, 15.

*Brown County, 1899.—Continued.*

Number.	VALUES.			EMPLOYES.			Price paid per gross ton—hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	Number of horses or mules employed in or about the mine.	ACCIDENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.							Fatal.	Non-fatal.
1	\$1 50		\$420				\$1 00	W.	150	\$280				
2	1 50		330				1 00	..	110	220				
3	1 50		285				1 00	..	100	190				
4	1 50		285				1 00	..	100	190				
5	1 50		240				1 00	..	85	160				
6	1 50		300				1 00	..	80	215				
7	1 50		105	1		1	1 00	..	75	70				
8	1 50		300				1 00	..	100	220				
9	1 50		180				1 00	..	60	120				
10	1 50		240				1 00	..	80	160				
11	1 50		270				1 00	..	90	180				
12	1 50		255				1 00	..	85	170				
13	1 50		255				1 00	..	85	170				
14	1 50		180				1 00	..	60	120				
15	1 50		300				1 00	..	100	200				
			\$3,945	30		30				\$2,665				
	\$1 50						\$1 00		91					

## Fulton County—Third District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.							OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted	Total tons produced.	Tons of lump coal.	Tons of other grades	
1	Whitebreast Fuel Co., C.	Dunfermline.	90	5	5	Sh.	St.	B.	147,918	108,973	38,945	
2	Whitebreast Fuel Co., D.	St. David.	60	5	5	..	..	..	79,743	57,216	22,527	
3	Astoria Coal & M. Co.	Astoria	70	5.6	5	..	..	..	46,599	32,785	13,814	
4	Jarvis Coal & M Co	..	50	5.6	5	..	..	..	9,000	7,000	2,000	
5	Sunday Creek Coal Co.	Middle Grove.	106	4	5	..	..	..	61,430	49,862	11,568	
6	Newsam Bros., lessee.	Farmington	85	4	5	..	..	..	22,190	15,690	6,500	
7	Farmington Coal Co.	..	145	4	5	..	..	..	35,062	23,906	11,156	
8	Firdley Coal & Coke Co.	..	67	4	5	..	..	..	12,032	8,020	4,012	
9	J. M. Laws	Cuba	80	4.6	5	..	..	..	21,383	21,383	..	
10	Taylor & Peck, No. 1.	..	70	4.6	5	Sl.	Sl.	..	14,500	12,500	2,000	
11	Taylor & Peck, No. 2.	..	40	4.6	5	..	Hp	..	3,500	2,800	700	
12	P. W. Meehan.	Breeds.	70	4.6	5	..	St.	..	22,000	20,000	2,000	
13	Cline & Shaw.	Fiatt	30	4.6	5	..	Hp	..	9,200	9,200	..	
14	Canton Union Coal Co.	Canton.	50	4.6	5	..	St.	..	34,500	34,500	..	
15	Canton Coal Co	..	80	4.6	5	..	..	..	18,248	18,248	..	
16	Howast Bros. Coal Co.	..	80	4.6	5	Sh.	..	..	650	650	..	
17	Thomas Parcell.	..	80	4.6	5	..	..	..	4,280	4,000	280	
18	Noris Coal Co.	Norris.	112	5	6	..	..	..	20,253	14,000	6,253	
19	Lowry & Kinnowman.	Lewistown	30	2.4	1	Dr.	H.	..	2,900	2,400	500	
20	Richard Blagden	Leaman.	39	3.6	1	..	..	..	487	487	..	
21	Turner Bros.	Lewistown	75	2.6	1	Sh.	St.	..	4,132	3,632	500	
22	Isaac Bath.	..	35	2.4	1	..	Hp	..	1,400	1,400	..	
23	Albert Eymann.	..	35	2.4	1	Dr.	H.	..	900	900	..	
24	Thomas Fox.	..	35	2.4	1	..	..	..	280	280	..	
25	Joseph Gensell.	..	35	2.4	1	..	..	..	80	80	..	
26	W. H. Chapman	..	30	5	5	..	..	..	500	500	..	
27	P. McLinden	Canton.	50	4.6	5	..	Hd	..	1,120	1,120	..	
28	George Hollinsworth.	..	59	4.6	5	..	..	..	1,240	1,240	..	
29	Lewis Memmon	..	50	4.6	5	..	..	..	1,140	1,140	..	
30	E. E. Peck	..	50	4.6	5	Sh.	..	..	1,200	1,200	..	
31	Wm. Hughes	..	60	4.6	5	Dr.	..	..	320	320	..	
32	Charles Seanlon	..	60	4.6	5	..	..	..	1,072	1,072	..	
33	Murphy Bros	..	60	4.6	5	..	..	..	520	520	..	
34	Wm. Chepping.	..	60	4.6	5	..	..	..	1,000	1,000	..	
35	Charles Minuet.	..	60	4.6	5	..	..	..	820	820	..	
36	Wager Bros.	..	60	4.6	5	..	Sl.	..	1,230	1,230	..	
37	Oliver Harris.	..	50	4.6	5	Dr.	..	..	320	320	..	
38	Robert Ribley	Cuba.	60	4.6	5	..	..	..	180	180	..	
39	John Stevens.	..	60	4.6	5	..	..	..	85	85	..	
40	John Hamilton.	..	60	4.6	5	..	..	..	400	400	..	
41	Timothy Yemm.	..	60	4.6	5	..	..	..	100	100	..	
42	W. Willick	Astoria	40	5	5	Sh.	Hp	..	1,550	1,550	..	
43	John Perry	..	30	2.6	1	Dr.	Hd	M.	320	320	..	
44	L. Hoopes.	..	30	2.6	1	..	..	..	300	300	..	
45	Steve Stevenson.	..	30	5	5	..	..	B.	100	100	..	
46	Wm. Suggett	Breeds.	45	4.6	5	..	..	..	170	170	..	
47	Wm. Jordan.	St. David.	30	5	5	..	..	..	200	200	..	
48	L. R. Snyder.	..	30	5	5	..	..	..	350	350	..	
49	Thomas Courtney.	..	40	5	5	..	..	..	140	140	..	
50	James Woods.	..	40	5	5	..	..	..	200	200	..	
51	James H. Straley	Norris.	20	5	6	..	..	..	400	400	..	
52	R. Rodis.	Ipavia	40	5	5	..	..	..	500	500	..	
53	R. E. Gould & Co.	Fairview	50	4	6	..	..	M.	1,600	1,600	..	
54	W. A. Maple	..	50	4	6	..	..	B.	1,670	1,670	..	
55	George Overcash.	..	55	5	5	..	..	..	300	300	..	
56	John Abbdusky	..	55	5	5	..	..	..	680	680	..	
57	D. Williams	..	55	5	5	..	..	..	380	380	..	
58	Thomas Caldwell.	Avon.	35	2.4	2	Sh.	Hp	M.	700	700	..	
59	R. Stannard.	..	35	2.4	2	Dr.	Hd	..	120	120	..	
60	Garrett Van Winkle.	..	35	2.6	1	Sh.	Hp	B.	50	50	..	



Fullon County, 1899—Continued.

Number.	VALUES.			EMPLOYES.			Price paid per gross ton hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employees excepting office help.	Kegs of powder used.	Number of horses or mules employed in or about the mine.		Accidents.	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.		
1	\$1 07	\$0 46	\$130,515	177	100	277	\$0 45	S-M	208	\$160,815	4,517	43	8		
2	1 04	47	70,091	95	34	129	45	178	158	53,463	2,257	22	1		
3	1 00	45	39,004	60	23	83	40	188	134	26,500	1,180	8	1		
4	1 00	45	7,900	24	14	38	40	100	100	7,410	215	1	1		
5	87.5	12	45,017	60	17	77	45	134	134	37,875	3,100	17	3		
6	1 00	35	17,965	50	14	64	45	150	150	14,650	1,100	5	5		
7	1 02	41	28,358	43	33	76	45	227	227	23,500	1,267	10	10		
8	1 00	30	9,223	20	12	32	45	200	200	7,900	832	3	3		
9	80	.....	17,106	25	7	32	45	240	240	12,900	528	4	4		
10	1 00	39	13,100	27	7	34	60	160	160	9,420	369	3	3		
11	1 00	30	3,010	6	2	8	60	160	160	2,580	130	2	2		
12	1 00	20	20,400	30	6	36	60	185	185	12,400	800	4	4		
13	1 25	.....	11,500	18	3	21	60	200	200	6,800	175	4	4		
14	.....	.....	31,050	45	10	55	45	225	225	22,400	1,250	3	3		
15	1 00	.....	18,248	25	6	31	60	200	200	13,300	730	1	1		
16	1 00	.....	650	6	2	8	60	50	50	540	30	.....	.....		
17	1 00	40	1,112	8	2	10	60	180	180	3,100	800	.....	.....		
18	80	40	13,701	18	10	28	60	230	230	11,300	512	4	1		
19	1 12	29	2,788	7	1	8	80	250	250	2,000	145	.....	.....		
20	1 20	.....	581	7	3	8	75	120	120	350	40	.....	.....		
21	1 30	.....	5,221	6	5	11	75	250	250	4,600	100	4	4		
22	1 25	1 00	1,750	5	6	6	85	250	250	1,250	70	1	1		
23	1 25	.....	1,125	3	.....	4	85	270	270	850	.....	2	2		
24	1 25	.....	350	2	2	2	85	180	180	270	.....	.....	.....		
25	1 25	.....	100	1	.....	1	85	110	110	80	.....	.....	.....		
26	1 00	.....	500	2	2	2	75	170	170	375	25	.....	.....		
27	1 00	.....	1,120	4	4	4	60	120	120	720	55	1	1		
28	1 00	.....	1,240	3	1	4	60	125	125	800	60	.....	.....		
29	1 00	.....	1,140	3	1	4	60	140	140	690	50	1	1		
30	1 00	.....	1,200	4	1	5	60	181	181	810	65	.....	.....		
31	1 00	.....	320	1	.....	1	60	150	150	225	17	.....	.....		
32	1 00	.....	1,070	3	.....	3	60	155	155	750	42	1	1		
33	1 00	.....	520	2	.....	2	60	120	120	370	23	.....	.....		
34	1 00	.....	1,000	4	1	5	60	115	115	725	47	1	1		
35	1 00	.....	820	2	.....	2	60	130	130	590	53	2	2		
36	1 00	.....	1,230	4	1	5	60	142	142	840	50	1	1		
37	1 00	.....	320	1	.....	1	60	110	110	200	12	.....	.....		
38	75	.....	135	2	.....	2	60	50	50	108	8	.....	.....		
39	75	.....	63	1	.....	1	60	50	50	51	3	.....	.....		
40	75	.....	300	1	.....	1	60	120	120	240	16	1	1		
41	75	.....	75	1	.....	1	60	50	50	60	6	.....	.....		
42	1 10	.....	1,705	3	1	4	60	220	220	1,100	60	1	1		
43	1 10	.....	352	2	.....	2	80	120	120	260	.....	.....	.....		
44	1 10	.....	330	2	.....	2	80	110	110	240	.....	.....	.....		
45	1 00	.....	100	2	.....	2	60	25	25	65	1	1	1		
46	1 50	.....	255	1	.....	1	60	80	80	125	9	.....	.....		
47	1 00	.....	200	1	.....	1	60	100	100	135	10	.....	.....		
48	1 00	.....	350	2	.....	2	60	110	110	240	15	.....	.....		
49	1 00	.....	140	1	.....	1	60	70	70	100	6	.....	.....		
50	1 00	.....	200	1	.....	1	60	115	115	140	9	.....	.....		
51	1 00	.....	400	2	.....	2	60	200	200	275	15	.....	.....		
52	1 00	.....	500	2	.....	2	60	200	200	370	25	1	1		
53	1 00	.....	1,600	4	.....	4	60	220	220	1,200	.....	.....	.....		
54	1 00	.....	1,670	4	.....	4	60	240	240	1,250	11	.....	.....		
55	1 00	.....	300	2	.....	2	60	100	100	225	12	.....	.....		
56	1 00	.....	680	2	.....	2	60	260	260	470	26	.....	.....		
57	1 00	.....	380	2	.....	2	60	140	140	270	14	.....	.....		
58	1 75	.....	1,225	3	.....	3	1 25	190	190	1,080	.....	1	1		
59	1 75	.....	210	2	.....	2	1 25	50	50	165	.....	.....	.....		
60	1 75	.....	87	1	.....	1	1 25	28	28	70	3	1	1		

## Fulton County—Third District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
61	Geer & Kirkbride.....	Vermont.....	30	2.4	2	Dr.	H.	M.	480	480	.....
62	R. Dougherty.....	Table Grove..	40	2.4	2	Dr.	..	..	390	390	.....
63	Charles Maple.....	Dunfermline..	60	5.4	5	..	..	B.	200	200	.....
64	Charles Hall.....	"	60	5	5	..	..	..	250	250	.....
65	J. W. Crouse.....	Emon.....	40	2.6	2	..	..	M.	400	400	.....
66	Thomas Wilson, Jr.....	"	40	2.6	2	..	..	..	280	280	.....
67	Isral Shawgo.....	"	40	2.6	2	..	..	..	320	320	.....
68	D. Lockhard.....	"	40	2.6	2	..	..	..	200	200	.....
69	Hartford Curlen.....	Bluff City.....	40	2.6	2	..	..	..	240	340	.....
70	Henry Floren.....	"	40	2.6	2	..	..	..	80	80	.....
71	David Nappin.....	Farmington..	50	4	6	Sh.	Hp	..	2,400	2,400	.....
72	Soloman Shaffer.....	Summan.....	40	6	5	Dr.	Hd	..	300	300	.....
73	G. N. Kerstetter.....	Marietta.....	40	3.6	1	..	Hp	B.	440	440	.....
74	J. W. Offord.....	"	40	2.4	2	..	Hd	M.	220	220	.....
75	S. Keppell.....	"	40	2.4	2	..	..	..	300	300	.....
76	Wm. Foraker.....	"	40	2.4	2	..	..	..	300	300	.....
77	W. Sherwood.....	"	40	2.4	2	..	..	..	240	240	.....
78	Marshall Bellen.....	Duncan Mills.	40	2.6	2	..	..	..	400	400	.....
Totals.....									601,084	478,329	12,275
Averages.....											

Whole number of openings reported in 1898, 87.

Number of new mines opened during the year, 21.

Number of mines exhausted or abandoned during the year, 30.

Whole number of openings reported for 1899, 78.

Average price paid per gross ton, 43.5 cents per ton.

Price for machine mining, 27.5 per ton for 25,471 tons.

Fulton County, 1899—Concluded.

Number.	VALUES.			EMPLOYES.			Price paid per gross ton—hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	Number of horses or mules employed in or about the mine.	ACCIDENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.							Fatal.	Non-fatal.
61	\$1 50	.....	\$720	4	.....	4	\$1 00	S-M.	110	\$540	.....	.....	.....	.....
62	1 50	.....	585	3	.....	3	1 00	..	100	430	.....	.....	.....	.....
63	1 00	.....	200	1	.....	1	60	..	100	120	10	.....	.....	.....
64	1 00	.....	250	1	.....	1	60	..	150	150	12	.....	.....	.....
65	1 25	.....	500	2	.....	2	1 00	..	150	400	.....	.....	.....	.....
66	1 25	.....	350	2	.....	2	1 00	..	100	280	.....	.....	.....	.....
67	1 25	.....	400	2	.....	2	1 00	..	120	320	.....	.....	.....	.....
68	1 25	.....	250	2	.....	2	1 00	..	70	200	.....	.....	.....	.....
69	1 25	.....	300	2	.....	2	1 00	..	100	240	.....	.....	.....	.....
70	1 25	.....	100	1	.....	1	1 00	..	70	80	.....	.....	.....	.....
71	1 25	.....	3,000	6	.....	7	75	..	220	210	.....	1	.....	.....
72	1 00	.....	300	2	.....	2	75	..	80	225	.....	.....	.....	.....
73	1 25	.....	550	3	.....	3	75	..	126	390	26	1	.....	.....
74	1 25	.....	275	2	.....	2	1 00	..	95	220	.....	.....	.....	.....
75	1 25	.....	375	2	.....	2	1 00	..	110	300	.....	.....	.....	.....
76	1 25	.....	375	2	.....	2	1 00	..	100	300	.....	.....	1	.....
77	1 25	.....	300	2	.....	2	1 00	..	95	240	.....	.....	.....	.....
78	1 25	.....	500	2	.....	2	1 00	..	125	400	.....	.....	.....	.....
.....	.....	.....	\$30,669	881	319	1,200	.....	.....	.....	\$398,032	21,214	153	3	13
.....	\$1 006	\$0 403	.....	.....	.....	.....	80 783	.....	145	.....	.....	.....	.....	.....

*Hancock County—Third District—1899.*

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam.	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	Merideth Bros.....	Augusta.....	50	2 6	2	Sh.	Hd.	M.	4,338	4,338	.....
2	Wm. Courtney.....	".....	30	2 6	2	"	"	"	400	400	.....
3	M. F. Ray.....	".....	30	2 6	2	Sl.	"	"	280	280	.....
4	John Highland.....	".....	30	2 6	2	"	"	"	240	240	.....
5	J. W. Marks.....	".....	30	2 6	2	Sh.	"	"	240	240	.....
Totals.....									5,498	5,498	.....
Averages.....											.....

Whole number of openings reported in 1898, 4.

Number of new mines or places opened during the year, 1.

Whole number of openings reported for 1899, 5.

*Hancock County, 1899* — Concluded.

Number.	VALUES.			EMPLOYES.			Price paid per gross ton— hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	Number of horses or mules employed in or about the mine.	ACCIDENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.							Fatal.	Non-fatal.
1	\$1 35	.....	85,832	14	2	16	\$0 34	S. M.	208	\$4,200	.....	12	.....	.....
2	1 75	.....	700	.....	1	3	1 00	.....	190	580	.....	1	.....	.....
3	1 75	.....	430	.....	.....	.....	1 00	.....	149	350	.....	1	.....	.....
4	1 75	.....	420	.....	.....	.....	1 00	.....	140	310	.....	1	.....	.....
5	1 75	.....	420	.....	1	3	1 00	.....	130	309	.....	1	.....	.....
.....	.....	.....	87,862	22	4	26	.....	.....	.....	85,740	.....	6	.....	.....
.....	\$1 43	.....	.....	.....	.....	.....	\$0 55.3	.....	162	.....	.....	.....	.....	.....

## Knor County—Third District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam.	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	George W. Essex	Soperville	112	4	1	Sh.	S.	B.	7,900	7,000	900
2	Wm. Woodward	Galesburg	50	4	1	Ho.	..	..	3,810	3,610	200
3	Reed & Pendergast	Soperville	93	4	1	..	S.	..	3,300	3,100	200
4	G. W. Corsepius	Galesburg	30	3.6	1	Ho.	..	..	1,850	1,500	350
5	Charles Morgan	Oneida	30	4	6	Sl.	..	M.	400	400	..
6	James McGovern	..	20	4	6	Sh.	..	..	2,350	2,350	..
7	George Clifford	..	20	4	6	Sl.	..	..	1,257	1,257	..
8	John Jacobson & Son	Wataga	39	4	6	D.	..	..	800	800	..
9	Lewis Nordeen	..	45	4	6	Sl.	..	..	650	650	..
10	Taylor Bros	..	45	4	6	Sh.	..	..	3,300	3,300	..
11	Lundeen & Preist	Tenro	45	4	6	Sl.	..	..	1,350	1,350	..
12	John Welsh	..	45	4	6	..	..	..	877	877	..
13	James Nelson	Knoxville	45	2.6	2	Sh.	..	..	520	520	..
14	Z. F. Dudley	..	30	2.6	2	..	..	..	1,400	1,400	..
15	Nelson & Anderson	..	30	2.6	2	..	..	..	600	600	..
16	Bowman Bros	Yates City	50	4	6	..	S.	..	1,810	1,086	725
17	Alonzo Emerick	Farmington	30	4	6	..	Ho.	..	200	200	..
18	Wm. Raffle & Son	..	30	4	6	..	..	..	230	230	..
19	K. Proctor	Elmwood	30	4	6	..	..	..	250	250	..
20	Wm. Fish	Appleton	30	4	6	Sl.	..	..	340	340	..
21	Eric Herkstrom	..	39	4	6	..	..	..	420	420	..
22	N. A. Anderson	Wataga	40	4	6	Sh.	..	..	3,400	3,400	..
23	A. Bankson	..	20	4	6	Sl.	..	..	200	200	..
24	John Dolan	..	20	4	6	..	..	..	600	600	..
25	C. P. Wagher	Etherley	40	4	6	D.	Hd	..	120	120	..
26	Aldgreen & Simons	E. Galesburg	70	2.4	2	Sh.	Ho.	..	300	300	..
27	Wm. Allen	Middle Grove	40	4	5	D.	..	B.	600	600	..
28	Anslor Morse	..	40	4	5	..	..	..	160	160	..
29	Able Dewit	..	40	4	6	..	..	M.	480	480	..
30	L. Loopman	..	40	4	5	..	..	B.	600	600	..
31	Melvin Morse	..	40	4	5	..	..	..	360	360	..
32	D. J. Foster	Rapatee	40	4	5	..	..	..	320	320	..
33	T. Morse	..	40	4	5	..	..	..	240	240	..
34	A. P. Boyer	Etherley	45	4	6	..	..	M.	280	280	..
35	E. Peterson	..	45	4	6	..	..	..	600	600	..
36	Joseph Thompson	..	45	4	6	..	..	..	680	680	..
37	H. E. Banney	Abingdon	45	2	2	..	..	..	630	630	..
Totals									43,214	40,840	2,374
Averages									..	..	..

Whole number of openings reported in 1898, 34.

Number of new mines or places opened during the year, 11.

Number of mines exhausted or abandoned during the year, 8.

Whole number of openings reported for 1899, 37.

*Knorr County, 1899—Concluded.*

Number.	VALUES.			EMPLOYES.			Price paid per screened ton—hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	Number of horses or mules employed in or about the mine.		ACCIDENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.		
1	\$1 25	\$1 00	\$9,656	20	5	25	\$0 75	S. M.	190	\$5,250	450				
2	1 25	1 00	4,712	8		11	75	..	200	2,708	180	1			
3	1 25	1 00	4,075	8		10	75	..	180	2,600	160				
4	1 25	1 00	2,225	5		7	75	..	174	1,657	40	1			
5	1 00	..	400	1		1	75	..	140	350		1			
6	1 00	..	2,350	6	1	7	75	..	175	1,580		1			
7	1 50	..	1,885	5	1	6	75	..	200	1,230		1			
8	1 12.5	..	900	4	1	4	75	S. M.	160	700		1			
9	1 12.5	..	731	3		3	75	..	170	530		1			
10	1 12.5	..	3,712	7	1	8	75	..	190	2,480		1			
11	1 00	..	1,350	4	1	5	75	..	140	1,080		1			
12	1 00	..	877	3	1	4	75	..	180	700		1			
13	1 50	..	2,780	9	1	3	1 00	..	220	580		1			
14	1 50	..	2,100	9	1	9	1 00	..	200	1,640		1			
15	1 50	..	900	3	1	3	1 00	..	225	450		1			
16	1 50	75	2,172	1	1	6	75	..	221	1,480					
17	1 25	..	250	1	1	3	75	..	150	200		1			
18	1 25	..	287	1	1	3	75	..	160	230		1			
19	1 25	..	350	1	1	3	75	..	140	280		1			
20	1 00	..	340	..	..	3	75	..	140	290		1			
21	1 00	..	420	..	..	3	75	..	145	350		1			
22	1 25	..	4,250	9	1	9	75	..	230	2,750		1			
23	1 25	..	250	..	..	4	75	..	175	165		1			
24	1 25	..	750	..	..	3	75	..	180	500		1			
25	1 25	..	150	..	..	2	75	..	50	100			1		
26	1 50	..	450	5	1	6	1 00	..	52	240		1			
27	1 00	..	600	..	..	2	75	..	160	450	36				
28	1 00	..	160	1	..	1	75	..	100	120	7				
29	1 00	..	480	..	..	2	75	..	110	360					
30	1 00	..	600	..	..	2	75	..	150	450	32				
31	1 00	..	360	1	..	1	75	..	170	270	18				
32	1 00	..	320	1	..	1	75	..	160	240	16				
33	1 00	..	240	1	..	1	75	..	170	180	12				
34	1 00	..	280	1	..	1	75	..	170	200					
35	1 00	..	600	..	..	2	75	..	180	450					
36	1 00	..	680	..	..	2	75	..	190	510					
37	1 50	..	945	3	..	3	1 00	..	250	630					
			851,571	141	26	167				\$33,980	951	22	1	1	
	\$1 20.9	\$0 92.3					\$0 76.7		167						

## McDonough County—Third District, 1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam.	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	Colechester Coal & M. Co.	Colechester	56	2 9	2	Sl.	S.	M.	16,500	15,400	1,100
2	Rippetoe & Rundle	"	55	2 9	2	"	"	"	15,340	13,567	1,773
3	Egerton Coal Co.	"	60	6	2	"	"	"	2,480	2,230	250
4	R. Laitz	"	40	4 4	2	D.	Hd	"	128	128	
5	Isaac Stone	"	40	4 4	2	"	"	"	150	150	
6	Wm. Martin	"	40	4 4	2	"	"	"	195	195	
7	Wm. Hodgson	"	40	4 4	2	"	"	"	290	290	
8	Henry Martin	"	40	4 4	2	"	"	"	400	400	
9	Charles Blackley	"	40	4 4	2	"	"	"	400	400	
10	Wm. Robinson	"	40	4 4	2	"	"	"	750	750	
11	F. M. Haines	"	40	4 4	2	"	"	"	200	200	
12	John Wilson	"	40	4 4	2	"	"	"	420	420	
13	Newman Foster	"	30	4 4	2	Sl.	"	"	114	114	
14	Marrian McClure	"	30	4 4	2	D.	"	"	400	400	
15	W. M. Webster	"	30	4 4	2	"	"	"	75	75	
16	A. Swanson	"	40	4 4	2	Sh.	Ho.	"	325	325	
17	Wm. Williams	"	30	4 4	2	"	"	"	325	325	
18	Hillery Bros	"	30	4 4	2	D.	Hd	"	1,155	1,155	
19	John Zimmerman	"	30	4 4	2	"	"	"	425	425	
20	George Polonus	"	30	4 4	2	"	"	"	300	300	
21	Wm. Kepling	"	30	4 4	2	"	"	"	800	800	
22	Wm. Dickerson	"	30	4 4	2	Sl.	"	"	600	600	
23	Joseph Bunt	"	30	4 4	2	D.	"	"	502	502	
24	Ely Hillard	"	30	4 4	2	"	"	"	240	240	
25	Lewis Atkinson	"	30	4 4	2	"	"	"	510	510	
26	George Garrison	"	30	4 4	2	Sl.	"	"	215	215	
27	Wash Entwistle	"	40	4 4	2	D.	"	"	460	460	
28	O Baird & Sons	"	40	4 4	2	"	"	"	1,150	1,150	
29	John McCord	"	40	4 4	2	"	"	"	120	120	
30	Fergus Whalen	Tennessee	40	2 4	2	Sh.	Ho.	"	260	260	
31	Dull Bros	"	40	4 4	2	"	"	"	375	375	
32	Wardell Bros	"	40	4 4	2	D.	Hd	"	350	350	
33	John Berry	Macomb	40	4 4	2	Sh.	Ho.	"	1,400	1,400	
34	W. H. Porter	"	40	4 4	2	"	"	"	306	306	
35	Wm. Berry	"	40	4 4	2	D.	Hd	"	225	225	
36	A. E. Wilson	"	40	4 4	2	"	"	"	98	98	
37	Curry Teel	Industry	40	4 4	2	"	"	"	310	310	
38	Wm. Stoneking	"	40	2 4	2	"	"	"	175	175	
39	Link Willey	"	40	4 4	2	"	"	"	185	185	
40	Wm. Baker	"	40	2 4	2	"	"	"	300	300	
41	Richard Jones	"	40	2 4	2	"	"	"	240	240	
42	J. Gillegan	"	40	2 4	2	"	"	"	78	78	
43	Frank Burdick	"	40	4 4	2	"	"	"	178	178	
44	Frank Taylor	Blandinville	40	4 4	2	Sh.	Ho.	"	230	230	
45	Joseph Dodger	"	40	2 4	2	"	"	"	175	175	
46	Thomas Wilson	"	40	4 4	2	"	"	"	320	320	
47	S. Lamborn	Doddsville	40	2 4	2	D.	Hd	"	200	200	
48	Witchell Bros	Vermont	30	4 4	2	"	"	"	400	400	
49	Kirkbride Bros	"	30	2 4	2	"	"	"	320	320	
50	Kirkbride & McIntire	"	30	2 4	2	"	"	"	400	400	
Totals									51,494	48,371	3,123
Averages											

Whole number of openings reported in 1898, 50.

Number of new mines or places opened during the year, 9.

Number of mines exhausted or abandoned during the year, 9.

Whole number of openings reported for 1899, 50.



McDonough County, 1899.--Concluded.

Number.	VALUES.			EMPLOYES.			Price paid per gross ton—hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employees excepting office help.	Kegs of powder used.	Number of horses or mules employed in or about the mine.	ACCIDENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.							Fatal.	Non-fatal.
1	\$1 35	\$0 35	\$21,175	50	8	58	\$1 00	S. M.	220	\$18,167				1
2	1 35	35	18,836	50	9	59	1 00	"	189	17,500				1
3	1 35	35	3,098	30	4	34	1 00	"	108	2,730				
4	1 50		192				1 00	"	100	128				
5	1 50		225		1	1	1 00	"	85	150				
6	1 50		282				1 00	"	85	195				
7	1 50		435				1 00	"	120	290				
8	1 50		600		1	1	1 00	"	110	400				
9	1 50		600				1 00	"	216	400				
10	1 50		1,125	4		4	1 00	"	185	750				
11	1 50		300	1	1	1	1 00	"	109	200				
12	1 50		630	5		5	1 00	"	80	420				
13	1 50		171				1 00	"	60	114	1			
14	1 50		600	4		4	1 00	"	90	400				
15	1 50		112	1		1	1 00	"	70	75				
16	1 50		487				1 00	"	100	325	1			
17	1 50		487				1 00	"	100	325	1			
18	1 50		1,732	4		4	1 00	"	200	1,155				
19	1 50		637	4		4	1 00	"	105	125				
20	1 50		450				1 00	"	135	300				
21	1 50		1,200				1 00	"	175	800				
22	1 50		900				1 00	"	200	600	1			
23	1 50		753				1 00	"	200	502				
24	1 50		360				1 00	"	120	249				
25	1 50		765	4		4	1 00	"	135	510				
26	1 50		322				1 00	"	80	215				
27	1 50		690	4		4	1 00	"	125	469				
28	1 50		1,725				1 00	"	210	1,150				
29	1 50		180				1 00	"	70	120				
30	1 50		390				1 00	"	125	260		1		
31	1 50		562				1 00	"	190	375		1		
32	1 50		525				1 00	"	160	350				
33	1 50		2,100				1 00	"	230	1,400		1		
34	1 50		459				1 00	"	100	306		1		
35	1 50		337				1 00	"	110	225				
36	1 50		147	1		1	1 00	"	100	98				
37	1 50		465	3		3	1 00	"	100	310				
38	1 50		262				1 00	"	110	175				
39	1 50		277				1 00	"	95	185				
40	1 50		450				1 00	"	90	300				
41	1 50		360				1 00	"	110	240				
42	1 50		117				1 00	"	60	78				
43	1 50		267				1 00	"	60	178				
44	1 50		345				1 00	"	110	230		1		
45	1 50		262				1 00	"	100	175		1		
46	1 50		480				1 00	"	110	320		1		
47	1 50		300				1 00	"	90	200				
48	1 50		600				1 00	"	185	400				
49	1 50		480				1 00	"	110	320				
50	1 50		600	3		3	1 00	"	180	400				
			\$68,958	257	24	281				855,475		11		3
	\$1 40.3	\$0 35					\$1 00		127					

## Schuyler County—Third District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTFIT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift...	Steam, horse or hand power.....	Mined or blasted.....	Total tons produced.	Tons of lump coal.	Ton of other grades
1	William Kerr .....	Rushville.....	48	4	5	Sh.	B.	2,130	2,130	.....	
2	William Portwood.....	" .....	38	5	5	Dr.	H.	1,680	1,680	.....	
3	William Cummings .....	" .....	.....	.....	.....	" .....	" .....	1,332	1,332	.....	
4	John Hodge.....	" .....	.....	.....	.....	" .....	" .....	1,200	1,200	.....	
5	A. Winnen.....	Ray .....	50	2 3/4	3	" .....	Hd M.	1,000	1,000	.....	
6	Rufus Porter.....	" .....	50	2 3/4	3	" .....	" .....	280	280	.....	
7	William Harris.....	" .....	50	2 3/4	3	" .....	" .....	400	400	.....	
8	A. L. Curry.....	Frederick .....	50	2 6	3	" .....	" .....	1,100	1,100	.....	
9	Jacob Backofen.....	Littleton.....	30	2 3/4	3	" .....	" .....	800	800	.....	
10	John Cagle.....	" .....	30	2 3/4	3	" .....	" .....	460	460	.....	
11	R. White & Sons.....	Frederick.....	40	5	5	Sh.	St. B.	750	750	.....	
Totals .....								11,132	11,132	.....	
Averages.....										.....	

Whole number of openings reported in 1898, 10.

Number of new mines or places opened during the year, 4.

Number of mines exhausted or abandoned during the year, 3.

Whole number of openings reported for 1899, 11.

*Schuyler County, 1899—Concluded.*

Number.	VALUES.			EMPLOYES.			Price paid per gross ton—hand mining.	Paid monthly, semi monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Keys of powder used.	ACCIDENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.
1	\$1 25		\$2,662	6	1	7	\$0 75	S-M.	220	\$1,650	114		
2	1 00		1,680	4	1	5	75	..	200	1,380	94	1	
3	1 00		1,332	4	1	5	75	..	234	1,100	73	1	
4	1 00		1,200	3	1	4	75	..	190	980	60	1	
5	1 25		1,250	4	1	5	1 00	W.	184	1,060			
6	1 25		350			2	1 00	..	140	325			
7	1 25		500			2	1 00	..	175	475			
8	1 25		1,375	3		3	1 00	..	280	1,100		1	
9	1 25		1,000	4		4	1 00	..	200	880			
10	1 25		575	2		2	1 00	..	195	500			
11	1 00		750	3	1	4	75	..	175	565	6		
			\$12,668	37	6	43				\$10,015	347	3	1
	\$1.138						\$0.841		199				

## Warren County—Third District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	C. F. McCartney.....	Alexis .....	70	4	1	Sh.	St.	B.	4,500	4,000	500
2	John Simeox.....	" .....	60	4	1	"	H.	"	1,800	1,800	.....
3	Cook & Gilmore.....	" .....	40	4	1	"	St.	"	1,600	1,500	100
4	John Selkirk.....	Monmouth ...	55	2 1/2	2	"	"	H. M.	1,200	1,200	.....
5	Murphy & Redmond.....	" .....	55	2 1/2	2	"	"	"	1,500	1,500	.....
6	J. G. Kidd.....	Roseville. ...	30	2 1/2	2	Sl.	Hd	"	440	440	.....
7	G. H. Little.....	" .....	30	2 1/2	2	"	"	"	200	200	.....
8	Bryner Bros.....	" .....	30	2 1/2	2	"	"	"	500	500	.....
9	Joseph Simpson.....	Youngstown .	30	2 1/2	2	Dr.	"	"	80	80	.....
10	Thomas Wearmouth.....	" .....	30	2 1/2	2	"	"	"	320	320	.....
11	Thomas Lee.....	" .....	30	2 1/2	2	"	"	"	140	140	.....
12	Joseph Wilson.....	Swan Creek ..	30	2 1/2	2	"	"	"	100	100	.....
13	Lafe Smith.....	Ayou.....	30	2 1/2	2	"	"	"	900	900	.....
14	H. Hopkins.....	" .....	30	2 1/2	2	"	"	"	600	600	.....
15	R. Delaney.....	" .....	30	2 1/2	2	"	"	"	200	200	.....
Totals .....									14,080	13,480	600
Averages.....									.....	.....	.....

Whole number of openings reported in 1898, 16.

Number of new mines or places opened during the year, 2.

Number of new mines exhausted or abandoned during the year, 3.

Whole number of openings reported in 1899, 15.

Warren County, 1899—Concluded.

Number.	VALUES.			EMPLOYES.			Price paid per gross ton— hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	ACCIDENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.
1	\$1 25	\$0 75	\$5,375	7	1	8	\$0 75	S-M	260	\$3,500	300		1
2	1 25		2,250	4	1	5	75		210	1,450	150	1	
3	1 25	75	1,950	4	1	5	75		180	1,280	150		
4	1 25		2,100	5	1	6	1 12 <sup>1</sup> / <sub>2</sub>		210	1,600		1	
5	1 75		2,625	5	1	6	1 12 <sup>1</sup> / <sub>2</sub>		230	1,800		1	
6			880			12	1 25		200	550			
7	00		400			12	1 25		120	350			
8	00		1,000	3		3	1 25		180	625			
9	00		160	1		1	1 25		100	100			
10	00		640	2		2	1 25		180	400			
11	00		280	1		1	1 25		160	175			
12	00		200	1		1	1 25		110	125			
13	1 75		1,575	5		5	1 25		200	1,125			
14	1 75		1,050	3		3	1 25		180	750			
15	1 75		350	2		2	1 25		100	250			
			\$20,832	47	5	52				\$13,980	600	3	1
	\$1 51.2	\$0 75					\$0 94.5		178				

## Recapitulation by Counties—

COUNTIES.	MINES.					PRODUCTS.					VALUES.	
	Number of mines.	Shipping mines.	Mines in local trade.	New mines.	Abandoned mines.	Total tons produced.	Tons of lump coal.	Tons of other grades.	Tons shipped.	Tons consumed or wasted at the mines.	Average value per ton of lump at the mines.	Average value of other grades per ton at the mines.
Brown .....	15	..	15	5	6	2,630	2,630	.....	.....	.....	\$1 50	.....
Fulton .....	78	18	60	21	30	601,084	478,329	122,755	523,256	14,957	1 00.6	\$0 40.3
Hancock.....	5	1	4	1	..	5,498	5,498	.....	4,338	.....	1 43	.....
Knox.....	37	..	37	11	8	43,214	40,840	2,374	.....	860	1 20.9	92.3
McDonough...	50	3	47	9	9	51,494	48,371	3,123	33,120	1,200	1 40.3	35
Schuyler.....	11	1	10	4	3	11,132	11,132	.....	950	180	1 13.8	.....
Warren.....	15	..	15	2	3	14,080	13,480	600	.....	300	1 51.2	75
Totals.....	211	23	188	53	59	729,132	600,280	128,852	561,664	17,497	.....	.....
Averages .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	\$1 07.2	\$0 41.3

Whole number of openings reported in 1898, 217.

Number of new mines or places opened during the year, 53.

Number of mines exhausted or abandoned during the year, 59.

Whole number of openings reported for 1899, 211.

Third District—1899.

Aggregate value of total product.....	EMPLOYES.			Average number of days of active operation.	Average price paid per gross ton for hand mining	Total wages paid during the year to all employes excepting office help.	Number of kegs of powder used.	Number of horses and mules employed in and about the mines.	CASUALTIES		MACHINES.				
	Number of miners.	Number of other employes.	Total employes.						Killed.	Injured.	Number of mines using machines.	Number of machines in use.	Total tons cut by machines.		
83,945	30	.....	30	91	\$1 00	\$2,665	.....	.....	.....	.....	.....	.....	.....	.....	.....
530,669	881	319	1,200	145	78.3	398,032	21,214	153	3	13	2	4	* 25,471		
7,862	22	4	26	162	95.3	5,740	.....	6	.....	.....	.....	.....	.....		
51,571	141	26	167	167	76.7	33,980	951	22	1	.....	.....	.....	.....		
68,958	257	24	281	127.6	1 00	55,471	.....	11	.....	3	.....	.....	.....		
12,668	37	6	43	199.4	84.1	10,015	347	3	.....	1	.....	.....	.....		
20,832	47	5	52	178.6	94.5	13,980	600	3	.....	.....	.....	.....	.....		
\$696,505	1,415	384	1,799	.....	.....	\$519,883	23,112	198	4	17	2	4	25,471		
.....	.....	.....	.....	146.3	\$0 89.4	.....	.....	.....	.....	.....	.....	.....	.....		

Average price paid for mining 556,454 gross tons, 47.5 cents per ton.

\* Price paid for machine mining, 27.5 cents per ton.

† Screened tons.





## FOURTH INSPECTION DISTRICT—1899.

Counties: Cass, Logan, Macon, McLean, Menard, Tazewell, Vermilion.

JOHN E. WILLIAMS, *Inspector*.

HON. DAVID ROSS, *Secretary*,

*State Bureau of Labor Statistics, Springfield, Illinois:*

SIR:—One of the many duties incumbent on the State Inspectors of Mines, consists in keeping a detailed record of his services during the year, and to transmit the same to you in the form of an annual report. I herewith have the honor to submit the sixteenth annual report of the Fourth Inspection District for the year ended June 30, 1899. This report gives tabulated statements, by counties, of the number of mines operated during the year; number of shipping mines, also those that are operated for local trade; number of miners and other employes; the total output of all grades of coal; the average value of all the different grades of coal, and also the total value of the whole product of the mines; the casualties in and around the mine, both fatal and non-fatal; the average number of days of active operation; the quantity of powder used; the number of mining machines in use and the amount of coal cut by such machines; the kind of machines used and the kind of power used to operate them; the total tons of coal shipped; the number of horses and mules employed in and around the mines; the price paid for mining, both hand and machine work; the number of wives made widows and the number of children left fatherless; the amount of coal consumed or wasted around the mines; the number of new mines opened, as well as those abandoned, together with the most important improvements at the mines made during the year; also the geological number of each seam of coal,

The following summary is presented for the year:

Number of counties producing coal.....	7
Number of shipping mines.....	37
Number of local mines.....	50
Total number of mines.....	87
Number of miners employed.....	3,056
Number of other employes.....	1,599
Total number of employes.....	4,655
Number employed above ground.....	1,455
Number employed under ground.....	3,200
Number of kegs of powder consumed.....	70,924
Tons of lump coal produced.....	2,404,385
Tons of other grades produced.....	953,352
Total product of mines, tons.....	3,537,737
Tons of coal shipped.....	2,746,842
Tons of coal to local trade.....	504,031

Tons of coal consumed at mines.....	106,864
Number of fatal accidents.....	11
Number of non-fatal accidents.....	119
Total number of accidents.....	130
Number of employes to each fatal accident.....	423
Number of employes to each non-fatal accident.....	39
Tons of coal produced to each fatal accident.....	305,249
Tons of coal produced to each non-fatal accident.....	28,216
Average value per ton of lump coal at the mine.....	\$0.8513
Aggregate value of total product.....	\$2,573,100
Average number of days worked during the year.....	199

The present year has been one of general activity in the coal business, and there have been practically no strikes to interrupt this condition. The only trouble worthy of mention is the strike at the Decatur Coal Company's mine, at Niantic, Macon county. This mine was idle for nine months, on account of the miners insisting that it become a union mine, with all the conditions that go with such a mine. The Coal Company insisted that it was impossible to make a profit out of the mine under the then existing conditions, and it would be impossible to continue operating the mine under the terms demanded by the union, as it very materially increased the cost of production. After nine months' idleness the mine resumed work as a machine mine, the company in the mean time having put in an electric plant and installed a number of Jeffrey mining machines. As a result of the prolonged strike at Niantic the tonnage of Macon county will be nearly one-third less this year than last—quite a noticeable fact when compared with all the other counties comprising the Fourth District, which shows a considerably increased tonnage over last year. That the mines of this district are in a much safer and better condition, is evidenced by the small number of fatalities this year compared with the preceding year, notwithstanding there was 785,678 more tons of coal produced this year than last. This year the district produced 3,357,737 tons of coal, being 305,249 tons of coal mined for each life lost, and compares favorably with the older mining countries of the world.

In all the larger mines of this district hand mining is being gradually superseded by machines, as evidenced by the increase in the number of machines and the tonnage cut by them. The inefficient and antiquated method of ventilating mines with a furnace is being rapidly displaced by the more improved mechanical method—that of a fan. There have been more fans placed in the mines in this district during the past year than was ever put up in the same length of time since the mine inspection service was inaugurated. Quite a number of small mines that are operated exclusively for local trade have displaced the old furnace with a steam fan, which greatly improves the ventilation of such mines.

*Mine Fires.*—Early in the morning of August 5, 1898, fire was discovered in the boiler room of the Westville Coal Company's mine, Westville. Such rapid progress had been made by the fire before being discovered that it was an utter impossibility to save the building, which served the double purpose of a boiler room and an engine room. The mine being operated exclusively by electric machines, the fire destroyed the large dynamo located in the engine room. Fortunately the fire did no damage to the hoisting engine and boilers. After a period of thirty-eight days a new brick engine and boiler room had

been constructed and work was resumed. There were 250 men employed in the mine at the time the property was destroyed. The building destroyed was a wooden structure valued at \$1,000, partly covered by insurance. None of the workmen who were in the mine at the time of the fire were injured, as they were all hoisted out at the escape shaft.

All the curbing in the shaft, and all the top works at the mine of A. H. Bonnets, eight miles northwest of Danville, were destroyed by fire August 26, 1898. The fire was communicated to the shaft from the furnace, with which the mine was ventilated. Prior to the time of the fire the mine was what was known as a gin-shaft, that is, all the coal was hoisted by horse power. The mine was at once retimbered from bottom to top, and new steam hoisting machinery was substituted for the old horse power arrangement; a new ten foot fan was placed in position, with which the mine is now ventilated. Two days before the fire I made an examination of the mine and pointed out the danger always attendant upon the use of a furnace in the mine, especially where it is connected to one end of the hoisting shaft. Work was resumed November 1, giving employment to ten men, the same number employed before the fire. For a small mine it is now a model one in every respect.

On the night of October 6, 1898, a fire occurred at Hilliards' No. 2 mine, near East Peoria, Tazewell county, entirely destroying the pit tower. As there was no one around the mine at the time the fire broke out, it was impossible to determine its origin, but it was believed to be the work of an incendiary. The top works were rebuilt as quickly as possible, and the mine resumed operation. Forty-two men were temporarily thrown idle on account of the fire.

*Abandoned Mines.*—The most important mine abandoned during the year was that of the Illinois Coal Mining Company, at Bloomington. This mine was a new one, having been in operation scarcely a year. The seam of coal being worked was four feet thick and of splendid quality; the condition for mining could hardly have been more favorable, and the selling price was all that could be desired. The property would undoubtedly have been a paying one. No reason was assigned as to why the mine was abandoned, but quite a number of the people of Bloomington suspected and concluded that the company had been bought out by the McLean County Coal Co., which operates a mine, and the only one, in Bloomington. All of the machinery, which was of the very best kind, was removed to a new mine at Centralia, this state.

The old slope at East Peoria, which has been in operation for a number of years, was abandoned on account of some litigation with the former owners.

A shaft some two hundred feet deep, at Virginia, Cass county, that was operated in a small way for local trade for a number of years, was found to be a non-dividend paying investment, and was accordingly abandoned early in the year. Several small mines near Danville, which were operated on a small scale for local trade, have also been abandoned.

*New Mines.*—Some five years ago a joint stock company, composed of wealthy farmers and representative business men, residing in and around Colfax, McLean county, sunk a shaft there to seam No. 6 of the geological

section, which was found at a depth of 400 feet, and was a little over five feet thick and of a superior quality; but at that time there was no work done other than to remove a little coal at the bottom of the shaft. Through a misunderstanding of the different stockholders, the property became involved in litigation, causing a suspension of operations, which continued until about a year ago, when the present owners, Messrs. Ewing & Pitt, of Bloomington, secured the property and equipped it with first class hoisting machinery, in connection with a tower that is intended for a large output. It will undoubtedly be operated extensively in a short time. The mine is situated on the Kankakee and Bloomington division of the I. C. R. R., and the product will be shipped to Chicago and the northwest. About fifty men are employed at the present time.

A small shaft sunk in East Peoria by the Enterprise Coal Company, and was at first equipped with a gin arrangement to hoist the coal. Mr. William Cruickshanks & Sons have bought the mine, and have displaced the gin with a small geared hoisting engine, which makes it one of the best mines in that vicinity.

*Escape Shafts.*—The Himrod Coal Co., Danville, has completed its escape shaft, which is one of the largest in the State, and has equipped it with the necessary hoisting machinery to insure the safe and speedy removal of workmen in case of danger. It is 10x17 feet in the clear, over which a 20-foot fan has been placed for ventilation.

The Brookside Coal Co., Grape Creek, has sunk a new air shaft at its No. 1 mine, which greatly improves the ventilation.

King & Grosweiler, of Pekin, have completed sinking an escape shaft.

Arthur Jones & Sons, of Catlin, have sunk a new escape shaft which will be connected as soon as possible with their old mine, and will be used for a hoisting shaft afterwards.

*New Fans.*—The Kelleyville Coal Co. Westville, has placed a 12 foot fan at its No. 2 mine; the mine is now ventilated by two fans that are both run at the same time, one of which is 16 feet in diameter and the other is 12 feet. The larger one is used to ventilate the east side and the smaller one to ventilate the west side. This method greatly improves the ventilation, as the mine had become too extensive, and employed too many miners for the one fan to force a sufficient amount of air through the workings.

John O. Connel, who operates a mine at Grape Creek, known as the Blue Bird mine, has thoroughly remodeled the top works, and has discarded the slow horse hoister and placed in its stead a pair of geared double hoisting engines for the speedy removal of the coal. He has also added a new 12-foot fan for better ventilation.

Alfred Blake, East Peoria, has improved the ventilation of his mine by discarding the use of the furnace as a ventilator, and erecting a six-foot fan in its stead.

King & Grosweiler, Pekin, have erected a new 8-foot fan of the Brazil type.

Spangler & Miller, operating a small mine near Danville for local trade, now use an 8 foot fan.

*Fatal Accidents.*—George Sevillion, aged 35, single, was killed in room No. 12, fifth east entry, in the mine of the Consolidated Coal Company, at Fairmount, July 6, 1898. Deceased had fired several shots the night before, which had knocked out several props, and he was engaged in resetting them when the accident happened. He was of English descent, and lived in Rosedale, Ind.

Charles Hughes, aged 24 years, single, was killed in the mine of the Athens Coal Co., Athens, July 22, 1898, by a fall of slate. Deceased, at the time of the accident was employed as a loader, and had gone into the entry to work, when he observed that the track was too far back from the working face. He had taken his tools to lay the track and had just commenced work when the roof fell on him, killing him instantly. The place had been marked "dangerous" by the mine examiner, but it was very apparent that deceased had made no examination of the place before beginning work.

Frank Daniels, aged 25, single, was killed in A. Bonnett's mine, eight miles northwest of Danville, August 22, 1898, by a fall of roof. Parties working in the next room to deceased had called his attention to the dangerous condition of the roof, just a short time prior to the accident, but he paid no attention to the friendly warning, with the result as above stated.

October 8, 1898, John M. Rennie, aged 53 years a stable boss in the employ of the Catlin Coal Company, Catlin, got on a cage which was standing at the lower landing, for the purpose of going down into the mine, but for some reason failed to give the engineer the proper signal; the engineer raised him up. He became excited and jumped off, falling back into the shaft, which is nearly 200 feet deep, killing him instantly. He leaves a widow and five children.

George Ballanted, aged 27 years, was killed in room No. 32, sixth northeast entry in mine No. 2 of the Kelleyville Coal Co., October 26, 1898, by a fall of roof. He had discovered a bad rock in the room, and was making preparations to secure the same for his own safety, when the rock suddenly fell, with the result as stated. He left a widow and three children in indigent circumstances.

Andrew Hasse, a miner, employed in the mine of the Citizen's Coal Co., Lincoln, met death on the evening of Nov. 23, 1898, by the inhalation of carbonic oxide gas. At the regular shooting time deceased had fired a shot that had not sufficient amount of powder to blast the coal loose, and in mining parlance had "whistled through the needle hole," giving off very little smoke but a considerable amount of gas. In his haste to leave the mine with the other men he did not wait for the gas to be removed with the air, but went in to recharge the same hole. The evidence plainly showed that he understood the danger he was in, as he had retreated to the the cross-cut for fresh air before he had completed his task of recharging. He hastened back once more and commenced to tamp the hole, when he felt his senses leaving him. He made a frantic effort to reach the cross-hole again when he got bewildered out of the right road, where he was found by the night boss at about 7 p. m. He left a widow and three children dependent.

William Schoenbeck, a miner engaged in drawing pillars at the Pawnee Coal company's mine, Westville, was killed by a fall of rock. The accident happened Oct. 19, 1898. He was aged 48 years, married, leaving a widow and three children.

P. J. Franks, aged 60 years, single, resident of Westville, was killed in a room of the Kelleyville Coal company's No. 2 mine, January 19, 1899, by a fall of roof.

James Mitchenson, aged 50 years, was killed at the working face of his room by a fall of coal, Nov. 7, 1898. He was a widower, leaving two children.

Charles Sablatrey, aged 57 years, was killed by a fall of coal in the No. 2 mine of the Decatur Coal company, Decatur, Feb. 4, 1899. He was a Polandeer by birth and left a widow and five children.

Randolph Hudson, miner, aged 52, working in the mine of the Catlin Coal company, was instantly killed April 11, 1899, under the most peculiar circumstances. Miners working in the adjoining room, on the right of him, had discovered a large loose rock at the face of his room, which he was in the act of taking down, and was engaged in knocking out a prop from under it. When deceased came to the cross-cut between the two rooms he was told to stay back or he might get hurt. He stood still for a few minutes in the cross-cut watching the progress made in getting the loose rock down. The person working at the rock left it for a moment for the purpose of getting a piece of rail with which to knock out the prop, when deceased rushed in, saying, "Let me strike it," which he did, when the rock, weighing fully six tons, fell squarely on him. He left two children dependent. He was a member in good standing, of the Odd-Fellows, who buried him with all the honors of that Order.

*Fatal Casualties—Fourth District, 1899.*

Date.	Name.	Age.	Occupation.	Residence.	Married.	Widow.	Children.	Single.	Dependents.	Cause of Accident.
1898.										
July 6	George Sevillion.....	35	Miner.....	Fairmount.....			1		1	Falling rock.....
July 22	Chas. Hughes.....	24	".....	Athens.....					1	Falling rock.....
Aug 22	Frank Daniels.....	25	".....	Blount.....					1	Falling rock.....
Oct. 8	John M. Kennick.....	53	Stable boss.	Catlin.....	1	1	5		6	Falling down shaft..
Oct. 19	Wm. Schoenbeck.....	48	Miner.....	Dauville.....	1	1	3		4	Falling rock.....
Oct. 26	Geo. Ballanted.....	27	".....	Westville.....	1	1	3		4	Falling rock.....
Nov. 7	James Mitchenson.....	50	".....	".....	1		2		2	Falling coal.....
Nov. 23	Andrew Hasse.....	48	".....	Lincoln.....	1	1	3		4	Suffocation by gas...
1899.										
Jan. 19	P. J. Franks.....	60	".....	Westville.....					1	Falling rock.....
Feb. 4	Chas. Sablatrey.....	57	".....	Decatur.....	1	1	5		6	Falling coal.....
Apr. 11	Randolph Hudson.....	52	".....	Catlin.....	1		2		2	Falling rock.....
	Totals.....				7	5	23		4	28

*Recapitulation Fatal Casualties Fourth District, 1899.*

Residence.	No.	Occupation.	No.	Nature of Casualty	No.	Colliery.	No.
Athens.....	1	Miner.....	10	Falling coal.....	2	Athens Coal Co.....	1
Blount.....	1	Stable boss...	1	Falling down shaft	1	Bonnetts, A.....	1
Catlin.....	2			Falling rock.....	1	Catlin Coal Co.....	2
Danville.....	1			Suffocation by gas.	1	Citizens Coal Co.....	1
Decatur.....	1					Consolidated Coal Co	1
Fairmount....	1					Decatur Coal Co.....	1
Lincoln.....	1					Kelleyville Coal Co..	2
Westville.....	3					Pawnee Coal Co.....	1
						Westville Coal Co...	1
Totals....	11		11		11		11

*Non-Fatal Casualties—Fourth District, 1899.*

Date.	Name.	Age.	Residence.	Married.	Single.	Children.	Dependents.	Character of Injury.	Time lost—days.
1898.									
July 13	James Cottrell...	25	Grape Cr'k		1			Back and head injured	10
" 22	James Mitchell...	36	Fairmount...	1		1		Body injured	38
" 23	M. Corrigan.....	45	Colfax.....	1				Back injured	75
" 29	Geo. Strickler...	30	Westville...		1			Arm crushed	30
" 30	Chas. Polson.....	35	Grape Cr'k		1			Leg broken	90
Aug. 1	Willis Dorsett...	40	Colfax.....	1				Back injured	75
" 6	Chas. Jenkins...	35	Missionf'ld.	1		5		Hand crushed	17
" 15	Henry Wright....	42	"		1			Hand crushed	13
" 17	W. A. Stone.....	30	Westville...	1		1	2	Shoulder bruised	20
" 18	Robt. Keefe.....	18	Colfax.....		1			Back injured	24
" 19	Frank Morse.....	31	Missionf'ld.	1		2	3	Body injured	7
" 24	L. N. Slade.....	52	"	1		8	9	Foot injured	7
" 25	S. A. Smoot.....	38	"	1		1	2	Foot injured	10
" 26	Chas. Casteel...	23	Catlin.....		1			Back injured	35
" 27	Lee Haskins....	24	"	1		1	2	Back injured	14
" 27	M. Slade.....	19	Missionf'ld.		1			Hand injured	12
" 31	P. Hogan.....	36	"		1			Hand injured	9
Sept. 2	N. S. McCannon..	20	"		1			Hand injured	10
" 3	B. N. Babb.....	28	"	1				Eye injured	15
" 3	Thos. Henry.....	50	Westville...	1			1	Collar bone broken	40
" 3	Galvin Lichman..	25	"		1			Hip injured	28
" 3	John Jackson...	25	"		1			Hip bruised	20
" 8	S. Roberts.....	57	Missionf'ld.	1		7	8	Hand injured	20
" 10	Jas. Brytis.....	38	Westville...		1			Leg broken	90
" 12	John Erickson...	21	Danville...	1				Face injured	30
" 14	L. Erickson.....	24	Catlin.....	1		3	4	Foot injured	21
" 19	Mike Louder....	35	Westville...		1			Ankle injured	12
" 26	Chas. Long.....	25	Grape Cr'k		1			Leg broken	90
Oct. 11	Peter Alvoid....	25	Westville...	1				Body injured	14
" 22	John Bull.....	24	Athens.....		1			Foot crushed	90
" 25	Chas. Ramsey...	23	Grape Cr'k	1			1	Leg broken	90
" 31	Wm. Woodley...	41	Bloomingt'n	1		5	6	Leg injured	30
Nov. 3	Joe Norkys.....	35	Westville...		1			Collar bone broken	60
" 4	W. Kintz.....	27	Fairmount...		1			Finger injured	14
" 5	A. Merry.....	60	Grape Cr'k	1				Toe injured	19
" 7	J. Danbow.....	60	Danville...	1			5	Foot injured	30
" 7	J. Courtney...	50	Westville...	1		2	3	Ankle injured	18
" 8	Alf Hackney....	30	"	1		2	3	Face injured	25
" 14	V. Montgerard..	50	Danville...	1		1	2	Arm broken	60
" 21	M. Colman.....	22	Westville...		1			Face injured	16
" 22	R. K. Fox.....	48	Danville...	1			1	Foot injured	20
" 25	F. Fletcher....	25	Westville...		1			Hip injured	24
" 30	Perry Gritted...	28	Missionf'ld.	1		1	2	Back injured	8
" 18	S. Roberts.....	57	"	1		5	6	Finger cut off	26
" 18	Frank Woodard..	21	"		1			Hand injured	25
Dec. 1	Grant Evans....	36	"	1		3	4	Thumb injured	16
" 1	John G. Dawson	26	"	1				Head injured	10
" 1	Abner Jenkins..	23	"	1		1	2	Back injured	10
" 2	John Baum.....	2	Westville...	1			1	Leg injured	25
" 3	John Grear.....	26	"	1		1	2	Finger broken	30
" 2	Sam Morse.....	37	Fairmount...	1		2	3	Back injured	150
" 3	J. Davis.....	22	Grape Cr'k		1			Body injured	74

## Non-Fatal Casualties—Fourth District.—Concluded.

Date.	Name.	Age.	Residence.	Married.	Single.	Children.	Dependents.	Character of Injury.	Time lost— days.
1898.									
Dec. 6	W. P. Myers.....	23	Oakwood ...	1	...	1	2	Head injured.....	8
6	James Hill.....	56	Westville...	1	...	5	5	Back injured.....	200
7	Ollie Surdam.....	38	Missioni'ld.	1	...	...	1	Head cut.....	11
7	D. Andrews.....	30	Westville...	...	1	...	...	Arm broken.....	90
8	Lewis Young.....	27	Catlin.....	1	...	...	1	Back injured.....	28
14	Henry Crawford.	52	Dauville.....	1	...	5	5	Body injured.....	150
14	Jasper Humble...	30	...	1	...	12	3	Hips injured.....	50
20	A. Deacamp.....	40	Westville...	1	...	3	4	Arm broken.....	55
20	Riley Martin.....	46	Catlin.....	1	...	5	6	Body injured.....	30
28	J. Mantz.....	31	Bloomingt'n	...	1	...	...	Leg and ankle hurt.	14
31	Andrew Politus..	25	Westville...	...	1	...	...	Body injured.....	200
1899.									
Jan. 1	Clate Fertig.....	22	Grape Cr'k.	...	1	...	...	Foot injured.....	10
4	Chas. Angle.....	23	Danville.....	1	...	...	1	Hips injured.....	20
6	Wm. Hamilton...	24	Westville...	...	1	...	...	Hips injured.....	14
6	Chas. Easton.....	10	Bloomingt'n	1	...	2	3	Arm crushed.....	90
7	Wm. Sontag.....	35	Catlin.....	...	1	...	...	Leg broken.....	56
10	Frank Moss.....	31	Missioni'ld.	1	...	3	4	Hand injured.....	8
13	Paul Pause.....	28	Lincoln.....	1	...	1	2	Body injured.....	147
17	Willard Blue.....	32	Grape Cr'k.	1	...	2	3	Hip broken.....	46
19	John Boda.....	36	Westville...	...	1	...	...	Finger injured.....	40
20	W. DeWitt.....	27	...	...	1	...	...	Arm broken.....	65
23	Wm. Woodson....	25	...	...	1	...	...	Leg cut off.....	100
23	Bert Stagner.....	23	Colfax.....	...	1	...	...	Back injured.....	10
Feb. 2	P. J. Ogden.....	26	Danville.....	1	...	...	1	Back injured.....	21
3	G. Mauritz.....	35	Decatur.....	1	...	4	5	Arm injured.....	24
4	James Dickson...	22	Athens.....	...	1	...	...	Leg broken.....	90
4	Fred Barkley....	15	Westville...	...	1	...	...	Leg injured.....	10
6	Chris Pickens....	57	Decatur.....	1	...	4	5	Leg injured.....	161
7	Chas. Wascheck..	34	...	1	...	4	5	Rib broken.....	28
8	Gerome Dickens.	34	Danville.....	...	1	...	...	Arm injured.....	150
10	Geo. Jones.....	25	Tallula.....	1	...	3	4	Ankle injured.....	35
16	D. Nevins.....	61	Westville...	...	1	...	...	Back injured.....	45
16	Isaac Richie.....	41	Missioni'ld.	1	...	4	5	Foot crushed.....	18
20	Barney Brady....	33	Grape Cr'k.	...	1	...	...	Leg broken.....	90
Feb. 20	Chas. Conroy....	26	Westville...	...	1	...	...	Leg injured.....	30
23	Ino. Leichty.....	30	...	...	1	...	...	Foot injured.....	10
28	Joe Gushkieck...	39	Grape Creek	1	...	3	4	Body injured.....	100
Mc. 2	Thurman Rouse..	20	Missioni'ld.	...	1	...	...	Toe injured.....	10
6	Arthur Hille.....	22	Grape Creek	...	1	...	...	Eyes injured.....	13
9	Jas. Aplegate....	49	Missioni'ld.	1	...	7	8	Foot injured.....	60
29	Frank Love.....	20	...	...	1	...	...	Fingers mashed.....	15
April 6	Grant Evans.....	36	...	1	...	2	3	Eye injured.....	8
10	Geo. Steele.....	38	...	1	...	3	4	Arm bruised.....	21
13	Aug. Young.....	53	Danville.....	1	...	3	4	Leg broken.....	95
15	J. Blaze.....	34	Grape Creek	...	1	...	...	Leg injured.....	120
16	A. Hunter.....	30	Westville...	...	1	...	...	Foot injured.....	24
19	Henry Smith.....	17	East Peoria.	...	1	...	...	Ankle fractured.....	18
May 4	P. Anderson.....	36	Westville...	...	1	...	...	Leg broken.....	85
6	Tom Coxen.....	39	...	1	...	...	1	Back and head injured.	120
9	A. E. Petty.....	33	Missioni'ld.	...	1	...	...	Toe cut off.....	30
19	Roy Williams....	30	...	1	...	2	3	Back injured.....	10
23	C. Sharlen.....	46	Danville.....	1	...	5	6	Foot injured.....	40
24	John Brocks.....	50	East Peoria.	1	...	...	...	Toe cut off.....	65
25	Chris Schnuapt..	30	Westville...	...	1	1	2	Leg broken.....	90
25	Anton Morich....	38	...	1	...	3	4	Leg and foot injured.	30
27	Geo. W. Brewer..	54	Decatur.....	...	1	...	...	Ribs broken.....	90
June 5	John Hall.....	20	Colfax.....	...	1	...	2	Foot injured.....	8
10	Maunel Slade....	20	Missioni'ld.	...	1	...	...	Finger cut off.....	12
13	Chris Long.....	26	Westville...	...	1	...	...	Body injured.....	15
13	Geo. Goulding...	26	Danville.....	1	...	...	1	Back injured.....	60
14	J. E. Hughes.....	26	Athens.....	1	...	...	2	...	*
18	Henry Rowe.....	27	Greenview...	...	1	...	...	Ankle broken.....	60
20	E. P. Smith.....	28	...	...	1	...	...	Ankle injured.....	24
21	Joseph Gerrish..	45	Westville...	1	...	3	4	Body injured.....	14
28	E. A. Roger.....	27	Bloomingt'n	1	...	4	2	...	30
28	Wm. Homer.....	43	Greenview...	1	...	4	5	Leg broken.....	120
30	J. Harbeskny....	32	Tolulu.....	1	...	5	6	Back injured.....	45
				66	53	143	213		6232

\* Not recovered June 30, 1899.



Total men injured.....	119
Not recovered July 1, 1899.....	1
Number recovered.....	118
Time lost by men recovered.....	5,324 days.
Average time lost by men recovered.....	44.7

*Recapitulation of Non-Fatal Casualties—Fourth District—1899.*

Residence.	No.	Occupation.	No.	Cause of Accident.	No.	Colliery.	No.
Athens.....	3	Cager.....	1	Ax.....	1	Athens Coal Co.....	1
Bloomington.....	4	Carpenter.....	1	Cage.....	1	Auldridge Coal Co.....	1
Catlin.....	6	Dirtman.....	1	Elevator.....	1	Blake, A. C.....	1
Colfax.....	5	Drivers.....	17	Falling coal.....	1	Brookside Coal Co.....	8
Danville.....	12	Laborers.....	31	Falling rock.....	1	Catlin Coal Co.....	5
Decatur.....	4	Leverman.....	1	Falling timber.....	1	Citizens Coal Co.....	1
East Peoria.....	2	Loader.....	1	Flying coal.....	4	Colfax Coal Co.....	4
Fairmount.....	3	Mach. help'rs.....	2	Iron bar.....	1	Consolidated Coal Co.....	19
Grape Creek.....	12	Mach. runn'rs.....	3	Kicked by mules.....	3	Decatur Coal Co.....	3
Greenview.....	3	Miners.....	53	Pit-cars.....	2	East Peoria Coal Co.....	2
Lincoln.....	1	Stable boss.....	1	Powder explosion.....	2	Economy Coal Co.....	2
Missionfield.....	27	Timberman.....	1	Premature blast.....	1	Glenburn Coal Co.....	4
Oakwood.....	1	Top men.....	3	Tail chain.....	2	Greenview Coal Co.....	3
Tahula.....	2	Trapper.....	1			Himrod Coal Co.....	20
Westville.....	31	Trolleyman.....	1			Jones & Son.....	1
		Truckman.....	1			Kellyville Coal Co.....	24
						McLean Coal Co.....	10
						Tallula Coal Co.....	2
						Wabash Coal Co.....	2
						Westville Coal Co.....	6
Totals.....	119		119		119		119

*Table showing the Nature of Injuries, Number of Persons Injured, Dependents, Time Lost, with Averages and Percentages—Fourth District.*

NATURE OF INJURIES.	Number.	Married.	Single.	Dependents.	TIME LOST.		Per cent of injuries.
					Total days.	Average days.	
Ankles injured.....	6	3	3	12	166	27.7	5.05
Arms broken.....	5	2	3	6	257	51.4	4.2
Arms injured.....	4	2	2	12	330	82.5	3.36
Back and head injured.....	1		1		10	10	.84
Backs injured.....	16	12	4	29	916	57.3	13.45
Bodies injured.....	13	9	4	30	689	53	10.92
Collar bones broken.....	2	1	1	1	100	50	1.68
Eyes injured.....	3	2	1	3	36	12	2.52
Face injured.....	3	1	2	3	71	23.7	2.52
Feet injured.....	13	8	5	42	340	26.2	10.93
Fingers cut off.....	3	2	1	5	212	70.7	2.52
Fingers injured.....	3		3		76	25.3	2.52
Hands injured.....	8	3	5	18	106	13.3	6.72
Heads injured.....	3	3		4	29	9.7	2.52
Hips broken.....	1	1		3	46	46	.84
Hips injured.....	6	2	4	4	156	26	5.05
Legs broken.....	12	4	8	10	896	82.2	10.08
Leg cut off.....	1		1		100	100	.84
Legs injured.....	8	4	4	17	420	50.3	6.72
Ribs broken.....	2	1	1	5	118	59	1.68
Shoulder injured.....	1	1		2	20	20	.84
Thumb injured.....	1	1		4	16	16	.84
Toe cut off.....	1	1			65	65	.84
Toes injured.....	3	1	2		59	19.7	2.52
Totals, averages and percentages.....	119	64	55	213	5,324	44.7	100.00

## Cass County—Fourth District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift...	Steam, horse or hand power.....	Mined or blasted.....	Total tons produced.	Tons of lump coal.	Ton of other grades
1	J. G. & G. S. Russell.....	Ashland.....	265	2.4	5	Sh.	S.	M.	2,150	1,800	350
2	Chris Nelson.....	Chandlerville	30	2.10	5	..	Ho.	B.	1,280	1,280	..
Totals .....									3,430	3,080	350
Averages.....											

Whole number of openings reported in 1898, 3.

Number of mines exhausted or abandoned during the year, 1.

Whole number of openings reported for 1899, 2.

## Logan County—Fourth District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.....	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	Lincoln Coal Co.....	Lincoln.....	285	5	5	Sh.	S.	B.	99,962	61,977	37,985
2	Citizens' Coal Mining Co	".....	290	5	5	..	..	..	74,019	46,632	27,387
3	Union Coal Co.....	Mt. Pulaski..	360	4	5	..	..	..	12,000	8,000	4,000
Totals .....									185,981	116,609	69,372
Averages.....											

Whole number of openings reported in 1898, 3.

Whole number of openings reported for 1899, 3.

*Cass County, 1899—Concluded.*

Number.	VALUES.			EMPLOYES.			Price paid per gross ton— hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	ACCIDENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.
1	\$1 65	\$0 80	\$3,250	10	4	14	\$1 00	S. M.	200	\$2,480	.....	.....	.....
2	1 75	.....	2,240	5	1	6	1 00	W.	180	1,465	64	1	.....
	.....	.....	\$5,490	15	5	20	.....	.....	.....	\$3,945	64	1	.....
	\$1 69	\$0 80	.....	.....	.....	.....	\$1 00	.....	190	.....	.....	.....	.....

*Logan County, 1899—Concluded.*

Number.	VALUES.			EMPLOYES.			Price paid per screened ton— hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	ACCIDENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.
1	\$1 10	\$0 40	\$32,369	90	48	138	\$0 42.5	S. M.	265	*	3,400	14	.....
2	1 06	40	90,385	170	32	102	42.5	.....	182	\$58,571	2,119	16	1
	90	60	9,600	15	6	21	51	.....	170	8,750	390	3	.....
	.....	.....	\$152,351	175	86	261	.....	.....	.....	\$67,121	5,819	33	1
	\$1 07	\$0 41.1	.....	.....	.....	.....	\$0 43.5	.....	205	.....	.....	.....	.....

\* Amount not reported.

## Macon County—Fourth District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	Decatur Coal Co., No. 1...	Decatur.....	612	4	5	Sh.	S.	M.	86,680	69,344	17,336
2	.. .. . No. 2...	.....	614	4	5	..	..	..	88,680	70,000	18,680
3	.. .. .	Niantic .....	365	5	5	..	..	B.	21,688	17,677	4,011
	Totals .....	.....							197,048	157,021	40,027
	Averages.....	.....									

Whole number of openings reported in 1898, 3.

Whole number of openings reported for 1899, 3.

## McLean County—Fourth District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	McLean County Coal Co.	Bloomingt'n	541	4&3	2&5	Sh.	S.	M.	138,098	126,700	11,398
2	C. H. Hewitt Coal Co.....	Chenoa .....	275	4.6	6	..	..	B.	12,000	9,500	2,500
3	Colfax Coal Mining Co....	Colfax .....	400	5.6	6	..	..	..	31,356	23,446	7,910
4	E. Colfax Coal Co .....	.....	400	5.6	6	..	..	..	3,000	2,000	1,000
5	Illinois Coal Mining Co..	Bloomingt'n	400	4	5	..	..	M.	25,000	22,000	3,000
	Totals .....	.....							209,454	183,646	25,808
	Averages.....	.....									

Whole number of openings reported in 1898, 3.

Number of new mines or places opened during the year, 2.

Whole number of openings reported for 1899, 5.

*Macon County, 1899—Concluded.*

Number.	VALUES.			EMPLOYES.			Price paid per gross ton—hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	ACCIDENTS		
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.	
1	\$1 17	\$0 40	\$88,067	100	42	142	\$0 50	W.	300	\$135,000	.....	10	1	....
2	1 17	40	83,372	110	44	154	50	..	300	100,000	.....	15	..	.. 3
3	60	35	12,010	58	24	82	40	..	74	12,901	791	9	..	....
.....	.....	.....	\$189,449	268	110	378	.....	.....	.....	\$247,901	791	34	1	.. 3
.....	\$1 10.6	\$0 39.5	.....	.....	.....	.....	\$0 48.9	.....	224	.....	.....	.....	.....	.....

*McLean County, 1899—Concluded.*

Number.	VALUES.			EMPLOYES.			Price paid per gross ton—hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	ACCIDENTS		
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.	
1	\$1 10	\$0 70	\$147,349	215	65	280	\$0 60	W.	287	\$114,646	25	18	..	10
2	1 70	1 10	18,900	15	9	24	55	S.M.	300	6,500	459	12	..	....
3	99	44	25,691	26	23	49	42	..	280	25,627	1,312	6	..	.. 4
4	90	50	2,300	8	5	13	40	..	150	12,500	150	3	..	....
5	1 20	80	29,800	15	6	21	55	..	150	14,000	25	.....	..	....
.....	.....	.....	\$224,040	279	108	387	.....	.....	.....	\$163,273	1,962	29	..	14
.....	\$1 12.6	\$0 67.7	.....	.....	.....	.....	\$0 56.1	.....	233	.....	.....	.....	.....	.....

\* Upper seam 4 feet thick, 55 cents per gross ton; lower seam 3 feet thick, 65 cents per gross ton.

## Menard County—Fourth District, 1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	Athens Mining Co.....	Athens .....	200	5.6	5	Sh.	St.	B.	121,593	94,331	27,262
2	Chic. & Kas. City Coal Co	Petersburg .....	155	5.6	5	Sh.	St.	B.	59,745	44,742	15,003
3	Wabash Coal Co.....	Athens .....	187	5.6	5	Sh.	St.	B.	117,069	87,069	30,000
4	Tallula Coal Co.....	Tallula .....	185	5.6	5	Sh.	St.	B.	29,000	26,022	2,978
5	William Parkin.....	Sweetwater .....	170	6	5	Sh.	H.	St.	1,929	1,529	400
6	S. Mountain Coal Co .....	Petersburg .....	85	5.6	5	Sh.	St.	B.	5,589	4,324	265
7	Greenview C. Mining Co.	Greenview .....	100	6	5	Sh.	St.	B.	89,071	59,381	29,690
8	William Denton .....	Petersburg .....	60	6	5	Sh.	H.	St.	2,124	2,124	.....
9	M. A. Hohimer.....	.....	69	6	5	Sh.	H.	St.	1,438	1,438	.....
10	F. M. Miller.....	Tice.....	60	5.6	5	Sh.	St.	B.	381	381	.....
Totals .....									427,939	321,341	106,598
Averages.....									.....	.....	.....

Whole number of openings reported in 1898, 10.

Whole number of openings reported for 1899, 10.

Mined by machine, 71,471 tons, at 34 cents per ton.

## Tazewell County—Fourth District, 1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	A. C. Blake .....	East Peoria ..	50	4	5	Sh.	St.	B.	19,047	13,880	5,167
2	Bohlander Bros .....	Pekin .....	120	5	5	Sh.	St.	B.	5,526	5,526	.....
3	G. Gebelhausen.....	East Peoria ..	90	4	5	Sh.	H.	St.	1,601	1,561	40
4	E. Peoria Coal Co .....	.....	85	4	5	Sh.	St.	B.	20,000	11,250	8,750
5	Butler Bros.....	Pekin .....	100	5	5	Sh.	St.	B.	4,500	4,500	.....
6	King & Grosweiler.....	.....	130	5	5	Sh.	St.	B.	400	240	160
7	Cruikshanks G Sons.....	East Peoria ..	70	4	5	Sh.	St.	B.	2,239	1,575	664
8	Edward Little .....	.....	100	4	5	Sh.	St.	B.	26,705	26,705	.....
9	Millard Bros .....	.....	100	4	5	Sh.	St.	B.	2,000	1,700	300
10	L. Grant & Sons .....	Pekin .....	100	4.8	5	Sh.	St.	B.	24,000	20,000	4,000
11	Reusche Bros.....	East Peoria ..	65	4	5	Sh.	H.	St.	2,000	1,700	300
12	Groveland Coal Co .....	.....	50	4	5	Sh.	St.	B.	4,000	3,500	500
Totals .....									112,018	92,137	19,881
Averages.....									.....	.....	.....

Whole number of openings reported in 1898, 12.

Number of mines or places opened during the year, 1.

Number of mines exhausted or abandoned during the year, 1.

Whole number of openings reported for 1899, 12.

Menard County, 1899.—Concluded.

Number.	VALUES.			EMPLOYES.			Price paid per gross ton—hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	Number of horses or mules employed in or about the mine.		ACCI- DENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.		
1	\$0 76	\$0 20	\$77,144	116	56	172	\$0 40.5	S. M.	240	\$69,729	2,804	17	1	1	
2	78	26	38,799	80	30	110	40.7	..	143	40,745	2,263	..	..	..	
3	85	30	83,009	90	32	122	40.7	..	279	73,042	4,123	11	..	..	
4	90	48	24,849	28	14	40	40.7	..	313	20,204	1,059	..	..	..	
5	1 50	1 25	2,795	5	3	8	62.5	S. M.	175	2,219	90	3	..	..	
6	1 25	50	6,038	5	3	8	40.7	S. M.	179	4,526	211	..	..	..	
7	82	51	63,834	65	30	95	40.7	..	200	51,969	2,970	16	..	3	
8	1 00	..	1,124	4	3	7	52.5	W.	175	1,200	138	1	..	..	
9	1 75	..	1,516	4	1	5	50	..	300	850	120	1	..	..	
10	1 50	..	572	2	1	3	50	..	75	248	20	1	..	..	
..	..	..	\$301,680	397	173	570	..	..	..	\$264,732	13,798	52	1	8	
..	\$0 82.4	\$0 33.8	..	..	..	..	\$0 40.72	..	208	..	..	..	..	..	

\* Riddled coal.

† Forked coal.

Average for 4,053 forked and riddled tons, 57.3 cents per ton.

Tazewell County, 1899.—Concluded.

Number.	VALUES.			EMPLOYES.			Price paid per gross ton—hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	Number of horses or mules employed in or about the mine.		ACCI- DENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.		
1	\$1 00	\$0 25	\$15,172	20	11	31	\$0 45	S. M.	212	\$11,000	700	3	..	2	
2	1 10	..	6,079	7	2	9	*72.5	..	240	4,000	325	..	..	..	
3	1 00	25	1,574	3	1	4	*70	W.	200	1,100	77	1	..	..	
4	90	53.5	14,806	28	6	34	45	S. M.	280	12,550	850	4	..	..	
5	95	..	4,275	7	5	12	50	..	165	2,500	150	1	..	..	
6	1 60	40	304	6	1	7	*72.5	S. M.	150	2,356	40	..	..	..	
7	1 04	27	1,847	10	3	13	45	S. M.	120	280	88	..	..	..	
8	85	..	22,699	30	12	42	45	..	231	16,488	1,411	4	..	..	
9	85	75	1,670	14	9	23	45	..	50	1,500	100	3	..	..	
10	1 00	50	22,000	15	8	23	45	W.	250	16,500	1,000	3	..	..	
11	1 00	50	1,850	6	4	10	45	..	150	1,500	100	12	..	..	
12	1 00	50	3,750	4	2	6	45	..	200	3,000	200	12	..	..	
..	..	..	\$85,993	150	64	214	..	..	..	\$72,774	5,041	25	..	2	
..	\$0 94.6	\$0 44.5	..	..	..	..	\$0 45	..	187	..	..	..	..	..	

\* Forked coal.

## Vermilion County—Fourth District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted	Total tons produced.	Tons of lump coal.	Tons of other grades
1	Himrod Coal Co. No. 1...	Westville.....	90 8	6	Sh.	S.	M.	250,440	177,060	73,380	
2	" No. 2...	".....	170 8	6	"	"	"	215,876	215,876	"	
3	Catlin Coal Co.....	Catlin.....	168 6	6	"	"	B.	157,760	127,597	30,163	
4	Kellyville Coal Co., No. 2	Westville.....	200 7	6	"	"	**	288,035	288,035	"	
5	" No. 3	".....	212 7	6	"	"	M.	303,089	"	303,089	
6	Westville Coal Co.....	".....	210 7	6	"	"	"	251,624	251,624	"	
7	Consolidated Coal Co.....	Fairmount.....	208 5	7	"	"	B.	74,734	55,409	19,325	
8	".....	Missionfield.....	24 6	7	†	"	"	118,965	88,121	30,844	
9	Economy Coal Co., No. 1.	Missionfield.....	85 6	7	Sh.	"	B.	75,437	"	75,437	
10	Brookside Coal Co., No. 1	Grape Creek.....	40 7	6	"	"	"	112,958	112,958	"	
11	" No. 2	".....	85 7	6	Sl.	"	M.	75,306	75,306	"	
12	John O. Connell.....	".....	40 6.6	6	Sh.	"	B.	27,021	4,800	22,221	
13	Muncie Coal Co.....	Muncie.....	200 5	7	"	"	"	25,000	25,000	"	
14	Glenburn Coal Co.....	Glenburn.....	90 5.6	7	"	"	"	124,048	11,050	112,998	
15	France Bros., No. 1.....	Catlin.....	52 5	7	"	Ho.	"	3,600	3,600	"	
16	E. S. Gray.....	Danville.....	40 5	7	Sh.	"	"	10,000	4,000	6,000	
17	L. E. Baker.....	Oakwood.....	80 5	7	Sl.	"	"	1,500	1,400	100	
18	John Swanson.....	Danville.....	80 5.6	7	Sl.	"	"	1,237	991	245	
19	S. M. Hodge.....	".....	40 5.6	7	Sh.	"	"	6,997	4,810	2,187	
20	A Jones & Sons.....	Catlin.....	51 5.6	7	"	"	"	5,908	4,727	1,181	
21	Bunting Bros.....	Grape Creek.....	20 7	6	Sl.	"	"	4,872	4,872	"	
22	Haskin & Son.....	".....	40 6	6	"	"	"	1,500	1,000	500	
23	Danville Brick & Tile Co.	Danville.....	60 5.6	7	"	"	"	6,000	6,000	"	
24	Mauch Bros.....	".....	40 5.6	7	"	"	"	5,350	4,280	1,070	
25	M. C. Wilkinson.....	".....	10 5	7	Dr.	Hd	"	1,300	900	400	
26	H. Harris.....	Catlin.....	60 5	7	Sh.	Ho.	"	1,200	1,200	"	
27	Evan J. Jones.....	".....	50 6	7	"	"	"	1,000	700	300	
28	S. Parle.....	Danville.....	40 5	7	Sl.	"	"	2,500	1,700	800	
29	William C. Shaffer.....	".....	20 5.6	7	"	"	"	2,120	1,414	706	
30	John R. Colburn.....	Vandercook.....	10 5	7	†	"	†	500	500	"	
31	John Auldredge.....	Danville.....	40 6	7	Sl.	Ho.	B.	2,000	1,600	400	
32	Miller & Spangler.....	".....	100 6	7	Sh.	"	"	2,526	2,021	505	
33	William R. Auldredge.....	".....	45 6	7	Sl.	"	"	4,000	3,000	1,000	
34	William Ray.....	".....	50 5.6	7	Dr.	Hd	"	450	400	50	
35	John E. Lloyd.....	".....	42 5	7	"	Ho.	"	7,600	5,600	2,000	
36	James Thomas.....	".....	85 6	7	"	"	"	2,665	2,000	665	
37	D. A. Jenkins.....	".....	60 6	7	"	"	"	7,500	6,000	1,500	
38	Cunningham & Co.....	".....	48 6	7	"	"	"	2,000	1,500	500	
39	Stansbury & Watkins.....	".....	50 5.6	7	"	"	"	2,400	1,800	600	
40	A. H. Bonnett.....	Blount.....	100 6	7	Sh.	S.	"	8,000	7,000	1,000	
41	Elisha Lloyd.....	Danville.....	60 6	7	"	Ho.	"	6,100	5,000	1,100	
42	Jonah James.....	Grape Creek.....	25 6.6	6	Sl.	"	"	800	600	200	
43	H. Blakeney.....	".....	30 7	6	"	"	"	1,200	1,000	200	
44	John Woodard.....	Oakwood.....	60 5.6	7	Sh.	"	"	500	400	100	
45	J. W. Horning.....	Georgetown.....	14 4.6	7	†	"	†	400	350	50	
46	J. A. Allison.....	Danville.....	70 5	7	Dr.	Ho.	B.	1,000	900	100	
47	Otto Leveridge.....	".....	60 6	7	"	"	"	950	800	150	
48	Marriage & Son.....	Grape Creek.....	70 6.6	6	"	"	"	1,200	1,000	200	
49	Thomas Graham.....	Georgetown.....	10 4.6	7	†	"	†	500	450	50	
50	Ed. Earle.....	Danville.....	40 6.6	6	Sl.	S.	B.	5,000	5,000	"	
51	A. Humes.....	".....	45 6.6	6	"	"	"	1,200	1,200	"	
52	Bushong Bros.....	".....	40 6	6	Dr.	Hd	"	8,000	8,000	"	
Totals.....								2,221,867	1,530,551	691,316	
Averages.....											

\*† Both.

† Strip.

Whole number of openings reported in 1898, 60.

Number of mines exhausted or abandoned during the year, 8.

Whole number of openings reported for 1899, 52.



Vermilion County, 1899--Concluded.

Number.	VALUES.			EMPLOYES.			Price paid per gross ton—hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employees excepting office help.	Keels of powder used.	Number of horses or mules employed in or about the mine.		ACCI-DENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal	Non-fatal.		
1	80	62.5	8156,525	110	90	200	80	40	S-M.	252	\$138,461	4,207	40	1	7
2	62.5	.....	134,922	75	53	128	40	40	..	268	121,253	3,858	12	1	13
3	90	20	120,870	115	42	157	40	40	..	257	85,606	4,220	17	2	5
4	90	.....	259,231	210	131	341	40	40	..	240	174,424	4,088	18	2	8
5	.....	62	187,915	225	100	325	40	40	..	243	168,956	4,044	25	1	16
6	70	.....	176,137	270	71	341	40	40	..	205	122,450	3,150	25	1	6
7	1 00	30	61,207	64	30	94	40	40	..	249	47,336	3,054	7	1	3
8	90	40	91,647	.....	250	250	40	40	..	185	62,730	1,200	8	1	16
9	.....	70	52,806	125	47	152	40	40	..	258	43,677	2,400	9	1	2
10	65	.....	73,423	105	47	152	40	40	..	248	73,672	1,912	16	1	3
11	65	.....	48,919	70	35	105	40	40	..	218	49,114	1,408	8	1	5
12	93	68	19,574	60	20	80	40	40	..	185	17,552	1,200	4	1	.....
13	85	.....	21,250	40	13	53	40	40	..	150	13,000	1,200	3	1	.....
14	85	70	88,491	125	56	181	40	40	..	261	78,098	3,112	.....	.....	4
15	1 00	.....	3,600	9	3	10	66	40	..	260	2,750	100	.....	.....	.....
16	1 25	75	9,500	7	.....	12	40	40	..	260	5,600	300	.....	.....	.....
17	1 00	50	1,450	.....	.....	4	50	W.	.....	110	900	30	1	1	.....
18	1 25	25	1,300	.....	.....	2	40	40	..	170	702	30	1	1	.....
19	1 12	70	6,918	6	3	9	40	S-M.	.....	290	3,500	126	.....	.....	.....
20	1 12	62	6,026	7	3	10	55	W.	.....	244	4,780	149	.....	.....	1
21	1 00	.....	4,872	4	3	7	40	S-M.	.....	293	3,000	178	.....	.....	.....
22	60	28	740	.....	.....	2	40	40	..	120	970	25	1	1	.....
23	1 00	.....	6,000	3	1	4	45	M.	.....	323	3,300	84	1	1	.....
24	1 15	50	5,457	5	7	12	40	S-M.	.....	200	4,000	260	3	1	.....
25	1 12	75	1,308	.....	.....	2	40	W.	.....	140	964	.....	.....	.....	.....
26	1 00	.....	1,200	.....	.....	8	40	W.	.....	150	No rep't	50	1	1	.....
27	1 25	30	615	.....	.....	4	40	40	..	200	550	25	1	1	.....
28	1 25	25	2,325	.....	.....	8	40	40	..	150	1,040	30	5	1	.....
29	1 00	20	1,555	.....	.....	4	40	40	..	270	1,500	42	1	1	.....
30	1 00	.....	500	.....	.....	1	40	S-M.	.....	120	210	19	.....	.....	.....
31	1 00	25	1,700	3	1	4	40	W.	.....	200	1,400	150	.....	.....	1
32	1 00	18	2,112	3	3	6	40	40	..	157	1,840	122	.....	.....	.....
33	1 10	40	3,700	6	.....	9	40	S-M.	.....	150	2,830	160	.....	.....	.....
34	1 00	50	425	2	1	3	40	W.	.....	100	320	20	1	1	.....
35	80	40	5,280	10	6	16	40	W.	.....	280	5,280	215	4	1	.....
36	1 00	75	2,489	3	4	7	40	S-M.	.....	200	1,970	80	1	1	.....
37	1 15	80	8,100	12	4	16	40	W.	.....	300	5,300	200	.....	.....	.....
38	1 00	87	1,935	8	1	9	40	40	..	150	1,200	40	.....	.....	.....
39	1 00	50	2,100	5	2	7	40	40	..	200	1,800	40	.....	.....	.....
40	1 00	50	7,500	12	4	16	40	40	..	240	5,860	400	.....	.....	1
41	1 00	50	5,550	6	.....	8	40	40	..	231	446	350	.....	.....	.....
42	1 00	40	680	4	.....	6	40	40	..	100	520	40	1	1	.....
43	1 00	40	1,080	3	.....	5	40	40	..	150	800	100	1	1	.....
44	1 00	25	425	.....	1	3	40	40	..	80	300	80	1	1	.....
45	1 00	50	375	.....	.....	4	40	40	..	10	270	75	.....	.....	.....
46	1 00	50	950	3	.....	5	40	40	..	120	660	90	1	1	.....
47	1 00	50	875	3	.....	4	40	40	..	125	630	85	1	1	.....
48	1 00	40	1,080	4	.....	3	40	S-M.	.....	150	830	91	1	1	.....
49	1 00	50	475	.....	3	3	40	W.	.....	100	350	10	.....	.....	.....
50	70	.....	3,500	10	4	13	40	S-M.	.....	150	350	200	1	1	.....
51	70	.....	840	4	.....	6	40	40	..	100	850	60	1	1	.....
52	70	.....	5,600	6	.....	8	40	40	..	180	600	350	2	1	.....
.....	.....	.....	\$1,603,094	1,772	1,053	2,825	.....	.....	.....	.....	\$1,264,361	43,449	252	8	91
80.77.39	80.60.55	.....	.....	.....	.....	.....	80	40	.....	193	.....	.....	.....	.....	.....

\* Price for machine mining, 30 cents per ton.  
 † Price for machine mining, 23 cents per ton.  
 Price for machine mining, 35 cents per ton.  
 ‡ Miners paid \$1.50 per day for mining 120,365 tons.  
 § Forked coal.

## Recapitulation by Counties—

COUNTIES.	MINES.				PRODUCTS.					VALUES.		
	Number of mines.	Shipping mines.	Mines in local trade.	New mines.	Abandoned mines.	Total tons produced.	Tons of lump coal.	Tons of other grades.	Tons shipped.	Tons consumed or wasted at the mines.	Average value per ton of lump at the mines.	Average value of other grades per ton at the mines.
Cass.....	2	2	1			3,430	3,080	350		300	\$1 69	\$0 80
Logan .....	3	3				185,981	116,609	69,372	141,568	11,198	1 07	0 411
Macon.....	3	3				197,048	157,021	40,027	65,327	5,104	1 106	0 395
McLean.....	5	4	1	2		209,454	183,646	25,808	77,169	15,191	1 126	0 677
Menard .....	10	5	5			427,939	321,341	106,598	370,750	19,916	0 824	0 338
Tazewell.....	12	4	8	1	1	112,018	92,137	19,881	39,305	2,886	0 946	0 445
Vermilion .....	52	18	34		8	2,221,867	1,530,551	691,316	2,052,723	52,269	0 7739	0 6055
Totals.....	87	37	50	3	10	3,357,737	2,404,385	953,352	2,746,842	106,864	.....	.....
Averages.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	\$0 8513	\$0 5509

Whole number of openings reported in 1898, 94.

Number of new mines or places opened during the year, 3.

Number of mines exhausted or abandoned during the year, 10.

Whole number of openings reported for 1899, 87.

Average price paid for mining 18,610 screened tons, 72 cents per ton; 120,365 tons mined and paid for at \$1.50 per day.

## Fourth District—1899.

Aggregate value of total product.....	EMPLOYEES.			Average number of days of active operation.	Average price paid, per gross ton for hand mining	Total wages paid during the year to all employes excepting office help.	Number of kegs of powder used	Number of horses and mules employed in and about the mines.	CASUALTIES		MACHINES.	
	Number of miners.	Number of other employes.	Total employes.						Killed.	Injured.	Number of mines using machines.	Number of machines in use.
85,490	15	5	20	190	\$1 00	\$3,945	64	1	.....	.....	.....	.....
152,354	175	86	261	205	0 435	67,121	5,819	33	1	1	.....	.....
189,449	268	110	378	224	0 480	247,901	791	34	1	3	.....	.....
224,010	279	108	387	233	0 504	163,273	1,962	29	.....	14	.....	.....
301,680	397	173	570	208	0 407	264,732	13,798	52	1	8	1	5 71,471
95,993	150	64	214	187	0 45	72,774	5,041	25	.....	2	.....	.....
1,693,094	1,772	1,053	2,825	193	0 40	1,264,361	43,449	252	8	91	8	58 1,011,890
\$2,573,100	3,056	1,599	4,655	.....	.....	\$2,084,107	70,924	426	11	119	9	66 *1,083,361
.....	.....	.....	.....	199	\$0 4315	.....	.....	.....	.....	.....	.....	.....

\* Average price paid for machine mining, 29.1 cents per ton.



## FIFTH INSPECTION DISTRICT 1899.

Counties: Calhoun, Christian, Greene, Macoupin, Montgomery, Sangamon,  
Shelby, Scott, Jersey, Morgan.

WALTON RUTLEDGE, *Inspector*, Alton, Ill.

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HON. DAVID ROSS, *Secretary*,

*State Bureau of Labor Statistics, Springfield, Illinois:*

SIR:—In compliance with section 12 of an act of the General Assembly, in relation to coal mines and subjects relating thereto, and providing for the health and safety of persons employed therein, I have the honor herewith to submit the sixteenth annual report of the Fifth Inspection District, for the year ended June 30, 1899. The tabular part of this report gives the number of mines in the district, both shipping and local; new mines and abandoned mines; the depth of coal below the surface; the thickness of the seams of coal, and the geological number thereof; the number of miners and other employes engaged in the mining industry of the district; the number of days each mine was in operation during the year; the number of kegs of powder used in mining; the number of accidents, fatal and non-fatal; the number of horses and mules employed in and around the mine; the number of tons of lump and other grades of coal produced, and the disposition made of the same, whether shipped, sold to local consumers, or consumed at the mine; the prices per ton paid for mining; the value of lump and other grades per ton at the mine; the number of coal cutting machines in use, the power used by coal cutting machines, the total tonnage cut by machines, the aggregate value of the total product; the number of mines using cable haulage, and electric haulage; the number of ventilating fans; and the number of shaking or mechanical screens used at the mines.

The coal production, by counties, in the Fifth District, with increase or decrease of output in each, for the years ending June 30, 1898, and 1899, is shown as follows:

Counties.	Total Output of all Grades of Coal in Tons.		Increase.	Decrease.
	1898.	1899.		
Calhoun .....	4,893	4,118	.....	775
Christian .....	495,616	572,459	76,843	.....
Greene .....	8,520	14,370	5,85	.....
Jersey .....	1,680	4,050	2,370	.....
Macoupin .....	1,264,926	1,646,674	381,748	.....
Montgomery .....	294,667	354,201	59,534	.....
Morgan .....	1,800	4,800	3,000	.....
Sangamon .....	1,763,863	2,083,572	319,707	.....
Scott .....	21,337	20,617	.....	720
Shelby .....	68,388	105,765	37,377	.....
Total .....	3,925,690	4,810,626	886,431	1,495
Increase .....				886,431
Decrease .....				1,495
Net increase .....				884,936

The following summary is given as a recapitulation of the principal facts to be found in the schedules of the various counties:

Number of mines .....	87
Number of shipping mines .....	51
Number of local mines .....	36
Number of new mines .....	10
Number of abandoned mines .....	2
Total output in tons of 2,000 pounds .....	4,810,626
Tons of lump coal .....	3,480,311
Tons of other grades .....	1,330,315
Tons shipped by railroads .....	4,095,235
Average value per ton of lump coal at the mine .....	\$0.8215
Average value per ton of other grades at the mine .....	\$0.3456
Aggregate value of total product .....	\$3,318,120
Number of miners .....	4,421
Number of other employes .....	1,980
Total number of employes .....	6,401
Average number of days worked during the year .....	190
Total amount paid out in wages .....	\$2,665,965
Number of kegs of powder used .....	100,756
Number of horses and mules in and around the mines .....	621
Number of coal cutting machines used .....	144
Total number of tons cut by machines .....	2,892,040
Number of fatal accidents .....	14
Number of non-fatal accidents .....	68
Number of tons of coal produced to each fatal accident .....	343,616
Number of tons of coal produced to each non-fatal accident .....	70,745
Number of persons employed to each fatal accident .....	457
Number of persons employed to each non-fatal accident .....	94
Number of mines using compressed air coal cutting machines .....	11
Number of mines using electric coal cutting machines .....	2
Number of mines using cable haulage .....	4
Number of mines using electric haulage .....	1
Number of ventilating fans in the district .....	56
Number of shaking or mechanical screens at the mines .....	20

The output of coal for 1899 shows an increase of 884,936 tons or 22.5 per cent over 1898. The district is still about 750,000 tons short of its normal output. In Macoupin county the mines on the C. & A. R. R. did not work much over one-half time. The Consolidated Coal Co's. mines No. 10 Mount Olive,

and the Hornsby mine at Hornsby, only worked one-half time, owing to repairs being made at these mines. The Carlinville Coal Co.'s mine only worked 130 days, owing to the outer works at the mine being burned down; the loss in the county is about 350,000 tons for the year. The mines in Christian county, except the mine of the Taylorville Coal Co., only worked about one-half time, entailing a loss to the county of about 50,000 tons. Montgomery sustained a loss of about 50,000 tons, Sangamon county about 25,000 tons. Most of this loss of tonnage was caused by the coal companies at Pana and the companies on the C. & A. R. R. refusing to pay the scale price, of 40 cents per ton gross for mining.

*Mine Fires.*—At the Carlinville Coal Co.'s mine at Carlinville, on January 2, 1899, a fire broke out on the upper landing. The tower, screens, elevator bins and housing around the tower were all destroyed. The mine was working at the time. The men were safely taken out of the mine at the escape-ment shaft. A new plant has been erected on more modern principles very much superior to the old one.

At the Girard Coal Co.'s mine at Girard the machine and blacksmith and carpenter shops were destroyed by fire June 1, 1899. They have not been rebuilt at this time.

*Escapement Shafts.*—The Litchfield Mining & Power Co., of Litchfield, and the Edinburg Coal Co., of Edinburg, have finished their escapement shafts during the year. The Montgomery Coal Co., of Paisley, and the Citizens' Coal Co., at their "B" shaft in Springfield, will finish their escapement shafts in the near future. The Junction Mining Co., of Springfield, has made a through connection into the Black Diamond Coal & Tile Co.'s mine, which makes a second escapement for both of these mines. The Madison Coal Co., at its No. 5 mine at Mt. Olive, has made a through connection to the Consolidated Coal Co.'s No. 10 mine, which also makes a second escapement for both of these mines.

*Improvements.*—The Montgomery Coal Co., at Paisley, has put in a pair of first motion engines, also two boilers, with new engines and boiler houses. The engines and boilers were manufactured by the Litchfield Car & Machine Co., of Litchfield.

The Consolidated Coal Co., of St. Louis, Mo., have installed an electric haulage plant at their No. 10 mine at Mt. Olive during the year. A generator of 100-kilowatt power, with suitable engine power to run it, has been erected on the surface. The locomotive in the mine weighs 10 tons, and is 80 horse power, a four wheel, straight geared for 26-inch gauge, with a draw bar pull of 3,750 pounds, at a normal speed of 8 miles per hour. It is fitted with arc lights and auxiliary kerosene lights. They have also introduced fifty 16-current pressure incandescant protected lamps into the mine. In introducing the plant, 6,400 feet of new track was laid of 30 and 35-pound rail. The plant was installed by the Link-Belt Co., of Chicago, Ill.

*Electric Mining Locomotives.*—The Duncan Foundry & Machine Works, Alton, Ill., have just shipped the Western Coal & Mining Co., for use in one

of their mines, a mining locomotive of 3,000 pounds draw bar pull. This is the third locomotive the Duncan works have constructed for the coal companies.

The first two were small, weighing 2,000 pounds, with a drum and rope attachment which enabled them to draw loaded cars from rooms running to the dip in a pitching vein. The locomotive remains in the entry while the cars are hauled from the room face by the rope. By the use of clutches, the motor is thrown into gear with the driving axle or drum, or both, as desired.

The locomotive just shipped to Arkansas has an electric equipment furnished by the General Electric Co., consisting of 2-GE-61 motors, operated on a 250-volt line at a speed of 8 miles per hour. The locomotive exerts a draw bar pull of 3,000 pounds at full speed, and was designed by Mr. S. W. Farnham, mechanical engineer of the coal companies, to meet requirements in the coal companies' mines. Two similar machines are being constructed at Alton.

The entries in the southwestern mines are often low and narrow, requiring specially designed locomotives to operate in them to advantage. For gauges of 35 inches and upwards, the main frame of the locomotive is placed inside the wheels, the width of a 36-inch gauge locomotive over all being about 46 inches; the length, exclusive of bumpers, is 12 feet; the height above rail, exclusive of trolley, 42 inches. Motors with gear take up only 22 inches space along the axle. This enables a locomotive with frame outside the wheels to be constructed for track gauges as narrow as 24 inches.

The locomotive can be controlled from either end with equal facility, having a commutating switch, by means of which the motors can be used in parallel or series, as it suits the wish of the motorman to run at either full or half speed. In mine work, a series or parallel controller has often proved unsatisfactory, as on a bad track one pair of wheels frequently slip on the rails, and the motor without exerting any attractive effort produces a counter electro-motive force which prevents the other motor from doing work. It is generally necessary, therefore, to start the motors in multiple, and if half speed is required, the current can be cut off momentarily after the locomotive attains moderate speed and the motors thrown into series. Compactness has been the main object in view in designing these machines.

*Prospective Mines.*—The Madison Coal Co., of St. Louis, is putting down a hoisting and escapement shaft at Divernon, Sangamon county, on the line of the St. L., P. & N. R. R. Both shafts are being sunk at one time. This, when completed, will be one of the best plants in our State. A steel tower will be erected and all of the buildings used at the plant will be made fire-proof. The coal seam is on an average about 8 feet thick, having been proved by boring at a depth of 380 feet. Both shafts are made 9x18 feet in the clear. Iron stairways and platforms will be used for escapement in one compartment of the air or escapement shaft. The coal will be mined by electric coal cutting machines; the hauling done by electric motors. The mine will be opened out on the most approved principle for haulage and ventilation. The coal will be worked on the panel system. Everything is designed for a large daily output.



*Fatal Accidents.*—Arthur Jones, a single man, aged 19 years, died July 11, 1898, from an injury received in the Litchfield Mining and Power Company's mine, Litchfield. On July 8, 1898, Arthur Jones was taken into the mine by James and Louis Ramsey, for the purpose of seeing the mine, and see the miners work. James and Louis Ramsey, both being miners working in the mine, asked the mine manager to allow them to take Jones into the mine as they said they would look after him and see that he would come to no harm. The mine manager then allowed Jones to go into the mine. It appears that James Ramsey was setting props, and his son, Louis Ramsey, was sawing a prop and the boy, Jones, was sitting on a prop. A small piece of slate fell, striking Jones on the right side of his face. He did not seem to be seriously injured at first. James Ramsey and son took the boy out of the shaft and took him home. He died, however, July 11, 1898. The doctor stated that he died of hemorrhage of the brain.

Amos Howett, a miner aged 42 years, was killed July 16, 1898, in the Riverton Coal Company's No. 2 mine; his death was caused by the running away of a mule with an empty trip of cars. The cars jumped the track and striking Howett hurting him internally, from which he died in two days.

Thos. Price, a miner aged 47 years, was fatally injured July 18, 1898, in Spaulding Coal Company's mine, by a premature blast. The squib went off as soon as the light was put to it, which fired the shot. Price was struck by flying coal, from which he died in two days.

John Davis, a driver, aged 19 years, was killed September 2, 1898, in the Litchfield Mining & Power Company's mine at Litchfield by being crushed between a car and a prop. He was driving through the pass-way from the fourth north entry to the third north entry. There was a slight grade. From some cause he had failed to sprag the car. At the foot of the grade the car jumped the track, crushing him between the car and a prop.

James Rafferty, aged 32 years, and Joseph Mayfield, aged 23 years, were found dead September 2, 1898, in the Capitol Coal Company's mine, Springfield. Rafferty and Mayfield were sent by the mine manager to clean out a portion of the air course on the main east entry. The air having become charged with black damp where they were working, which caused their lights to go out. The men were trying to get to the main intake entry, where there was fresh air. They made a mistake and turned into an abandoned entry which was densely full of black damp. The damp struck them down. They were found dead at a point about twenty feet within the mouth of the old entry, and about one hundred and fifty feet from the main intake air course.

Fritz Hubert, miner, aged about 50 years, was killed September 19, 1898, in the Consolidated Coal Company's No. 10 mine at Mount Olive. Hubert was riding in the cars to his work in the morning. In passing along the south entry, some top coal had fallen in the entry; the cars run up against the top coal lying on the track. The driver unhooked the mule. Hubert and two other miners got out of the cars and passed over the fallen coal. From some cause Hubert turned back and was in the act of sounding the slate above where the coal had fallen. The slate came away very suddenly and caught him.

Pollitt Brown, a miner aged 38 years, was killed October 7, 1898, in the Assumption Coal & Mining company's mine at Assumption, by a fall of rock in the face of the Long Wall work. He was in the act of taking down some coal at the working face; there was a slip in the coal which passed up into the rock. When the coal was relieved from the slip the rock fell and caught him. The slip could not be seen from the face of the coal.

Andrew Malkis, a machine helper, aged 33 years, was killed Oct. 23, 1898, in the Taylorville Coal Company's mine, Taylorville. The machine runner had cut across the room and was working on the last cut, on the right hand side of the room. There was a large slip on the back of the coal that was being cut. About thirty tons of coal suddenly fell away and caught him as he was shoveling away from the machine, killing him instantly. It was said he had a wife and two children in Russia.

Oscar Fleming, miner, aged 58 years, was killed November 22, 1898, in the Consolidated Coal Company's No. 10 mine, Mount Olive. He was killed in the face of a room by top coal falling on him. Top coal had been left up for about seven feet back from the face of the room. The coal had been shattered by previous shots. Fleming was standing in a mine car prying off some coal left by the last shots at the face; when this coal fell it relieved the top coal, when it fell and caught him, pressing his head down on the end of the mine car, killing him instantly.

Louis D. Davis, engineer, aged 34 years, was found dead in the dynamo room of the Hillsboro Coal Company, Hillsboro. The dynamo room was in the rear of the engine room, where the hoisting engines were located. The engines were running away; had destroyed ropes, cages, etc. After the engines were stopped Davis' body was found near the pulley wheel of the dynamo. His skull was fractured and life was extinct. After a week's session by the coroner's jury their verdict was that he came to his death from causes unknown to the jury.

Henry Smith, miner, age not known, was injured by falling slate in the Penwell Coal & Mining Company's mine at Pana, December 5, 1898. He was working in the face of a room. Some slate fell and struck him on the back and shoulders. He was taken to St. John's Hospital, Springfield, Illinois, for treatment where he died December 12, 1898.

Toby Gusti, miner, aged 50 years, was killed January 3, 1899, in the Barclay Coal and Mining Company's mine, Barclay. He was killed at the face of the entry by falling slate. He had prepared to set props to support the roof; he failed to do so until it was too late.

Paul Lafis, miner, aged 50 years, was killed May 16, 1899, in the Spaulding Coal Company's mine, Spaulding. He was killed at the face of a room by a premature blast.

Harvey Williams, miner, aged 25 years, was killed May 25, 1899, in the Springside Coal & Mining Company's mine, Pana. He was killed at the face of room No. 12 in the 1st north entry. There was a slip in the slate, also in the coal. He had set a prop under the slate, but too far back from the slip.

In taking the coal off the slip the slate came away and caught him. If the slip could have been seen, it is presumed he would have secured the slate by timbering under it.

Following will be found the tables of casualties and the statistical tables of the output by counties.

Respectfully submitted,

WALTON RUTLEDGE,

Alton, Illinois.

State Inspector of Mines, Fifth District.

*Fatal Casualties—Fifth District—July 1, 1899.*

Date.	Name.	Age.	Occupation.	Residence. (Town)	Married.	Widow.	Children.	Single.	Dependents.	Cause of Accident.
1898.										
July 10	Amos Howett.....	42	Miner.....	Riverton...	1	1	6	7		Pit-car.....
July 18	Thos. Price.....	47	".....	Spaulding..	1	1	2	3		Premature blast....
Sept. 2	John Davis.....	19	Driver.....	Litchfield..				1		Pit-car.....
" 2	Jas. Rafferty.....	32	Laborer.....	Springfield.	1	1	3	4		Black damp.....
" 2	Jos. Mayfield.....	33	".....	Springfield.	1	1	1	2		Black damp.....
" 19	Fritz Hubert.....	50	Miner.....	Mt Olive....	1	1	4	5		Falling rock.....
Oct. 7	Pollitt Brown.....	38	".....	Assumption.	1	1	4	5		Falling of rock.....
" 23	Andrew Malkis.....	33	Mach. Hel.....	Taylorville..	1	1	2	3		Falling of coal.....
Nov. 22	Oscar Fleming.....	58	Miner.....	Mt. Olive....	1	1	8	9		Falling of coal.....
Dec. 3	Louis D. Davis.....	34	Engineer.....	Hillsboro....				1		Found d'd eng. room
" 12	Henry Smith.....	..	Miner.....	Pana.....				1		Falling of rock.....
1899.										
Jan. 3	Tobi Gusti.....	50	".....	Barclay.....	1	1	2	3		Falling rock.....
May 10	Paul Lafis.....	50	".....	Spaulding..	1		1	1		Premature blast....
May 25	Harvey Williams.....	25	".....	Pana.....				1		Falling rock.....
	<b>Totals</b> .....				<b>10</b>	<b>9</b>	<b>33</b>	<b>4</b>	<b>42</b>	

Total fatal casualties—14.

*Recapitulation of Fatal Casualties—Fifth District—July 1, 1899.*

Residence.	No.	Occupation.	No.	Nature of Casulty.	No.	Colliery.	No.
Assumption..	1	Driver.....	1	Black damp.....	2	A'smpt'n Coal & M Co	1
Barclay.....	1	Engineer.....	1	Falling coal.....	2	Barclay Coal & M Co	1
Hillsboro....	1	Laborers.....	2	Falling rock.....	5	Capital Ce-op Coal Co	2
Litchfield ...	1	Mach. helper.	1	Mine cars.....	2	Consolidat'd Coal Co	2
Mt. Olive....	2	Miners.....	9	Premature blast..	2	Hillsboro Coal Co....	1
Pana.....	2			Unknown.....	1	Litchfield M & P Co..	1
Riverton.....	1					Penwell Coal & M Co	1
Springfield... 2						Riverton Coal Co....	1
Spaulding.... 2						Spaulding Coal Co..	2
Taylorville ... 1						Sprinside Coal M Co..	1
						Taylorville Coal Co..	1
<b>Totals</b> ....	<b>14</b>		<b>14</b>		<b>14</b>		<b>14</b>

## Non-Fatal Casualties—Fifth District—July 1, 1899.

Date.	Name.	Age.	Residence.	Married	Single.	Children.	Dependent.	Character of Injury.	Time lost— days.
1898.									
July 12	John Vaughn	22	Assumption				1	Back injured	30
27	Nick Heibert	38	Hornsby				1	Head injured	45
29	Fred Long	18	Moweaqua				1	Hand injured	26
Aug. 1	John Pritchard	56	Staunton	1	3		3	Head injured	20
8	Wm. McCadrey	28	Hornsby				1	Hand injured	15
Sep. 12	Fred Dyer	39	Mt. Olive				1	Foot injured	20
10	John Pritchard	56	Staunton	1	3		3	Arm broken	40
22	Victor Singer	36	Barclay				1	Foot injured	20
Oct. 1	Andrew Corba	40	Moweaqua				1	Leg broken	90
10	Jos. Arndt	19	Staunton				1	Foot injured	20
13	J. R. Morris	30	Litchfield				1	Ribs broken	60
Nov. 9	Jos. Jurek	25	Moweaqua				1	Face injured	30
8	Louis Werler	45	Staunton				1	Legs injured	20
8	W. Selsby	21	Mt. Olive				1	Ankle injured	20
18	Bert Meekle	25	Litchfield	1	2		2	Rib broken	30
23	Rich Meichert	21					1	Hips injured	45
Oct. 24	H. M. Criswell	45	Hillsboro	1	2		2	Body injured	40
Nov. 23	Harvey Alexander	33	Staunton				1	Head injured	30
25	Frank Kautson	42		1	3		3	Body injured	40
28	Jas. McEvoy	40	Gillispie				1	Body injured	60
Aug. 8	Jac Kauf	52	Mt. Olive	1	1		1	Arm broken	70
Nov. 21	Walter Moore	22	Pana				1	Body injured	42
Nov. 21	Chas. Gaston	32	Pana				1	Body injured	20
21	Henry Johnson	24					1	Body injured	23
Dec. 2	Tom Bernette	21	Mt. Olive				1	Leg broken	120
6	Fritz Muentach	26	Staunton				1	Body injured	30
16	Ed Witten	25	Paisley	1	1		1	Leg broken	100
1899.									
Jan. 24	John Howells	47	Staunton				1	Body injured	45
24	Toney Seibert	32	Gillespie	1	2		2	Leg injured	30
24	Frank Oselett	15	Hornsby				1	Arm injured	45
Feb. 6	Virgil Bishop	25	Virden	1	1		1	Body injured	22
17	Fred Becker	49	Staunton				1	Leg injured	30
23	John Reaves	46	Litchfield	1	6		6	Legs injured	32
27	Felix Blusnik	25	Virden				1	Body injured	60
27	Jas. Puckett	18	Litchfield				1	Leg broken	90
Mar. 4	A. Tone	26	Moweaqua				1	Face injured	25
6	Wm. Loedeker	63	Mt. Olive	1	1		1	Collar bone broken	60
9	Oscar Cartledge	29	Gillespie	1	2		2	Leg broken	120
15	Peter Fagan	30	Assumption				1	Body injured	30
15	Frank Cartledge	21	Staunton	1	2		2	Leg injured	28
15	Wm. McIntyre	52		1	4		4	Foot injured	30
16	Wm. Stehline	19	Gillespie				1	Back injured	22
19	Peter Willing	50	Mt. Olive	1	5		5	Body injured	24
21	Chas. L. Lisinberg	44	Nilwood	1	4		4	Ribs broken	45
April 5	Robt. McVaneey	30	Green Ridge				1	Leg broken	100
4	P. A. Piper	23		1	1		2	Head injured	45
24	Frank Borg	50	Mt. Olive	1	4		4	Ankle injured	21
May 17	Chr. Flemming	16					1	Foot injured	25
23	Hes Knoewmiller	50	Staunton	1	5		5	Body injured	28
26	Peter Raanzauer	19		1	4		4	Body injured	30
31	Dwyer Campbell	19					1	Hand injured	15
June 2	Orville Chapman	17	Moweaqua				1	Body injured	20
7	Wm. Scheerschkl	45	Staunton	1	5		5	Body injured	20
8	John Covel	37	Mt. Olive	1	2		2	Arm injured	20
11	Gas. W. McGee	44	Pana	1	5		5	Leg broken	20
16	Fred Horn	21	Hornsby				1	Foot injured	20
July 3	Robt. Watts	22	Ridgely				1	Arm broken	90
Oct. 7	Ed Holyey	22	Springfield	1	1		1	Leg broken	85
Nov. 7	Ed McGovern	28	Ridgely				1	Shoulder dislocated	90
22	Geo. Hartman	21	Springfield				1	Arm broken	65
28	Frank Harwood	15	Starnes				1	Back injured	24
28	John Kurus	21	Ridgely				1	Arm broken	60
Jan 1	Ed Upton	25	Springfield				1	Body injured	40
19	J. J. Dillon, Jr.	25					1	Fingers injured	25
Feb. 13	Arthur Vancill	20	Auburn	1	1		1	Hips injured	45
24	Thos. Ryan	30	Ridgely	1	1		1	Head injured	20
Mar. 16	Fred Snyder	24	Springfield	1	1		1	Leg broken	120
June 10	Wm Thomas	60	Dawson				1	Leg injured	20

Total number injured .....	68
Number, time lost not reported.....	5
Number reported losing time.....	63
Total time lost .....	2,792 days
Average time lost.....	41.3

*Recapitulation of Non-Fatal Accidents—Fifth District—1899.*

Residence.	No.	Occupation.	No.	Cause of Accident.	No.	Colliery.	No.
Assumption..	2	Cager .....	1	Cages .....	2	Assumption Coal Co.	2
Auburn .....	1	Drivers .....	24	Drill .....	1	Barelay Coal Co. ....	1
Barelay .....	1	Gripper.....	1	Falling coal .....	10	Black Diam'd Coal Co.	1
Dawson .....	1	Laborers .....	4	Falling cross bar ..	1	Chicago-Virden C. C.	2
Gillespie .....	4	Loaders .....	7	Falling down shaft ..	1	Citizen's Coal Co. ....	1
Green Ridge.	2	Mach. helper.	4	Falling from car....	1	Consolidated Coal Co.	30
Hillsboro .....	1	Mach. runner.	1	Falling rock.....	14	Green Ridge Coal Co.	2
Hornsby .....	4	Mine examiner.	1	Fire camp.....	4	Hillsboro Coal Co. ....	1
Litchfield .....	5	Miners .....	20	Flying coal.....	1	Junction Coal Co. ....	5
Mt. Olive .....	9	Picker .....	1	Machine .....	1	Litchfield M. & P. Co.	1
Moweauqua.....	5	Timberman ..	1	Machine chain .....	1	Madison Coal Co. ....	2
Nilwood .....	1	Trappers .....	2	Mules .....	4	Montgomery Coal Co.	5
Pana .....	4	Trimmers ....	2	Pit cars .....	22	Moweauqua Coal Co.	5
Paisley .....	1			Powder explosion....	2	Nilwood Coal Co. ....	1
Ridgely .....	4			Premature blast....	3	Pana Coal Co. ....	4
Springfield ..	5					Sangamon Coal Co. ....	1
Starnes .....	1					Springfield Co. C. C.	1
Stamton .....	15					Springfield Iron Co. ..	2
Virden .....	2					Starnes Coal Co. ....	3
						Virden Coal Co. ....	1
						Wabash Coal Co. ....	1
Totals.....	68		68		68		68

*Table Showing the Nature of Injuries, Number of Persons Injured, Dependents, Time Lost, with Averages and Percentages.*

NATURE OF INJURIES.	Number.	Married.	Single.	Dependents.	TIME LOST.		Per cent of injuries.
					Total days.	Average days.	
Ankles injured.....	2	1	1	4	41	22	2.9
Arm broken .....	5	2	3	4	325	65	7.4
Arm injured .....	2	1	1	2	45	23	2.9
Backs injured .....	3		3		76	25	4.4
Body injured .....	17	7	10	25	574	33.8	25
Collar bone broken.....	1	1		1	60	60	1.5
Face injured .....	2		2		55	26	2.9
Feet injured .....	6	1	5	4	115	17.5	8.8
Fingers injured .....	1		1		25	25	1.5
Hands injured .....	3		3		56	18.7	4.4
Heads injured .....	5	3	2	6	140	28	7.4
Hips injured .....	2	1	1	1	90	45	2.9
Legs broken .....	9	5	4	10	225	91.7	13.3
Legs injured .....	6	3	3	10	140	23.3	8.8
Ribs broken .....	3	2	1	6	135	45	4.4
Shoulder dislocated .....	1		1		90	90	1.5
Total averages and percentages.....	68	27	41	73	2,792	41.3	100.0

## Calhoun County—Fifth District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	Thomas P. Brick Co.....	Golden Eagle.	....	24	1	D.	....	M.	4,118	4,118	.....
	Totals .....	.....	.....	.....	.....	.....	.....	.....	4,118	4,118	.....
	Averages.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Whole number of openings reported in 1898, 1.

Whole number of openings reported for 1899, 1.

## Christian County—Fifth District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.			
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades	
1	Assumption Coal & M. Co	Assumption ..	1003	3.6	..	Sh.	..	S.	M.	55,200	38,640	16,560
2	Edinburg Coal Co.....	Edinburg.....	365	7	..	..	..	..	B.	9,450	7,200	2,250
3	Pana Coal Co., Nos. 1 & 2	Pana.....	720	7.6	..	..	..	..	M.	43,163	21,204	21,959
4	Penwell Coal Mining Co.	..	723	7.6	5	..	..	..	..	132,689	96,163	36,526
5	Springside Coal M. Co...	..	723	7.6	5	..	..	..	..	76,957	46,007	30,950
6	Taylorville Coal Co.....	Taylorville...	462	7.6	5	..	..	..	..	255,000	223,000	32,000
	Totals .....	.....	.....	.....	.....	.....	.....	.....	.....	572,459	432,214	140,245
	Averages.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Whole number of openings reported in 1898, 6.

Whole number of openings reported for 1899, 6.

*Calhoun County, 1899—Concluded.*

Number.	VALUES.			EMPLOYES.			Price paid per gross ton— hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	ACCIDENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.
1	\$1 50	.....	\$6,177	8	12	20	*	M.	261	\$6,177	112	4	.....
	.....	.....	\$6,177	8	12	20	.....	.....	.....	\$6,177	112	4	.....
	\$1 50	.....	.....	.....	.....	.....	.....	.....	261	.....	.....	.....	.....

\* Price of machine mining 4,118 tons, 25 cents per ton.

*Christian County, 1899—Concluded.*

Number.	VALUES.			EMPLOYES.			Price paid per gross ton— hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	ACCIDENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.
1	\$1 10	\$0 50	\$50,784	147	25	172	\$0 52.5	S. M.	168	\$48,220	100	10	1
2	1 00	50	8,325	15	13	28	40.7	.....	200	7,320	294	3	.....
3	65	25	19,272	75	94	169	.....	.....	91	23,230	178	6	.....
4	65	25	71,637	88	75	163	.....	.....	217	59,050	776	24	1
5	65	25	37,642	90	32	122	*25	.....	170	42,000	380	9	1
6	75	45	181,650	155	70	225	.....	.....	250	127,000	1,200	22	1
	.....	.....	\$369,310	570	309	879	.....	.....	.....	\$306,820	2,848	74	4
	\$0 74.7	\$0 32.9	.....	.....	.....	.....	\$0 29	.....	183	.....	.....	.....	.....

\* Price for machine mining 255,000 tons, 30 cents per ton.

## Greene County—Fifth District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTFIT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift...	Steam, horse or hand power.....	Mined or blasted.....	Total tons produced.	Tons of lump coal.	Tons of other grades
1	J. T. Revis, lessee.....	Roodhouse ...	27	*	...	Sh.	Ho.	M.	3,100	3,100	.....
2	E. Griffiths .....	" .....	50	2	6	1	..	..	2,200	2,200	.....
3	Thos. Griffiths, No. 1.....	Waitehall .....	47	*	...	..	..	..	4,100	4,100	.....
4	" " No. 2.....	" .....	59	*	...	..	..	..	1,200	1,200	.....
5	Hudson, Tucker & Co. (L)	" .....	69	2	6	1	..	..	2,250	2,250	.....
6	Jas. Little.....	Roodhouse .....	29	2	6	1	..	..	800	800	.....
7	Ed Axley.....	" .....	25	2	6	1	..	..	600	600	.....
8	Alvirda Smith.....	" .....	20	2	6	1	Sl.	Hd	120	120	.....
Totals .....									14,370	14,370	.....
Averages.....											.....

\* Pocket coal, cannel and bituminous.

Whole number of openings reported in 1898, 6.

Number of new mines or places opened during the year, 3.

Number of mines exhausted or abandoned during the year, 1.

Whole number of openings reported for 1899, 8.

## Jersey County—Fifth District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.			
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.....	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades	
1	Frank Hubener.....	Brighton.....	24	3	6	5	Sh.	Ho.	M.	900	900	.....
2	Ed Springman.....	" .....	26	3	6	5	D.	Hd	..	480	480	.....
3	Andy Williams, lessee...	" .....	25	3	6	5	..	..	..	750	750	.....
4	M. Fitzsimmons.....	" .....	25	3	6	5	..	..	..	520	520	.....
5	John Kreps .....	" .....	26	3	6	5	Sh.	Ho.	..	1,200	1,200	.....
6	Rich Motley .....	Delhi.....	25	2	6	1	D.	Hd	..	200	200	.....
Totals .....									4,050	4,050	.....	
Averages.....											.....	

Whole number of openings reported in 1898, 1.

Number of new mines or places opened during the year, 5.

Whole number of openings reported for 1899, 6.



Greene County, 1899—Concluded.

Number.	VALUES.			EMPLOYES.			Price paid per gross ton hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	ACCIDENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.
1	\$1 25	.....	\$3,875	7	1	7	\$0 70	S. M.	205	\$3,000	.....	1	.....
2	1 25	.....	19,750	5	1	5	.....	.....	220	12,200	.....	.....	.....
3	1 25	.....	5,125	12	1	13	.....	.....	225	4,500	.....	1	.....
4	1 25	.....	1,500	4	1	5	.....	.....	150	1,200	.....	1	.....
5	1 25	.....	2,813	6	1	7	.....	.....	200	2,000	.....	1	.....
6	1 25	.....	1,000	4	1	5	.....	.....	150	750	.....	1	.....
7	1 25	.....	7,500	3	1	4	.....	.....	220	600	.....	1	.....
8	1 25	.....	150	2	.....	2	.....	.....	90	120	.....	.....	.....
	.....	.....	\$17,963	43	7	50	.....	.....	.....	\$14,370	.....	3	.....
	\$1 25	.....	.....	.....	.....	.....	\$0 70	.....	183	.....	.....	.....	.....

Jersey County, 1899—Concluded.

Number.	VALUES.			EMPLOYES.			Price paid per gross ton hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	ACCIDENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.
1	\$1 50	.....	\$1,350	4	1	5	\$0 87	S. M.	150	\$1,000	.....	1	.....
2	1 50	.....	720	.....	.....	.....	.....	.....	130	600	.....	1	.....
3	1 50	.....	1,125	.....	.....	.....	.....	.....	150	850	.....	.....	.....
4	1 50	.....	780	3	.....	3	.....	.....	160	650	.....	.....	.....
5	1 50	.....	1,800	4	1	5	.....	.....	150	1,500	.....	1	.....
6	1 50	.....	300	2	.....	2	.....	.....	160	250	.....	.....	.....
	.....	.....	\$6,075	18	2	20	.....	.....	.....	\$4,850	.....	3	.....
	\$1 50	.....	.....	.....	.....	.....	\$0 87.5	.....	150	.....	.....	.....	.....

## Macoupin County—Fifth District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	(Geological) No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	Consol Coal Co., 6	Staunton	322	6	5	Sh.	St.	M.	* 271,664	195,337	76,327
2	" " " 7	"	360	6.8	5	"	"	"	* 160,104	219,407	40,697
3	" " " 8	Mt. Olive	410	8	5	"	"	"	* 225,419	163,922	61,497
4	" " " 10	"	431	8	5	"	"	"	* 150,334	104,413	46,521
5	" " Gillespie	Gillespie	355	7	5	"	"	"	* 113,907	87,629	26,278
6	" " Hornsby	Hornsby	388	6.6	5	"	"	"	* 70,344	55,204	15,140
7	Wm. Neal & Co., lessee	Bunker Hill	250	5.6	5	"	"	"	* 7,220	4,954	2,266
8	Carlinville Coal Co.	Carlinville	290	6	5	"	"	B.	34,696	19,042	15,654
9	Nilwood Coal Co.	Nilwood	325	6	5	"	"	"	13,386	10,920	2,466
10	Greenridge Mining Co.	Greenridge	350	6	5	"	"	"	59,686	35,290	24,396
11	Girard Coal Co.	Girard	354	6.6	5	"	"	M.	* 83,425	66,398	17,027
12	Virden Coal Co.	Virden	320	7.6	5	"	"	B.	82,970	50,928	32,042
13	Chi.-Virden Coal Co., 1	"	320	7.6	5	"	"	M.	* 101,422	59,772	41,650
14	Madison Coal Co., 5	Mt. Olive	435	8	5	"	"	"	* 268,077	242,067	56,010
15	Sam Curtis	Rockbridge	55	7	"	"	"	Ho.	610	610	.....
16	J. T. Harbaugh	Chesterfield	50	5.6	"	D.	Ha.	"	110	110	.....
17	Thos. Rand	"	50	5.6	"	"	"	"	80	80	.....
18	Robt. McCormick	"	50	5.6	"	"	"	"	120	120	.....
19	W. H. A. Bodi	"	50	5.6	"	"	"	"	1,440	1,440	.....
20	C. Lueking	Fosterburg	75	3.9	"	Sh.	Ho.	"	960	960	.....
21	R. R. Davis	Chesterfield	10	5.6	"	"	"	"	100	100	.....
Totals									1,646,674	1,188,703	457,971
Averages									.....	.....	.....

Whole number of openings reported in 1898, 20.

Number of new mines or places opened during the year, 1.

Whole number of openings reported for 1899, 21.

\* Machine mined at 33 cents per ton.

Macoupin County, 1899--Concluded.

Number.	VALUES.			EMPLOYES.			Price paid per screened ton—hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	ACCIDENTS		
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.	
1	\$0 90	\$0 30	\$198,701	150	87	237	.....	S. M.	238	\$118,789	1,272	17	10	
2	90	30	119,675	99	101	200	.....	.....	230	81,593	886	19	5	
3	90	30	165,979	118	122	240	.....	.....	228	101,023	931	30	1	
4	90	30	107,928	130	86	216	.....	.....	172	74,777	521	36	6	
5	95	35	92,445	84	18	132	.....	.....	236	64,450	706	15	4	
6	95	35	57,743	64	42	106	.....	.....	179	41,675	434	10	4	
7	1 12.5	30	6,235	8	5	13	.....	.....	240	6,000	72	2	.....	
8	90	35	22,626	60	23	83	\$0 40	S. M.	130	24,449	1,062	10	.....	
9	75	32	8,979	46	11	51	40	.....	110	8,990	425	5	1	
10	75	25	32,567	100	25	125	40	.....	93	18,260	1,875	10	2	
11	75	30	54,907	100	57	157	.....	.....	167	49,253	1,399	21	.....	
12	75	30	47,809	100	28	128	40	.....	195	48,369	1,965	11	1	
13	70	30	54,335	170	76	246	.....	.....	126	62,000	1,301	25	1	
14	80	35	189,257	160	60	220	.....	.....	263	119,107	1,035	24	2	
15	1 25	.....	763	4	.....	5	75	.....	140	600	.....	.....	1	
16	1 25	.....	138	1	.....	1	75	.....	75	100	.....	.....	.....	
17	1 25	.....	100	1	.....	1	75	.....	70	75	.....	.....	.....	
18	1 25	.....	150	1	.....	1	75	.....	80	110	.....	.....	.....	
19	1 25	.....	1,800	6	.....	6	75	.....	120	1,600	60	1	.....	
20	1 25	.....	1,200	4	.....	5	75	.....	150	1,000	.....	.....	.....	
21	1 25	.....	125	1	.....	12	75	.....	60	100	.....	.....	.....	
	.....	.....	\$1,163,479	1,401	774	2,175	.....	.....	.....	\$849,621	13,914	231	2	37
	\$0 85.9	\$0 31	.....	.....	.....	.....	\$0 40.6	.....	157	.....	.....	.....	.....	.....

## Montgomery County—Fifth District, 1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	Coffeen Coal & Coke Co.	Coffeen .....	534	8	5	Sh.	†	B.	125,000	75,000	50,000
2	Hillsboro Coal Co. ....	Hillsboro .....	440	7.6	5	..	..	M.	*127,035	78,221	50,814
3	Litchfield M. & M. Co. ....	Litchfield .....	500	3.6	..	..	..	..	5,820	4,200	1,620
4	Litchfield M. & P. Co. ....	" .....	684	..	..	..	..	B.	52,020	36,414	15,606
5	Montgomery Coal Co. ....	Paisley .....	534	8	5	..	..	..	40,036	24,540	15,496
6	Wm. Jamison & Co. (L)..	Raymond .....	434	3.3	..	..	..	M.	74,290	3,238	1,072
Totals .....									354,201	219,593	134,608
Averages .....											

Whole number of openings reported in 1898, 6.

Whole number of openings reported for 1899, 6.

\* Mined by machine at 33 cents per ton.

† Mined by machine at 50 cents per ton.

## Morgan County—Fifth District, 1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	F. Wagstaffe .....	Murryville ...	70	4.6	5	Sh.	Ho.	M.	3,200	3,200	.....
2	W. F. Fisher .....	" ..	26	4	5	Sh.	..	..	1,600	1,600	.....
Totals .....									4,800	4,800	.....
Averages .....											.....

Whole number of openings reported in 1898, 1.

Number of new mines or places opened during the year, 1.

Whole number of openings reported for 1899, 2.

Montgomery County, 1899.—Concluded.

Number.	VALUES.			EMPLOYES.			Price paid per gross ton—hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	ACCIDENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.
1	\$0 75	\$0 40	\$76,350	125	69	194	\$0 40	S.M.	280	\$72,532	3,300	18	.....
2	75	40	77,491	75	40	115	.....	.....	271	74,220	1,007	11	.....
3	1 00	50	5,010	20	15	35	48	.....	90	5,000	.....	12	.....
4	80	40	35,374	70	32	102	40	.....	180	30,210	1,860	6	1 5
5	75	25	22,279	47	15	62	35	.....	198	21,910	200	3	.....
6	1 50	30	5,149	8	5	13	.....	.....	260	4,000	.....	.....	.....
.....	.....	.....	\$221,553	345	166	511	.....	.....	.....	\$207,871	6,367	40	2 7
.....	\$0 78	\$0 38	.....	.....	.....	.....	\$0 39.31	.....	213	.....	.....	.....	.....

Morgan County, 1899.—Concluded.

Number.	VALUES.			EMPLOYES.			Price paid per gross ton—hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	ACCIDENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.
1	\$1 50	.....	\$4,800	7	1	8	\$0 87.5	S.M.	225	\$3,700	.....	1	.....
2	1 50	.....	2,400	4	1	5	87.5	.....	210	2,000	.....	1	.....
.....	.....	.....	\$7,200	11	2	13	\$0 87.5	.....	.....	\$5,700	.....	2	.....
.....	\$1 50	.....	.....	.....	.....	.....	.....	.....	218	.....	.....	.....	.....

## Sangamon County—Fifth District, 1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	Auburn Coal Co.....	Auburn.....	268	7.6	5	Sh.	S.	B.	15,304	11,050	4,254
2	C.-Virden Coal Co., No. 2.	.....	280	7.6	5	..	..	..	102,457	50,210	52,247
3	Barclay C. & M. Co.....	Barclay.....	249	5.9	5	..	..	..	86,933	74,237	12,696
4	Cantrall Coöp. Coal Co....	Cantrall.....	213	6	5	..	..	..	100,916	78,080	22,836
5	Murphy & Senseney (L.)	Chatham.....	259	7	5	..	..	..	18,150	12,100	6,050
6	Wabash Coal Co.....	Dawson.....	259	5.4	5	..	..	..	107,631	70,343	37,288
7	Black Dia'd Coal & T. Co	Hes Junction.	215	5.9	5	..	..	..	116,170	91,010	25,160
8	Junction Mining Co.....	.....	250	5.9	5	..	..	..	68,501	50,414	18,087
9	Woodside Coal Co.....	Springfield...	250	5.9	5	..	..	..	80,000	60,000	20,000
10	Horse Creek Coal Co.....	Pawnee.....	324	7	5	..	..	..	8,900	6,675	2,225
11	Sp. & P. Plains Coal Co...	Pl. Plains....	129	5.6	5	..	..	..	9,655	6,436	3,219
12	Clear Lake Coöp. Coal Co	Bissell.....	220	5.9	5	..	..	..	62,250	46,688	15,562
13	Riverton Coal Co., No. 2.	Riverton.....	232	5.9	5	..	..	..	208,569	139,693	68,876
14	Spaulding Coal Co.....	Spaulding....	238	5.9	5	..	..	..	91,864	85,191	6,673
15	C. Coöp. Coal Co., No. 1.	Springfield...	240	5.9	5	..	..	..	24,723	21,776	2,947
16	C. Coöp. Coal Co., No. 2.	.....	240	5.9	5	..	..	..	131,752	405,087	26,665
17	Citizens' C. M. Co., "A"...	.....	210	5.9	5	..	..	..	97,599	70,678	26,921
18	Citizens' C. M. Co., "B"...	.....	205	5.4	5	..	..	..	78,493	51,631	26,862
19	Sangamon Coal Co.....	.....	265	5.9	5	..	..	..	126,677	98,739	27,938
20	Springfield Coöp. Coal Co	Ridgely.....	250	5.9	5	..	..	..	70,496	52,872	17,624
21	Springfield C. M. & T. Co	Springfield...	250	5.9	5	..	..	..	111,167	95,982	15,185
22	Starns Coal Co.....	.....	250	5.9	5	..	..	..	131,458	88,775	42,683
23	Springfield Iron Co. (L.)	Ridgely.....	245	5.9	5	..	..	..	108,146	65,000	43,146
24	West End Coal Co.....	Springfield...	150	5.9	5	..	..	..	68,771	56,717	12,054
25	Williams Coal Co.....	Williamsville.	269	5.6	5	..	..	..	55,790	37,194	18,596
26	Gordon & Duncan.....	Saulsbury....	150	5.6	5	..	..	..	1,200	1,000	200
Totals.....									2,083,572	1,527,578	55,994
Averages.....											

Whole number of openings reported in 1898, 25.

Number of new mines or places opened during the year, 1.

Whole number of openings reported for 1899, 26.

Sangamon County, 1899.—Concluded.

Number.	VALUES.			EMPLOYES.			Price paid per gross ton—hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	Number of horses or mules employed in or about the mine.		ACCIDENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal	Non-fatal.		
1	\$0 80	\$0 20	\$9,691	19	6	25	\$0 40	S. M.	220	\$8,322	450	3	.....		
2	80	30	50,821	157	43	200	40	.....	103	50,000	3,098	15	1		
3	80	40	64,468	90	25	115	40.7	.....	247	52,106	3,133	15	1		
4	80	40	63,135	70	27	97	40.7	.....	275	57,842	3,526	17	.....		
5	80	40	12,100	30	9	39	40	.....	144	12,600	525	4	.....		
6	70	40	64,155	86	32	118	40.7	.....	209	63,700	4,076	12	1		
7	80	40	82,872	86	25	111	40.7	.....	193	65,139	3,877	17	1		
8	80	40	47,566	90	19	109	40.7	.....	160	42,667	2,472	7	1		
9	85	40	59,000	85	31	116	40.7	.....	200	48,000	2,965	15	.....		
10	1 25	50	9,456	5	2	7	40.7	.....	235	6,000	296	2	.....		
11	90	35	6,919	24	10	34	40.7	.....	200	6,237	375	3	.....		
12	75	30	39,685	50	19	69	40.7	.....	231	3,270	1,992	7	.....		
13	76	49	139,916	163	41	204	40.7	.....	223	113,950	7,470	17	1		
14	80	40	70,822	75	23	98	40.7	.....	204	61,020	3,672	10	2		
15	75	35	18,617	20	12	32	40.7	.....	248	17,014	907	5	.....		
16	85	40	90,990	95	43	138	40.7	.....	289	80,980	4,957	9	2		
17	72	25	57,678	70	21	91	40.7	.....	197	47,299	3,574	8	1		
18	72	25	43,890	70	18	88	40.7	.....	190	38,448	2,858	6	.....		
19	78	36	87,074	110	33	143	40.7	.....	211	85,000	4,370	14	1		
20	90	35	53,753	55	22	77	40.7	.....	200	52,000	3,240	10	1		
21	70	45	74,020	90	34	124	40.7	.....	216	64,226	3,705	.....	.....		
22	85	40	91,532	102	39	141	40.7	.....	220	65,808	4,744	14	3		
23	90	42	77,021	100	50	150	40.7	.....	296	65,259	3,630	19	2		
24	82	31	50,245	80	30	110	40.7	.....	175	39,727	2,253	9	.....		
25	80	40	37,177	50	18	68	40.7	.....	230	26,379	1,720	8	.....		
26	1 25	75	1,400	2	1	3	40.5	.....	150	1,200	40	.....	.....		
.....	.....	.....	81,403,092	1,874	633	2,567	.....	.....	.....	\$1,174,119	73,925	246	6	13	
.....	\$0 78.7	\$0 36.1	.....	.....	.....	.....	\$0 40.7	.....	210	.....	.....	.....	.....		

## Scott County—Fifth District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	Wm. H Bates & Co.....	Winchester ..	96	2 6	1	Sh.	S.	B.	18,715	17,990	725
2	Jackson Jones.....	"	30	2 6	1	D.	Hd.	::	402	402	.....
3	Wm. Parker.....	"	25	2 6	1	::	::	::	720	720	.....
4	John McGuire .....	Aley .....	40	2 6	1	::	::	::	780	780	.....
Totals .....									20,617	19,892	725
Averages.....											

Whole number of openings reported in 1898, 5.

Number of mines exhausted or abandoned during the year, 1.

Whole number of openings reported for 1899, 4.

## Shelby County—Fifth District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	Moweaua C. M. & M. Co.	Moweaua....	618	5 4	5	Sh.	S.	*	† 98,637	57,865	40,772
2	John Richardson .....	Shelbyville...	90	2 3	15	::	Hc.	M.	2,250	2,250	.....
3	M. Brophy .....	"	90	2 3	15	::	::	::	1,696	1,696	.....
4	B. F. Stretch .....	"	100	2 3	15	::	::	::	720	720	.....
5	Samuel Igo .....	"	60	2 3	15	::	::	::	522	522	.....
6	John H. Galligher.....	Mode.....	60	2 3	15	::	::	::	1,620	1,620	.....
7	John Stockdale .....	Robinson Cr'k	45	2 3	15	D.	Hd	::	320	320	.....
Totals .....									105,765	64,993	40,772
Averages.....											

\* Both.

† Mined by machines 49,081 tons, at 25.5 cents per ton.

Whole number of openings reported in 1898, 8.

Number of mines exhausted or abandoned during the year, 1.

Whole number of openings reported for 1899, 7.



Scott County, 1899—Concluded.

Number.	VALUES.			EMPLOYES.			Price paid per gross ton—hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	Number of horses or mules employed in or about the mine.	ACCI-DENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.							Fatal.	Non-fatal.
1	\$1 30	\$0 50	\$23,750	35	9	44	\$0 80	S-M.	302	\$20,130	785	.....	.....	
1 50	.....	.....	603	2	.....	2	1 00	.....	126	500	.....	.....	.....	
1 50	.....	.....	1,080	4	.....	4	1 00	.....	220	800	.....	.....	.....	
1 50	.....	.....	1,170	3	.....	3	1 00	.....	240	1,000	.....	.....	.....	
.....	.....	.....	\$26,603	44	9	53	.....	.....	.....	\$24,429	785	.....	.....	
.....	\$1 32	\$0 50	.....	.....	.....	.....	\$0 81.8	.....	222	.....	.....	.....	.....	

Shelby County, 1899—Concluded.

Number.	VALUES.			EMPLOYES.			Price paid per gross ton—hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	Number of horses or mules employed in or about the mine.	ACCI-DENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.							Fatal.	Non-fatal.
1	\$1 05	\$0 48	\$80,329	80	61	141	\$0 45	S-M.	275	\$61,408	2,800	9	.....	
1 25	.....	.....	5,063	10	1	11	1 37.5	.....	218	4,000	.....	1	.....	
1 25	.....	.....	3,816	4	1	5	1 37.5	.....	230	3,000	1	1	.....	
1 25	.....	.....	1,620	4	1	5	1 37.5	.....	150	1,200	.....	.....	.....	
1 25	.....	.....	1,175	3	1	4	1 37.5	.....	200	800	1	1	.....	
1 25	.....	.....	3,645	4	1	5	1 37.5	.....	210	3,000	1	1	.....	
1 25	.....	.....	720	2	.....	2	1 37.5	.....	160	600	.....	.....	.....	
.....	.....	.....	\$96,368	107	66	173	.....	.....	.....	\$74,008	2,805	13	.....	
.....	\$1 18	\$0 48	.....	.....	.....	.....	\$0 54.4	.....	205	.....	.....	.....	.....	

## Recapitulation by Counties--

COUNTIES.	MINES.					PRODUCTS.					VALUES.	
	Number of mines.	Shipping mines.	Mines in local trade.	New mines.	Abandoned mines.	Total tons produced.	Tons of lump coal.	Tons of other grades.	Tons shipped.	Tons consumed or wasted at the mines.	Average value per ton of lump at the mines.	Average value of other grades per ton at the mines.
Calhoun . . . .	1	1				4,118	4,118				\$1 50	
Christian . . . .	6	6				572,459	432,214	140,245	483,760	38,329	0 74.7	\$0 32.9
Greene . . . . .	8	8	3	1		14,370	14,370				1 25	
Jersey . . . . .	6	6	5			4,050	4,050				1 50	
Macoupin . . . .	21	13	8	1		1,646,674	1,188,703	457,971	1,413,611	158,069	0 85	0 31
Montgomery . .	6	5	1			354,201	219,593	134,608	298,131	13,506	0 78	0 38
Morgan . . . . .	2	2	1			4,800	4,800				1 50	
Sangamon . . . .	6	5	1	1		2,083,572	1,527,578	555,994	1,794,636	61,238	0 78.7	0 36.1
Scott . . . . .	4	1	3	1		20,617	19,892	725	16,590	500	1 32	0 50
Shelby . . . . .	7	1	6	1		105,765	64,993	40,772	88,507	3,812	1 18	0 48
Totals . . . . .	87	51	36	11	3	4,810,626	3,480,311	1,330,315	4,095,235	275,454		
Averages . . . . .											\$0 8215	\$0 3456

Whole number of openings reported in 1898, 79.

Number of new mines or places opened during the year, 11.

Number of mines exhausted or abandoned during the year, 3.

Whole number of openings reported for 1899, 87.

*Fifth District—1899.*

Aggregate value of total product.....	EMPLOYES.			Average number of days of active operation.	Average price paid per gross ton for hand mining	Total wages paid during the year to all employes excepting office help.	Number of kegs of powder used.	Number of horses and mules employed in and about the mines.	CASUALTIES		MACHINES.		
	Number of miners.	Number of other employes.	Total employes.						Killed.	Injured.	Number of mines using machines.	Number of machines in use.	Total tons cut by machines.
\$6,177	8	12	20	261	.....	\$6,177	112	4	.....	.....	1	2	1,118
369,310	570	309	879	183	\$0 29	306,820	2,848	71	4	6	1	14 *	255,000
17,963	43	7	50	183	0 70	11,370	.....	8	.....	.....	.....	.....	.....
6,075	18	2	20	150	0 87.5	4,850	.....	3	.....	.....	.....	.....	.....
1,163,479	1,401	774	2,175	157	0 40.6	819,621	13,914	231	2	37	10	115 †	1,452,516
221,553	345	166	511	213	0 39.3 ‡	207,871	6,367	40	2	7	2	7 †	131,325
7,200	11	2	13	218	0 87.5	5,700	.....	2	.....	.....	.....	.....	.....
1,403,392	1,874	633	2,507	210	0 40.7	1,174,119	73,925	246	6	13	.....	.....	.....
26,603	44	9	53	222	0 81.8	22,429	785	.....	.....	.....	.....	.....	.....
96,368	107	66	173	205	0 54.4	74,005	2,805	13	.....	5	1	6	49,081
\$3,318,120	4,421	1,980	6,401	.....	.....	\$2,665,965	100,756	621	14	68	15	141	1,892,040
.....	.....	.....	.....	190	\$0 40.3	.....	.....	.....	.....	.....	.....	.....	.....

\* Price paid for machine mining, 30 cents per ton.  
 † Price paid for machine mining, 33 cents per ton.  
 ‡ Price paid for machine mining, 25.5 cents per ton.  
 Average price paid for machine mining for the district, 32.4 cents per ton.



## SIXTH INSPECTION DISTRICT—1899.

Counties: St. Clair, Madison, Clinton, Marion, Bond.

John Dunlop, *Inspector*, Centralia.

HON. DAVID ROSS, *Secretary*,

*State Bureau of Labor Statistics, Springfield, Ill.:*

SIR:—In compliance with section 12 of the general mining law of the State of Illinois, I have the honor to submit to you the fourth annual report of the Sixth Inspection District for the year ended June 30, 1899, comprising the coal producing counties of St. Clair, Madison, Clinton, Marion and Bond.

This report gives tabulated statements by counties of the number of mines operated during the year, showing the average number of miners and other employes; the total output of all grades of coal; the average value of coal at the mine, and the aggregate value of total product; the number of shipping and local mines; the casualties in and around the mines; the average number of days worked; the quantity of powder used; the number of machines in use, and the total tons produced by machines.

The following summary, as taken from the statistical tables, is given for the year 1899:

Number of counties in which coal is produced.....	5
Total number of mines.....	104
Shipping mines.....	72
Local mines.....	32
New mines.....	13
Abandoned mines.....	7
Total tonnage.....	4,283,258
Tons of lump coal.....	3,294,077
Tons of other grades.....	989,181
Tons shipped.....	3,673,703
Average value of lump coal per ton at the mine.....	\$0.7169
Aggregate value of total product.....	\$2,653,912
Number of miners.....	3,583
Number of other employes.....	1,425
Total employes.....	5,008
Average number of days of active operation for all mines.....	196.8
Number of kegs of powder used.....	68,883
Fatal accidents.....	22
Non-fatal accidents.....	92
Number of widows.....	14
Number of orphans.....	38
Number of mines using machines.....	23
Number of machines in use.....	144
Total tons cut by machines.....	2,199,954
Number of tons produced to each fatal accident.....	194,694
Number of tons produced to each non-fatal accident.....	46,557
Number of persons employed to each fatal accident.....	228
Number of persons employed to each non-fatal accident.....	54

Coal production by counties, with increase or decrease in each year for the years ended June 30, 1898, and 1899:

COUNTIES.	Total Output of all Grades of Coal in Tons.		Increase.	Decrease.
	1898.	1899.		
St. Clair.....	1,849,474	1,600,752	248,722	.....
Madison.....	1,403,977	630,769	773,208	.....
Clinton.....	434,735	417,584	17,151	.....
Marion.....	494,117	714,513	.....	220,396
Bond.....	100,955	96,314	4,641	.....
Total.....	4,283,258	3,459,932	1,043,722	220,396
Increase.....				1,043,722
Decrease.....				220,396
Net increase.....				823,326

The counties of St. Clair, Madison, Clinton and Bond show an increase of 1,043,722 tons over the output of last year, and Marion shows a decrease of 220,396 tons, leaving the net increase for the district 823,326 tons, or 23.8 per cent.

The reason for the decrease in Marion is that the general strike of 1898 continued until December at Centralia, and at Sandoval to January 8, 1899, when work was resumed.

The number of days lost on account of strikes at the above named places was 266, and 20 days were lost at Oden. At the present time the district is free from strikes, and the indications are that the year now entered on will show a large increase in production.

During the last year the production of coal cut by machines has increased 20 per cent. This increase is due to the change of mining machines being placed where drills were formerly used, with one exception. Also the number of machines being put in at other mines has increased 20 per cent over that of last year, and so long as present conditions remain the tendency is that each year will see more machines being put in. The reason for this apparent tendency is that section 1 of an act providing that all coal mined shall be paid for is being complied with throughout the entire district.

The percentage of fine coal produced by machines varies from 20 to 30 per cent. The percentage of fine coal produced by shooting off the solid varies from 33 to 45 per cent.

From these figures it will be seen that the amount of saleable coal from machines is increased 15 per cent. Added to this the differential allowed varies from 17 to 19 per cent. With this enhancement in favor of machines, it will be seen that the time is not far distant when machines will be adopted in all mines that produce coal for commercial purposes.

*Improvements.*—The schedules will show a small amount of coal taken out at New Baden and Germantown, Clinton county. The shaft at New Baden is only 6x9 feet; it is intended for an escapement shaft. It is expected

that work will be commenced on the main hoisting shaft during September. The Germantown Coal Co. has recently built up the top works at its mine and has commenced shipping coal.

The Henrietta Coal Co., now known as the Penny Coal company, has put down an escapement shaft and is making preparations to put a fan at the top of the same. The company has also equipped its mine with electric mining machines, installed by the Morgan & Gardner Electric company. The machines are now working at a great disadvantage; the roof, which is soapstone varies in thickness from 6 inches to 2 feet and is very brittle, requiring props to be placed close to the face of the coal.

The following companies have put electric machines in their mines: The Tirre & Sons Coal Co., Lenzburg; the Johnson Coal & Mfg. Co., Marissa; and the Hippard Coal company, Belleville, all in St. Clair county. The Sorrento Prospecting and Mining company, Sorrento, Bond county, has added to its plant two electric mining machines, put in by the Link-Belt Electric company. The Conrad Reinecke Coal company, Belleville, has replaced drills with electric cutting machines, put in by the Jeffrey Electric company.

The Missouri & Illinois Coal company has put in three mining machines in the mine at Wilderman, where formerly air drills were operated.

The Kalb Coal Co. of Mascoutah, has put in four mining machines where it formerly had air drills.

*Escapement Shafts.*—The following escapement shafts have been put down during the year: The Trenton Coal, Light & Power company, Trenton, Clinton county, and the Hydraulic Press Brick company, known as the Independent Coal Co., Collinsville, Madison county.

The sinking of the escapement of the Kinmundy Coal company, Kinmundy, Marion county, is still in operation. The depth at present is nearly 700 feet.

The following escapement shafts caved in, owing to the severe winter, and the shaft timbers being a little decayed, but all have been reopened: the escapement shaft at Zildolph's mine, Marissa, St. Clair county, and one at the Brookside mine, Troy, Madison county, both owned by the Consolidated Coal Company.

*New Mines in Contemplation.*—The St. Louis & O'Fallon Coal company has sunk a main and escapement shafts. It is located in what is called "Nigger Hollow," one and a half miles northeast of Birkner, St. Clair county. The size of the main shaft is 7½ x 15 feet, and the escapement shaft 5 x 10 feet. This is the Belleville seam known as Number 6.

The company is at present grading railroad bed to the mine and has possession of a right of way between East St. Louis and the mine.

The Donke Bros. Coal & Coke Co., Belleville, St. Clair county, has started to sink a shaft. The size is 9 x 18 feet in the clear. It is the intention to equip it with all the modern and latest improved machinery, steel top works and electric mining machines, and to place their coal in the market over their own railroad. The shaft is located nearly two miles west of Collinsville, Madison county.

*Fatal Accidents.*—July 15, 1898, John Radenacher was instantly killed by a fall of slate in the Mt. Olive and Staunton Coal company's mine, Staunton, Madison county. Deceased was 32 years of age and leaves a widow and five children.

August 29, 1898, Louis Byman, a miner, working in the Heinz Bluff mine of the Consolidated Coal Co., Collinsville, Madison county, was killed by falling clod. There were three men working in one place and they had three cars to load. The two cars on the inside were loaded and the car on the outside was left unfinished. They then started to take down a piece of loose clod, but as they heard the driver coming for their cars, they started to finish loading the outside car. The deceased went underneath the loose clod, when it gave way, falling on him. His age was 33 years; he leaves a widow and one child.

September 19, 1898, John Stiff, a miner in the Pittsburg mine of the Consolidated Coal Co., Belleville, St. Clair county, was injured internally by falling slate, and died three hours afterward from the effects of the same. He was 18 years of age and single.

October 5, 1898, Ben Anderson, a miner in Madison No. 3 mine, of the Madison Coal company, Edwardsville, Madison county; while working at the face of his room a piece of clod weighing nearly 1,000 pounds gave way and fell on him, killing him instantly. He had only been in this mine three days; his age was 36 years; he leaves a widow and three children.

October 10, 1898, Ed. Floyd, a cager at the Independent Coal company's mine, Collinsville, Madison county, was standing at the bottom of the shaft waiting for the cage to land. A driver coming out to the bottom on the other side of the shaft cried "Look out for that car!" Floyd started to cross the bottom when the cage landed on him, fracturing his back. He was taken to a hospital in St. Louis, where he died June 10, 1899. He was 35 years of age and single.

October 12, 1898, John Kolar, a miner in the Heinz Bluff mine, of the Consolidated Coal company, Collinsville, Madison county, was working at the face of a room, loading coal, when a piece of clod gave way which fell on him, causing instant death. His age was 46 years; he leaves a widow and one child.

October 24, 1898, Frank E. Bayer, a top laborer, was killed at the Home Trade Coal company's mine, Edwardsville, Madison county. A car had been taken off the cage at the lower landing. After it was emptied the deceased started to push the car back on the cage, but got on the wrong track, and not taking any notice he pushed the car into the shaft, and was dragged down with it, causing his death. A bar was used for the purpose of closing the entrance to the shaft, but this had been taken down and deceased forgot to replace it. His age was 24 years. He leaves a widow and one child.

October 27, 1898, Nick Loquitt, a miner in the Darrow mine of the O'Fallon Coal and Manufacturing Co., St. Clair county, was injured by falling soapstone; he was mining a shot in the top coal; the roof was known to be dangerous, and he was advised by the mine examiner to use extra precaution while mining. The soapstone gave way, falling on its outer edge, then fall-



ing on him, squeezing him against the coal. He died 18 hours afterward. There were no bones broken and the attending physician said his death was caused by heart disease.

November 17, 1898, John W. Reed, check-weighman at the Madison Coal company's No. 3 mine, Edwardsville, Madison county, was killed by falling down the shaft while with the top man on the ground landing. The engineer hoisted the cage with a loaded car; there being no one to put in stops for the cage to rest on, the engineer put on brakes, also steam to prevent it from lowering. The two men, going to the top landing, found the cage on a level with the floor. The top man, being first, went to the front end and put down the keeper. The deceased was at the rear end and began to push the ear, when the front end went off the cage. The cage then started upward and the car fell back into the shaft, carrying the deceased with it. He was found lying inside of the empty car, dead. His age was 53 years, and he leaves a widow and one child.

November 18, 1898, Thomas Taylor, mine manager at Joseph Taylor's mine, O'Fallon, St. Clair county, was instantly killed by falling roof. A squeeze was on in a part of the mine and he went to examine where the roof had come down. He was on top of the rock when another piece fell on him. No one was present but his son, who could not lift it off, and by the time help arrived he was dead. Deceased was 55 years of age and leaves a widow and three children.

December 5, 1898, George Lowry, a loader, was killed in the South mine, operated by the Centralia Mining & Mfg. Co., Centralia, Marion county, by a fall of slate while working at the face, loading a car. A hole had been drilled in the right hand corner and had pierced the roof, striking a slip in the slate. This being unknown, deceased was working inside when it gave way, killing him and injuring his partner. His age was 25 years, he leaves a widow and two children.

December 19, 1898, Joseph Straubinger, a miner in Conrad Straubinger's mine, French Village, St. Clair county, was instantly killed by falling drift coal. He was 31 years of age and single.

December 27, 1898, Frank Schindler, a miner working in the Mount Olive & Staunton Coal Co's mine, Staunton, Madison county, was killed by falling clod; he was wedging down a piece of clod and had only struck the wedge two blows when it fell striking edgewise on the floor, then rolled over onto him. He lived only a few hours. Deceased was 43 years of age, and leaves a widow and seven children.

January 12, 1899, Frank Houille was engaged as top boss at the No. 2 mine of the Madison Coal Company, Glen Carbon, Madison county. In moving a railroad car, loaded with lumber, which had a defective brake, unknown to him until after it was started; deceased ran forward to a coal car immediately in front of the lumber car, to set the brake; while doing so the car with lumber bumped against the coal car knocking him off to the ground between the rails, with his right leg across the rail; before he could recover himself the front wheel passed over his leg about the knee, making amputation necessary; he died during the operation. He was 23 years of age and single.

January 19, 1899, Adolph Beible, a miner, working in the Rentehler mine of the Mo. & Ill. Coal Company, Belleville, St. Clair county, was seriously injured by a prop which was knocked out by falling coal at the face of his room: he died about two hours afterward. Deceased was 29 years of age, married, and leaves a widow.

January 23, 1899, William Hopper, a machine helper, working in the Mount Olive & Staunton Coal Company's mine, Staunton, Madison county, had his left leg caught in the chain of the mining machine while in motion, mashing it so that amputation was deemed necessary. Death resulted the next day, half an hour after the amputation. He was 24 years of age and leaves a widow and two children.

January 28, 1899, August Phillips, a miner working in the No. 4 mine of the Madison Coal Co., Glen Carbon, Madison county, in shooting the coal down the day before, props were knocked out, which should have been replaced before commencing to load coal, as it was known that the roof was dangerous. Deceased wanted to load some coal before doing so, when the roof gave way, falling on him causing his death. He was 22 years of age and unmarried.

February 2, 1899, William Fickert, a miner working in the Mount Olive & Staunton Coal Company's mine, Staunton, Madison county, was killed by a fall of slate at face of his room. His age was 50 years; he leaves a widow and six children.

March 18, 1899, James Dubes, a miner, working in the Henrietta Coal Co's mine, Edwardsville, Madison county, was killed by falling coal. He and his partner were wedging coal down; they were on their knees doing this work when a piece of coal fell off the face of the room on deceased, rupturing a blood vessel; he died the next morning at three o'clock. His age was 34 years, and leaves a widow and two children.

March 29, 1899, Angelo Biado, a miner, working in the No. 4 mine of the Madison Coal Co., Glen Carbon, Madison county, was killed by a pit car. He was on his way home after his day's work. While traveling out the entry near the bottom of the shaft, a driver was coming out with a trip which was made up of three cars; at the place mentioned there is a small grade of one per cent in favor of the load; when the driver was about to make up with him he stepped aside to let the driver and trip pass; thinking the trip had passed, he stepped onto the entry, making his way out, when a car that had become uncoupled from the trip ran him down causing his death. He was 28 years of age and single.

May 8, 1899, Joseph Mowe, a machine helper in the Bennett mine, of the Lebanon Coal & Mining Association, Lebanon, St. Clair county, was killed instantly by a tunnel machine falling on him; the machine was reversed to bring back the thread bar and cutter, the braces were loosened and the machine was again given air to start cutting; it not being fastened down, the machine was turned over, falling on the deceased causing his death. He was 22 years of age and single.

May 29, 1899, Wm. Risinger, a loader in the Odin Coal Co.'s mine, Odin, Marion county, while loading coal at the face of his room, a piece of top coal gave way, falling on him, causing internal injuries from which he died the following day. His age was 35 years; he leaves a widow and three children.

Another fatal accident occurred, but the deceased was not an employé at the mine. June 21, 1899, Homer E. Wood, a boy, resident of Bethalto, while playing around the top at John James' mine at that place, fell down the shaft a depth of 76 feet, causing instant death. There seems to be doubt in the minds of some persons that were well acquainted with the boy, as to whether it was done intentionally or not. He was 15 years of age.

It will be noticed in this report that a large number of the fatal accidents have occurred in Madison county, which may be partly due to the system of mining being changed during the year. The system of mining prior to this year was, that a certain number of men were allowed after a machine, and each workman had special work to do; experienced men were selected to do the timbering and shooting, and inexperienced men did the loading; and, judging from the past record, it would seem that this brought good results, as only three fatal accidents were reported during the year 1897, and none in the year 1898. The present system is that the men do their own shooting and timbering, and the result, as will be seen from this report, is that men who had to timber and do their own shooting had no experience in that kind of work. The roof throughout the coal field of Madison county is of a dangerous nature; there is not a mine free from clod or soapstone, which varies in thickness from six inches to four feet, and is very brittle and full of slips; the greatest care has to be exercised in timbering the roof properly.

It will also be noticed that the production of Madison county has increased upwards of 122 per cent over that of last year, and as a result has increased the responsibilities of the State Inspector.

During the year I have visited Monroe, Effingham and Jasper counties. The coal in Monroe county is only local, and is found at Columbia and New Hanover; it is three feet in thickness, and has not been worked for two and a half years. In Effingham county there is no coal being mined. A seam was found on the bottom of the Little Wabash river, six miles from Effingham; it is about 48 inches in thickness; the seam is probably No. 15.

In Jasper county, at Newton, the county seat, I found two small mines in operation. Coal has been mined at this place for the last six years. The coal is found in a ridge, the height of which is about 60 feet above the bottom lands on each side. The breadth of the ridge, where one of the mines is located, is only 100 feet. The ridge extends north and broadens out. The seam is 30 inches in thickness, and to measure from the top of the ridge to the coal seam, it will average 50 feet in depth. The number of the seam is probably 16.

Respectfully submitted,

JOHN DUNLOP,

*State Inspector of Mines, Sixth District.*

## Fatal Casualties—Sixth District—1899.

Date.	Name.	Age	Occupation.	Residence (Town.)	Married.	Widow.	Children.	Single.	Dependents	Cause of Accident.
1898										
July 15	John Radenacher.....	32	Miner.....	Staunton....	1	1	5	..	6	Falling clod.....
Aug. 24	Louis Byman.....	33	"	Collinsville.	1	1	1	..	2	Falling roof.....
Sep. 19	John Stiff.....	18	"	Belleville....	..	..	..	1	..	Falling clod.....
Oct. 5	Ben Anderson.....	36	"	Edw'sville....	1	1	3	..	4	Falling clod.....
Oct. 10	Ed Floyd.....	35	Cager.....	Collinsville..	..	..	..	1	..	Descending cage....
Oct. 12	John Kolar.....	46	Miner.....	..	1	1	1	..	2	Falling clod.....
Oct. 24	Frank E. Boyer.....	24	Laborer.....	Edw'sville..	1	1	1	..	2	Falling down shaft..
Oct. 27	Nick Loquitt.....	55	Miner.....	O'Fallon....	1	1	1	..	1	Falling roof.....
Nov. 17	John W. Reed.....	53	Ch'ck w'h'g.	Edw'sville....	1	1	1	..	2	Falling down shaft..
Nov. 18	Thomas Taylor.....	55	M. m'g'r....	O'Fallon....	1	1	3	..	4	Falling roof.....
Dec. 5	Geo. Lowry.....	25	Loader.....	Centralia....	1	1	2	..	3	"
Dec. 19	Jos. Straubinger.....	31	Miner.....	French Vill..	..	..	..	1	..	"
Dec. 27	Frank Schindler.....	43	"	Staunton....	1	1	7	..	8	Falling clod.....
1899										
Jan. 12	A. R. Houlle.....	23	Top boss....	Glen Carbon..	..	..	..	1	..	Machine chain.....
Jan. 19	Adolph Beible.....	29	Miner.....	Rentchler....	1	1	1	..	1	R. R. car.....
Jan. 23	Wm. Hopper.....	24	M. helper....	Staunton....	1	1	2	..	3	Machine chain.....
Jan. 28	A. Phillips.....	22	Miner.....	Glen Carbon..	..	..	..	1	..	Falling roof.....
Feb. 2	Wm. Fickert.....	56	"	Staunton....	1	1	6	..	7	"
Feb. 18	Jas. Dubes.....	34	"	Edw'sville....	1	1	2	..	3	Falling coal.....
Feb. 29	Angelo Biado.....	28	"	Glen Carbon..	..	..	..	1	..	Pit car.....
May 8	Jos. Mowe.....	22	M. helper....	Lebanon.....	..	..	..	1	..	Tunnel machine....
May 29	Wm. Risinger.....	55	Loader.....	Odin.....	1	1	3	..	4	Falling coal.....
Totals.....					15	14	38	7	52	

## Recapitulation of Fatal Casualties—1899.

Residence.	No.	Occupation.	No.	Nature of Casualty	No.	Colliery.	No.
Belleville....	3	Cager.....	1	Descending cage...	1	Centralia M. & M. Co	1
Centralia....	1	Check w'h'n.	1	Falling coal.....	2	Consolidated Coal Co	3
Collinsville..	3	Loader.....	21	Falling clod.....	5	Henrietta Coal Co...	1
Edw'sville....	4	Mach. helper.	2	Falling down shaft	2	Home Trade Coal Co	1
French Vill..	1	Miner.....	13	Falling roof.....	7	Independence C'l Co	1
Glen Carbon..	3	Ming m'g'r....	1	Machine chain.....	2	Lebanon Coal Co.....	1
Lebanon.....	1	Top boss.....	1	Pit car.....	1	Madison Coal Co.....	5
O'Fallon....	2	"	1	R. R. car.....	1	Mt. Olive-Sta't'n C.C.	4
Odin.....	1	"	1	Tunnel machine...	1	Mo. & Ill. Coal Co...	1
Rentchler....	1	"	..	"	..	Odin Coal Co.....	1
Staunton....	4	"	..	"	..	O'Fallon Coal Co....	1
						Strawbinger, C.....	1
						Taylor, J.....	1
Totals....	22		22		22		22

*Non-Fatal Casualties—Sixth District—1899.*

Date.	Name.	Residence.	Age.	Married.	Children.	Single.	Dependents.	Character of Injury.	Time lost days.
1899									
July	7 Fred Ferguson	24 Odin	1				1	Face injured	12
..	7 Chas. Jones	26	1				1	Back injured	10
..	15 Hy Herzbache	45 Staunton	1		6		7	Leg broken	180
Aug.	13 W. J. Montrey	22 Odin	1				1	Back injured	30
..	15 John Barbaris	22 Heintzville	1		4		5	Leg injured	8
..	15 Peter Ardison	33	1		12		3	Head injured	40
..	20 Wm. Kuenckie	45 Breese	1		4		5	Leg broken	50
..	20 Wm. Godder	38 Odin	1		7		8	Arm broken	21
Sep.	19 Frank Wicka	28 Belleville	1	1				Foot injured	30
..	20 John Slaby	41 Edw'sville	1		9		10	Back injured	25
..	22 Jno. Collins	28 Marissa	1				1	Collar bone broken	30
..	22 Arthur Wader	18 Belleville	1	1				Leg injured	20
..	29 Eugene Riga	30 Glen Carbon	1				1	Head injured	14
Oct.	1 W. J. Wilson	20 Edw'sville	1		1			Body injured	60
..	3 Jos. Teifer	23 Bennett's m	1					Leg broken	60
..	4 G. Weuceski	45 Collinsville	1		2		3	Leg broken	50
..	4 Fred Ernest	40	1		3		4	Body injured	60
..	17 Fred Slenteis	54 Belleville	1		6		7	Leg broken	80
..	19 Chas. Adcox	21 Glen Carbon	1	1				Ankle injured	14
..	22 Alex Ruzer	38 Belleville	1				2	Leg broken	60
..	22 Henry Jenrick	38 Glen Carbon	1	1				Collar bone broken	42
..	24 Jos. Cummings	42 Belleville	1		2		3	Body injured	120
..	29 Thos. Chapman	40 Staunton	1		6		7	Leg broken	90
..	29 Ed Lewis	40 Virden	1		4		5	Head injured	10
..	31 John Jones	32 Troy	1	1				Foot injured	20
Nov.	5 Ed Myers	22 Glen Carbon	1		1		2	Hand injured	10
..	11 Chas. Coneper	25 Trenton	1	1				Shoulder injured	10
..	17 Luther Pigg	24 Odin	1		1		2	Hand injured	12
..	21 Chas. Kokuiski	38 Collinsville	1				1	Head injured	20
Dec.	5 Jacob Relhart	43 Centralia	1		9		10	Arm and leg broken	90
..	8 Thos. Hafkin	58 Belleville	1		8		9	Head injured	12
..	9 Jacob Schmidt	57	1		11		12	Hips injured	10
..	9 And. Seltenrich	28	1		4		4	Arm broken	40
..	13 Jas. Hubbard	25 Glen Carbon	1		1		2	Ribs injured	20
..	20 John Hetzel	34 Trenton	1		2		3	Foot injured	40
..	29 Chris Miller	18 Collinsville	1		7		8	Leg injured	14
1899									
Jan.	6 Jas. Lanahan	32 Glen Carbon	1					Arm injured	10
..	9 Chas. Haeker	45	1		6		7	Ribs injured	21
..	10 John Scherer	20 Belleville	1	1				Hips injured	200
..	11 Chas. Seagor	33 Trenton	1		4		5	Leg broken	90
..	16 Svl Bellville	26 Belleville	1		1		2	Hand injured	30
..	17 Wm. Henry	48 Staunton	1		4		5	Foot injured	20
..	20 Fred Hartcop	28 Edw'sville	1		1		2	Head injured	20
..	20 Ed Skates	22 Centralia	1					Hand injured	10
..	21 Jno. Ruff	17 Collinsville	1					Foot injured	21
..	21 Fred Rehe	30 Belleville	1					Finger injured	12
..	24 Crist Brandhoos	35 Centralia	1		3		4	Shoulder injured	20
..	25 E. Hutchison	51 Collinsville	1		7		8	Foot injured	90
Feb.	1 Chas. Taber	28 Centralia	1	1				Leg injured	20
..	2 Frank Walsh	31 Belleville	1		1		2	Face injured	90
..	4 James Collins	20	1					Leg broken	60
..	14 David Traverse	55 Lenz Stat'n	1		6		7	Ribs injured	30
..	24 Chris Greenbust	42 Edwards'v'e	1					Shoulders injured	14
..	25 Harry Poole	33 Sandoval	1					Body injured	30
..	25 Peter Skein	30	1					Body injured	30
..	27 Thos. Harvey	31 Staunton	1	1				Shoulder injured	20
Mar.	1 John Boisee	35	1		1		1	Head injured	14
..	4 Mike Holland	30	1		2		3	Shoulders injured	14
..	6 David Allen, Jr.	18 Belleville	1	1				Arm broken	60
..	11 Casper Myers	59 Centralia	1		4		5	Body injured	21
..	12 Hy Lamont	24 White Oak	1	1				Toes cut off	60
..	16 Jas. Cunningham	50 Sandoval	1				1	Head injured	30
..	16 J. L. Farris	30 Sorento	1		1		2	Body injured	20
..	16 Geo. W. Farris	25	1					Body injured	25
..	16 Bert Camron	21	1					Body injured	22

## Non-Fatal Casualties - Sixth District, 1899.

Date.	Name.	Age.	Residence.	Married.	Single.	Children.	Dependent.	Character of Injury.	Time lost - Days.
1899.									
Mar. 25	John Seiple.....	22	Central City	1	1	.....	.....	Leg injured .....	20
" 28	J. W. Lockhart...	18	Glen Carbon	1	.....	.....	.....	Head injured.....	21
April 4	Paul Roman.....	28	Glen Carbon	.....	1	.....	.....	Hand injured .....	10
" 5	Carl Foester.....	46	Centralia ...	1	.....	5	.....	Leg broken.....	90
" 6	Pat O'Hara.....	36	Sorento .....	1	.....	4	.....	Body injured.....	8
" 7	Fred Steinman...	25	Central City	1	.....	3	.....	Body injured.....	10
" 10	John Rebeck.....	35	Glen Carbon	1	.....	3	.....	Body injured.....	10
" 11	Frank Reeves.....	21	Odin .....	.....	1	.....	.....	Foot injured .....	20
" 19	Pat Kelly.....	22	Glen Carbon	.....	1	.....	.....	Collar bone broken.	42
May 4	John Campbell...	30	Sandoval .....	.....	1	.....	.....	Leg broken.....	60
" 5	Jno. Station.....	29	Trenton .....	.....	1	.....	.....	Leg injured .....	12
" 6	Albert Schbreck'r	47	Belleville...	1	.....	5	.....	Leg broken.....	90
" 9	Max Binder.....	28	Edwardsv'e	.....	1	.....	.....	Hand injured .....	20
" 10	Chas. McKinney...	40	Centralia .....	1	.....	.....	.....	Body injured.....	90
" 15	David Henry.....	27	Edwardsv'e	.....	.....	3	.....	Head injured.....	20
" 22	Leaf Logan.....	29	Glen Carbon	1	.....	1	.....	Body injured.....	21
" 22	Wm. D-werf.....	23	" .....	.....	1	.....	.....	Back injured.....	.....
" 24	John Gill .....	24	Centralia ...	1	.....	.....	.....	Foot injured .....	30
June 5	J. G. Nevers.....	35	Lenz Stat'n.	1	.....	3	.....	Shoulder injured .....	30
" 7	Chas. King.....	21	Edwardsv'e	1	.....	.....	.....	Hand injured .....	8
" 12	Jno. Hickman...	43	Belleville...	1	.....	1	.....	Head injured .....	20
" 14	J. A. Smith.....	36	Glen Carbon	1	.....	4	.....	Head injured .....	10
" 16	Dixon Crane.....	21	Odin .....	1	.....	.....	.....	Back injured.....	20
" 17	Oliver Barnett...	35	Centralia ...	1	.....	3	.....	Back injured.....	14
" 20	Louis Scharchar.	45	O'Fallon.....	1	.....	.....	.....	Leg broken.....	*
" 22	Louis Sims.....	43	Collinsville.	.....	1	.....	.....	Leg broken.....	*
" 28	Peter Koontz.....	40	Glen Carbon	1	.....	3	.....	Head injured .....	10
	Totals .....			60	32	178	239		

\* Not recovered.

Total men injured .....	92
Number not recovered .....	2
Number recovered .....	90
Total time lost by men recovered..	3,147 days.
Average time lost per man recovered.	35

*Recapitulation of Non-Fatal Casualties—Sixth District, 1899.*

Residence.	No.	Occupation.	No.	Cause of Accident.	No.	Colliery.	No.
Belleville	16	Cager	1	Cage	1	Belleville & O'F. C.C.	2
Bennetts' M.	1	Drillers	2	Falling coal	20	Bennett's mine	1
Breese	1	Drivers	21	Falling prop.	1	Breese Coal Co.	1
Central City	2	Fireman	1	Falling rock	31	Centralia M. & M. Co.	7
Centralia	9	Laborers	3	Falling wire	1	Consolidated Coal Co.	11
Collinsville	7	Loaders	7	Fell from gangway	1	Crown Coal Co.	4
Edwardsville	7	Mach. helpers	4	Flying coal	4	Dank Bros.	3
Glen Carbon	15	Mach. runners	4	Kick'd by mule	3	Glendale Coal Co.	1
Heintzville	2	Mine mgr.	1	Machine	2	Hippard Coal Co.	3
Lenz Station	2	Miners	38	Machine chain	1	Home Trade Coal Co.	1
Marissa	1	Shooters	2	Pit cars	19	Independent Coal Co.	1
Odin	7	Shovelers	4	Powder explosion	6	Lumaghi Coal Co.	3
O'Fallon	1	Timberman	1	Railroad cars	1	Madison Coal Co.	21
Sandoval	4			Tie fall'g down shift	1	Mo. & Ill. Coal Co.	1
Sorento	4					Mt. Olive & St. L.C.C.	7
Stanton	6					Muren Coal & Ice Co.	1
Trenton	4					Oak Hill Coal Co.	1
Troy	1					Odin Coal Co.	7
White Oak	1					Pettinger & Davis M. & M. Co.	4
Worden	1					Sandoval Coal Co.	4
						Skellett Coal Co.	1
						Sorento P. & M. Co.	4
						Taylor, Joseph	1
						Trenton C., L. & P. Co.	2
Totals	92		92		92		92

*Table Showing the Nature of Injuries, Number of Persons Injured, Dependents, Time Lost, with averages and Percentages—Sixth District, 1899.*

NATURE OF INJURY.	Number.	Married.	Single.	Dependents.	TIME LOST.		Per cent of injuries.
					Total days.	Average injuries, days.	
Ankles injured	1		1		14	10	1.09
Arms broken	3	2	1	12	121	40	3.26
Arm and leg broken	1	1		10	90	90	1.09
Arms injured	1		1		10	10	1.09
Backs injured	6	5	1	17	102	17	6.52
Bodies injured	14	9	5	27	429	30.6	15.23
Collar bones broken	3	1	2	1	114	38	3.26
Face injured	1	1		2	90	90	1.09
Feet injured	8	4	4	17	271	33.9	8.7
Fingers injured	2	1	1	6	22	11	2.17
Hands injured	7	4	3	7	100	14.3	7.6
Heads injured	13	13		38	241	18.5	14.13
Hips injured	2	1	1	12	210	105	2.17
Legs broken	13	9	4	42	820	63	14.13
Legs injured	7	3	4	20	274	39.1	7.6
Ribs injured	3	3		16	71	23.7	3.26
Shoulders injured	6	3	3	11	108	18	6.52
Toes cut off	1		1		60	60	1.09
Totals	92	60	32	238	3,147	34.2	100.00

## Bond County—Sixth District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTFIT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift...	Steam, horse or hand power.....	Mined or blasted.....	Total tons produced.	Tons of lump coal.	Tons of other grades
1	Sorento P. and Mfg Co...	Sorento.....	380	7.6	6	Sh.	S.	M.	100,955	58,960	41,995
	Totals.....								100,955	58,960	41,995
	Averages.....										

Price for machine mining, 94,455 tons, 33 cents per ton.

Whole number of openings reported in 1898, 2.

Number of mines exhausted or abandoned during the year, 1.

Whole number of openings reported for 1899, 1.

## Clinton County—Sixth District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.....	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	Consolidated Coal Co....	Trenton.....	333	4.10	6	Sh.	S.	M.	† 80,048	57,734	22,314
2	Trenton Coal L. & P. Co.	".....	335	4.10	6	"	"	"	† 75,658	56,744	18,914
3	Breese Coal Co.....	Breese.....	400	7.6	6	"	"	B.	203,998	181,828	22,170
4	Consolidated Coal Co....	".....	400	5	6	"	"	"	73,674	53,477	20,197
5	Muren Coal and Ice Co...	New Baden...	324	8	6	"	"	"	357	357	.....
6	Germantown Coal Co....	Germantown..	342	4	6	"	"	"	1,000	753	247
	Totals.....								434,735	350,893	83,842
	Averages.....										

\* Only in operation about one month at the date of this report. Cost of sinking the shaft, \$14,000.

† Mined by machines at 38 cents per ton.

Whole number of openings reported in 1898, 4.

Number of new mines or places opened during the year, 2.

Whole number of openings reported for 1899, 6.



*Bond County, 1899—Concluded.*

Number.	VALUES.			EMPLOYES.			Price paid per gross ton—hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	ACCIDENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.
1	\$0.897	\$0.118	\$57,842	128	53	181	\$0.40	N.M.	178	\$60,503	1,425	17	4
			\$57,842	128	53	181				\$60,503	1,425	17	4
	\$0.897	\$0.118					\$0.40		178				

*Clinton County, 1899—Concluded.*

Number.	VALUES.			EMPLOYES.			Price paid per gross ton—hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	ACCIDENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.
1	\$0.80	\$0.40	\$55,112	50	43	93		N.M.	248	\$60,135	447	11	12
2	.90	.35	55,798	65	31	96			142	47,664	549		
3	.65	.20	122,622	150	17	167	\$0.40		216	100,000	4,425	12	1
4	.45		33,409	80	29	109	40		184	39,120	1,453	5	
5	.65		232	4	6	10	40		20	*	10		
6	1.00	.50	876	4	5	9	45	M.	141	4,132	50		
			\$274,449	353	129	482				\$251,051	6,976	34	5
	\$0.715	\$0.277					\$0.40		159				

\* Not reported.

## Madison County—Sixth District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Slant, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	C. C. Co., Abbey No. 3....	Collinsville ...	116	7	6	Sh.	S.	M.	* 188,415	144,368	44,047
2	Heinz Bluff....	.....	162	7	6	.....	.....	.....	* 154,294	122,367	31,927
3	Brookside....	Troy .....	278	6	6	.....	.....	B.	* 26,461	19,793	6,671
4	Troy.....	.....	278	6	6	.....	.....	M.	* 39,768	28,464	11,244
5	McDonald.....	Worden.....	390	6	6	.....	.....	B.	942	785	157
6	No. 12.....	.....	273	6	6	.....	.....	.....	1,037	610	397
7	Madison Coal Co., No. 2..	Glen Carbon..	110	6.6	6	.....	.....	M.	* 293,559	218,934	74,625
8	No. 3..	Edwardsville..	217	6.6	6	.....	.....	.....	* 56,778	43,924	12,854
9	No. 4..	Glen Carbon..	130	6.6	6	.....	.....	.....	* 218,697	177,015	41,682
10	Mt. O. & S. Coal Co.....	Staunton.....	292	7	6	.....	.....	.....	* 219,229	165,011	54,218
11	John James.....	Bethalto.....	67	5.6	6	.....	.....	Ho	825	825	.....
12	W. R. Richardson.....	Moro.....	47	5	5	.....	.....	.....	200	200	.....
13	Latley Yeager.....	.....	59	5	5	.....	.....	.....	100	109	.....
14	Sam McDonald.....	.....	45	6	5	.....	.....	.....	85	85	.....
15	Malloy & Ball.....	North Alton..	100	2.6	1	.....	.....	.....	1,252	1,232	.....
16	Nathan Sydal.....	.....	86	2.6	1	.....	.....	.....	171	171	.....
17	John McNally.....	.....	39	2.6	1	.....	.....	.....	400	400	.....
18	Frauk Cortcamp.....	.....	69	2.6	1	.....	.....	.....	109	109	.....
19	Charles Kabel.....	Moro.....	85	4.6	5	.....	.....	.....	400	400	.....
20	Perry Meyer.....	Bethalto.....	65	4	6	.....	.....	.....	200	200	.....
21	Amos Chalengsworth....	Fosterburg....	70	3	5	.....	.....	.....	500	500	.....
22	Home Trade Coal Co.....	Edwardsville..	131	5	6	.....	.....	S.	* 4,833	3,807	1,026
23	Henrietta Coal Co.....	.....	180	7	6	.....	.....	B.	* 31,015	27,898	6,207
24	Bullock Bros.....	Collinsville ...	170	7	6	.....	.....	Ho.	2,839	2,103	736
25	Lumaghi Coal Co.....	.....	160	7	6	.....	.....	S.	99,918	66,890	33,028
26	Independent Coal Co.....	.....	188	7	6	.....	.....	.....	59,016	39,344	19,672
Totals .....									1,403,977	1,065,516	338,461
Averages.....									.....	.....	.....

\* Mined by machine, price paid 33 cents per ton.

Whole number of openings reported in 1898, 23.

Number of new mines or places opened during the year, 4.

Number of mines exhausted or abandoned during the year, 1.

Whole number of openings reported for 1899, 26.

Madison County, 1899. Concluded.

Number.	VALUES.			EMPLOYES.			Price paid per screened ton - hand mining.	Paid monthly, sent in order or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	Number of horses or mules employed in or about the mine.		ACCIDENTS.	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.		
1	80 65	80 25	8104,850	48	60	148	.....	.....	274	857,679	97	.....	.....	.....	.....
2	65	25	87,520	31	31	102	.....	.....	257	.....	.....	.....	.....	.....	.....
3	50	10	18,592	19	19	57	.....	.....	145	20,585	1	.....	.....	.....	.....
4	50	10	27,268	32	35	57	80	40	191	25,310	3	.....	.....	.....	.....
5	50	10	601	1	1	1	.....	.....	112	1,163	1	.....	.....	.....	.....
6	80	40	670	3	3	3	.....	.....	130	1,334	1	.....	.....	.....	.....
7	80	35	201,235	172	172	215	.....	.....	257	155,318	1,80	.....	.....	.....	.....
8	85	40	42,477	22	30	62	.....	.....	236	41,629	1,00	.....	.....	.....	.....
9	80	35	159,211	138	137	185	.....	.....	253	131,118	1,60	.....	.....	.....	.....
10	62	25	115,861	129	61	184	.....	.....	225	15,975	1,91	.....	.....	.....	.....
11	.....	.....	1,217	1	1	1	.....	.....	200	1,233	.....	.....	.....	.....	.....
12	1 50	.....	294	1	1	1	.....	.....	61	150	.....	.....	.....	.....	.....
13	1 30	.....	151	1	1	1	.....	.....	30	80	.....	.....	.....	.....	.....
14	1 25	.....	105	1	1	1	.....	.....	30	80	.....	.....	.....	.....	.....
15	1 50	.....	1,878	3	3	4	.....	.....	220	1,252	.....	.....	.....	.....	.....
16	1 50	.....	256	1	1	1	.....	.....	60	170	.....	.....	.....	.....	.....
17	1 50	.....	909	1	3	3	.....	.....	200	100	.....	.....	.....	.....	.....
18	1 50	.....	150	.....	.....	.....	.....	.....	50	100	.....	.....	.....	.....	.....
19	1 25	.....	500	3	4	4	.....	.....	225	300	.....	.....	.....	.....	.....
20	1 50	.....	300	1	3	3	.....	.....	90	200	.....	.....	.....	.....	.....
21	1 50	.....	750	3	1	1	.....	.....	150	.....	.....	.....	.....	.....	.....
22	1 00	50	4,321	3	3	10	.....	.....	300	3,811	1,15	.....	.....	.....	.....
23	75	35	29,028	19	15	55	.....	.....	254	15,583	398	.....	.....	.....	.....
24	1 37 5	75	3,443	1	1	5	.....	.....	50	3,143	.....	.....	.....	.....	.....
25	70	40	69,031	93	26	122	.....	.....	40	41,611	2,37	.....	.....	.....	.....
26	65	30	31,476	41	11	52	.....	.....	10	62,478	1,30	.....	.....	.....	.....
.....	.....	.....	8883,845	807	398	1,295	.....	.....	.....	8678,332	17,180	110	14	30	.....
80	72.6	80	31.9	.....	.....	.....	80	41	181	.....	.....	.....	.....	.....	.....

## Marion County—Sixth District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	Centralia M. & M. Co., No. 2	Centralia	576	6 6	Sh.	S	M.	* 111,271	82,892	28,379	
2	Pittenger & Davis Mining & Mfg Co. (Big 4)	"	637	6 6	"	"	B	105,779	73,332	32,447	
3	Odin Coal Co.	Odin	714	7 6	"	"	M.	* 142,574	95,049	47,525	
4	Sandoval Coal Co.	Sandoval	609	6 6	"	"	P.	85,079	55,517	29,562	
5	Kimmundy Coal Co.	Kimmundy	571	4 6	"	"	"	38,675	27,558	11,117	
6	Salem Coal Co.	Salem	885	4 6	"	"	M.	10,739	8,592	2,147	
Totals								494,117	342,940	151,177	
Averages											

\* Mined by machines, price paid 29 cents per ton.

Whole number of openings reported in 1898, 6.

Whole number of openings reported for 1899, 6.

## St. Clair County—Sixth District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	Con. C. Co., Richland	Belleville	90	8	6	Sh.	S.	M.	* 34,756	28,608	6,148
2	" " Schureman	"	125	6	6	"	"	"	* 41,780	36,758	5,022
3	" " Gartside, No. 4	"	205	6	6	"	"	"	* 43,741	36,765	6,976
4	" " Green Mt.	"	160	6	6	"	"	"	* 37,445	32,223	5,222
5	" " Pittsburg	"	125	6 6	6	"	"	B.	14,994	13,550	1,444
6	" " Rose Hill	"	132	6	6	"	"	"	* 24,015	19,148	4,867
7	" " Marissa	Marissa	120	6	6	"	"	"	* 27,022	22,265	4,757
8	" " White Oak	"	147	6	6	"	"	"	* 76,040	64,108	11,932
9	Oakland Coal Co.	Belleville	175	6 6	6	"	"	M.	* 54,406	46,116	8,290
10	Crown C. & T. Co., No. 2	"	"	"	"	"	"	"	9,118	7,060	2,058
11	Lenz C. & Mfg Co.	"	185	7	6	"	"	B.	12,101	10,125	1,976
12	Crown C. & T. Co., No. 4	"	125	7	6	"	"	"	83,198	69,390	13,808
13	Con. C. Co., Reinecke, No. 1	"	119	6	6	"	"	"	† 69,970	56,000	13,970
14	Highland Coal Co.	"	139	6 6	6	"	"	"	35,295	32,293	3,002
15	Belleville & O'Fallon C. Co.	"	120	6 6	6	"	"	"	39,426	31,007	8,419
16	Glendale Coal Co., No. 1	"	120	6 6	6	"	"	"	* 74,409	55,300	19,100
17	Glendale Coal Co., No. 2	"	115	6 6	6	"	"	"	13,165	10,532	2,633
18	Oak Hill Coal Co.	"	187	6	6	"	"	B.	38,305	34,037	4,268
19	Skellett Coal Co.	"	169	6 6	6	"	"	"	11,410	35,389	6,021
20	Hippard Coal Co.	"	75	7	6	"	"	M.	39,630	36,111	3,519
21	Denk Bros. Coal Co.	"	"	6	6	D.	"	B	68,538	59,437	9,101
22	Humboldt Coal Co.	"	100	6 6	6	Sh.	"	"	32,699	21,800	10,899
23	Mo. & H. C. Co., Wildman	"	90	6	6	"	"	"	73,784	51,022	22,762
24	Mo. & H. C. Co., Freeburg	"	128	6	6	"	"	"	65,100	47,250	17,850

\* Machine mining, price paid 53 cents per ton.

† Machine mining, 25,543 tons at 33 cents per ton.

Marion County, 1899—Concluded.

Number.	VALUES.			EMPLOYES.			Price paid per gross ton—hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	Number of horses or mules employed in or about the mine.		ACCI-DENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.		
1	80 81	80 30 <sup>3</sup> / <sub>4</sub>	875, 867	130	76	206	.....	7. M.	165	\$60, 086	717	20	1	5	
2	81 9	33. 7	70, 993	132	86	218	80 36	.....	175	59, 236	2, 660	36	.....	6	
3	75	20	20, 791	125	72	197	.....	.....	280	76, 989	1, 679	45	1	7	
4	70	17	43, 886	160	68	228	36	.....	120	42, 012	12, 895	.....	.....	4	
5	85	15	25, 091	33	13	46	41	.....	250	24, 191	925	12	.....	.....	
6	1 00	50	9, 665	20	12	32	41	.....	200	9, 076	152	12	.....	.....	
.....	.....	.....	8306, 294	600	327	927	.....	.....	.....	\$271, 620	8, 428	117	2	22	
.....	80 77	80 24. 4	.....	.....	.....	.....	80 37	.....	195	.....	.....	.....	.....	.....	

St. Clair County, 1899—Continued.

Number.	VALUES.			EMPLOYES.			Price paid per gross ton—hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	Number of horses or mules employed in or about the mine.		ACCI-DENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.		
1	81 65	80 25	820, 132	27	9	36	.....	7. M.	216	\$15, 400	324	4	.....	.....	
2	65	25	25, 147	32	15	47	.....	.....	177	20, 172	244	7	.....	1	
3	65	25	25, 611	40	16	56	.....	.....	169	19, 829	247	6	.....	.....	
4	65	25	22, 249	25	11	36	.....	.....	179	15, 652	205	4	.....	.....	
5	65	25	9, 168	17	11	28	80 40	.....	135	7, 590	498	3	1	.....	
6	65	25	13, 662	22	19	41	.....	.....	156	9, 638	136	4	.....	.....	
7	65	25	15, 661	14	13	27	10	.....	194	14, 872	675	3	.....	.....	
8	65	25	44, 653	4	24	28	.....	.....	240	32, 548	364	6	.....	2	
9	70	35	35, 182	32	10	42	.....	.....	250	25, 691	300	4	.....	.....	
10	65	35	5, 309	.....	.....	.....	40	.....	85	5, 900	227	.....	.....	.....	
11	60	15	6, 374	.....	12	11	.....	.....	75	5, 610	247	.....	.....	1	
12	65	35	49, 935	75	17	92	.....	.....	269	51, 485	2, 080	6	.....	3	
13	60	10	34, 995	40	19	59	.....	.....	222	33, 463	1, 447	.....	.....	.....	
14	73	25	24, 323	35	12	47	.....	.....	300	17, 062	758	.....	.....	.....	
15	69	20	22, 550	39	.....	46	42	.....	204	19, 622	973	.....	.....	.....	
16	69	37	15, 224	32	21	53	.....	.....	243	36, 630	785	11	.....	2	
17	71	52	8, 846	23	3	26	40	.....	138	8, 236	255	3	.....	.....	
18	65	30	23, 404	29	6	35	10	.....	247	18, 572	1, 016	3	.....	1	
19	65	25	21, 507	35	13	48	40	.....	210	19, 041	1, 648	4	.....	3	
20	75	45	28, 666	40	13	53	40	.....	175	29, 461	1, 696	3	.....	1	
21	65	35	11, 819	75	21	96	40	.....	243	39, 718	1, 714	.....	.....	3	
22	62	25	16, 240	24	6	30	40	.....	250	18, 240	720	.....	.....	.....	
23	70	25	11, 495	40	24	64	40	.....	234	29, 767	2, 410	6	.....	1	
24	70	25	37, 537	55	14	69	40	.....	221	31, 761	1, 658	6	.....	.....	

## St. Clair County, 1899.—Concluded.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
25	Mo. & Ill. C. Co., R'ntchl'r	Belleville.....	130	6	6	Sl.	S.	B.	36,301	29,401	7,900
26	Leb. Coal & M. Asso.....	Lebanon.....	200	6	7	..	..	M.	*19,477	40,080	9,037
27	J. Moser, Turkey Hill.....	Rentchler.....	110	6	6	..	..	B.	12,000	8,000	4,000
28	Wm. Ogden & Bro.....	.....	120	7	7	..	..	..	12,000	8,400	4,200
29	Freeburg Mfg Co.....	Freeburg.....	120	7	6	..	..	..	1,750	1,550	200
30	Dutch Hollow Coal Co.....	.....	150	8	6	..	..	..	32,121	21,826	7,295
31	L. Krantz.....	Belleville.....	55	6	6	..	..	..	1,163	1,133	30
32	Eb-l Bros.....	.....	50	6	6	..	..	..	5,300	4,800	500
33	Johnson Coal Co.....	Marissa.....	120	6	6	..	..	..	35,000	28,700	6,300
34	Eureka Coal Co.....	.....	114	6	6	..	..	..	12,248	12,166	82
35	O'F. C. & M. Co., Dariow.....	O'Fallon.....	186	6	7	..	..	..	47,005	32,157	14,848
36	Joseph Taylor, Taylor.....	.....	200	6	6	..	..	..	62,400	52,000	10,600
37	Joseph Taylor, Newton.....	.....	210	7	6	..	..	..	57,159	45,729	11,430
38	Rubicon, Joyce & Greece, Ruby.....	Caseyville.....	200	7	6	..	..	..	12,512	9,384	3,128
39	Walnut Hill Coal Co.....	Birkner.....	200	7	6	..	..	M.	47,000	39,000	8,000
40	Summit Coal Co.....	.....	190	7	6	..	..	B.	32,000	24,000	8,000
41	Trix & Sons Coal Co.....	Lenzburg.....	191	6	6	..	..	..	22,321	18,193	4,128
42	Kolb Coal Co.....	Mascoutah.....	160	7	6	..	..	..	70,000	51,000	19,000
43	James Beaty.....	.....	175	7	6	..	..	..	2,779	2,479	300
44	Millstadt Coal Co.....	Millstadt.....	48	6	6	..	..	..	14,656	8,106	6,550
45	Wm. Pistor.....	.....	46	6	6	..	..	Ho.	3,126	3,126	.....
46	Dutch Hill Coal Co.....	New Athens.....	70	6	6	..	..	S.	5,580	4,580	1,000
47	Muron Coal & Ice Co.....	Belleville.....	180	6	6	..	..	..	129,000	80,000	40,000
48	Taylor Bros.....	.....	35	6	6	..	..	Ho.	5,869	5,869	.....
49	Nicholas Weiss.....	.....	66	6	6	..	..	..	2,489	2,489	.....
50	Klingenfus Bros.....	.....	70	6	6	..	..	..	3,400	3,000	100
51	Johnson Coal & Mfg Co., Briar Hill.....	.....	75	6	6	Sh.	S.	..	28,800	24,000	4,800
52	Advance Coal Co.....	Marissa.....	87	6	6	..	..	..	14,017	10,254	3,763
53	John Harst.....	Belleville.....	55	7	6	..	..	Ho.	3,500	3,500	.....
54	Fleming & Son.....	Centerville.....	60	6	6	..	..	..	1,500	1,500	.....
55	James Charleton.....	French Vill'ge.....	50	6	6	D.	S.	..	5,008	5,008	.....
56	Conrad Strawbinger.....	.....	.....	6	6	Sh.	M.	..	1,000	1,000	.....
57	Conrad Reeb.....	Belleville.....	100	7	6	Sl.	Ho.	..	1,944	4,613	331
58	Louis Grossman.....	.....	20	6	6	Sh.	M.	M.	560	560	.....
59	Frederick Murphy.....	.....	60	6	6	..	..	Ho.	12,000	12,000	.....
60	Benj. Johnson.....	.....	30	6	6	..	..	M.	500	500	.....
61	Diedrich Ccal Co.....	Freeburg.....	60	7	6	..	..	..	400	400	.....
62	Charles Hartman.....	Belleville.....	90	6	6	..	..	S.	20,400	16,320	4,080
63	Smith Bros.....	Smithton.....	20	6	6	D.	Ho.	..	440	440	.....
64	Griffith & Warner.....	Caseyville.....	.....	6	6	..	..	..	120	120	.....
65	J. C. Marshall.....	.....	.....	6	6	..	..	..	100	100	.....
Totals.....									1,849,474	1,475,768	373,706
Averages.....									.....	.....	.....

Whole number of openings reported in 1898, 63.

Number of new mines or places opened during the year, 7.

Number of mines exhausted or abandoned during the year, 5.

Whole number of openings reported for 1899, 65.

\* Machine mining, price paid 30 cents per ton.

St. Clair County, 1899.—Concluded.

Number.	VALUES.			EMPLOYEES.			Price paid per gross ton hand-mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	Number of horses or mules employed in or about the mine.		ACCI-DENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.		
25	\$0 70	\$0 25	\$21,855	31	13	47	\$0 40	S-M.	168	\$18,622	883	4	1	.....	
26	80	50	36,612	70	21	94	.....	.....	309	29,506	359	11	1	.....	
27	65	25	6,200	7	4	12	.....	.....	260	6,000	300	2	.....	1	
28	63	30	6,720	15	4	19	.....	.....	180	6,300	360	2	.....	.....	
29	75	50	1,262	6	.....	.....	.....	.....	60	700	70	1	.....	.....	
30	70	30	19,566	25	7	32	.....	.....	180	17,941	581	5	.....	.....	
31	75	35	859	7	3	10	.....	.....	250	639	39	1	.....	.....	
32	1 00	50	5,059	6	3	9	.....	.....	300	2,650	240	1	.....	.....	
33	70	40	22,610	30	9	39	.....	.....	175	17,500	845	4	.....	.....	
34	65	55	7,952	8	3	11	.....	.....	240	6,736	350	1	.....	.....	
35	80	35	30,921	50	12	62	.....	.....	209	25,242	922	3	1	.....	
36	75	65	45,890	65	14	79	.....	.....	182	30,112	1,322	5	.....	1	
37	75	65	11,719	60	11	74	.....	.....	176	28,916	1,443	5	.....	.....	
38	70	25	7,350	20	6	26	.....	.....	90	6,652	70	3	.....	.....	
39	70	35	30,106	35	7	43	.....	.....	200	20,900	400	5	.....	.....	
40	65	30	18,000	28	7	35	.....	.....	240	12,259	806	3	.....	.....	
41	65	40	13,476	20	6	26	.....	.....	261	12,278	1,116	2	.....	.....	
42	65	20	36,956	40	19	59	.....	.....	225	30,000	2,000	5	.....	.....	
43	1 25	20	3,158	5	2	7	.....	W.	309	1,667	150	1	.....	.....	
44	70	50	8,919	22	4	26	.....	S-M.	175	8,949	.....	1	.....	.....	
45	1 00	.....	3,126	5	1	6	.....	.....	239	1,875	.....	2	.....	.....	
46	80	50	4,164	11	4	15	.....	.....	192	5,170	250	1	.....	.....	
47	65	30	64,060	90	11	101	.....	.....	260	60,000	3,000	3	.....	1	
48	1 00	.....	5,869	5	2	7	.....	.....	310	2,931	5	1	.....	.....	
49	1 00	.....	2,489	4	1	5	.....	.....	275	1,874	40	1	.....	.....	
50	1 00	50	3,050	4	2	6	.....	W.	240	1,555	90	1	.....	.....	
51	60	25	15,600	20	11	31	.....	S-M.	200	12,230	1,200	3	.....	.....	
52	80	50	10,084	8	4	12	.....	M.	210	10,084	323	3	.....	.....	
53	1 00	.....	3,500	4	2	6	.....	W.	310	1,601	100	1	.....	.....	
54	80	.....	1,200	3	1	4	.....	.....	120	1,200	3	1	.....	.....	
55	75	.....	3,736	4	2	6	.....	.....	261	2,786	240	3	.....	.....	
56	90	.....	900	2	1	3	.....	.....	270	600	29	1	1	.....	
57	75	25	3,541	5	2	7	.....	S-M.	289	2,400	71	1	.....	.....	
58	1 00	.....	660	2	1	3	.....	.....	62	500	.....	1	.....	.....	
59	60	.....	7,200	10	3	13	.....	S-M.	250	6,000	150	2	.....	.....	
60	1 00	.....	500	2	1	3	.....	M.	180	500	.....	1	.....	.....	
61	1 00	.....	400	2	1	3	.....	.....	150	400	.....	1	.....	.....	
62	70	40	13,056	20	6	26	.....	S-M.	250	10,000	75	2	.....	.....	
63	1 00	.....	440	1	1	2	.....	M.	200	440	.....	1	.....	.....	
64	1 00	.....	120	2	.....	2	.....	.....	50	120	3	.....	.....	.....	
65	1 00	.....	100	1	.....	1	.....	W.	96	100	2	.....	.....	.....	
.....			\$1,131,482	1,605	518	2,123	.....	.....	.....	\$020,640	38,598	204	6	22	
80 68	80 31.7	.....	.....	.....	.....	.....	\$0 40	.....	206	.....	.....	.....	.....	.....	

*Recapitulation by Counties--*

COUNTIES.	MINES.					PRODUCTS.					VALUES.	
	Number of mines.	Shipping mines.	Mines in local trade.	New mines.	Abandoned mines	Total tons produced.	Tons of lump coal.	Tons of other grades.	Tons shipped.	Tons consumed or wasted at the mines.	Average value per ton of lump at the mines	Average value of other grades per ton at the mines.
Bond.....	1	1	.....	..	1	100,955	58,960	41,995	79,796	11,281	\$0 89.7	\$0 11.8
Clinton .....	6	6	.....	2	..	434,735	350,893	83,842	380,700	28,598	71.5	27.7
Madison .....	26	12	14	4	1	1,403,977	1,065,516	338,461	1,165,977	164,183	72.6	31.9
Marion .....	6	6	.....	.....	.....	494,117	342,940	151,177	448,753	18,040	78	24.4
St. Clair .....	5	7	18	7	5	1,849,474	1,475,768	373,706	1,598,477	104,566	68	31.7
Totals.....	104	72	32	13	7	4,283,258	3,294,077	989,181	3,673,703	326,668	.....	.....
Averages. ....											\$0 71.69	\$0 29.5

Whole number of openings reported in 1898, 98.

Number of new mines or places opened during the year, 13.

Number of mines exhausted or abandoned during the year, 7.

Whole number of openings reported for 1899, 104.



*Sixth District—1899.*

Aggregate value of total product.....	EMPLOYEES.				Average price paid per gross ton for hand mining	Total wages paid during the year to all employes excepting office help.	Number of kegs of powder used.	Number of horses and mules employed in and about the mines.	CASUALTIES		MACHINES.		
	Number of miners.	Number of other employes.	Total employes.	Average number of days of active operation.					Killed.	Injured.	Number of mines using machines.	Number of machines in use.	Total tons cut by machines.
\$57,842	128	53	181	178	\$0 40	\$60,503	1,425	17	.....	4	1	7 *	94,405
274,449	353	129	482	159	40	251,051	6,976	34	.....	5	2	20 †	155,706
883,845	897	398	1,295	181	41.5	678,933	13,486	140	14	39	8	67 ‡	*1,204,695
306,294	600	327	927	198	37	271,620	8,428	117	2	22	2	11 †	253,845
1,131,482	1,605	518	2,123	210	40	920,640	38,568	204	6	22	10	39 *	461,303
\$2,653,912	3,583	1,425	5,008	.....	.....	\$2,182,747	68,883	512	22	92	23	144 ‡	\$2,169,954
.....	.....	.....	.....	196.8	80 40	.....	.....	.....	.....	.....	.....	.....	.....

\* Price paid, 33 cents per ton.

† Price paid, 38 cents per ton.

‡ Price paid, 29 cents per ton.

§ Average price paid, 32.9 cents per ton.



## SEVENTH INSPECTION DISTRICT—1899.

Counties: Gallatin, Hamilton, Jackson, Jefferson, Johnson, Perry, Randolph, Saline, Washington, Williamson.

EVAN D. JOHN, *Inspector*, Carbondale.

HON. DAVID ROSS, *Secretary*,

*State Bureau of Labor Statistics, Springfield, Illinois:*

SIR:—In compliance with section 12 of the general mining law of the State of Illinois, I have the honor to submit herewith to you the fourth annual report of the coal mines located in the Seventh Inspection District, as now defined, and the sixteenth of the general series for the year ending June 30, 1899.

The district shows an increase in output over that of 1898 of 233,076 tons. The tabular statement herewith, gives the statistics of each county, showing the number of mines operated during the year, both shipping and local mines; the new and abandoned mines; the depth of coal below the surface; the total tonnage of all grades of coal; the value per ton at each mine, and the aggregate value of the total product, and the number of tons of coal produced by machines.

The following summary gives the principal facts compiled from the schedules of the several counties:

Number of counties in which coal is produced .....	10
Total number of mines.....	131
Shipping mines.....	57
Local mines.....	74
New mines.....	15
Abandoned mines.....	7
Mines using machines.....	12
Total tonnage .....	3,392,376
Tons of lump coal.....	2,301,555
Tons of other grades.....	1,090,821
Aggregate value of total product .....	\$2,322,098
Average value of lump coal per ton at the mine.....	80,769
Average value of other grades per ton at the mine.....	80,295
Number of miners.....	3,366
Number of other employes.....	1,496
Number of boys.....	137
Total number of employes.....	4,999
Average number of days of operation for all mines.....	159
Number of kegs of powder used in blasting coal.....	79,267
Number of kegs of powder used for other purposes.....	81
Number of fatal accidents.....	14
Number of non fatal accidents.....	60
Number of widows.....	9
Number of children.....	23
Number of coal cutting machines.....	64
Total tonnage cut by machines.....	807,692
Number of tons of coal produced to each fatal accident.....	242,313
Number of tons of coal produced to each non-fatal accident.....	56,540
Number of persons employed to each fatal accident.....	357
Number of persons employed to each non-fatal accident.....	83

*Prospective Mine.*—The Sunnyside Coal Co. is sinking a shaft one mile west of Herrin, in Williamson county, on the Illinois Central Railroad.

*Abandoned Mines.*—Two mines have been abandoned in Randolph county, three in Williamson county, and five in Perry county. The five mines abandoned in Perry county were shipping mines; three of them belonged to the Duquoin Union Coal Co., one to the Jupiter Mining Co., all located at Duquoin, and one a small mine at St. Johns.

*Fatal Accidents.* The following is a detailed account of the fatal accidents that have taken place in the Seventh District:

July 12, 1898. August Durbee, a miner, aged 33 years, married, leaves a widow and four children, was killed instantly by a fall of slate at the face of his working place in shaft No. 7 operated by the Big Muddy Coal & Iron Co., at Herrin, Williamson county. The deceased was working off a standing shot which was the only support to the broken roof; the piece of slate that fell on him would weigh fully three tons.

July 21, 1898, William Rice, single, age 28 years, a miner employed at G. W. Brown's mine, Pinckneyville, was injured by falling clod at 8 a. m. and died when conveyed to the surface about 9:30 a. m. The deceased was loading his car, he heard the noise of the clod working loose, and, instead of staying at the face of his working place he made an attempt to come out and was caught. He knew of the dangerous condition of the place and had promised the mine manager to timber the place before loading any more coal. The clod that fell would weigh about 3,000 pounds.

August 25, 1898, John Dalton, a miner, age 22 years, single, was severely crushed by falling roof at the face of his working place in the Willisville Coal Co. mine, located at Willisville, Perry county, and died from the injuries received Sept. 2, 1898. At the time of the accident deceased was in a sitting posture at the right hand side of his working place, when a mass of roof weighing about 1500 pounds suddenly fell striking him with the above result as described.

September 27, 1898, Jeo Marlo, a miner, age 29 years, single, employed at the Scott-Wilson Coal Co. shaft No. 2, Fredonia, Williamson county, was cleaning up a fall of slate that had come down the night before on top of some loose coal; he sounded the roof before starting to work and made the remark that it was all right, but in a few minutes afterward a piece of roof weighing about 1000 pounds suddenly fell striking him on the back, he was taken to his boarding house and died from his injuries at 5:30 p. m. the same day.

October 10, 1898, Alfred Reneson, trip rider, aged 22 years, married, leaves a widow. The deceased was engaged as a trip rider his duty was to accompany the trip in on the engine plane to the inside partings and out again. He was riding on the front loaded car on the engine plane; the trip of cars was moving at an ordinary rate of speed, when the coupling between the first and second cars broke, throwing him and the car he was on against the side of the entry; he was killed instantly,

November 16, 1898, Walter Kenney, a machine helper, age 22 years, single, a resident of Grand Tower employed in the No. 6 mine of the Big Muddy Coal & Iron company, Murphysboro, Jackson county. The deceased was at work at the face of his room shoveling the slack from a machine when a mass of coal weighing about two tons, fell on him, killing him instantly.

November 24, 1898, Edgar McAlpin, laborer, age 23 years, married, leaves a widow and one child, was killed in the mine of the Ohio and Mississippi Valley Coal & Mining Co., Marion, Williamson county. The deceased was coming out of the shaft on the cage with four other men; when about 50 feet up he lost his balance and fell into the west chamber and down the shaft. This was only his third day in the mine.

December 21, 1898, James Vansage, miner, aged 33 years, married, leaves a widow and three children, was killed while at work in a pillar in the mine of the St. Louis & Big Muddy Coal Co., Cartersville, Williamson county. He was working off some coal that had been shattered by a shot the night before when a piece of top coal weighing about 200 pounds fell, crushing his head against a pit-car which was close by.

January 17, 1899, George Beck, a miner, age 40 years, married, leaves a widow and two children, was killed at the face of his working place about 3 a. m., in the Willis Coal & Mining company's mine, Willisville, Perry county. Deceased had prepared three blasts, and when ready to fire placed the squib in the hole. He must have held his lamp near the powder part of squib, as he never moved until he was knocked back by the force of the shot; he was instantly killed.

April 5, 1899, Benj. Hudgens, miner, age 47 years, married, leaves a widow and seven children, was injured at the Ledford mine, Saline county, at the face of his room by a fall of slate. He had tried that morning to take down the slate and failed. He then went to work under it without putting up timbers, and while at work the slate suddenly fell, striking him on the back and head. He died from the injuries received April 7, two days after the accident.

May 3, 1899, John Shanks, age 32 years, single, was instantly killed while at work loading his first car about 7:45 a. m., in room 32 on the 6th west entry, north side, in the mine of the Horn Colliery Co., Duquoin, Perry county. The deceased had fired two shots the night before which knocked out eight props. A miner by the name of Jones was in the room at the time of the accident and was just asking the deceased if the roof was all right. Before he could reply the roof fell, crushing his head against the pit-car, killing him instantly. Jones escaped unharmed.

May 8, 1899, Charles Harris, age 26 years, married, leaves a widow and one child, was killed at the top of the Sato Coal & Mining company's mine, Sato, Jackson county. The deceased was employed as top driver. There had been no work at the shaft this day. Deceased thought he would go into the mine and bring out some mining tools he had there. It was about 8 a. m. when he went down the stairway and brought the tools to the bottom of the shaft; he then went out and asked the engineer if he would get up steam and hoist his tools. It was agreed that the engineer would hoist them in the afternoon.

About 2:00 p. m. the engineer started up the engine. Harris walked to the top of the lower landing and stood there until the west cage came up which struck him on the head. He fell backward to the ground and died inside of a half hour afterward.

May 11, 1899, Henry Beaver, miner, age 38 years, married, leaves a widow and three children, was killed while at work in room No. 1, fifth east entry, north side, in the Eden mine of the Western A. Coal & Coke Co., Sparta, Randolph county. Deceased was getting ready to drill a hole, when suddenly the roof fell, striking him on the back. He died about 3 p. m., four hours after the accident.

June 15, 1899, William Yates, age 24 years, married, leaving a widow and two children; was employed at the Horn Colliery Co's mine, Duquoin, Perry county, as a night roadman. About 5 a. m., Yates was coming out, and on reaching the bottom he volunteered and went to help the pump man in his work. The pump would not take water. Yates got a piece of scantling and was prying at the suction pipe when his hold slipped and he fell into the sump and was scalded. The exhaust of the steam pump had been discharging into the sump. He died June 17, two days after the accident.

Respectfully submitted,

EVAN D. JOHN,

Carbondale, Ill.

State Inspector of Mines, Seventh District.

*Fatal Casualties—Seventh District, 1899.*

Date.	Name.	Age.	Occupation.	Residence.	Married.	Widow.	Children.	Single.	Dependent.	Cause of Accident.
1898.										
July 16	August Durbee.....	33	Miner.....	Herrin.....	1	1	4	..	5	Falling roof.....
21	William Rice.....	28	".....	Pinekn'ye.....	..	..	1	..	1	Falling roof.....
Aug. 25	John Dalton.....	22	".....	Willisville.....	..	..	1	..	1	Falling roof.....
Sept. 27	Joseph Mario.....	29	".....	Fredonia.....	..	..	1	..	1	Falling roof.....
Oct. 19	Alfred Reneson.....	22	Trip rider...	St. Johns.....	1	1	..	..	1	Pit cars.....
Nov. 16	William Kenney.....	22	Mach. helper	Gr'n'd Tow'r.....	..	..	1	..	1	Falling coal.....
" 24	Edgar McAlpin.....	23	Laborer.....	Marion.....	1	1	1	..	2	Falling from cage...
Dec. 21	James Varsage.....	33	Miner.....	Carterville..	1	1	3	..	4	Falling roof.....
1899.										
Jan. 1	Geo. Reek.....	40	".....	Willisville..	1	1	2	..	3	Premature blast.....
April 3	Benj. Hudgens.....	47	".....	Ledford.....	1	1	4	..	4	Falling roof.....
May 3	John Shanks.....	32	".....	DuQuoin.....	..	..	1	..	1	Falling roof.....
" 8	Charles Harris.....	26	Driver.....	Sato.....	1	1	1	..	2	Ascending cage.....
" 1	Henry Beaver.....	38	Miner.....	Sparta.....	1	1	3	..	4	Falling roof.....
June 15	William Yates.....	24	Laborer.....	DuQuoin.....	1	1	2	..	3	Scalded in sump.....
	Totals.....				9	9	23	5	28	

*Recapitulation of Fatal Casualties—Seventh District, 1899.*

Residence.	No.	Occupation.	No.	Nature of Casualty	No.	Colliery.	No.
Cartersville...	1	Laborers.....	2	Ascending cage....	1	Big Muddy Coal & Iron Co	2
DuQuoin.....	2	Mach. helper.	1	Falling cage.....	1	Brown, G. W.....	1
Fredonia.....	1	Miners.....	9	Falling coal.....	1	Horn's Colliery Co.....	2
Grand Tower	1	Top driver....	1	Falling roof.....	8	Illinois Cent. Coal & I. Co	1
Herrin.....	1	Trip rider....	1	Pit cars.....	1	O. & M. Valley Coal Co...	1
Ledford.....	1			Premature blast...	1	St. L. & Big Muddy C. Co.	1
Marion.....	1			Scalded in sump...	1	Sato Coal Co.....	1
Pinckneyville	1					Scott-Willis Coal Co.....	1
St. Johns.....	1					Strickland Bros.....	1
Sato.....	1					Western A. C. & C. Co.....	1
Sparta.....	1					Willis Coal Co.....	2
Willisville....	2						
Totals....	14		14		14		14

*Non-Fatal Casualties—Seventh District, 1899.*

Date.	Name.	Residence.	Age.	Married.	Single.	Children.	Dependents.	Character of Injury.	Time lost—day %.
1898									
July 5	Thos. Colombo...	Herrin	17			1		Head injured	36
.. 15	Sylv. str Graciana	Murphysboro.	33	1		2		3 Foot injured	*
.. 16	Thos. M. Campbell	Pinckneyville	58	1		6		3 Back injured	*
.. 21	Dan Greenlee....	Cartersville	24		1			Body injured	140
Aug. 15	George White....	Murphysboro.	24	1		1		2 Finger broken	15
.. 16	John Mose.....	Cartersville	26		1			Hand injured	14
.. 20	Isreal Talley....	Herrin	28	1		1		2 Thumb injured	10
.. 20	P. H. Quigley....		23		1			Elbow injured	10
.. 20	C. E. Wilson....	Murphysboro.	27	1		1		2 Foot injured	10
.. 26	Louis Sato.....	Cartersville	33	1				1 Leg broken	120
Sept. 12	F. W. W. Philips.	Murphysboro.	29		1			Foot injured	7
.. 28	William Grant	Sparta	36		1			Back injured	*
Oct. 5	Sam Ronimics...	Hallidayboro.	25		1			Back injured	*
.. 15	John Kneec.....	Murphysboro.	48	1		6		7 Body injured	7
.. 24	Salvator Piazzia.		46	1				1 Body injured	10
.. 28	H. Taylor.....		24		1			Hip injured	*
.. 28	Nace Banks.....	St. John.	45	1				1 Arm broken	80
.. 31	Frank Clayton..	Murphysboro.	37	1				1 Foot injured	7
Nov. 1	J. Batson.....		33	1		3		4 Hip injured	190
.. 16	Wm. A. Wilson...		33	1		5		6 Hips injured	20
.. 16	Mont. Kindman..		23	1		2		3 Fingers injured	7
.. 17	Val Miller.....	DuQuoin	31	1		3		4 Back injured	*
.. 24	George H. Putney	Murphysboro.	61	1				1 Back injured	60
.. 30	Edward Hodgens		50	1		5		6 Body injured	8
Dec. 2	Ralph Simpson..	Hallidayboro.	26	1		1		2 Leg broken	180
.. 9	Albert Hoytan..	Sparta	45	1		3		4 Leg injured	14
.. 27	Joseph Costino..	Murphysboro.	23		1			Head injured	7
.. 28	James Walters..		34	1		3		4 Foot injured	15
1899									
Jan. 4	Peter Wagoner..		46	1		5		5 Head injured	7
.. 7	C. C. Hurst.....	Herrin	40		1			Hip injured	11
.. 11	John Dickey....	Sparta	28		1			Ribs broken	42
.. 12	Wm. Brokling..	Hallidayboro.	22		1			Back injured	*
.. 16	E. Ferges.....	Herrin	22		1			Head injured	7
.. 17	James Brewster.	Murphysboro.	35	1		1		2 Leg injured	10
Feb. 3	John M. Bandy..	Herrin	39	1		1		2 Foot injured	10
.. 11	W. W. Holman..	Conant	46	1		4		5 Body injured	60
.. 21	John Bornolt..	Cartersville.	40		1			Foot injured	40
.. 22	John Meehan..	Murphysboro.	48	1		11		12 Back injured	10
.. 24	Andrew Barker.		28	1		1		2 Back injured	50
Mar. 14	Albert Boston..		17		1			Collar-bone broken	10
.. 22	Alonzo Balz....	Cartersville.	21		1			Ankle injured	14

\* Not recovered July 1, 1899.

## Non-Fatal Casualties—Seventh District, 1899—Concluded.

Date.	Name.	Residence.	Age.	Married.	Single.	Children.	Dependents.	Character of Injury.	Time lost—days.
1899									
April 5	Thomas Kelly....	Johnston City	23	.....	1	.....	.....	Hip injured .....	8
" 10	Chas. Underwood	Murphysboro.	31	1	.....	5	6	Back injured.....	4
" 14	Wm. Boatwright.	"	18	.....	1	.....	.....	Leg injured .....	7
" 14	Gordon Ferguson	"	22	1	.....	.....	1	Back injured.....	15
" 22	John Roberts.....	Percy .....	50	.....	1	.....	.....	Face and body injured	*
" 22	Frank Estee.....	"	21	1	.....	1	2	Face and body injured	14
" 22	Mason Smith.....	Cartersville....	38	1	.....	5	6	Finger cut off .....	90
" 25	George Davis.....	Murphysboro.	25	1	.....	1	2	Knee injured.....	7
May 4	Willis Byars.....	"	38	1	.....	12	3	Toe injured.....	15
" 8	L. C. Grills.....	DuQuoin.....	38	1	.....	3	4	Body injured.....	7
" 12	H. R. Harris.....	Holidayboro....	29	.....	1	.....	.....	Back injured.....	*
" 14	E. E. Taylor.....	Johnston City	27	.....	1	.....	.....	Body injured.....	7
" 19	Wm. O. Banion ..	Murphysboro.	24	1	.....	.....	1	Back injured.....	30
June 2	Robert Bradshaw	"	18	.....	1	.....	.....	Head injured.....	15
" 3	William Duncan.	"	24	.....	1	.....	.....	Body injured.....	7
" 12	Fred Duncan.....	"	25	.....	1	.....	.....	Back injured.....	10
" 16	Harry Dale.....	"	15	.....	1	1	.....	Head injured.....	*
" 16	John Murphy.....	"	42	1	.....	.....	1	Head injured.....	*
" 23	Cæsar Bruzette..	"	28	1	.....	.....	1	Hips injured.....	*
	Totals.....			35	25	82	112		

Total men injured.....	60
Not recovered July 1, 1899.....	13
Number recovered.....	47
Total time lost by men recovered.....	1,460 days
Average time lost per man recovered.....	31

\* Not recovered July 1, 1899.

## Recapitulation of Non-Fatal Casualties—Seventh District, 1899.

Residence.	No.	Occupation.	No.	Cause of Accident.	No.	Colliery.	No.
Cartersville....	6	Blacksmith...	1	Ax.....	1	Big Muddy C. & I. Co.	35
Conant .....	1	Cager.....	1	Cage .....	1	Brown & Barwell.....	1
DuQuoin .....	2	Carpenter .....	1	Crossbar .....	1	Brown, G. W.....	1
Holidayboro.	4	Drivers.....	19	Falling coal .....	11	Gartside Coal Co.....	3
Her'n's Prairie	6	Laborers.....	4	Falling prop .....	2	Goalby & Sons .....	2
Johnston City	2	Loaders.....	6	Falling rock.....	9	Ill. Cent. Coal & Salt Co	2
Murphysboro.	32	Mach. helpers	3	Machine .....	1	Illinois Fuel & Pros. Co	1
Percy.....	2	Mach. runners	2	Mules.....	5	Muddy Valley M.&M. Co	4
Pinckneyville	1	Miners.....	20	Pick .....	1	Pope Mining Co.....	1
Sparta.....	3	Pumpman.....	1	Pit-cars.....	25	St. L. & Big M. C. Co..	6
St. John .....	1	Roadman.....	1	Premature blast.....	3	Western A. C. & C. Co..	2
		Timberman...	1			Williamson Co. C. Co...	2
Totals.....	60		60		60		60



*Table Showing the Nature of Injuries, Number of Persons Injured, Dependents, Time Lost, with Averages and Percentages.—Seventh District.*

NATURE OF INJURIES.	Number.	Married.	Single.	Dependents.	TIME LOST.		Per cent of injuries.
					Total days.	Average days.	
Ankle injured.....	1		1		14	14	1.67
Arm broken.....	1	1		1	80	80	1.67
Back injured.....	13	8	5	30	175	13.5	21.66
Body injured.....	8	5	3	22	246	30.8	13.33
Collar-bone broken.....	1		1		10	10	1.67
Elbow injured.....	1		1		10	10	1.67
Face and body injured.....	2	1	1	2	14	7	3.33
Feet injured.....	7	5	2	12	79	11.3	11.66
Finger cut off.....	1	1		6	90	90	1.67
Fingers injured.....	2	2		5	22	11	3.33
Hand injured.....	1		1		14	14	1.67
Head injured.....	7	2	5	6	72	10	11.66
Hips injured.....	6	3	3	11	229	38.2	10
Knee injured.....	1	1		2	7	7	1.67
Legs broken.....	2	2		3	300	150	3.33
Legs injured.....	3	2	1	6	31	10.3	5
Ribs broken.....	1		1		42	42	1.67
Thumb injured.....	1	1		2	10	10	1.67
Toe injured.....	1	1		3	15	15	1.67
Totals, averages and percentages.....	60	35	25	112	1,460	24.3	100.00

## Gallatin County—Seventh District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	Equality Coal Co.....	Equality.....	80	4.10	5	Sh.	St	B.	10,521	10,021	500
2	Wm. H. Stader.....	".....	39	4	5	D.	Hd	"	1,200	1,200	.....
3	Wm. McLain.....	".....	31	4	5	"	"	"	618	618	.....
4	John H. Underwood, No. 11	".....	20	4.4	5	"	"	"	400	400	.....
5	Rutler & Smith.....	".....	25	4.6	5	"	"	"	1,220	1,220	.....
6	J. D. Strong.....	Shawneetown	25	4.6	6	"	"	"	1,200	800	400
7	M. Carney.....	".....	25	4.6	6	"	"	"	1,350	950	400
8	Leon Vogt.....	".....	30	4.6	6	"	"	"	145	120	25
9	Robert Reid.....	Saline Mines.	39	4.9	6	"	"	"	100	100	.....
Totals.....									16,754	15,429	1,325
Averages.....											

Whole number of openings reported in 1898, 9.

Whole number of openings reported for 1899, 9.

## Hamilton County—Seventh District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	J. C. Harper.....	Flint.....	8	12	1	St.	.....	.....	400	400	.....
2	R. I. Yates.....	Daighreen....	8	12.6	1	St.	.....	.....	240	240	.....
Totals.....									640	640	.....
Averages.....											

Whole number of openings reported in 1898, 2.

Whole number of openings reported for 1899, 2.

Gallatin County, 1899—Concluded.

Number.	VALUES.			EMPLOYES.			Price paid per gross ton—hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	ACCIDENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal	Non-fatal.
1	\$1 00	\$0 25	\$10,146	30	15	45	\$9 50	Mo.	180	\$10,146	600	6	.....
2	1 00	.....	1,200	4	12	6	50	S.M.	150	1,200	75	1	.....
3	1 00	.....	618	.....	.....	.....	62 5	Wk.	140	618	34	1	.....
4	1 00	.....	400	.....	.....	.....	50	.....	125	400	20	1	.....
5	1 00	.....	1,220	32	12	50	50	S.M.	140	1,220	74	1	.....
6	1 00	25	900	4	1	5	62.5	Mo.	150	900	50	1	.....
7	1 00	25	1,050	3	1	4	62.5	S.M.	200	1,050	74	1	.....
8	1 00	25	126	.....	.....	.....	62.5	Wk.	50	126	4	1	.....
9	1 00	.....	100	.....	.....	.....	62.5	.....	.....	100	5	1	.....
.....	.....	.....	\$15,760	52	21	73	.....	.....	.....	\$15,760	936	14	.....
.....	\$1 00	\$0 25	.....	.....	.....	.....	\$0 52.4	.....	142	.....	.....	.....	.....

Hamilton County, 1899—Concluded.

Number.	VALUES.			EMPLOYES.			Price paid per gross ton—hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	ACCIDENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal	Non-fatal.
1	\$1 50	.....	\$600	8	.....	8	\$0 62.5	Wk.	75	\$600	12 5	.....	.....
2	1 25	.....	300	3	.....	3	62.5	.....	60	300	.....	.....	.....
.....	.....	.....	\$900	11	.....	11	.....	.....	.....	\$900	7	4	.....
.....	\$1 40	.....	.....	.....	.....	.....	\$0 62.5	.....	68	.....	.....	.....	.....

## Jackson County—Seventh District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	Gartside Coal Co., No. 1.	Murphysboro.	121	6.6	2	Sh.	S.	M.	*36,053	32,963	3,090
2	" " " " No. 3.	" "	146	6.6	2	"	"	"	*61,335	43,186	18,149
3	" " " " No. 4.	" "	148	6.6	2	"	"	"	*67,575	44,474	23,101
4	Big Muddy Coal & Iron Co., Fo. 5.	" "	150	6.6	2	"	"	"	*148,744	104,569	44,175
5	Big Muddy Coal & Iron Co., No. 6.	" "	150	6.6	2	"	"	"	*146,346	94,455	51,891
6	Big Muddy Coal & Iron Co., Harrison.	" "	150	6.3	2	"	"	"	*127,854	72,289	55,565
7	Wild & Gill, Willis.	" "	130	7	2	"	"	Bl.	12,870	11,570	1,300
8	E. C. Poole	" "	60	2.8	1	"	"	"	595	476	119
9	Wm. C. Beard	Carbondale	35	1.5	7	D.	Hd.	"	200	200	
10	John C. Ritch	" "	25	7.5	7	Sh.	Ho.	"	500	500	
11	J. H. Presson	" "	22	7.6	7	"	"	"	560	560	
12	Wm. Myer	" "	24	6.6	7	D.	Hd.	"	700	700	
13	Oliver Bailey	" "	30	7	7	"	"	"	600	600	
14	Henry Lauenders	" "	20	7	7	"	"	"	300	300	
15	Sato Coal & Mining Co.	Sato.	35	6	12	Sh.	S.	"	10,200	10,200	
16	Winning C. & M Co., Big 4	" "	12	6	12	Sh.	Ho.	"	4,800	4,800	
17	Murphysboro B. M. C. Co., No. 5.	" "	49	6	12	Sh.	S.	"	17,000	16,000	1,000
18	S. Argus	" "	14	6	12	Sh.	Hd.	"	687	687	
19	C. S. Jones	" "	20	6	12	Sh.	Ho.	"	600	600	100
20	Marion Owens	Vergennes	24	3.4	12	Sh.	"	"	600	600	
21	John Campbell	" "	30	3.6	12	"	"	"	540	540	
22	H. Moos	" "	30	3.4	12	"	"	"	500	500	
23	John Juber	Oraville	30	3.6	12	D.	Hd.	"	300	300	
24	Big Muddy C. & Coke Co.	DeSoto	60	9	7	Sh.	S.	"	62,678	37,986	24,692
25	Wisley & Dyer.	" "	30	7	7	"	Ho.	"	300	300	
26	M. Valley M. & Mfg Co.	Hallidayboro.	166	8	7	"	S.	"	*172,381	112,567	59,814
27	Henry Langwith	Campbell Hill							893	893	
Totals									875,711	592,715	282,926
Averages											

Whole number of openings reported in 1898, 21.

Number of new mines or places opened during the year, 6

Whole number of openings reported for 1899, 27.

\* Machine mining, in part, a total of 521,645 tons at 29 cents per ton.

Jackson County, 1899—Concluded.

Number.	VALUES.			EMPLOYES.			Price paid per gross ton—hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	Number of horses or mules employed in or about the mine.	ACCI- DENTS.		
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.							Fatal.	Non-fatal.	
1	\$1 15	80	\$41,225	25	20	45	80	36	S. M.	320	823,883	350	5	...	3
2	1 25	75	67,594	50	33	83	36	36	"	200	43,817	600	7	...	3
3	1 35	75	72,929	40	37	77	36	36	"	250	44,291	650	12	...	...
4	1 00	50	126,657	108	92	200	36	"	"	253	94,416	1,417	16	...	10
5	1 00	50	120,401	145	60	205	36	"	"	266	72,993	1,412	18	1	14
6	1 00	50	100,072	115	55	170	36	"	"	240	63,278	1,386	18	...	5
7	1 00	70	12,480	16	8	24	36	"	"	300	7,760	150	2	...	...
8	1 50	1 00	834	2	1	3	75	W.	"	150	583	24	...	...	...
9	1 00	...	200	1	...	1	30	"	"	140	†	10	...	...	...
10	1 00	...	500	3	1	4	30	"	"	182	260	24	...	...	...
11	1 00	...	560	3	1	4	30	"	"	132	272	50	...	...	...
12	1 00	...	700	3	1	3	30	"	"	150	385	35	...	...	...
13	1 00	...	600	3	1	4	3	"	"	182	300	50	...	...	...
14	1 00	...	300	2	1	3	30	"	"	182	100	30	...	...	...
15	1 00	...	10,200	20	14	34	36	S. M.	"	188	5,649	402	6	1	...
16	1 00	...	4,800	7	5	12	36	"	"	120	660	135	3	...	...
17	1 15	40	18,800	27	16	43	36	"	"	209	12,003	500	6	...	...
18	1 00	...	687	1	1	2	36	"	"	212	444	23	1	...	...
19	1 00	75	575	2	1	3	36	"	"	150	300	50	2	...	...
20	1 00	...	600	2	...	2	36	"	"	180	200	50	1	...	...
21	1 00	...	540	2	...	2	36	"	"	172	140	48	1	...	...
22	1 00	...	500	1	...	1	36	"	"	200	†	40	1	...	...
23	1 00	...	300	2	...	2	36	W.	"	150	150	50	...	...	...
24	75	60	43,305	70	37	107	36	S. M.	"	146	38,419	1,750	13	...	...
25	1 00	...	300	4	1	5	36	"	"	40	210	50	1	...	...
26	85	35	116,617	170	82	252	36	"	"	236	96,511	6,337	30	...	4
27	1 25	...	1,116	3	1	4	36	W.	"	150	420	40	...	...	...
.....	.....	.....	\$743,392	826	469	1,295	.....	.....	.....	.....	\$508,493	15,657	146	2	36
.....	\$1 00.6	\$0 52	.....	.....	.....	.....	80 36	.....	.....	189	.....	.....	.....	.....	.....

† Amount of wages paid not reported.

## Jefferson County—Seventh District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	Mount Vernon Coal Co...	Mt. Vernon...	825	4 10	5	Sh.	S.	M.	* 32,407	22,407	10,000
2	G. W. Shelton .....	Opdyke.....	6	1.6	12	St.	Ho.	B.	800	800	.....
	Totals .....								33,207	23,207	10,000
	Averages.....										

\* Machine mining 33 cents per ton, for 24,307 tons.

Whole number of openings reported in 1898, 2.

Whole number of openings reported for 1899, 2

## Johnson County—Seventh District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	New Burnside Coal Co...	New Burnside	30	3 8	2	Sh.	Ho.	B.	3,000	2,000	1,000
2	D. J. Wallace .....	"	20	3 4	3	D.	H.	"	550	550	.....
3	McMichael & King .....	"	20	3 4	3	"	"	"	600	550	50
4	Hampton & Son .....	"	20	3 4	3	"	"	"	400	400	.....
5	Walter Smith.....	"	20	3 4	3	"	"	"	406	406	.....
	Totals .....								4,956	3,906	1,050
	Averages.....										

Whole number of openings reported in 1898, 5.

Whole number of openings reported for 1899, 5.

*Jefferson County, 1899—Concluded.*

Number.	VALUES.			EMPLOYES.			Price paid per gross ton—hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes, excepting office help.	Kegs of powder used.	ACCIDENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Number of horses or mules employed in or about the mine.	Fatal.
1	\$1 00	\$0 75	\$29,907	50	32	82	\$0 40	Y. M.	240	\$29,907	400	6	...
2	1 00	.....	800	3	.....	3	40	.....	200	800	5	2	.....
.....	.....	.....	\$30,707	53	32	85	.....	.....	.....	\$30,707	405	8	.....
.....	\$1 00	\$0 75	.....	.....	.....	.....	\$0 40	.....	220	.....	.....	.....	.....

*Johnson County, 1899—Concluded.*

Number.	VALUES.			EMPLOYES.			Price paid per gross ton—hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes, excepting office help.	Kegs of powder used.	ACCIDENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Number of horses or mules employed in or about the mine.	Fatal.
1	\$1 00	\$0 50	\$2,500	10	6	16	\$0 37	Y. M.	112	\$1,110	80	3	.....
2	1 00	.....	550	3	.....	3	55	.....	125	300	20	1	.....
3	1 00	50	575	12	.....	12	45	.....	120	100	13	1	.....
4	1 00	.....	400	12	.....	12	45	.....	108	120	12	1	.....
5	1 00	.....	406	12	.....	12	45	.....	140	310	14	1	.....
.....	.....	.....	\$4,431	19	7	26	.....	.....	.....	\$1,970	139	7	.....
.....	\$1 00	\$0 50	.....	.....	.....	.....	\$0 42.4	.....	121	.....	.....	.....	.....

## Perry County—Seventh District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	Du Quoin Union Coal Co., Browning .....	Du Quoin....	45	6.6	6	Sh.	St.	B.	100,000	55,000	45,000
2	Du Quoin Union Coal Co., Enterprize .....	"	90	6.6	6	"	"	"	100,000	55,000	45,000
3	Du Quoin Union Coal Co., Egyptian .....	"	90	6.6	6	"	"	"	52,000	27,000	25,000
4	John C. Porter, Lake .....	"	62	6	6	"	"	"	9,599	6,924	2,675
5	Jupiter Mining Co., Eaton .....	"	38	6	6	"	"	"	5,000	5,000	.....
6	Horns Colliery Co., Horns .....	"	80	7	6	"	"	"	123,829	80,000	43,829
7	Greenwood & Davis, Greenwood .....	"	38	6	6	"	"	"	54,000	27,000	27,000
8	Pope Mining Co. ....	"	44	6	6	"	"	"	24,654	15,230	9,424
9	Morris Bros. & Co. ....	"	22	5.5	6	"	"	"	24,000	18,000	6,000
10	City Coal Co. ....	"	32	5.6	6	"	"	"	2,500	1,250	1,250
11	Thos. J. Howell .....	"	25	5	6	"	"	"	3,000	2,700	300
12	Ill. Central Coal & Salt Co., St. John .....	St. John .....	300	9	6	Sh.	St.	"	109,500	74,200	35,300
13	M. F. Harvey .....	"	28	6.6	6	"	Ho.	"	400	400	.....
14	Sun Coal & Coke Co. ....	Sunfield .....	80	5.5	6	"	St.	"	34,633	23,914	10,719
15	Tamaroa Coop. Coal Co. ....	Tamaroa .....	200	6.6	6	"	"	"	9,600	9,600	600
16	G. W. Brown .....	Pinckneyville .....	90	6	6	"	"	"	77,477	46,487	30,990
17	Turner & Faust .....	"	86	6	6	"	"	"	16,000	14,000	2,000
18	Henry Maasburg .....	"	35	6	6	"	"	"	2,565	2,565	.....
19	H. W. Duckwith .....	"	35	6	6	"	"	"	1,000	1,000	.....
20	Brown & Barwell .....	Conant .....	72	6	6	"	"	"	14,238	14,238	.....
21	William Barnard .....	Cutler .....	122	6	6	"	"	"	27,427	25,689	1,738
22	C. A. Cunningham .....	"	40	5.6	6	"	Ho.	"	400	400	.....
23	Thomas Carter .....	Denmark .....	20	5.6	6	"	"	"	300	300	.....
24	John E. Henson .....	"	25	5.6	6	"	"	"	325	325	.....
25	Willis Coal & M'n'g Co. .	Willisville....	80	6	6	"	St.	M.	86,975	66,975	20,000
	Totals.....	.....	.....	.....	.....	.....	.....	.....	879,422	572,547	306,825
	Averages.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Whole number of openings reported in 1898, 24.

Number of new mines or places opened during the year, 3.

Number of mines exhausted or abandoned during the year, 2.

Whole number of openings reported for 1899, 25.

Tamora Colliery Company on strike during the year.



*Perry County, 1899—Concluded.*

Number.	VALUES.			EMPLOYES.			Price paid per gross ton—hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	ACCIDENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.
1	\$0 80	\$0 30	\$57,500	75	60	135	\$0 30	S. M.	175	\$63,400	2,211	20	.....
2	80	30	57,500	64	49	113	36	"	175	60,600	2,121	18	.....
3	75	20	25,250	23	17	40	36	"	165	31,463	1,242	6	.....
4	82.5	25	6,381	30	11	41	36	"	108	5,456	384	3	.....
5	75	.....	3,750	28	10	38	36	"	48	3,200	120	6	.....
6	75	25	70,957	145	40	185	36	"	250	64,100	3,000	18	2
7	95	45	37,800	80	37	117	36	"	193	23,000	1,550	6	.....
8	80	37	15,671	29	9	38	36	"	225	12,327	625	4	1
9	75	15	14,400	40	12	52	36	"	200	13,400	1,200	7	.....
10	1 00	90	2,375	4	2	6	36	"	264	1,400	50	1	.....
11	1 25	60	3,555	4	1	5	36	W.	200	2,400	125	2	.....
12	88	35	77,651	100	58	158	36	S. M.	243	75,000	720	18	1 2
13	1 00	.....	400	2	1	3	36	"	90	*	15	1	.....
14	75	40	22,223	41	22	63	36	"	221	19,894	800	9	.....
15	70	50	6,600	14	7	21	36	M.	220	2,400	300	4	.....
16	70	20	38,739	85	27	112	40	S. M.	149	41,104	2,126	9	1 1
17	85	50	12,900	10	6	16	40	M.	200	7,800	550	2	.....
18	1 10	.....	2,822	3	3	6	40	"	190	928	89	.....	.....
19	1 10	.....	1,109	3	1	4	40	"	160	500	43	.....	.....
20	72.5	.....	10,323	20	6	26	40	S. M.	150	7,119	500	3	1
21	70	10	18,156	30	8	38	40	"	275	15,190	1,000	3	.....
22	1 00	.....	400	1	1	2	40	"	150	*	18	1	.....
23	1 00	.....	300	1	1	2	40	"	130	*	14	1	.....
24	1 00	.....	325	1	1	2	40	"	132	*	15	1	.....
25	70	20	50,883	85	28	113	40	"	300	40,800	2,000	10	2
.....	.....	.....	\$537,961	918	418	1,336	.....	.....	.....	\$491,481	20,818	153	6 5
\$0 78 27	\$0 29	.....	.....	.....	.....	.....	\$0 369	.....	185	.....	.....	.....	.....

\* Amount of wages paid not reported.

## Randolph County—Seventh District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	Western A. C. & C. Co., "Eden."	Sparta	140	6	6	Sh.	S.	B.	132,245	109,222	23,023
2	Boyd C. & C. Co., No. 1.	"	80	6	6	"	"	"	74,401	74,401	
3	" " " " " " " " " " " "	"	75	6	6	"	"	"	12,376	12,376	
4	Ill. Fuel & Pros. Co., No. 2.	"	37	6	6	"	"	"	5,813	5,813	
5	" " " " " " " " " " " "	"	36	5	2	6	"	"	15,296	15,296	
6	Coulterville Min. Co., No. 1	Coulterville	370	6	6	"	"	"	25,091	23,891	1,200
7	Donk Bros. C. & C. Co.	Filden	180	6	6	"	"	"	55,040	48,384	6,656
8	Wm. Goalby & Sons, No. 2	Percy	70	6	6	"	"	"	26,381	26,381	
9	Wm. Borders, "L. M'dy."	"	65	6	6	"	"	"	14,000	14,000	
10	Rosborough C. Co.	"	30	5	5	"	"	"	10,773	9,773	1,000
11	Henry Dean	"	20	5	5	"	"	Hd	300	300	
12	Dietrich Steamer	"	18	5	5	"	"	"	400	400	
13	George Stanway	Blair	24	6	6	"	"	Ho.	2,207	2,043	164
Totals									374,323	342,280	32,043
Averages											

Whole number of openings reported in 1898, 15.

Number of mines exhausted or abandoned during the year, 2.

Whole number of openings reported for 1899, 13.

*Randolph County, 1899—Concluded.*

Number.	VALUES.			EMPLOYEES.			Price paid per gross ton— hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Keels of powder used.	ACCIDENTS		
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.	
1	\$0 65	\$0 25	\$76,750	107	38	145	\$0 40	S. M.	268	\$73,022	4,010	11	1	2
2	80	.....	59,521	50	13	63	40	.....	250	37,260	1,200	5	.....	.....
3	80	.....	9,901	10	4	14	40	.....	230	6,188	400	1	.....	.....
4	67	.....	3,895	7	4	11	40	.....	97	3,720	191	3	.....	.....
5	67	.....	10,248	10	4	14	40	.....	177	9,777	383	4	.....	1
6	75	30	18,278	28	20	48	40	.....	227	12,546	600	5	.....	.....
7	65	20	32,781	44	16	60	40	.....	258	29,458	1,761	4	.....	.....
8	70	.....	18,467	40	9	49	40	.....	217	12,970	768	3	.....	2
9	65	.....	9,100	31	5	36	40	.....	145	8,700	290	3	.....	.....
10	80	65	8,468	25	12	37	40	.....	160	6,420	600	4	.....	.....
11	1 00	.....	300	1	1	2	40	.....	108	*	12	1	.....	.....
12	1 00	.....	400	2	1	3	40	.....	112	*	17	1	.....	.....
13	1 00	50	2,125	3	1	4	40	.....	200	150	91	1	.....	.....
.....	.....	.....	\$250,234	358	128	486	.....	.....	.....	\$200,151	10,233	41	1	5
.....	80 70.7	80 25.5	.....	.....	.....	.....	\$0 40	.....	182	.....	.....	.....	.....	.....

\* Amount of wages paid not reported.

## Saline County—Seventh District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	Davenport C. Co., Ledford	Harrisburgh..	144	8	5	Sh.	St.	B.	62,943	55,959	6,984
2	Harrisburg M. & Coke Co	"	290	8	5	"	"	"	25,300	15,000	10,300
3	J. B. Blackman .....	"	4	10	6	"	Ho.	"	1,140	1,140	.....
4	Dorris & Evans .....	"	21	4.10	6	Sl.	"	"	600	600	.....
5	Strickland Bros .....	Ledford .....	4	8	6	"	"	"	900	900	.....
6	Geo. Rilying .....	"	20	4.8	6	"	"	"	400	400	.....
7	Wm. Butler .....	Stonefort .....	18	3	5	D.	Hd	"	120	120	.....
8	John Hawkins .....	"	20	3	5	"	"	"	220	220	.....
9	Teal & Williams .....	"	25	3	5	Sl.	Ho.	"	280	280	.....
10	H. A. Sittig .....	"	40	3	5	D.	Hd	"	125	125	.....
11	John Chanery .....	"	40	3	5	"	"	"	110	110	.....
12	Charles Trammell .....	"	40	3	5	"	"	"	100	100	.....
13	A. C. Coydili .....	"	30	3	5	Sl.	Ho.	"	25	25	.....
14	Noah Stiff .....	S. America ..	10	5	6	St.	"	"	120	120	.....
15	R. M. Berry .....	Cottage Grove	18	4	6	"	"	"	175	175	.....
16	John Yates .....	"	26	4	5	"	"	"	280	280	.....
17	James Lyod .....	"	25	4.6	5	"	"	"	1,110	1,110	.....
18	Charles Hall .....	"	40	4.3	5	"	"	"	200	200	.....
Totals .....								94,148	76,864	17,284	
Averages .....											

Whole number of openings reported in 1898, 15.

Number of new mines or places opened during the year, 3.

Whole number of openings reported for 1899, 18.

## Washington County—Seventh District, 1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	Alexander Murray .....	Nashville .....	425	5.6	6	Sh.	S.	B.	15,723	13,678	2,045
2	P. J. Breuggerman .....	"	376	4.6	6	"	"	"	5,627	5,000	627
3	Adam Kuhn .....	DuBois .....	296	5.6	6	"	"	"	11,000	8,000	3,000
4	Okawville W. S. C. & Co.	Okawville .....	320	5.6	6	"	"	"	2,110	1,760	350
Totals .....								34,460	28,438	6,622	
Averages .....											

Whole number of openings reported in 1898, 4.

Whole number of openings reported in 1899, 4.

Saline County, 1899—Concluded.

Number.	VALUES.			EMPLOYES.			Price paid per gross ton— hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	ACCIDENTS		
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.	
1	\$0 75	\$0 40	\$44,763	68	31	99	\$0 30	S. M.	287	\$12,413	3,000	8	.....	
2	1 00	60	21,180	25	9	34	30	..	210	2,337	460	3	.....	
3	1 00	.....	1,110	4	1	5	30	..	100	800	20	1	.....	
4	1 00	.....	600	1	1	2	50	W.	32	.....	7	1	.....	
5	1 00	.....	900	1	1	2	50	..	55	.....	1	1	.....	
6	1 00	.....	400	1	1	2	50	..	62	585	12	1	.....	
7	1 00	.....	120	1	1	2	50	..	6	.....	3	.....	.....	
8	1 00	.....	220	.....	.....	.....	50	..	100	.....	6	.....	.....	
9	1 00	.....	250	.....	.....	.....	50	..	110	.....	6	1	.....	
10	1 00	.....	125	.....	.....	.....	50	..	45	.....	3	.....	.....	
11	1 00	.....	110	.....	.....	.....	50	..	46	.....	3	.....	.....	
12	1 00	.....	100	.....	.....	.....	50	..	31	.....	3	.....	.....	
13	1 00	.....	25	.....	.....	.....	50	..	20	.....	4	1	.....	
14	1 00	.....	120	.....	.....	.....	50	..	32	.....	4	2	.....	
15	1 00	.....	175	.....	.....	.....	50	..	90	65	10	1	.....	
16	1 00	.....	280	.....	.....	.....	50	..	102	112	7	1	.....	
17	1 00	.....	1,110	.....	.....	.....	50	..	170	786	35	1	.....	
18	1 00	.....	200	.....	.....	.....	50	..	102	75	10	1	.....	
.....	.....	.....	\$71,848	125	48	173	.....	.....	.....	\$18,173	3,590	23	1	.....
.....	\$0 81.8	\$0 52	.....	.....	.....	.....	\$0 31.1	.....	101	.....	.....	.....	.....	.....

\* Not reported.

Washington County, 1899—Concluded.

Number.	VALUES.			EMPLOYES.			Price paid per screened ton— hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	ACCIDENTS	
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.
1	\$0 85	\$0 75	\$13,160	22	7	29	\$0 40	S. M.	250	\$9,434	320	.....	.....
2	85	50	4,564	10	5	15	45	..	160	3,761	250	.....	.....
3	75	37 <sup>1</sup> / <sub>2</sub>	7,125	25	12	37	33	M.	120	5,000	200	3	.....
4	1 37 <sup>1</sup> / <sub>2</sub>	1 12 <sup>1</sup> / <sub>2</sub>	2,814	4	2	6	62 <sup>1</sup> / <sub>2</sub>	W.	185	1,240	70	.....	.....
.....	.....	.....	\$27,663	61	26	87	.....	.....	.....	\$19,435	870	8	.....
.....	\$0 85.4	\$0 56.7	.....	.....	.....	.....	\$0 40	.....	181	.....	.....	.....	.....

## Williamson County—Seventh District—1899.

Number.	Name of Operator.	Postoffice.	DESCRIPTION.						OUTPUT.		
			Depth of coal—feet.	Thickness of coal—feet and inches.	Geological No. of seam.	Shaft, slope or drift.	Steam, horse or hand power.	Mined or blasted.	Total tons produced.	Tons of lump coal.	Tons of other grades
1	St. Louis Big Muddy Coal Co., Dawes.....	Cartersville ...	90	7	7	Sh.	S.	Bl.	300,591	182,890	117,701
2	Cartersville Coal Co., Bun	.....	60	7	7	Sh.	S.	Bl.	122,815	66,570	56,245
3	Scott-Wilson Coal Co., No. 1, Prosperity .....	"	65	7	7	"	"	"	82,286	51,714	30,572
4	Scott-Wilson C. Co., No. 2	"	7	7	7	"	"	"	75,048	53,850	22,198
5	Robt. Dick C. Co., Dick..	"	7	7	7	"	"	"	643	643	.....
6	John A. Young .....	"	7	7	7	"	"	"	3,531	3,531	.....
7	O. & M. Valley Coal and M. Co., No. 1, Snider....	Marion.....	60	7	7	Sl.	"	"	61,261	36,757	24,504
8	O. & M. V. C. & M. C., No. 2	"	80	7	7	Sh.	"	"	*110,843	60,964	49,879
9	C. Orchard C. C., Goodall	"	40	7	7	"	"	"	17,000	9,350	7,650
10	William Jack, No. 1 .....	"	40	7	7	"	Ho.	"	500	400	100
11	William Allen, Strip .....	"	8	7	7	St.	"	"	700	700	.....
12	Ohio Valley C. & C. Co. ..	Spillertown ..	22	7	7	Sl.	S.	"	*65,926	34,703	31,223
13	Big M. C. & I. Co., No. 7.	Herrings .....	140	7	7	"	"	"	†170,722	103,723	66,999
14	John Reid .....	"	40	7	7	"	"	"	1,000	800	200
15	Williams'n Co. C. C., No. 1	Lake Cr'k P.O.	150	7	7	"	"	"	59,409	34,404	25,005
16	E. E. Ensminger .....	Crab Orchard	25	5.6	6	D.	Ho.	"	400	400	.....
17	L. F. Bowes .....	"	20	5.6	6	"	"	"	240	240	.....
18	Edgar Sparks .....	"	20	5.6	6	"	"	"	1,500	1,500	.....
19	T. Motsinger .....	"	22	5.6	6	"	Hd	"	400	400	.....
20	W. C. Cambell .....	"	20	5.6	6	"	"	"	230	230	.....
21	T. H. Wilford .....	"	25	5.6	6	Sl.	Ho.	"	270	270	.....
22	William Reid .....	Absher .....	7	7	6	St.	Hd	"	80	80	.....
23	William Ritchie .....	"	8	7	6	"	"	"	75	75	.....
24	E. W. Notsinger .....	"	8	7	6	"	"	"	85	85	.....
25	S. C. Howells .....	Blairsville....	50	7	7	Sh.	S.	"	400	300	100
26	J. D. Ward .....	Pulleys' Mill.	30	3	1	Sl.	Ho.	M.	1,800	900	900
Totals .....									1,078,755	645,479	433,276
Averages .....											

Whole number of openings reported in 1898, 26.

Number of new mines or places opened during the year, 3.

Number of mines exhausted or abandoned during the year, 3.

Whole number of openings reported for 1899, 26.

\* Machine mining, price paid 23 cents per ton.

† Machine mining, 23,305 tons, at 29 cents per ton.

Williamson County, 1899.—Concluded.

Number.	VALUES.			EMPLOYES.			Price paid per gross ton hand mining.	Paid monthly, semi-monthly or weekly.	Days of active operation.	Total wages paid during the year to all employes excepting office help.	Kegs of powder used.	ACCIDENTS		
	Average value of lump per ton at the mine.	Average value of other grades.	Aggregate value of total product.	Average number of miners employed.	All other employes.	Total employes.						Fatal.	Non-fatal.	
1	\$0 70.5	\$0 33.3	\$168,132	226	84	310	\$0 30	S. M.	304	\$156,240	8,880	42	1	6
2	85	38	77,958	80	53	130	30	..	254	61,242	3,210	20	..	..
3	80	30	50,543	45	22	67	30	..	283	42,902	1,411	..	..	..
4	80	30	49,739	55	34	89	30	..	226	38,181	1,624	11	1	..
5	55	..	354	5	5	13	30	..	42	1,200	50	1	..	..
6	1 00	..	3,531	4	1	5	30	W.	200	1,553	90	1	..	..
7	70	38	35,041	92	28	120	30	S. M.	129	27,505	1,651	12	..	..
8	70	38	61,629	120	85	205	..	..	200	48,969	1,626	18	1	..
9	80	25	9,393	22	15	37	30	..	150	8,379	439	3	..	..
10	1 00	75	475	1	1	2	40	W.	60	400	14	..	..	..
11	1 00	..	700	..	..	..	40	..	120	506	3	2	..	..
12	70	36	35,532	35	39	74	..	S. M.	185	25,932	900	9	..	..
13	69	55	108,418	170	75	245	30	..	275	90,916	5,126	12	1	6
14	90	50	820	3	1	4	45	W.	90	600	40	1	..	..
15	70	30	31,584	55	29	84	30	S. M.	130	25,039	1,420	5	..	2
16	75	..	300	3	1	4	45	W.	70	200	18	2	..	..
17	1 00	..	240	3	..	3	45	..	120	125	6	1	..	..
18	1 00	..	1,500	3	1	4	45	..	200	1,000	75	2	..	..
19	75	..	300	3	..	3	45	..	80	300	15	..	..	..
20	1 00	..	230	2	..	2	45	..	75	100	12	..	..	..
21	75	..	203	1	..	1	45	..	70	30	24	1	..	..
22	75	..	60	2	..	2	45	..	24	..	2	..	..	..
23	75	..	56	1	..	1	45	..	35	..	1	..	..	..
24	75	..	64	2	..	2	45	..	25	..	2	..	..	..
25	1 25	75	375	2	1	3	50	..	50	240	20	..	..	..
26	1 25	1 00	2,025	5	..	5	50	..	200	1,500	25	1	..	..
			\$639,202	943	484	1,427				\$533,119	26,624	150	4	14
			\$0 73.7	\$0 37.7			\$0 30		138					

1 Amount of wages not reported.

## Recapitulation by Counties—

COUNTIES.	MINES.				PRODUCTS.					VALUES.		
	Number of mines.	Shipping mines.	Mines in local trade.	New mines.	Abandoned mines.	Total tons produced.	Tons of lump coal.	Tons of other grades.	Tons shipped.	Tons consumed or wasted at the mines.	Average value per ton of lump at the mines.	Average value of other grades per ton at the mines.
Gallatin.....	9	1	8	...	...	16,754	15,429	1,325	10,021	200	\$1 00	\$0 25
Hamilton.....	2	...	2	...	...	640	640	.....	.....	.....	1 40	.....
Jackson.....	27	12	15	6	..	875,711	592,715	282,996	783,258	59,628	1 00.6	52
Jefferson.....	2	1	1	...	...	33,207	23,207	10,000	22,407	2,400	1 00	75
Johnson.....	5	1	4	...	...	4,956	3,906	1,050	3,000	.....	1 00	50
Lerry.....	25	17	8	3	2	879,422	572,597	306,825	801,694	43,964	78.27	29
Randolph.....	13	10	3	...	2	374,323	342,280	32,043	341,268	9,111	70.7	25.5
Saline.....	18	2	16	3	..	94,148	76,864	17,284	81,103	2,840	81.8	52
Washington..	4	3	1	...	...	31,460	28,438	6,022	19,000	5,202	85.4	56.7
Williamson...	26	10	16	3	3	1,078,755	645,479	433,276	1,003,206	50,606	73.7	37.7
Total... ..	131	57	74	15	7	3,392,376	2,301,555	1,090,821	3,064,957	173,951	.....	.....
Averages. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	\$0 82.24	\$0 39.35

Whole number of openings reported in 1898, 123.

Number of new mines or places opened during the year, 15.

Number of mines exhausted or abandoned during the year, 7.

Whole number of openings reported for 1899, 131.



Seventh District—1899.

Aggregate value of total product.....	EMPLOYES.			Average number of days of active operation.	Average price paid per gross ton for hand mining	Total wages paid during the year to all employes excepting office help.	Number of kegs of powder used.	Number of horses and mules employed in and about the mines.	CASUALTIES		MACHINES.		
	Number of miners.	Number of other employes.	Total employes.						Killed.	Injured.	Number of mines using machines.	Number of machines in use.	Total tons cut by machines.
\$15,760	52	21	73	142	\$0 52.4	\$15,760	936	14	.....	.....	.....	.....	.....
900	11	.....	11	68	62.5	900	7	4	.....	.....	.....	.....	.....
743,392	826	469	1,295	189	36	* 508,493	15,657	146	2	36	7	41	a 521.64
30,707	53	32	85	220	40	30,707	405	8	.....	.....	1	5	b 24.3
4,431	19	7	26	121	42.4	1,970	139	7	.....	.....	.....	.....	.....
537,961	918	418	1,336	185	36.9	† 491,481	20,818	153	6	5	1	4	b 56,666
250,234	358	128	486	182	40	‡ 200,151	10,233	44	1	5	.....	.....	.....
71,848	125	48	173	101	31.1	§ 18,173	3,599	26	1	.....	.....	.....	.....
27,663	61	26	87	181	40	19,435	870	8	.....	.....	.....	.....	.....
639,202	943	84	1,427	138	30	‡ 533,149	26,684	150	4	14	3	14	c 205,074
\$2,322,098	3,366	1,633	4,999	.....	.....	\$1,820,219	79,348	557	14	60	12	64	807,692
.....	.....	.....	.....	159	\$0 34.5	.....	.....	.....	.....	.....	.....	.....	.....

\* Two mines amount of wages paid not reported.

† Four mines amount of wages paid not reported.

‡ Two mines amount of wages paid not reported.

§ Ten mines amount of wages paid not reported.

‡ Three mines amount of wages paid not reported.

a Price paid for machine mining, 29 cents per ton.

b Price paid for machine mining, 33 cents per ton.

c Average price paid for machine mining, 27.75 cents per ton.

Average price paid for machine mining in the district, 28.1 cents per ton.



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# APPENDIX.

REGISTER OF CERTIFICATED—

MINE MANAGERS.

HOISTING ENGINEERS.

MINE EXAMINERS.

REPORT ON INSPECTION FEES.

REVISED MINING LAW AND OTHER LAWS

REPORTS OF FREE EMPLOYMENT OFFICES.

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## REGISTER OF CERTIFICATED MINE MANAGERS, HOISTING ENGINEERS AND MINE EXAMINERS.

NOTE—This list includes all the mine managers to whom certificates were issued prior to January 1, 1900.

The names which are printed in *italic* are those who hold both certificates of service and subsequent certificates of competency acquired through examination.

The names which are followed by the abbreviation "ex." are those who have exchanged certificates of service for those of competency, without examination, under the provisions of the amendment of 1895.

The post office addresses here given are those recorded at the time the certificate was issued, and in many cases are not the present addresses of the certificate holders.

### MINE MANAGERS HOLDING CERTIFICATES OF COMPETENCY.

Name.	Postoffice.	Name.	Postoffice.
<i>Adams, Charles T</i> .....	Rosboro .....	Bartlett, Thomas, ex .....	Cuba .....
Adams, J. M. ....	Wanlock .....	<i>Bashong, Andrew</i> .....	Danville..
Ainsworth, Samuel .....	Taylorville .....	<i>Barwell, John</i> .....	Marissa .....
Ainsworth, Samuel, Jr. ....	" .....	<i>Bates, W. H.</i> .....	Winchester .....
Ainsworth, Thomas .....	" .....	Bates, R. D. ....	" .....
Aitken, James .....	Streator .....	Baumer, Fred. ....	Marquette .....
Anderson, W. C. ....	Elmwood .....	Bauer, Valentine .....	Clyde .....
Anderson, James .....	Ladd .....	Baxter, William .....	Ladd .....
<i>Andreas, Aug.</i> .....	Belleville .....	Beaghan, Peter .....	Cantrall .....
<i>Angel, Hiram</i> .....	" .....	Beattie, John .....	Danville .....
Angell, Charles .....	" .....	Beatty, James .....	Mascoutah .....
Apblett, William R. ....	Springfield .....	Beatty, James H. ....	" .....
Argyle, Joseph .....	Coal City .....	Becker, F. W. ....	Pinckneyville .....
Atkinson, Edward .....	Streator .....	Beharelle, Fred. ....	Orchard Mines .....
Atkinson, William .....	Murphysboro .....	Bell, Richard .....	Gillespie .....
Atkinson, William .....	Braceville .....	Bell, William .....	Streator .....
Armstrong, Thomas J. ....	Spring Valley .....	Belger, John .....	Nilwood .....
Archer, John .....	Barclay .....	Bengston, John A., ex .....	Galva .....
Aston, Hubert, ex .....	Fairmount .....	Bennett, James .....	Odin .....
Archibald, David .....	Freeburg .....	Bennett, John .....	Centralia .....
Ax, John .....	Edwardsville .....	Berkstresser, W. A. ....	DuQuoin .....
<i>Azford, Thomas</i> .....	Petersburg .....	Betts, Joseph E. ....	Belleville .....
		<i>Betz, Charles C.</i> .....	DuQuoin .....
		Bevard, John J. ....	Kinmundy .....
		Bevard, F. C. ....	Cartersville .....
Baker, Gustav .....	Streator .....	Beveridge, David .....	Sorento .....
Back, Thomas .....	Mapleton .....	Beggs, Samuel, ex .....	Clark City .....
Bailey, William .....	Athens .....	Biebel, Henry, ex .....	Rentehler .....
Bailey, Joseph .....	DuQuoin .....	Biggins, James .....	Sorento .....
Ball, Edward .....	Bartonville .....	Bingham, Robert .....	O'Fallon .....
<i>Bangart, Henry</i> .....	Lincoln .....	Bird, George W. ....	Coffeen .....
Barlow, Henry .....	Coffeen .....	Birtin, Henry .....	Pana .....
Barnett, Oliver .....	Bryant .....	Birtley, William P. ....	Springfield .....
Barron, James, ex .....	Cantrall .....		

## Mine Managers—Certificates of Competency—Continued.

Name.	Postoffice.	Name.	Postoffice.
Blair, Gus.....	Murphysboro	Cruikshanks, Wm.....	Middle Grove
Boettcher, F. J.....	New Athens	Cryer, James T.....	Spring Valley
Boston, G. W.....	Murphysboro	Cumming, Ambrose B.....	Sparland
Boston, James.....	DuQuoin	Cumming, James P.....	
Bottomely, Edward.....	Oglesby	Cumming, John P.....	Braceville
Bottomely, John.....		Cumming, Thomas S.....	Gardner
Bowers, Robert.....	Wenona	Cumming, D. H.....	
Bowie, James.....	Braidwood	Cunningham, Thomas.....	Girard
Bracken, James A.....	Greenview	Cunningham, Cormick.....	Springfield
Bradenburger, P.....	Belleville		
Brockhouse, Samuel.....	Caseyville		
Brigham, Wm.....	Marissa	Daenzer, Anton.....	Belleville
Brown, John.....	Glen Carbon	Dale, Henry.....	Murphysboro
Brown, William J.....	Coal City	Dale, John.....	Fredonia
Brown, William F.....	Pontiac	Daniels, James.....	Belleville
Brown, F. M.....	Farmington	Daniels, Samuel.....	
Browning, J. M.....	DuQuoin	Daaney, William.....	Lincoln
Bru-ekner, Emil.....	Staunton	Davis, Caleb.....	Collinsville
Brueggeman, George.....	Belleville	Davis, J. H.....	Cuba
Bulmer, John, ex.....	St. John	Davis, Thomas.....	Dunfermline
Bulmer, Benjamin.....	Muddy Valley	Davis, P. J.....	Percy
Bundy, John.....	Streator	Davis, William.....	Litchfield
Burdett, J. P.....	Colchester	Davidson, M.....	DuQuoin
Burke, George, ex.....	Peru	Davidson, James.....	Sparta
Burkhardt, John B.....	Mt. Olive	Dawson, Richard.....	Athens
		Deans, Henry.....	Percy
		Denny, John J.....	Springfield
Cairns, John.....	Moweaqua	Denny, Lawrence.....	Springfield
Callar, Isaac.....	Pottstown	Devlin, Henry.....	Toluca
Cameron, David J.....	Pana	Devlin, Thomas H.....	Spring Valley
Cameron, D. S., ex.....	Sorento	Diamond, Peter.....	DuQuoin
Campbell, William.....	Sandoval	Dick, Robert.....	
Campbell, Frank J.....	Athens	Dickenson, James E.....	Belleville
Campbell, Thomas M.....	Pinckneyville	Dickerson, J. L.....	Danville
Campbell, H. J.....	Assumption	Dodd, William.....	Cable
Canfield, R. A.....	Madisonville, Ky.	Dodge, H. N.....	St. David
Carson, J. H.....	O'Fallon	Donahoe, James.....	Carterville
Carter, Charles.....	Birkner	Donaldson, William.....	Kangley
Carter, George.....		Donaldson, James W.....	Peoria
Cartledge, Oscar.....	Gillespie	Donaley, James.....	Carterville
Carroll, John.....	O'Fallon	Dooley, Harry.....	Springfield
Catheart, Matthew, ex.....	Tilden	Dooner, P. J.....	Glenburn
Chalderton, John.....	Lenz Station	Doughty, James.....	Danville
Cherry, John T.....	Seatonville	Dougherty, Daniel.....	Virginia
Cherry, James.....		Dowell, Thomas.....	Muddy Valley
Cherry, W. S.....	Streator	Downing, Timothy.....	Briar Bluff
Checkin, David.....	Reed City	Drake, George.....	Streator
Chivers, Joseph.....	Braceville	Duddey, John.....	Pana
Christie, David.....	Murphysboro	Dudek, John.....	Kimmundy
Church, Henry M.....	Marissa	Duffner, J. W.....	Belleville
Clark, Martin.....	Decatur	Duncan, Charles.....	Streator
Clark, Quintin.....	Braidwood	Dunham, John F.....	Springfield
Clark, Thomas.....	Decatur	Dunlop, John.....	Odin
Clayton, John F.....	Troy	Durkin, Michael.....	Sunfield
Clelland, Robert.....	Braidwood		
Clifford, Michael J.....	Kewanee		
Coar, Firman.....	Worden	Edwards, S. E.....	Centralia
Collier, Frank J.....	Bartonville	Edwards, Thomas.....	Springfield
Collins, Richard J., ex.....	O'Fallon	Ehret, Frank A.....	Wesley
Condis, Malcom.....	Spring Valley	Eller, William.....	Edwardsville
Conity, Patrick.....	DuQuoin	Emery, Charles.....	Breese
Cooper, Charles.....	Nilwood	Emery, Joseph.....	Belleville
Cook, Robinson.....	Riverton	English, Ralph.....	Mt. Olive
Connors, William.....	Toluca	English, Thomas.....	Streator
Conrad, William.....	Springfield	Erwin, William.....	Belleville
Costello, Henry.....	Pana	Essex, George W.....	Soperville
Costor, George.....	Grape Creek	Evans, George.....	Lincoln
Corrigan, James.....	Marseilles	Evans, John Nine, ex.....	LaSalle
Cowell, William.....	Assumption	Evans, John O., ex.....	O'Fallon
Craine, John E.....	Murphysboro	Evans, Albert E.....	Streator
Craine, B. S.....	"	Evans, William.....	Norris
Crampton, Edward.....	"	Evans, John O., Jr.....	Caseyville
Crauch, J. E.....	Virden		
Crankshaw, Thomas.....	Decatur	Fagan, Michael.....	Spring Valley
Crankshaw, William.....		Fagan, Patrick T.....	Decatur
Crighon, Robert.....	Chenoa	Fohl, Bernard, ex.....	Belleville
Cruikshanks, John.....	Farmington		

## Certificates of Competency—Continued.

Name.	Postoffice.	Name.	Postoffice.
Farlie, James	Gilechrist.	Hall, Matthew	Braecville.
Falcetti, John B.	Glen Carbon.	Hainsel, Daniel	Lenzburg.
Farnworth, Lawrence, ex.	Barclay.	Halbert, J. A.	Westville.
Felker, John	Danville.	Hamilton, Thomas	Nashville.
Fellows, Edward	Streator.	Hanley, John H.	Springfield.
Ferguson, John	Reed City.	Haroin, Joseph H.	Vandercook.
Ferguson, Walter	Braidwood.	Harding, Enos	Birkner.
Finfrack, M. M.	Pana.	Harding, Thomas P.	Danville.
Fleming, James	Decatur.	Harding, William	Lebanon.
Fleming, Jacob	Kewanee.	Harkes, William	Coal City.
Fletcher, John	LaSalle.	Harper, John	Colchester.
Fletcher, John J.	Collinsville	<i>Harrison, Earnest</i>	Streator.
Fletcher, T. C.	"	Harrison, John	Virgen.
Fletcher, William	"	Harrison, John, ex.	Odin.
Foley, George, ex	LaSalle.	Harrison, William	Murphysboro.
Foley, W. E.	Mapleton	Harrop, James T.	Seatonville.
<i>Forsythe, Peter</i>	Centrilia.	Hartman, Frank, ex.	Murphysboro.
Forsythe, Robert	Murphysboro.	Hartman, Wm.	Freeburg.
Foster, William	Lincoln.	Haskins, George H.	Grape Creek.
Foster, James	Marion.	Hauck, Fred.	Glen Carbon.
Francis, T. L.	Braidwood.	Heyes, Henry	Streator.
Frazer, William H.	Danville.	Hebenstreit, Bruno	Staunton.
<i>Frauden, Bernard</i>	Lincoln.	Hebenstreit, E. W.	"
Freer, James	Peoria.	Hebenstreit, J. P.	Rentchler.
Friska, Jan.	Edwardsville.	Helfrich, Henry	Springfield.
Fritz, William, ex.	Breese.	Henderson, Edward	Coal City.
		Henderson, Joseph	Marissa.
		Henderson, Thomas	New Athens.
Gafligan, Michael	Petersburg.	Henley, J. H.	Niantic.
Garrity, John	Riverton.	Henley, Richard	Tilden.
Gaul, Henry J.	Ridge Prairie	Heppard, George	Kewanee.
Gavin, Barney	Springfield.	Henry, Frederick	Pontiac.
Geisler, Ernest	Golden Eagle.	Henry, John T.	Kewanee.
Gell, Philip	Gilechrist.	Henry, Philip	Spring Valley.
Gibson, Michael	Spring Valley	Heriot, James	LaSalle.
<i>Gilbert, Edward</i>	Niantic	Hetherington, Benj. M.	Springfield.
Giles, William	Gillespie.	Hickey, John	Sherrard.
Gilechrist, John W.	Gilechrist.	Hicks, Rd. J.	Wyoming.
Glass, William H.	Pana.	Higbee, A. W.	Cartersville.
Goalby, John F.	Gillespie.	Higbee, James	Colchester.
Goalby, William H., ex.	Percy.	Hill, Marshall	Moline.
Goddard, Benjamin B.	DuQuoin.	Hillary, Edward	DuQuoin.
Goddard, William	"	Hind, John A.	Lincoln.
<i>Golder, William</i>	Cuba.	Hoffman, John	Harrisburg.
<i>Golden, George</i>	Springfield.	Holmes, Thomas F.	Percy.
Golden, William D.	"	Horning, Charles A.	DuQuoin.
Goodall, George	Assumption.	Houston, Robert	"
Gordon, Ephriam G.	Wanlock.	Howell, Thomas H.	Braecville.
Grabuek, R. H.	Staunton.	Howell, D. J.	DuQuoin.
Graham, Hiram	Virgen.	Howells, Eben.	Braidwood.
Graham, John W.	Dunfermline.	Howells, T. J.	"
Graham, Louis A.	Jacksonville.	<i>Hoye, James</i>	"
Graham, William	Virgen.	Hoye, William	Staunton.
Graham, David L.	Springfield.	Huddy, T. H.	Etherly.
Grant, Peter, Jr.	Peoria.	Hudson, Thomas	Braidwood.
Gratz, Gottlieb	Hornsby.	Hughes, James	"
Granlick, Jul. M.	Belleville.	Hughes, John W.	Pana.
Gray, Thomas R.	Springfield.	Hughes, Hugh J.	Litchfield.
Green, Arthur	Braecville.	Hughes, John J.	Hillary.
Green, Joseph, ex.	Marissa.	Hummie, J. A.	Breese.
Green, John W.	Springfield.	Hummert, Henry	Murphysboro.
<i>Green, Robert</i>	"	Humphreys, Edward	Edwards.
Greenwood, John R.	Edinburg.	Hunt, Albert J.	"
<i>Greenwood, Robert</i>	DuQuoin.		
Greives, Peter	Collinsville	Iberson, James	Athens.
Grindrod, William E.	Belleville.	Issininghaus, William	Lebanon.
Groom, John	"	Izat, William	Litchfield.
Grosspitch, August	"		
Guest, Joseph, ex.	"	Jackson, Geo. W.	Cable.
Guiney, James T.	Braidwood.	Jacobson, Charles P.	St. David.
		James, John	Mt. Olive.
Haddiek, John, Jr.	Cable.	James, Jonan	Grape Creek.
Haddiek, William, ex.	Sherrard.	Jaques, William	Belleville.
Haddow, Thomas	Pana.	Jaques, Richard	"
Hagerton, Joseph	St. John	Jefford, R. H.	Kingston Mines.
Haile, George	Ladd.		

*Mine Managers—Certificates of Competency—Continued.*

Name.	Postoffice.	Name.	Postoffice.
Jefford, Thomas H., ex.....	Kingston.....	Lloyd, John E.....	Danville.....
Jeffrey, Peter.....	Cartersville.....	Lloyd, Thomas.....	Rentchler.....
Jenking, Alexander.....	Dunfermline.....	Long, Thomas.....	Wanlock.....
Jenkins, Thomas C.....	Murphysboro.....	Lord, John S.....	Springfield.....
<i>Jermire, William M.</i> .....	DuQuoin.....	Love, John W.....	Carbon Hill.....
John, Evan D.....	Spaulding.....	Lowery, Frank.....	Orchard Mines.....
Johnston, Cochran.....	Spring valley.....	Lumaghi, Joseph.....	Collinsville.....
Johnston, Samuel.....	Oglesby.....	Lumaghi, Louis F.....	.....
Jolly, Thomas J.....	Collinsville.....		
Jones, Charles.....	Marissa.....		
<i>Jones, David</i> .....		Macke, P. H.....	Ledford.....
Jones, D. L.....	Taylorville.....	Malcolm, William J.....	Braceville.....
Jones, Edward.....	Oglesby.....	Malloy, Henry E.....	Decatur.....
Jones, Harry D.....	Riverton.....	Malone, Frank.....	Pinkneyville.....
Jones, John H.....	DuQuoin.....	Maltby, William.....	Braidwood.....
Jones, Logan.....	Marissa.....	Marland, John, Sr., ex.....	Wenona.....
Jones, T. L.....	Ladd.....	Martin, George.....	Farmington.....
Jones, William.....	Marissa.....	Mason, Eli.....	Edinburg.....
Jones, William E.....	Sheffield.....	<i>Mason, Mark, Jr</i> .....	Sato.....
Jones, William E.....	Wesley City.....	Massie, John G.....	Marissa.....
Jones, William M.....	Tamora.....	Matthews, W. S.....	Kimmunity.....
Jordan, Robert.....	Streator.....	Maxwell, Augus.....	Carlinsville.....
		Mays, John F.....	Pana.....
		Medill, Duncan.....	Oglesby.....
Kahle, Joseph.....	Coulterville.....	<i>Meehan, Patrick</i> .....	Breeds.....
Kane, Charles H.....	Dunfermline.....	<i>Meehan, Peter</i> .....	Williamsville.....
Kay, James.....	Sherrard.....	Michaels, Theodore.....	Belleville.....
Karrall, Edgar.....	Braceville.....	Millard, John.....	Peoria.....
Keating, James A.....	Streator.....	Miller, Edward.....	Sorento.....
Keay, A. H. S.....	Seatonville.....	Milburn, Thomas.....	Loceyville.....
Keay, John.....	Springfield.....	Middleton, James L.....	Sandoval.....
Keefe, William.....	Danville.....	<i>Michaels, Lewis</i> .....	Belleville.....
Keil, Mathew.....	Dubois.....	Michaels, Otto L.....	
Keil, Peter.....		Miller, Alexander.....	Ridge Prairie.....
Kelley, Bernard.....	Litchfield.....	Miller, Hugh.....	Coal City.....
Kelley, D. J.....	Carbon Hill.....	<i>Miller, William</i> .....	Leuzburg.....
Kelly, Frank S.....	Centralia.....	<i>Milem, John</i> .....	Norris.....
Kelly, Joseph G., ex.....	Braidwood.....	<i>Millett, Thomas</i> .....	Collinsville.....
Kelly, Robert D.....	Carbon Hill.....	Mills, T. J.....	Cable.....
Kelly, J. D., Sr.....		Mitchell, T. J.....	Pana.....
Kempper, Henry.....	Gillespie.....	Moffat, R. E.....	Percy.....
Kenny, Thomas.....	Springfield.....	<i>Moffat, Thomas</i> .....	
Kerr, John.....	Rushville.....	<i>Monaghan, Edward</i> .....	Carbon Hill.....
Kidd, Alexander.....	Oglesby.....	Moore, Samuel.....	Springfield.....
Kidd, Andrew.....		Morland, John, Jr.....	Wenona.....
Kidd, W.....	Ridge Prairie.....	<i>Morin, Jeremiah</i> .....	Danville.....
<i>Kidd, Neugene</i> .....		Morrin, D. A.....	
Kienbush, David.....	Edwards Station.....	Morgan, George.....	Springfield.....
Kirby, James.....	Athens.....	Morgan, Joseph.....	Streator.....
Kirchner, Frank.....	Belleville.....	Morris, G. W.....	Lebanon.....
Kirkwood, Martin.....	Berkner.....	Morris, J. H.....	Nashville.....
Klinginfus, Otto.....	Belleville.....	Morris, James F.....	Springfield.....
Kloever, Joseph.....	Pana.....	Morris, P. K.....	Roanoke.....
Knies, Henry.....	Breese.....	Morris, William M.....	Belleville.....
Kortkamp, William.....	Hillsboro.....	Morris, Joseph, ex.....	Nashville.....
<i>Kramer, Anthony F</i> .....	Sato.....	Morris, Robert.....	Marion.....
Krantz, Jacob.....	Belleville.....	Morrissey, Thomas.....	Lebanon.....
		Morrison, D. H.....	Girard.....
		Morton, Andrew.....	Virginia.....
		<i>Morton, Robert</i> .....	
Lacour, August.....	Bartonville.....	Moss, Thomas.....	Staunton.....
Laesser, Adolph.....	Belleville.....	Mould, Thomas R.....	O'Fallon.....
Lander, Alexander, ex.....	Cartersville.....	Muir, Hunter.....	Etherley.....
Large, James M.....	Athens.....	Murphy, Jerry.....	Chatham.....
Laws, J. M.....	Cuba.....	<i>Murphy, John</i> .....	Braidwood.....
Lawson, John.....	Mt. Olive.....	Murphy, Patrick.....	Springfield.....
Lawson, Thomas.....	Lake Creek.....	Murray, A.....	Nashville.....
Ree, Robert.....	Cable.....	Murray, David.....	Sparta.....
Lee, Shelleross G.....	Canton.....	Murray, Hugh.....	
Leming, W. C.....	DuQuoin.....	Murray, J. H.....	Galva.....
Lettsome, William.....	Carbon Hill.....	Murrie, Archibald.....	Centralia.....
Lettsome, Absalom.....			
Lewis, James.....	Bryant.....		
Lewis, William.....	Streator.....	McAllister, Hector.....	Streator.....
Lindley, Richard.....	Collinsville.....	McAnarney, James.....	Girard.....
Lindsay, John O.....	DuQuoin.....	McCann, Patrick.....	Lincoln.....
Linsky, P. J.....	Braidwood.....	McCleary, John.....	Cantrall.....
Lister, James H.....	Peters Station.....	<i>McCleary, James</i> .....	Kangley.....
Little, Thomas.....	Summerfield.....	McClintock, John.....	Murphysboro.....
Lloyd, David J.....	Edinburg.....		



*Certificates of Competency—Continued.*

Name.	Postoffice.	Name.	Postoffice.
McCordle, David.....	Oglesby	Pryce, John M. ....	Coal Valley
McDonald, Robert.....	Streator	Pugh, Daniel.....	St. John
McDonald, William.....	Braidwood	Pullen, Charles.....	Litchfield.
McPadden, Jos.....	Danville	Pullen, James.....	Sorento.
McFarland, William A.....	Edwardsville.....		
McGreachin, Robert.....	Sorento.		
McGinnis, John.....	Springfield	Raby, Robert A.....	Cuba.....
McGunnigal, John.....	Murphysboro	Radford, Thomas, ex.....	Bloomington
McGunnigal, James.....	Marissa	Radford, William.....	Cuba.....
McGunnigal, Bernard.....	Spring Valley	Radford, James.....	Springfield.
McKean, Isaac.....	Coal City	Radford, William T.....	Bloomington.
McKeown, Frank.....	Decatur	Rae, Robert.....	Braidwood.
McKernan, James.....	Collinsville.	Ramsay, Charles J.....	Gillespie
McKillop, Donald.....	Carbon Hill	Randall, Jesse.....	Birkner
McLean, Robert.....	Girard	Rarick, Phil. W.....	Glen Carbon.
McManaman, Patrick F.....	Spring Valley	Rauth, John.....	Belleville
McMorrow, Michael.....	Farmington	Rasmussen, James E.....	Mineral.
McMath, George.....	Cartersville	Reagan, Daniel.....	Muddy Valley
McMurtie, A. B.....	Bryden	Reavley, Robert.....	Riverton
McWhinnie, Andrew.....	Virden	Reyard, John.....	Olin
		Reed, W. M.....	Girard
		Reed, Wm. B.....	Wilmsman.
Nael, Reese.....	Kangley	Reents, August.....	Kramm
Neal, Albert M.....	Murphysboro	Reese, Daniel.....	Danville
Neal, William.....		Reid, Andrew.....	Springfield.
Needles, Thaddeus.....	Glenburn.	Reid, Joseph.....	Marion
Neil, Peter, ex.....	Bunker Hill	Reilly, Edward.....	Danville
Newman, Henry T.....	Springfield	Reimann, John.....	Belleville
Newsam, John.....	Kingston	Reinnison, Henry.....	St. John
Newsam, Richard.....	Orchard Mines.	Reynolds, William.....	East Peoria
Newsam, Richard, Jr.....	Kingston Mines.	Reynolds, John.....	Streator
Newsam, Thomas.....		Rhodes, Jefferson.....	Pana
Newsam, Thomas Jr.....		Richardson, Joseph.....	Litchfield.
Nesbit, Charles, ex.....	Millstadt	Richardson, Robert.....	Cartersville.
Nevener, John.....	Belleville	Ridgely, O. L.....	Mt. Olive.
Nicholson, George A.....	Cuba	Ritchie, Alex., Sr.....	Clinton
Nicholson, William.....		Ritchie, A., Jr.....	Trenton
Nold, Fred.....	Freeburg	Roberts, Benjamin D.....	Streator.
Nordeen, Peter.....	Galva	Roberts, John D., ex.....	
		Robinson, Henry.....	Gardner
O'Beirne, John.....	Spring Valley	Robinson, John T.....	Kingston Mines.
O'Brien, John W.....	Toluca	Rodden, John.....	Pana
O'Brien, John J.....	Marquette	Rodenburg, Charles.....	Belleville
O'Brine, Patrick J.....	Spring Valley	Roe, Samuel.....	Oglesby.
O'Brine, William.....	Pana	Roe, Thomas.....	
O'Connor, James.....	Spring Valley	Rogers, Josiah.....	Braidwood.
O'Connor, John.....	Braidwood	Rollo, George.....	Mount Olive.
O'Leary, John.....	Marquette	Rollo, John.....	Gillespie
Opie, William.....	Sandoval	Rollo, William.....	Pana.
Owens, Robert.....	Marion	Rookin, Thomas.....	Edwards Station.
		Ross, David.....	Oglesby.
Parker, Albert.....	Collinsville.	Rowland, Charles, ex.....	Belleville
Passent, Wm. C.....	Barclay	Rundle, John C.....	Colchester.
Patchet, John.....	Murphysboro	Rutledge, Walton.....	Alton
Patterson, J. C.....	Assumption	Rutledge, J. J.....	Staunton.
Pearl, John.....	Braidwood	Ryan, James.....	Springfield.
Percell, Thomas.....	Norris	Ryan, Thomas.....	N. Springfield.
Peterf, J. D.....	Murphysboro.		
Pettier, Moses.....	Spring Valley	Sangrelet, Marshall.....	Mount Olive.
Phillips, James.....	Minonk.....	Sansom, Henry S., ex.....	Streator
Pick, Edward.....	Centralia.	Sauer, Frederick.....	Belleville
Pickett, Robert.....	Spring Valley	Scaife, William.....	Coal City.
Pieton, Joseph.....	St. David.	Schroll, Joseph.....	Bartonville
Pierce, William.....	Edinburg.	Schramm, Richard.....	Bellevill
Pool, Edgar E.....	Murphysboro.	Scully, William J.....	Glen Carbon.
Potter, George.....	Mapleton	Seurrah, Castling R.....	Braaceville
Postle, John.....	Belleville	Seor, Frederick D.....	Olin
Powell, Albert E.....	Belleville	Senioe, George.....	St. John
Powell, Evan.....	Murphysboro.	Sevan, Charles.....	Danville
Powell, David, ex.....	Braaceville	Sharp, Montgomery, ex.....	Coal City.
Powell, J. E.....	Sato.	Sholeen, R. A.....	Galva.
Powell, Thomas H.....	Belleville.	Sholl, Joseph, ex.....	Bartonville
Powell, Samuel.....	Roanoke.	Shields, Frank D.....	Pana
Prince, Thomas.....	Gillespie	Schuler, Charles.....	Gilechrist.
Proctor, Michael J.....	Toluca	Sidall, John S.....	Pana
Prudent, Edward.....	Centralia.	Sidall, James.....	Streator.
		Siddle, John.....	Edwardsville.

## Mine Managers—Certificates of Competency—Continued.

Name.	Postoffice.	Name.	Postoffice.
Simkin, Samuel.....	Streator.....	<i>Thornton, James</i> .....	DuQuoin.....
Simmons, Thos.....	Canton.....	Thorand, Joseph.....	Trenton.....
Simpson, Isaac.....	Glen Carbon.....	Tolle, E. B.....	Kingston Mines.....
Simpson, David.....	Spring Valley.....	Tregoning, Walter.....	Murphysboro.....
Simpson.....	Springfield.....	Twomley, Edwin, ex.....	Coal Valley.....
Simpson, George A.....	".....		
Simpson, George C.....	".....	Vallow, Charles.....	Kimmundy.....
Simpson, William J.....	Collinsville.....	Vandebur, John, ex.....	Springfield.....
Simpson, Thomas.....	".....	Vicary, John, ex.....	Lincoln.....
Simpson, Thomas.....	O'Fallon.....	Vose, John.....	Springfield.....
Sisk, A. J.....	Equality.....		
Skinner, Alexander.....	Diamond.....		
Skinner, David.....	".....	Wagner, I.....	Mapleton.....
Skinner, John.....	".....	Wallace, David.....	Carterville.....
Skinner, John.....	Astoria.....	Walland, Ed. S., ex.....	Bartonville.....
Sloan, Edward C.....	Wesley City.....	Walsehag, Stephen.....	Peoria.....
Small, James.....	Middle Grove.....	Walsh, Patrick.....	Springfield.....
Smethurst, Nathan.....	Spring Valley.....	Walsh, Peter P.....	Pleasant Plains.....
Smith, Alexander M.....	Sandoval.....	Walters, Wm. H.....	Staunton.....
Smith, David P.....	Dawson.....	Wanless, Isaac.....	Riverton.....
Smith, Felix.....	Birkner.....	<i>Wanless, William</i> .....	".....
Smith, George A.....	Sandoval.....	Wanless, Wm. H.....	".....
Smith, James L.....	Mount Olive.....	Wantling, T. J.....	Peoria.....
Smith, James L.....	Riverton.....	Wantling, Thomas.....	Pottstown.....
Smith, James P.....	Collinsville.....	Walters, Thomas W.....	Ladd.....
Smith, Joseph.....	Bloomington.....	Watson, George R.....	Wyoming.....
Smith, T. J.....	Pana.....	Watts, Thomas J.....	Elmwood.....
Smith, William.....	Athens.....	Watts, William.....	Collinsville.....
Smith, William G.....	Riverton.....	Webster, Richard.....	Streator.....
Smith, W. J.....	Girard.....	Weeks, Thomas.....	Mt. Olive.....
Sneddon, Richard.....	Virden.....	Weisenborn, F. E.....	Springfield.....
Sollenberger, Harry C.....	Dunfermline.....	Wenneborg, Otto.....	Pekin.....
Spires, Alfred.....	Braceville.....	Westwater, David.....	Belleville.....
Springer, Albert R.....	Glen Carbon.....	Westwood, Albert.....	Streator.....
Staehe, August.....	Belleville.....	Westwood, John.....	Belleville.....
Stanton, William E., ex.....	Colchester.....	<i>Westwood, Thomas</i> .....	Belleville.....
Steel, Alexander.....	Streator.....	Wheatcraft, James.....	Elmwood.....
Steel, Daniel.....	Collinsville.....	Whennen, Charles.....	Oglesby.....
Steel, James.....	Spring Valley.....	Whitaker, John.....	Collinsville.....
Steel, Neal.....	Centralia.....	Whitaker, Wm. J.....	".....
<i>Stewart, D. G.</i> .....	Seatonville.....	White, Owen.....	Seatonville.....
Stirrat, James.....	Peoria.....	Whitehead, Joseph.....	Farmington.....
Stockett, Howard N.....	Springfield.....	<i>Wild, James</i> .....	Murphysboro.....
Stockett, Lewis.....	Collinsville.....	Wiley, Robertson.....	St. David.....
Stockett, Thos. R., Jr.....	St. Louis, Mo.....	Wilkinson, Frank.....	Westville.....
Stockman, W. H.....	DuQuoin.....	Wilkinson, T. H.....	Diamond.....
Stoneburner, L. L.....	Moweaqua.....	Williams, James.....	Murphysboro.....
Storrie, Archibald.....	Seatonville.....	Williams, Jeff.....	Farmington.....
Stratman, Henry, ex.....	Springfield.....	Williams, John.....	Riverton.....
Strebel, George.....	Edwardsville.....	Williams, Louis.....	Belleville.....
Strickland, John.....	Coal City.....	Williams, Robert H.....	Girard.....
<i>Sutton, Thomas</i> .....	Millstadt.....	<i>Williams, Walter</i> .....	DuQuoin.....
Swansberg, John L.....	Danville.....	Williams, W. W.....	Hornsby.....
Swarthout, J. P.....	Peoria.....	Williamson, Wm.....	Staunton.....
Syson, Frank.....	Niantic.....	Wilson, David.....	Murphysboro.....
		Wilson, David.....	Spring Valley.....
Tallman, John, ex.....	Kangley.....	Wilson, Hugh.....	Kimmundy.....
Taylor, Charles.....	Edwards.....	Wilson, Hiram.....	Carbondale.....
Taylor, Daniel.....	".....	Wilson, H. C.....	Pekin.....
Taylor, Henry.....	Belleville.....	Wilson, John B.....	Sparta.....
Taylor, James.....	Edwards.....	Wilson, John J.....	Wesley City.....
Taylor, Joseph.....	Springfield.....	Wilson, Robert.....	Roanoke.....
Taylor, Thomas, ex.....	O'Fallon.....	Wilson, Thomas.....	Norris.....
Taylor, Thomas, ex.....	Springfield.....	Wilson, W. R.....	Reed City.....
Thom, Alexander, ex.....	Coal City.....	Winning, James.....	Carterville.....
Thomas, H.....	Westville.....	Winning, Robert.....	".....
Thomas, John R.....	Ladd.....	Winterbottom, John.....	Murphysboro.....
Thomas, T. J.....	Collinsville.....	Winters, Samuel P.....	Bartonville.....
Thomas, Reese.....	Spaulding.....	Wittman, Daniel.....	New Baden.....
Thomas, Richard.....	Ridge Prairie.....	Wolschlag, Stephen, ex.....	Peoria.....
Thome, Martin, ex.....	Bartonville.....	Woods, William, ex.....	Morris.....
<i>Thompson, John</i> .....	DeSota.....	Wright, John.....	Belleville.....
Thompson, Robert C.....	Murphysboro.....	Wright, J. W.....	Kingston Mines.....
Thompson, Mark.....	Sherrard.....		

*Mine Managers—Certificates of Competency—Concluded.*

Name.	Postoffice.	Name.	Postoffice.
Yates, John.....	Belleville.....	Zink, Peter A.....	Belleville.....
Young, Hiram.....	Girard.....	Zoller, Robert H.....	Braidwood.....
Young, Hugh G.....	Braidwood.....		

## MINE MANAGERS HOLDING CERTIFICATES OF SERVICE.

Name.	Postoffice.	Name.	Postoffice.
<i>Adams, Charles T.....</i>	<i>Rosboro.....</i>	<i>Gilbert, Edward.....</i>	<i>Niantic.....</i>
<i>Aslopp, William H.....</i>	<i>New Castle.....</i>	<i>Glenn, John.....</i>	<i>Peoria.....</i>
<i>Anderson, William.....</i>	<i>Streator.....</i>	<i>Goodler, Wm.....</i>	<i>Cuba.....</i>
<i>Andrus, August.....</i>	<i>Belleville.....</i>	<i>Golden, George.....</i>	<i>Springfield.....</i>
<i>Angel, Hiram.....</i>	<i>Glenn.....</i>	<i>Grabar, Henry.....</i>	<i>Orchard Mines.....</i>
<i>Atkinson, Edward.....</i>	<i>Streator.....</i>	<i>Grant, David.....</i>	<i>Pekin.....</i>
<i>Arford, Thomas.....</i>	<i>Petersburg.....</i>	<i>Gray, John.....</i>	<i>Roanoke.....</i>
		<i>Green, Robert.....</i>	<i>Springfield.....</i>
		<i>Greenwood, Robert.....</i>	<i>DuQuoin.....</i>
<i>Bailey, Robert.....</i>	<i>Sunfield.....</i>	<i>Grieve, Peter.....</i>	<i>Collinsville.....</i>
<i>Banqart, Henry.....</i>	<i>Lincoln.....</i>	<i>Griffith, William A.....</i>	<i>Colona.....</i>
<i>Bartlett, Thomas.....</i>	<i>Cuba.....</i>		
<i>Barcell, John.....</i>	<i>Cutler.....</i>	<i>Haddick, Robert.....</i>	<i>Cable.....</i>
<i>Bates, W. H.....</i>	<i>Winchester.....</i>	<i>Haensel, Daniel.....</i>	<i>Lenzburg.....</i>
<i>Betz, Charles C.....</i>	<i>DuQuoin.....</i>	<i>Harrison, Ernest.....</i>	<i>Streator.....</i>
<i>Bolander, John.....</i>	<i>Pekin.....</i>	<i>Heinz, John L.....</i>	<i>LaSalle.....</i>
<i>Bracken James A.....</i>	<i>Greenview.....</i>	<i>Howe, William.....</i>	<i>Streator.....</i>
<i>Brown, Jabez.....</i>	<i>Cutler.....</i>	<i>Hoye, James.....</i>	<i>Braidwood.....</i>
<i>Brown, Thomas M.....</i>	<i>Pineknayville.....</i>	<i>Hutton, James.....</i>	<i>Tallula.....</i>
<i>Bunting, J. H.....</i>	<i>Grape Creek.....</i>		
<i>Bushong, Andrew M.....</i>	<i>Danville.....</i>	<i>Jenkins, Eugene.....</i>	<i>Bartonville.....</i>
		<i>Jerrimire, Wm. M.....</i>	<i>DuQuoin.....</i>
<i>Caldwell James.....</i>	<i>Elmwood.....</i>	<i>Jones, David.....</i>	<i>Marissa.....</i>
<i>Cameron Duncan S.....</i>	<i>Sorento.....</i>		
<i>Cape, Thomas.....</i>	<i>Fairview.....</i>	<i>Keller, George, Jr.....</i>	<i>Bartonville.....</i>
<i>Chere, George.....</i>	<i>Pleasant Plains.....</i>	<i>Kidd, Andrew.....</i>	<i>Wenona.....</i>
<i>Christie, David.....</i>	<i>Murphysboro.....</i>	<i>Kidd, Neugeae.....</i>	<i>Ridge Prairie.....</i>
<i>Collier, Frank J.....</i>	<i>Burtonville.....</i>	<i>Kirley, Bernard.....</i>	<i>Kewanee.....</i>
<i>Cooper, Charles.....</i>	<i>Nilwood.....</i>	<i>Klingenhagen, Henry.....</i>	<i>Belleville.....</i>
<i>Costor, George.....</i>	<i>Grape Creek.....</i>	<i>Kramer, Anthony F.....</i>	<i>Sato.....</i>
<i>Crawson, Elihu.....</i>	<i>O'Fallon.....</i>		
<i>Cummings, William.....</i>	<i>Rushville.....</i>	<i>Laumbattus, Philip H.....</i>	<i>Tamaroa.....</i>
<i>Cusack, M.....</i>	<i>Edwards.....</i>	<i>Lenze, Charles.....</i>	<i>Belleville.....</i>
		<i>Lloyd, Hosea W.....</i>	<i>Sheffield.....</i>
<i>Dale, John.....</i>	<i>Fredonia.....</i>		
<i>Davenport, John.....</i>	<i>Harrisburg.....</i>	<i>Mason, Mark, Jr.....</i>	<i>Sato.....</i>
<i>Davis, Caleb.....</i>	<i>Collinsville.....</i>	<i>Maule, Robert.....</i>	<i>Belleville.....</i>
<i>Davison, Matthew.....</i>	<i>DuQuoin.....</i>	<i>Meehan, Patrick.....</i>	<i>Breeds.....</i>
<i>Deans, Henry.....</i>	<i>Percy.....</i>	<i>Meehan, Peter.....</i>	<i>Williamsville.....</i>
<i>Donaly, James.....</i>	<i>Carterville.....</i>	<i>Meredith, C. W.....</i>	<i>Augusta.....</i>
<i>Duffner, J. W.....</i>	<i>Belleville.....</i>	<i>Michaels, Lewis.....</i>	<i>Belleville.....</i>
		<i>Miller, Nicholas.....</i>	<i>Lebanon.....</i>
<i>Entsminger, Emanuel E.....</i>	<i>Crab Orchard....</i>	<i>Miler, William.....</i>	<i>Lenzburg.....</i>
<i>Entwhistle, Robert.....</i>	<i>Colechester.....</i>	<i>Milom, John.....</i>	<i>Norris.....</i>
<i>Erwin, William.....</i>	<i>West Belleville.....</i>	<i>Millett, Thomas.....</i>	<i>Collinsville.....</i>
<i>Esper, Peter.....</i>	<i>Spaulding.....</i>	<i>Moffatt, Thomas.....</i>	<i>Percy.....</i>
		<i>Mouughan, Edward.....</i>	<i>Carbon Hill.....</i>
<i>Fagan, Patrick.....</i>	<i>Decatur.....</i>	<i>Morin, Jeremiah.....</i>	<i>Danville.....</i>
<i>Fletcher, Adam.....</i>	<i>Ladd.....</i>	<i>Morton, Robert.....</i>	<i>Virginia.....</i>
<i>Forsythe, Peter.....</i>	<i>Centralia.....</i>	<i>Murphy, John.....</i>	<i>Braidwood.....</i>
<i>Forsythe, Thomas.....</i>		<i>McClery, James.....</i>	<i>Kangley.....</i>
<i>Fowler, Henry.....</i>	<i>Millersburg.....</i>	<i>McDonald, Daniel.....</i>	<i>Menard.....</i>
<i>Frankin, Bernard.....</i>	<i>Lincoln.....</i>	<i>McDowell, James A.....</i>	<i>Grape Creek.....</i>

*Mine Managers—Certificates of Service—Concluded.*

Name.	Postoffice.	Name.	Postoffice.
<i>McGonnigal, Bernard</i> ....	Spring Valley ....	Schmidt, Frank P. ....	Limestone .....
<i>McKernan, James</i> .....	Collinsville.....	Shaw, Nuthan. ....	Kramm.....
		<i>Smith, David P.</i> .....	Dawson .....
		<i>Smith, Felix</i> .....	Breese .....
<i>Neal, William</i> .....	Murphysboro.....	Solomon, Robert .....	Springfield.
<i>Nicholson, William</i> .....	Cuba.....	Spencer, George.....	DuQuoin .....
<i>Noyd, Lewis</i> .....	Galva.....	Stanway, George.....	Blair.....
		Stark, Andrew.....	Galva.....
		<i>Stewart, David J.</i> .....	Seatonville.....
Oexner, Wendelin .....	West Belleville..	Stuhlsatz, Michael.....	Kewanee.....
		<i>Sutton, Thomas</i> .....	Millstadt.....
		Swan, Charles.....	Oakwood.....
Parkin, William.....	Sweetwater.....	Swisher, James E.....	St. David.....
<i>Patterson, J. C.</i> .....	Assumption.....		
<i>Pearl, John</i> .....	Braidwood.....	Teifer, Alexander W.....	Morris .....
Pfander, Fred.....	Peoria.....	Terrill, Thomas.....	Colchester .....
<i>Pickett, Robert</i> .....	Canton.....	<i>Thompson, John</i> .....	DeSota.....
<i>Pool, Edgar E.</i> .....	Murphysboro.....	<i>Thornton, James</i> .....	DuQuoin .....
Price, David.....	Fairbury.....		
Price, James L.....	Drnville.....	Waugh, George, Sr.....	Peoria.....
<i>Pullen, Charles</i> .....	Sorento.....	<i>Wanless, William</i> .....	Riverton .....
		<i>Westwood, Thomas</i> .....	Belleville.....
<i>Radford, William</i> .....	Cnba.....	<i>Wild, James, deceased</i> ...	Murphysboro.....
<i>Randle, Jesse</i> .....	Birkner.....	Wilkin, John B .....	Petersburg.....
<i>Reynolds, William</i> .....	East Peoria.....	Williams, John.....	Sato.....
Royster, Moses L.....	Peoria.....	Williams, John T.....	Coalville .....
Rusche, Christian.....	East Peoria.....	<i>Williams, Walter</i> .....	DuQuoin.....
<i>Ryan, James</i> .....	Springfield.....	Wilms, William.....	Springfield.....

## HOISTING ENGINEERS, HOLDING CERTIFICATES OF COMPETENCY.

NOTE.—This and the following list include all the hoisting engineers to whom certificates were issued prior to January 1, 1900. The postoffice addresses here given are those recorded at the time the certificates were issued, and in many cases are not the present addresses of the certificate holders.

Name.	Postoffice.	Name.	Postoffice.
Ablen, Henry	Breese	Blake, Albert	Streator
Adams, Nelson	Lincoln	Blair, George	Troy
Adams, Wm. H.	Braidwood	Blue, Jesse	Norris
Ainsworth, Samuel, Jr.	Taylorville	Black, Jas. A.	Sherrard
Alexander, Henry	Oglesby	Blomberg, Albert	Kewanee
Alexander, W. A.	Rosboro	Billips, Joseph M.	Freeburg
Allen, C. E.	Troy	Boettcher, Alfred	Kewanee
Allen, C. H.	Seneca	Boggs, Dow J.	Mt. Olive
Altman, H. P.	Collinsville	Bohlen, Henry E.	Odin
Anderson, Henry	Lincoln	Boring, Frank L.	Murphysboro
Anderson, W. C.	Elmwood	Boston, William H.	Carbondale
Anderson, Z. B.	Sparta	Bradbury, R. D.	Belleville
Andrews, Solomon	Girard	Bradenburg, F.	Edwardsville
Anthony, John C.	Belleville	Bradley, Simon	Virden
Appleby, John	East Peoria	Bradley, Wm. P.	Centralia
Appleton, Thomas	Virden	Brasel, S. R.	Germantown
Archibald, David	Freeburg	Bretz, Anton	Coal City
Armentrout, Martin	Duncan	Bromley, Charles	Catlin
Armstrong, C.	Muncie	Bromley, George, Sr.	Kellyville
Armstrong, William C.	Marion	Bromley, George, Jr.	Coffeen
Ashman, Joseph	Murphysboro	Broughton, Geo. C.	Iles Junction
Atkin, Robert R.	Tilden	Brown, George A.	Moweaqua
Atwater, Stephen	Clarke City	Brown, Thomas	Pontiac
Averill, C. P.	Colchester	Brown, Wm. F.	Athens
Avery, William	Lens Station	Bruse, James	Nashville
Bailey, James F.	Westville	Bueggeman, Geo.	Sparland
Baird, Robert	Sparta	Buckley, Calvin, W.	Percy
Baker, Darius N.	Spillertown	Burlinson, Aaron	Coulterville
Baker, James E.	Westville	Burr, Chauncy	Farmington
Baker, C. H.	Fairmount	Burrell, G. K.	Murphysboro
Bateman, Harry	Murphysboro	Butcher, Thomas, Jr.	Litchfield
Barber, C. E.	DuQuoin	Butt, Thomas R.	LaSalle
Barber, C. W.	Kinmundy	Byrne, Michael	Marion
Barnhill, H. G.	Centralia	Cagle, Alfred	Ridgely
Barr, Frank	Cable	Cain, Daniel	"
Barton, C. W.	Fairmount	Cain, Daniel P.	"
Barton, Charles W.	Streator	Cain, John	Pottstown
Beard, Charles A.	Mascoutah	Callar, Isaac	Pana
Beatty, James H.	Mt. Olive	Cameron, Daniel	Westville
Beatty, Nepha	Sandoval	Camp, John R.	Sorento
Becker, Fritz	Springfield	Campbell, Fred	Coal City
Becker, F. M.	Belleville	Campbell, W. J.	Farmington
Behrend, A. D.	Danville	Cantrell, H. T.	Springfield
Beby, William	Pana	Carmichael, Thos.	Girard
Beese, John E., Jr.	Spaulding	Carpenter, Charles	Freeburg
Bell, Mark	Belleville	Carr, Robert H.	Moweaqua
Bertin, Henry	Danville	Carrington, Eugene	Moweaqua
Bienert, J. O.	Pana	Carsell, Hugh	Cutler
Bigelow, A. E.	Spaulding	Carter, Albert J.	

## Hoisting Engineers, Certificates of Competency—Continued.

Name.	Postoffice.	Name.	Postoffice.
Chapman, J. B.	Petersburg	Dowling, Ira F.	Springfield
Chapman, William E.	Salisbury	Drake, William	Streator
Chester, David	Springfield	Duffy, Glenn E.	Collinsville
Chew, B. R.	Carlinville	Duncan, J. R.	LaSalle
Christ, Philip	Wenona	Dunsmore, Thomas	Springfield
Clark, Christopher	Decatur	Dunstedler, William S.	Edwardsville
Clark, C. N.	DuQuoin	Dyer, Harry	DuQuoin
Clark, John	Marquette		
Clark, John	Virden		
Clark, Quintin	Braidwood	Eaton, A. C.	DuQuoin
Claudin, Josh	Pekin	Easton, Geo.	Willisville
Cleckner, C. S.	Witt	Eccleston, John	Streator
Clifford, Michael	Kewanee	Eddy, Vermont	Athens
Clifton, Wm. H.	Sparland	Eastham, G. A.	Girard
Coatney, Grant	Fairmount	Edwards, George W.	Springfield
Collinton, Chas.	Belleville	Elliott, Clarence	Bryant
Collingwood, Wm.	Greenview	Elliott, H. H.	Centralia
Collingwood, Albert E.	Springfield	Edwards, Thomas	Spring Valley
Collins, Walter	Mt. Vernon	Egis, Daniel B.	Springfield
Colton, George C.	Cartersville	Egis, Henry	Ridgley
Conley, John	Streator	Emans, Ransom R.	Farmington
Connelly, J. J.	Murphysboro	Ellis, Albert	Cable
Conway, John	Collinsville	Elmore, V. M.	Coffeen
Conway, Michael	Ladd	Emery, H. W.	Greenville
Cook, Wm. D.	Westville	English, Thomas	Streator
Cooper, J. H.	Nilwood	Erisman, Jacob D.	Niantic
Cornelius, Richard	Fairmount	Erisman, Jesse	
Cottle, Elmer	Buffalo	Estes, W. B.	Danville
Cotton, George	Halidayboro	Evans, Albert	Glen Carbon
Craig, Daniel	Danville	Evans, Thomas	Spaulding
Croker, Edward	Marquette	Evans, C. L.	Virden
Cruikshanks, Robert	Middle Grove	Evans, Price	Bissell
Cummings, George	Pana	Evans, W. E.	Danville
Cumming, Geo. A. P.	Gardner	Eytman, Frank	Spring Valley
Cumming, Geo. P.	Sparland		
Cummings, Robert W.	Sparta		
		Fahay, John	Decatur
Dalhous, Frank C.	Staunton	Falkenstien, George A.	Astoria
Dana, John W.	Springfield	Farley, James	Riverton
Daniel, James	Belleville	Ferguson, John J.	Spring Valley
Daniels, Joel		Ferris, W. H.	Marquette
Dankins, Thos. J.	Brazeville	Fillingham, J. A.	Canton
Darnstader, William	New Athens	Finnigan, Thomas J.	Springfield
Davis, B. D.	Coffeen	Fischer, Phillip	Lenzburg
Davis, Jas. A.	Hillsboro	Fisher, George	Staunton
Davis, Chas. W.	Edinburg	Fisher, Patrick	Kangley
Davis, Jackson	Athens	Fitzsimmons, Maurice	Peru
Davis, E. E.	Auburn	Flesher, A.	Taylorville
Davis, Frank	Lincoln	Fletcher, Henry A.	Ladd
Davis, Harry J.	Du Quoin	Foote, Charles	Westville
Davis, James P.	Belleville	Foote, William	
Davis, John W.	Lake Creek	Fox, Frank L.	Assumption
Davis, John	Belleville	Forister, Robert	Murphysboro
Davis, L. D.	Coffeen	Forister, William	
Davison, Joseph	Sherrard	Fortney, John W.	Kimundy
Dawson, Van C.	Spring Valley	Foster, A. J.	Litchfield
Dawson, John C.	Streator	Fox, James B.	LaSalle
Deans, Robert	Belleville	Fox, Thomas	Lincoln
Deaton, L. B.	Tallula	Frain, Austin	Ridge Prairie
DeBacher, Thomas	Elmwood	Frankland, Tim	Streator
Dee, Henry	Glen Carbon	Freeman, M. F.	Shelbyville
DeJarnett, Thomas	Mt. Vernon	Freeman, E. F.	DuQuoin
Delmore, Frank	Springfield	Frick, U. B.	Lake Creek
Delorey, William	Westville	Friend, J. W.	Collinsville
Dent, William	Diamond	Frier, Jacob	Ormsby
Dick, Robert	Sunfield	Friend, William L.	Collinsville
Dillon, John	Auburn	Friesland, C. M.	Salisbury
Dixon, George	Wenona	Fritz, Gustav	Breese
Dodd, Sam'l H.	Pottstown	Fry, D. W.	Clark City
Dodwell, Edward J.	Decatur	Ferguson, S. P.	Strasburg
Doolin, E. W.	Pontiac	Fusten, D. H.	Murphysboro
Doehring, Fred	Mt. Olive		
Donaldson, J. W., Jr.	Dunfermline	Gately, James	Seatonville
Doolin, E. J.	Pontiac	Gates, William S.	Kankakee
Dougherty, Joseph	Taylorville	Gallagher, Peter	Clark City
Dowler, John	Auburn	Gaughan, James	Braidwood

*Hoisting Engineers—Certificates of Competency—Continued.*

Name.	Postoffice.	Name.	Postoffice.
Geer, Benjamin H.	Woleott	Herring, George P.	Odin
Gelmour, Allan	Diamond	Herring, J. P.	Staunton
Geer, U. S.	Pekin	Hershaw, A. F.	Abingdon
Geyer, J. A.	Wanlock	Heskitt, John	Ridgely
Gibson, John	Sandoval	Hess, Edward B.	Morrisonville
Gillson, R. W.	Danville	Hillard, James	St. David
Girfen, Henry	Troy	Hill, C. C.	Marrissa
Glacken, Hugh	Coal City	Hill, C. W.	Pontiac
Gladders, William		Hill, Emberson	Westville
Goalby, Arthur A.	Percy	Hilmes, Henry	Astoria
Goalby, B. F.		Hobbs, Francis E.	Centralia
Goalby, Frank H.	Stookeny	Hodgson, Edward	Murphysboro
Goddard, William H.	Spillertown	Hodson, Moses	Smithboro
Gordon, E. J.	Petersburg	Hoecker, Charles	Glen Carbon
Gould, George	Sato	Hogan, Frank	Springfield
Gowin, Frank	Green Ridge	Holtkamp, Geo.	Breese
Grace, John T.	Kewanee	Hopper, George	Glen Carbon
Graham, L. A.	Bloomington	Hopper, H. H.	Gillespie
Graham, Reuben	Virden	Hord, Alvin	Taylorville
Gray, Chas. H.	Springfield	Hottinger, J.	Freeburg
Greaves, Walter	Ladd	House, C. O.	St. John
Green, Daniel	Braidwood	Howe, Chas.	Streator
Green, Thomas	Marissa	Huggins, William	Murphysboro
Green, Wm. H.	Streator	Huggins, J. A.	Streator
Greenhalgh, James	Hill-boro	Hughes, John C.	Springfield
Greenhalgh, William	"	Hull, Lee	Murphysboro
Grice, Albert	Kewanee	Humphrey, Chas.	Edinburg
Grievies, James	Birkner		
Griffin, John O.	Kewanee	Irwin, Byron	Pana
Groom, Alexander	Belleville	Irwin, John	Gillespie
Groom, John, Sr.	"	Irwin, Robert K.	Pontiac
Groom, James	"	Isadore, George	Rosboro
Groom, William	"		
Grubb, Michael	Riverton	Jackson, William	Minonk
Geistdorfer, Fred	DeSoto	Jacobs, George R.	Elmwood
Guy, D. F.	Springfield	Jacobs, James M.	Moweaqua
Groom, John	Belleville	Jacobs, William	Murphysboro
		Jacobs, W. Sr.	Peoria
Hackett, Owen	Spaulding	Jeffrey, James	Marrissa
Haddick, William L.	Sherrard	Jeffrey, John	Belleville
Haensel, Edward	Lenzburg	Jenkins, John L.	Danville
Haensel, David		Jenkins, T. E.	Athens
Hagler, Charles	Fredonia	Jenks, William	Bloomington
Hale, William T.	Troy	Johnson, John W.	Birkner
Hall, G. R.	Colchester	Johnsohn, J. S.	DuQuoin
Hall, G. R.	Nilwood	Johnson, Robert	Pawnee
Hamilton, Chas. E.	Canton	Johnson, William H.	Soperville
Hamilton, James H.	Sparland	Johnson, William L.	Spring Valley
Hampton, N. R.	Murphysboro	Johnston, Joseph R.	Pontiac
Hand, P. L.	Peoria	Johnston, Thomas	
Hand, Ledlie	Taylorville	Johnston, Thomas B.	Freeburg
Hanenstein, J. W.	Willisville	Jones, George	Belleville
Hanes, W. J.	Salem	Jones, Henry E.	Staunton
Hankins, John W.	Sorento	Jones, John P.	Marissa
Hanson, William	O'Fallon	Jones, Jonathan, Jr.	"
Hanvey, John J.	Collinsville	Jones, Jonathan, Sr.	"
Hanvey, Robert	"	Jones, Joseph	Staunton
Hanvey, William	"	Jones, Logan	Marissa
Happer, Frank	Edwardsville	Jones, Felix E.	Barclay
Harding, Enos	Birkner	Jones, William	Marissa
Harper, Oscar	Lebanon	Jones, William	Braceville
Hardy, Thos. W.	Dawson	Jordan, Robert	Streator
Harris, J. W.	Springfield	Judd, Charles E.	Edwardsville
Hartman, Frank	Murphysboro		
Harvey, Wm. R.	Wanlock	Keating, Edward F.	Streator
Havel, Joseph	French Village	Keating, Richard	
Hawker, J. O.	Pana	Kelley, James D.	Carbon Hill
Hayes, Arthur H.	Danville	Kelley, Robert D.	
Hayes, James	Bloomington	Kelly, Chas.	Streator
Hayler, George L.	Murphysboro	Kenady, Fred A.	Cambridge
Head, John S.	Assumption	Kennedy, W. J.	Edwardsville
Hendrick, C. W.	O'Fallon	Kerchner, Howard	Belleville
Hennegan, John F.	Wanlock	Kessick, Chas. W.	Decatur
Henry, Philip	Kewanee	Kidd, Alonzo	Fairmount
Heppard, George	Belleville		
Herder, Walter	Edwardsville		

*Hoisting Engineers—Certificates of Competency—Continued.*

Name.	Postoffice.	Name.	Postoffice.
Kilbride, T. C.	Farmington	Marland, James	Wenona
Killinger, C.	Collinsville	Marland, William	Sparland
Killinger, Harry	Germantown	Marshall, Robert	Murphysboro
Killinger, John	Collinsville	Martin, N. W.	Marion
Kimber, John	Ladd	Marxer, Louis J.	Milstadt
Kingerfus, Wm	Belleville	Massie, J. T.	Belleville
Kinghom, John	Staunton	Matthews, C.	Willisville
King, Alexander, Sr.	Carterville	Maule, William	Belleville
King, Alexander, Jr.		Maxwell, Fred.	Peoria
King, L. B.	Smithboro	Mayor, J. W.	DuQuoin
Kirshner, Frank	Belleville	Meadows, William	Ledford
Klaus, Louis		Meyer, Henry	Trenton
Klingenfus, Edward		Michaels, Otto L.	Belleville
Klinkner, Frank	Colfax	Miller, A. J. F.	Centralia
Knapp, Enoch	Assumptio.	Miller, Hugh	Braceville
		Miller, James	Alma
		Miller, T. H.	Raymond
Lambert, George W.	LaSalle	Miller, William C.	Rentchler
Larkin, James G.	Athens	Mills, Thomas S.	Coal City
Lavallier, U. S.	Chenoa	Moffat, R. E.	Cutler
Lawson, George	Cable	Monaghan, James	Gillespie
Layne, J. W.	DeSoto	Moor, F. J. W.	Springfield
Ledbetter, George	Sorento	Morcck, John	Belleville
Lehman, Philip	Lebanon	Morgan, John C.	Springfield
Lemons, J. L.	Girard	Morgan, William	Carbon Hill
Leslie, George	Gardner	Morris, George	Belleville
Leslie, N. B.	Braidwood	Morris, James H.	Nashville
Lewis, Alvin	Catlin	Morris, James	Mt. Olive
Lindsay, Martin H.	Streator	Morris, William	
Lindstrom, Oscar	Sherrard	Morrisey, Thomas	Lebanon
Linsky, James	Braidwood	Morrison, Archie	Oglesby
Linsky, Patrick J.		Mulvany, A. T.	Glenburn
Little, Thomas	Murphysboro	Muren, Alfred L.	Belleville
Lockhart, Louis	Niantic	Murphy, Robert T.	Norris
Lockie, William	Carterville	Murrie, Archie	Trenton
Loding, Chas A.	Loding	Murray, Hugh	Nashville
Loebel, Frank	Trenton	Murray, Joseph P.	Rosboro
Long, Noah B.	Pontiac	Myers, Henry	Minonk
Lucht, M. F.	Mt. Olive		
Lundeen, Frank W.	Galva	Nagle, Jake	Springfield
Lundy, J. P.	Mt. Pulaski	Neal, Ambrose	Carlinville
Lundley, Ralph	Ridge Prairie	Needham, Daniel	Breese
		Nelson, Andrew V.	Centralia
McAddams, John W.	Percy	Nentzel, Fred H.	Caseyville
McCanley, Aaron	Streator	Newal, Leroy	Sparland
McConachie, Ed.	Auburn	Nevenor, James	Belleville
McCormack, James J.	Springfield	Nichols, John	Athens
McCulley, G. L.	Pawnee	Nicol, Adolph	Belleville
McCunky, Tobias	Assumption	Norborg, Peter	Galva
McDonald, John	Springfield	Norton, William	Oglesby
McDonald, W. H.	Pana		
McDonald, William J.	Percy	O'Brien, Terry	Decatur
McFarland, F. E.	Murphysboro	O'Donnell, Michael	
McGuttigan, Thomas	Pana	Ogden, Samuel	Mascoutah
McGowan, Edward	Lincoln	Olinger, J.	Odin
McGowan, J. R.	Herrins Prairie	Olson, August	Streator
McKean, Andrew	Coal City	O'Neal, James	
McKean, John	Carbon Hill	Ople, Frederick	Mt. Olive
McKean, Isaac	Coal City	Ord, S. R.	Mt. Vernon
McKearnan, J. B.	Athens	Osborne, Benjamin	Streator
McKee, C. L.	Lake Creek	Osburn, Glen L.	
McKeerman, John	Belleville	Otto, John	Collinsville
McLaughlan, F. T.	Carbon Hill	Outhouse, John	Johnson City
McLaughlin, George			
McPherson, James	Murphyshoro	Paddock, W. D.	Pana
McVey, Frank W.	Roanoke	Paden, J. W.	Spring Valley
McVicar, Donald	LaSalle	Parks, James	Streator
		Parker, Joseph M.	Murphysboro
Maasburg, H. C.	Pinckneyville	Patterson, R. J.	
Mader, Charles H.	Staunton	Patterson, W. M.	St. Louis, Mo.
Manley, Leo	Coffeen	Pearce, H. L.	Cable
Mainwaring, James	Braceville	Peecher, David	Braidwood
Mair, Max	Lebanon	Pee, Chas.	Marselles
Malcolm, Wm. J.	Braceville	Pemberton, C. H.	DuQuoin
Maltby, Edward	Braidwood		



*Hoisting Engineers—Certificates of Competency.—Continued.*

Name.	Postoffice.	Name.	Postoffice.
Perkes, Ephraim.....	Soperville.....	Sadler, George.....	Murphysboro.....
Petrea, J. W.....	Vandercreek.....	Sallade, George.....	Chatham.....
Pendergast, John.....	Centralia.....	Sallade, J. E.....	Chatham.....
Perrins, George H.....	Herrin.....	Sands, Robert K.....	Marissa.....
Phillips, J. M.....	Athens.....	Savage, Richard.....	Clarke City.....
Piper, James.....	Worden.....	Sawyers, Joseph.....	Coal City.....
Piper, Oliver G.....	Staunton.....	Saylor, C. F.....	Murphysboro.....
Piper, Joseph.....	Glen Carbon.....	Schaifer, Fred.....	Belleville.....
Pircher, Peter P.....	Sandoval.....	Schraun, Charles.....	Belleville.....
Pitra Frank.....	Odin.....	Scharinck, Frank.....	Edwardsville.....
Pitt, Joseph.....	Trenton.....	Schmacker, Herman.....	Glen Carbon.....
Plenty, Geo. R.....	Canton.....	Schroeder, Charles.....	Mt. Olive.....
Plummer, Benjamin.....	Creator.....	Schroeder, Henry.....	Belleville.....
Plocker, Henry.....	Pana.....	Schnessell, Conrad.....	Breese.....
Pointer, Edward H.....	Belleville.....	Schulte, Fritz.....	Clinton.....
Powell, Edwin.....	Caseyville.....	Schumacher, Chas.....	Marissa.....
Powell, F. C.....	Seatonville.....	Schumm, Fred W.....	Gardner.....
Price, Thomas.....	Spaulding.....	Scott, J. W.....	Colchester.....
Pritchard, H. C.....	Lewiston.....	Secor, Fred D.....	Odin.....
Pugh Daniel.....	St. John.....	Seeman, John C.....	Cantrall.....
Pullen, R. H.....	Sorento.....	Seidel, Fred.....	Kinmundy.....
Pulver, R. H.....	Centralia.....	Seiler, William.....	Ormsby.....
Quick, A. T.....	Sato.....	Sells, Chas. B.....	Colfax.....
Quick, A. S. H.....	Hallidayboro.....	Seymour, John.....	Lincoln.....
Quigley, Henry.....	Hallidayboro.....	Shroyer, A. D.....	Lincoln.....
Raber, F. C.....	Troy.....	Shinn, Charles.....	Springfield.....
Raber, Louis.....	Collinsville.....	Shriver, P. A.....	Kinmundy.....
Radford, William T.....	Bloomington.....	Siddall, John.....	Belleville.....
Rafter, Michael.....	Marquette.....	Siddall, Levi.....	Belleville.....
Raisbeck, John.....	Braceville.....	Slocum, Clarence.....	Gilechrist.....
Randle, Caleb.....	Belleville.....	Smith, Edward J.....	Collinsville.....
Randle, William.....	Freeburg.....	Smith, George W.....	Virginia.....
Rasor, J. D.....	Staunton.....	Smith, George W.....	St. Louis, Mo.....
Rawlings, Alex N.....	Cantrall.....	Smith, S.....	Marshall.....
Reagan, William.....	Mt. Olive.....	Smyth, C. M.....	Danville.....
Reatz, Hans.....	Lincoln.....	Sneddon, John.....	O'Fallon.....
Reading, Curtis.....	Niantic.....	Sneddon, Richard.....	Canlin.....
Reed John.....	Herrin.....	Sneyd, James.....	Westville.....
Reed, W. J.....	Danville.....	Sowerby, Miles.....	Willisville.....
Reetz, Herman.....	Lincoln.....	Sparks, J. L.....	Mt. Vernon.....
Reeger, John C.....	Pinkneyville.....	Sparling, Charles.....	Seatonville.....
Reid, Archibald.....	Springfield.....	Sparling, Henry.....	Seatonville.....
Reilly, Henry.....	Toluca.....	Sprunt, J. W.....	Pontiac.....
Reimann, John.....	Belleville.....	Stanfel, Martin.....	Toluca.....
Remelius, Jacob.....	O'Fallon.....	Stanford, J. W.....	Pana.....
Rennard, Jas. Ed.....	Grape Creek.....	Stedman, Edgar.....	Missionfield.....
Reichman, George.....	Trenton.....	Stedman, Robert, Sr.....	Danville.....
Renni, Andrew.....	Dumfermline.....	Steel, E. H.....	Salem.....
Rennie, James.....	Belleville.....	Steinheimer, Theodore.....	Lenzburg.....
Repplinger, H.....	Belleville.....	Stephen, C. H.....	Spring Valley.....
Reyabek, Joseph.....	Glen Carbon.....	Steward, L. A.....	Mt. Vernon.....
Rhodes, Almon R.....	Chenoa.....	Stewart, James C.....	Carbon Hill.....
Rice, C. D.....	Harrisburg.....	Stewart, Peter.....	Murphysboro.....
Rice, James M.....	Sunfield.....	Stoker, A. E.....	Buffalo.....
Rice, Moses.....	Murphysboro.....	Stone, Frank.....	Lebanon.....
Richards, John T.....	Staunton.....	Storm, Edwin.....	Worden.....
Richard, Lee.....	Moweaqua.....	Stout, F. M.....	Springfield.....
Richmond, John E.....	Coal City.....	Stout, W. E.....	Rutland.....
Riley, B. J.....	Cantrall.....	Stowell, G. W.....	Bloomington.....
Riley, Michael.....	Grape Creek.....	Streib, William.....	Belleville.....
Rippitoe, J. G.....	Colchester.....	Strivey, William.....	Taylorville.....
Ritchie, John.....	Trenton.....	Stroud, William.....	Worden.....
Roberts, John.....	Litchfield.....	Struck, Carl.....	Springfield.....
Roberts, Jonathan.....	Willisville.....	Struse, Henry H.....	Athens.....
Robinson, Charles.....	Wenona.....	Stuthard, Geo. B.....	Westville.....
Robinson, J. A.....	Riverton.....	Stuart, John.....	Ladd.....
Robinson, William A.....	Toluca.....	Swartz, Fred.....	Toluca.....
Rockey, Charles.....	Peoria.....	Taylor, Edwin.....	Trenton.....
Rodgers, Edward.....	Murphysboro.....	Taylor, Mack.....	Westville.....
Rogers, Geo. R.....	Sunfield.....	Teft, Ernest.....	Mt. Olive.....
Rohour, Michael.....	Grape Creek.....	Temple, James C.....	Springfield.....
Rowland, Sidney G.....	Belleville.....	Terry, W. F.....	Litchfield.....
Roy, A. L.....	Collinsville.....	Thexton, Henry.....	Rushville.....
Royster, Richard.....	Peoria.....	Thomas, Fred.....	Rutland.....
Russell, Zeus.....	Pana.....	Thompson, Fred.....	Westville.....
Rutliff, Isaac.....	Ashland.....	Thompson, J. H.....	Marion.....

*Hoisting Engineers—Certificates of Competency—Concluded.*

Name.	Postoffice.	Name.	Postoffice.
Tibballs, E. A.	Marion	Wickersham, J. R.	Lake Creek
Travis, Alonzo	Pana	Wilkin, W. P.	Springfield
Travis, William	Birkner	Williams, Huston	Spaulding
Tregoning, Charles	Cartersville	Williams, John	Spring Valley
Twombly, Edward	Coal Valley	Williams, Thomas E.	St. David
		Williams, Watson	Virden
		Williams, William H.	Sherrard
Vaughn, John	McLean	Williams, Wm. Hampton	Murphysboro
Vandveer, Perry E.	Taylorville	Williamson, Henry	Coal City
Vernon, James	LaSalle	Williamson, William	
		Wilson, David	Birkner
		Wilson, William H.	Middle Grove
Wagoner, William F.	Raymond	Wines, E. R.	Springfield
Wagmire, James	Assumption	Wohlers, Henry	Mt. Olive
Waldron, Thomas	Fredonia	Woodward, J. R.	Streator
Walker, John H.	Mt. Olive	Woolbright, D. A.	Centralia
Walker, Joshua		Woodworth, Peter	Pekin
Wallford, Noah	Hillsboro	Wright, William M.	Pana
Wallock, Charles	Braceville	Wrigley, James	Collinsville
Walsh, James D.	Auburn		
Walton, A. F.	LaSalle	Yates, John	DeSoto
Walton, Patrick	Bureau Junction	Yates, William	Coal City
Walton, Joseph	St. David	Yehling, Fred H.	DuQuoin
Wantling, T. J.	Pottstown	Young, J. K.	Girard
Wandless, W. S.	Collinsville	Young, James G.	Gardner
Warner, Richard	Troy	Young, Robert	LaSalle
Wassel, Anton	Braceville	Young, A. O. K.	Girard
Watson, Frank	Springfield	Young, Peter J.	Springfield
Wattawa, Joseph	Belleville	Young, W. L.	DuQuoin
Watts, T. J.	Elmwood	Youngquist, Frank	Sherrard
Wente, Frank	Nashville		
West, W. H.	Murphysboro	Zeigler, John	Iles Junction
Westwood, Albert	Belleville	Zink, Louis	Belleville
Westwood, Edward	Birkner	Zink, Peter A.	
Wheatley, John W.	Coal City	Zuriker, Lorens	Cable
White, Henry	Riverton		
White, Perry J.	Springfield		
White, Robert	Lincoln		

## HOISTING ENGINEERS HOLDING CERTIFICATES OF SERVICE.

Name.	Postoffice.	Name.	Postoffice.
Ackerman, Jacob	Belleville	Cook, W. D.	Westville
Allen, William H.	Collinsville	Cotton, George	Hallidayboro
Anthony, John C.	Belleville	Cox, John	Ledford
		Craig, Daniel	Danville
Baiwair, John	Braidwood	Crawson, William	O'Fallon
Banker, Henry	Ridge Prairie	Crimigan, Barney	LaSalle
Bath, Ameston	Cuba	Crocker, Edward	Marquette
Beeby, William	Springfield	Cruicksbanks, Wm. A.	Middle Grove
Bell, George E.	Canton	Cumming, Robert H. L.	Sparland
Benvenuto, Charles	Toluca		
Birkley, N. T.	Cuba	Daley, Thomas	Diamond
Blue, Jesse	Norris	Dauck, John	LaSalle
Bonick, Andrew	Gilchrist	Davenport, Thomas	New Castle
Bowman, George W.	Yates City	Davis, George W.	Hanna City
Brown, G. A.	Iles Junction	Davis, Thomas	Swanwick
Brubeck, J. W.	Pawnee	Davis, William H.	Streator
Bumann, Albert	Springfield	Davison, J. G.	St. John
		Dawson, John	Streator
		Dawson, Thomas	
Campbell, Albert	Pottstown	Dawson, V. C.	Spring Valley
Campbell, James	Coal City	DeBacher, Thomas	Elmwood
Carson, Alexander	Galva	DeHass, B. L.	Tallula
Carrington, Eugene	Moweaqua	Dietrich, Philip	Freeburg
Carter, Albert J.	Pineknayville	Dillon, John	Auburn
Chitwood, William	Glenburn	Doe, R. P.	Glen Carbon
Clark, Charles M.	DuQuoin	Dodd, Samuel	Pottstown
Cline, John	LaSalle		
Collins, John	Birkner		

*Certificates of Service—Continued*

Name.	Postoffice.	Name.	Postoffice.
Ebel, August.....	Belleville.....	McCalster, Thomas.....	Muddy Valley.....
Edwards, George W.....	Springfield.....	McDonald, William H.....	Pana.....
Egerton, J. O.....	Colchester.....	McLean, John.....	Pleasant Plains.....
Ekis, Daniel B.....	Springfield.....	McMillen, W. M.....	Danville.....
Essex, George M.....	Soperville.....	McWerthy, G. A.....	Smithboro.....
Evans, Albert.....	Glen Carbon.....		
Everett, Charles.....	Rutland.....		
		Marshall, Robert.....	Yates City.....
Fischer, George.....	Staunton.....	Mathaws, George.....	DuQuoin.....
Fisher, Patrick.....	Kangley.....	Mattern, Daniel.....	Spring Valley.....
		Mathews, C.....	Marion.....
Gandy, James W.....	Peoria.....	Matthews, William G.....	Bartonville.....
Glasford, Oliver.....	Orchard Mines.....	Maurer, Edward.....	Spring Valley.....
Glenam, Philip.....	Williamsville.....	Maxwell, Fred.....	Peoria.....
Graham, J. A.....	Nilwood.....	Melvin, T. M.....	Tamaroa.....
Graham, Reuben.....	Virden.....	Milem, John.....	Spring Valley.....
Grattendick, Fred.....	Okayville.....	Miller, William.....	Streator.....
Greaves, Allen.....	Nashville.....	Morrison, Archie.....	Oglesby.....
Grey, David F.....	Springfield.....	Mumford, E. A.....	Kewanee.....
Grierson, John.....	Streator.....	Murray, James H.....	Galva.....
Grimshaw, Joseph.....	LaSalle.....		
Groom, John.....	Belleville.....	Neal, Ambrose.....	Barclay.....
		Neil, John H.....	Bunker Hill.....
		Neilson, J. W.....	Sparta.....
		Nicholson, George A.....	Cuba.....
		Noid, John E.....	Galva.....
Haas, Jacob.....	Millstadt.....	Ogden, David.....	Rentchler.....
Hackett, Owen.....	Spaulding.....	Ogden, Samuel.....	Mascoutah.....
Hagler, Charles.....	Fredonia.....	Oison, Aug.....	Kangley.....
Hall, George R.....	Nilwood.....	Osborne, Benjamin.....	Streator.....
Hanson, William.....	O'Fallon.....	Ottinger, William.....	Catlin.....
Harms, Heike.....	Petersburg.....		
Harris, J. T.....	Tamaroa.....		
Hayes, John.....	Riverton.....		
Heaver, F.....	Sandoval.....		
Hickox, Lee.....	Springfield.....		
Howe, Charles.....	Streator.....		
		Pankey, John M.....	Equality.....
Iehman, Frank.....	Spring Valley.....	Pett, Charles.....	Marseilles.....
Isadore, Charles.....	Sparta.....	Pendergast, James.....	Soperville.....
Isadore, George.....		Phillips, William.....	Hallidayboro.....
		Pieton, Joseph.....	Farmington.....
		Pieton, Thomas H.....	
		Piper, Oliver.....	Worden.....
		Prichard, H. C.....	Lewistown.....
		Prichett, T. M.....	Niantic.....
Jackson, William.....	Minonk.....	Qualls, Nevel.....	Dubois.....
Jacobs, John P.....	Orchard Mines.....	Quick, A. T.....	Sato.....
Jacobs, William.....	Murphysboro.....		
Jamison, John.....	Petersburg.....		
Jeffrey, William.....	Gilchrist.....		
Johnson, Edgar W.....	Marissa.....		
Jones, George W.....	Riverton.....		
Jones, T. A.....	Muncie.....		
Judd, Thomas.....	Cuba.....		
Karney, E.....	Hallidayboro.....	Raber, Louis.....	Caseyville.....
Kelley, Martin.....	Toluca.....	Radford, James W.....	Cuba.....
Kemper, Christian.....	Belleville.....	Radford, W. T.....	Bloomington.....
Kennedy, W. J.....	Edwardsville.....	Rahaur, Michael.....	Pawnee.....
King, Alexander, Jr.....	Carterville.....	Redyard, John.....	Olin.....
King, John.....		Reeise, William M.....	Roanoke.....
Kirby, Thos., Jr.....	Peru.....	Reid, A. B., Jr.....	DuQuoin.....
Klaug, John.....	Galva.....	Rennard, James E.....	Westville.....
Klaus, Louis.....	Belleville.....	Reum, Charles H.....	Sorento.....
		Rice, B. F.....	Harrisburg.....
		Richmond, Edward B.....	Winchester.....
		Rieger, John C.....	Pinckneyville.....
		Riley, Michael.....	Westville.....
		Roach, Samuel.....	Tamaroa.....
		Rogers, George.....	Sunfield.....
		Rogers, Henry.....	Braidwood.....
		Rude, Edmond.....	DeSoto.....
Langran, James.....	Fairbury.....	Sallade, George A.....	Chatham.....
Larson, Charles L.....	Galva.....	Sanson, T. J.....	Carterville.....
Lathan, William H.....	Hallidayboro.....	Sawyers, Joseph.....	Coal City.....
Lewis, Jacob H.....	Potts-town.....	Schmacher, Charles.....	Marissa.....
Lewis, William.....	Wanlock.....	Schramm, Charles.....	Belleville.....
Lippert, Adolph.....	Kewanee.....		
Lloyd, Benjamin.....	Rentchler.....		
Love, William.....	Virden.....		
Lumdberg, Eric.....	Galva.....		

*Hoisting Engineers—Certificates of Service—Concluded.*

Name.	Postoffice.	Name.	Postoffice.
Seeback, Joseph .....	Spring Valley....	Wallace, Harry G .....	East Peoria .....
Sexton, LaFayette .....	Dawson.....	Warner, Andrew M.....	Wenona .....
Seymour, A. J. ....	Fredonia.....	Waymire, James .....	Assumption .....
Sheppard, W. C. ....	Marquette .....	Wertwood, Edward .....	Birkner .....
Shurm, Fred .....	Gardner .....	Wheatley, Rolley .....	DuQuoin .....
Smith, George W .....	Virginia .....	White, Henry .....	Riverton .....
Sorrels, D. H. ....	Ashland .....	Williams, Husten.....	Spaulding .....
Sowarby, Miles .....	Willsville .....	Williams, Stephen P.....	Wyoming .....
Stoker, Edward .....	Bartonville.....	Williams, Watson.....	Barelay .....
Strick, William .....	Belleville .....	Willis, Harry .....	New Castle.....
Stroud, William.....	Worden.....	Wood, Daniel A .....	Colfax .....
Struck, Carl .....	Springfield.....	Woolbright, D. A .....	Centralia .....
Stuart, John .....	Oglesby .....	Wonnes, Joseph .....	Birkner .....
		Wormack, Charles A.....	Glen Carbon.....
Tanner, Henry .....	Pinckneyville ....		
Taylor, Benjamin .....	Bartonville .....	Zeigler, John.....	Iles Junction.....
Taylor, Willard W .....	Tamaroa.....		
Tefft, Ernst.....	Girard .....		
Telfer, John K .....	Morris .....		
Thome, Martin .....	Martinville.....		

## FIRE BOSSES HOLDING CERTIFICATES OF COMPETENCY

NOTE.—This and the following list include all the fire bosses to whom certificates were issued prior to January 1, 1900. The postoffice addresses here given are those recorded at the time the certificates were issued and in many cases are not the present addresses of the certificate holders.

Name.	Postoffice.	Name.	Postoffice.
Andrew, Thomas .....	Oglesby.....	James, Johann.....	Grape Creek.....
Argyle, Joseph.....	Coal City.....	Jenkins, T. C.....	Murphysboro.....
Barlow, Harry .....	Lake Creek.....	Jennings, William.....	Athens.....
Bell, William.....	Streator.....	Jeten, T. F.....	Roanoke.....
Bluefield, Charles .....	Coal City.....	Jones, Benjamin J.....	Coffeen.....
Bowen, Gwilym.....	Herrins.....	Jones, Morgan.....	Litchfield.....
Bullough, James.....	Girard.....	Johnson, David.....	Oglesby.....
Bundy, John.....	Streator.....	Johnston, Samuel.....	.....
Campbell, James .....	Assumption.....	Jordon, Robert.....	Streator.....
Cappin, Aaron.....	Wenona.....	Kloever, Matthew .....	Pana.....
Castillo, Henry .....	Pana.....	Lawson, Thomas.....	Lake Creek.....
Chadderton, John.....	Lenz Station.....	Lettsom, William.....	Seneca.....
Champley, James.....	Wenona.....	Lumaghi, Louis F.....	Collinsville.....
Clark, Joseph B.....	Hornsby.....	Lyons, Mark.....	Lincoln.....
Craite, J. E., Jr.....	Murphysboro.....	McCranor, James.....	Girard.....
Cunningham, David.....	Carlinville.....	McCrindle, David.....	Oglesby.....
Damrath, Frederick.....	Virden.....	McDonald, William.....	Braidwood.....
Davis, William.....	Streator.....	McDill, James.....	Assumption.....
Dodge, H. N.....	East Peoria.....	McEwen, Charles.....	Carbon Hill.....
Doonier, P. J.....	Westville.....	McKillop, Donald.....	.....
Eduunds, Morgan.....	Mt. Olive.....	Maggo, Jacob.....	Danville.....
English, Thomas .....	Streator.....	Massie, J. G.....	Belleville.....
Farrand, Walter .....	Barelay.....	Middleton, J. L.....	Salem.....
Galbraith, Patrick.....	Coal City.....	Miller, Alexander.....	Ridge Prairie.....
Galvin, Martin.....	Assumption.....	Miller, G. W.....	Pawnee.....
Gloss, Michael.....	Gardner.....	Morgan, E. T.....	Georgetown.....
Goebe, William.....	Staunton.....	Morgan, Joseph.....	Streator.....
Grabsuck, Emile.....	.....	Morris, John H.....	Wenona.....
Graham, L. A.....	Bloomington.....	Moss, Thomas.....	Staunton.....
Gray, Henry.....	Athens.....	Muentrich, J.....	.....
Green, J. W.....	Springfield.....	Muir, Andrew.....	Springfield.....
Haddow, Thomas.....	Pana.....	Murphy, John.....	Braidwood.....
Hardman, J. J.....	Auburn.....	Nichols, Eli W.....	Dunfermline.....
Harrison, James.....	Athens.....	Nixon, Robert.....	Streator.....
Harrison, John.....	Odin.....	Nordner, C. K.....	Athens.....
Hann, George.....	Litchfield.....	Oloyd, Peter W.....	Westville.....
Henley, J. H.....	Odin.....	Opp, Sherman W.....	Sandoval.....
Holden, Andrew.....	Coal City.....	Payne, Emanuel.....	Litchfield.....
Hopkins, Reese.....	Litchfield.....	Peart, John.....	Braidwood.....
Howells, George.....	Staunton.....	Phillips, Benjamin.....	Kangley.....
Hoye, William.....	Braidwood.....	Pick, Edward.....	Central City.....
		Prince, Thomas.....	Mt. Olive.....
		Prudent, Edward.....	Centralia.....

*Fire Bosses—Certificates of Competency—Concluded.*

Name.	Postoffice.	Name.	Postoffice.
Quinn, Bernard.....	Bloomington.....	Smith, James.....	Streator.....
Raab, Rudolph.....	Carlinville.....	Spires, Alfred.....	Braceville.....
Rae, Robert.....	Carbon Hill.....	Steel, Daniel.....	Collinsville.....
Rankin, Thos. A.....	Westville.....	Steel, Neal.....	Centralia.....
Reimnison, Henry.....	St. Johns.....	Stearns, James.....	Hallidayboro.....
Reynolds, John.....	Streator.....	Stonburner, L. L.....	Sorento.....
Rhodes, D. R.....	Pana.....	Thom, John.....	Coal City.....
Rhodes, J. L.....	Westville.....	Thomas, John R.....	Spring Valley....
Ritson, Hugh.....	Farmington.....	Vit, Charles.....	Litchfield.....
Ryder, James H.....	Pontiac.....	Whalen, Michael.....	Greenridge.....
Schmid, Conrad.....	Lincoln.....	Whitecamper, Louis.....	Lincoln.....
Secor, T. D.....	Odin.....	Williams, William E.....	Streator.....
Siddall, John W.....	Streator.....	Wilson, Henry.....	Pana.....
Siddell, James.....	Streator.....	Winterbottom, John.....	Sparta.....
Smith, George A.....	Sandoval.....		
Smith, Henry.....	Smithboro.....		

## FIRE BOSSES HOLDING CERTIFICATES OF SERVICE.

Name.	Postoffice.	Name.	Postoffice.
Arnold, Stephen.....	Kangley.....	Kortkamp, Carl.....	Hillsboro.....
Bagshaw, George W.....	Virden.....	Kortkamp, Lewis.....	".....
Blakeman, George.....	Streator.....	Lewis, Edward.....	Ladd.....
Borg, Frank.....	Mt. Olive.....	McDonald, M. E.....	LaSalle.....
Boulton, Henry.....	Coal City.....	Moffet, Edward A.....	Bartonville.....
Bough, William.....	Dawson.....	Montgomery, John H.....	Gardner.....
Brooks, Peter.....	Taylorville.....	Mooney, Arthur.....	Kangley.....
Brown, John.....	Streator.....	Ross, S. H.....	Girard.....
Caveny, Edward.....	Pana.....	Schmidt, Ernest.....	Mt. Olive.....
Franzen, Mat.....	Girard.....	Schultz, John.....	Diamond.....
Gray, William.....	Streator.....	Shaw, Francis M.....	Hallidayboro.....
Griffin, John.....	Niantic.....	Shopman, John.....	Mt. Olive.....
Hall, John Herbert.....	Minonk.....	Siebenhauer, Wm.....	LaSalle.....
Hoesfield, Aaron.....	Oglesby.....	Solufskie, Hermann.....	Decatur.....
Hornanor, Paul.....	Lincoln.....	Stewart, Samuel.....	Coal City.....
Hughes, John.....	Decatur.....	Taylor, Samuel.....	O'Fallon.....
Humphreys, William.....	Clark City.....	Thomas, David.....	Canton.....
Jenkins, Rutland.....	LaSalle.....	Wilson, Archie.....	Clark City.....
Kneper, David.....	Girard.....	Wilson, John.....	Gardner.....
Kopps, August.....	".....	Wood, Henry.....	Streator.....

MINE EXAMINERS.

NOTE.—The revised mining law of 1899 changed the title or name "Fire Boss" to that of of "Mine Examiner," and provided that those holding certificates as Fire Boss could exchange the same for that of Mine Examiner. The names which are followed by the abbreviation "ex" have made such exchange.

Name.	Postoffice.	Name.	Postoffice.
Andrew, Thomas	Kangley	Kloever, Matthew, ex.	Pana
Arnold, Stephen	Oglesby	Knapp, Charles	Seatonville
		Kramer, Frederick	Centralia
Baker, Sharrd	Gillespie		
Barlow, Harry, ex.	Lake Creek	Lawson, Thomas, ex.	Lake Creek
Baugh, William	Dawson	Lloyd, Rowland R.	Barelay
Blakemore, George	Streator		
Blenkinsopp, Thomas Jr.	Cable	Maggs, Jacob, ex.	Westville
Blue, J. W.	Grape Creek	Meyer, Louis	Breese
Booth, Enoch	Springfield	Millet, Thomas	Troy
Borg, Frank	Mt. Olive	Monghan, T. P.	Springfield
Brennan, Patrick	Toluca	Morgan, E. T., ex.	Georgetown
Brown, Archibald	Streator	Muentrick, John, ex.	Staunton
Brooks, Peter	Taylorville	McGarrity, John	Springfield
		McKenzie, Alex. C.	Canton
		McLaughlin, John P.	Auburn
Carr, J. W.	Odin		
Case, William	Diamond	Noll, Charles	Springfield
Casey, John	Williamsville		
Campbell, Robert	Witt	Olroyd, Peter W., ex.	Springfield
Cawley, William	DuQuoin	Opp, Sherman W. ex.	Canton
Champley, James, ex.	Weuona	Owens, Evan	Auburn
Connolly, Terrance J.	Assumption		
Cook, Elijah	Wanlock	Payne, Emanuel, ex.	Westville
Cook, Thomas	Belleville	Phillips, Benjamin, ex.	Sandoval
Costello, Henry, ex.	Pana	Potter, Edward	Belleville
Dacy, William	Springfield	Rankin, Thos. A., ex.	Litchfield
Davis, George		Ready, Thos	Springfield
Davis, Thomas	Nilwood	Reynolds, Andrew	Danville
Davis, William	Streator	Reynolds, John, ex	Streator
Dowell, W. C.	Centralia	Roberts, Evan	Danville
		Robbins, Aaron	Mt. Pulaski
Edmunds, Morgan, ex.	Mt. Olive		
		Scattergood, John	Barelay
Farmer, James	Marrissa	Scott, Wm. J.	Springfield
Felton, Harry	Petersburg	Seoby, Ray	Gilchrist
		Shaw, Henry	Spring Valley
Gastenecker, William	Troy	Siddall, Edward	Streator
Ghebandy, Honore	Westville	Siddall, John W., ex.	Streator
Gray, Henry, ex.	Athens	Smith, Harry	Troy
Gray, William	Streator	Smith, William	Belleville
Gregor, Charles	Springfield	Spires, Alfred	Braceville
Griffiths, Evan	St. David	Stirrat, James	Canton
Groom, Isaac	Belleville	Stoneburner, L. L., ex.	Moweaqua
Guy, John	Streator		
		Thom, John	Coal City
Hart, Chas. J.	Virden	Thorunt, Joseph, sr.	Trenton
Hayden, G. S.	Weuona	Tompkins, Frank	St. David
Hopkins, Reese, ex.	Litchfield		
Howells, George, ex.	Staunton	Ward, John G.	Streator
		Wendler, Adelbert.	Glen Carbon
Jones, Ben. J., ex.	Coffeen	Wilson, Henry, ex.	Pana
Kepper, William	Peru		

*Statement of the Reports of the State Inspectors of Mines of the Inspection of Mines, the Amount of Fees Charged and Paid, for the year ended June 1, 1899.*

## FIRST DISTRICT.

Date of Inspection.	Name of Firm, Company or Person Operating Mine.	Location of Mine.	Number of men employed.	Inspection fee charged.	Inspection fee paid.
July 7, 1898	Acme Coal Co.....	Streator.....	97	\$8 00	.....
Oct. 7, 1898	" .....	" .....	152	10 00	.....
Jan. 4, 1899	" .....	" .....	145	8 00	.....
April 6, 1899	" .....	" .....	145	8 00	.....
Aug. 3, 1898	Barrackman, A. M.....	" .....	8	6 00	.....
Oct. 31, 1898	" .....	" .....	26	6 00	.....
Feb. 1, 1899	" .....	" .....	37	6 00	.....
Sept. 22, 1898	Braceville Coal Co.....	Braceville.....	555	10 00	.....
Dec. 14, 1898	" .....	" .....	570	10 00	.....
Mar. 13, 1899	" .....	" .....	560	10 00	.....
June 21, 1899	" .....	" .....	563	10 00	.....
July 28, 1898	Burrell & Reese.....	Streator.....	9	6 00	.....
Oct. 22, 1898	Burrell, Wm.....	" .....	9	6 00	.....
Feb. 2, 1899	" .....	" .....	12	6 00	.....
May 1, 1899	" .....	" .....	8	6 00	.....
Feb. 2, 1899	Buchanan, Ed.....	" .....	8	6 00	.....
May 23, 1899	Bargreen Bros.....	" .....	7	6 00	.....
July 12, 1898	Cahill, James.....	Peru.....	160	10 00	.....
Oct. 26, 1898	" .....	" .....	162	10 00	.....
Jan. 13, 1899	" .....	" .....	175	10 00	.....
April 27, 1899	" .....	" .....	160	10 00	.....
July 18, 1898	Coöperative Coal Co.....	Bradwood.....	20	6 00	\$24
Oct. 24, 1898	" .....	" .....	25	6 00	.....
Jan. 10, 1899	" .....	" .....	20	6 00	.....
April 24, 1899	" .....	" .....	9	6 00	.....
Aug. 8, 1898	Coöperative Coal Co.....	Fairbury.....	13	6 00	.....
Nov. 1, 1898	" .....	" .....	18	6 00	.....
Feb. 7, 1899	" .....	" .....	15	6 00	.....
May 5, 1899	" .....	" .....	15	6 00	.....
Aug. 12, 1898	Chicago, Will. & V. Coal Co. No. 2.....	Streator.....	465	10 00	.....
Oct. 4, 1898	" .....	" .....	515	10 00	.....
Oct. 28, 1898	" .....	" .....	F A	10 00	.....
Nov. 10, 1898	" .....	" .....	423	10 00	.....
Jan. 6, 1899	" .....	" .....	530	10 00	.....
Jan. 26, 1899	" .....	Heenanville.....	F A	10 00	.....
Feb. 8, 1899	" .....	" .....	450	10 00	.....
Mar. 9, 1899	" .....	" .....	F A	10 00	.....
April 10, 1899	" .....	Streator.....	516	10 00	.....
April 21, 1899	" .....	" .....	29	6 00	.....
May 22, 1899	" .....	" .....	440	10 00	.....
Aug. 8, 1898	Diamond Coöperative Coal Co.....	Pontiac.....	7	6 00	.....
Oct. 11, 1898	" .....	" .....	7	6 00	.....
Jan. 9, 1899	" .....	" .....	8	6 00	.....
April 19, 1899	" .....	" .....	8	6 00	.....
Dec. 19, 1898	Darm, C. G.....	Streator.....	7	6 00	.....
Nov. 26, 1898	Dawson, J. C. & Co.....	Deer Park.....	8	6 00	.....
Feb. 13, 1899	" .....	" .....	12	6 00	.....
June 2, 1899	" .....	" .....	15	6 00	.....



## First District, Statement—Continued.

Date of Inspection.	Name of Firm, Company or Person Operating Mine.	Location of Mine.	Number of men employed.	Inspection fee charged.	Inspection fee paid.
Oct. 21, 1898	Dewey Coal Co.	Streator.	12	\$6 00	
Jan. 14, 1899	..	..	11	6 00	
July 25, 1898	Edwards, Thomas	..	7	6 00	
Oct. 31, 1898	..	..	7	6 00	
Feb. 1, 1899	..	..	7	6 00	
Aug. 15, 1898	Espley, J. T.	Morris	7	6 00	
Nov. 28, 1898	..	..	12	6 00	
Feb. 20, 1899	..	..	15	6 00	
May 24, 1899	..	..	13	6 00	
July 25, 1898	Evaus, R. Jr. and Bro.	Streator.	18	6 00	
Oct. 31, 1898	..	..	22	6 00	
Feb. 1, 1899	..	..	6	8 00	
June 22, 1899	..	..	14	6 00	
May 24, 1899	Fleming, Thos. & Co.	Morris	8	6 00	
July 26, 1898	Gardner & Wil. Coal Co.	Gardner	19	6 00	
Aug. 1, 1898	..	Clarke City	190	10 00	
Oct. 3, 1898	..	Gardner	22	6 00	
Nov. 15, 1898	..	Clarke City	215	10 00	
Jan. 30, 1899	..	Gardner	52	8 00	
Mar. 20, 1899	..	Clarke City	250	10 00	
April 21, 1899	..	Gardner	29	6 00	
May 31, 1899	..	Clarke City	155	10 00	
Aug. 15, 1898	Gilbride, Frank	Morris	8	6 00	
Nov. 28, 1898	..	..	9	6 00	
Feb. 20, 1899	..	..	11	6 00	
May 24, 1899	..	..	7	6 00	
July 11, 1898	Hakes, E.	Rutland.	164	10 00	
Oct. 14, 1898	..	..	170	10 00	
Jan. 12, 1899	..	..	175	10 00	
April 17, 1899	..	..	176	10 00	
July 15, 1898	Howe, Wm. Coal Co.	Streator.	60	8 00	
Oct. 6, 1898	..	..	68	8 00	
Jan. 3, 1899	..	..	78	8 00	
April 5, 1899	..	..	60	8 00	
Nov. 29, 1898	Heathen, James	Morris	7	6 00	
Feb. 20, 1899	..	..	9	6 00	
May 25, 1899	..	..	9	6 00	
Nov. 29, 1898	Howe, M. C.	..	7	6 00	
Feb. 21, 1899	..	..	6	6 00	
Aug. 3, 1898	Kilburn, Joseph	Streator.	13	6 00	
July 25, 1898	Kimes, Oscar	..	8	6 00	
Oct. 31, 1898	Kimes, R. S.	..	7	6 00	
Feb. 1, 1899	..	..	6	6 00	
Feb. 20, 1899	Kay, Harry	Morris	6	6 00	
May 24, 1899	..	..	6	6 00	
Aug. 15, 1898	Laherty, William	..	8	6 00	
Nov. 28, 1898	Laherty, William & Bro.	..	11	6 00	
Feb. 20, 1899	Laherty, William	..	10	6 00	
July 20, 1898	LaSalle Co. Carbon Coal Co. Union mine.	LaSalle.	190	10 00	
July 21, 1898	Rockwell mine.	..	115	8 00	
Aug. 24, 1898	LaSalle mine.	..	257	10 00	
Aug. 25, 1898	LaSalle Co. Carbon Coal Co., No. 1.	..	271	10 00	
Nov. 18, 1898	LaSalle.	LaSalle	258	10 00	
Nov. 11, 1898	Union	..	245	10 00	
Nov. 14, 1898	Rockwell	..	170	10 00	
Dec. 20, 1898	LaSalle	..	280	10 00	
Jan. 25, 1899	No. 1.	F A	10	10 00	
Feb. 10, 1899	Rockwell	..	214	10 00	
Feb. 14, 1899	Union	..	314	10 00	
Feb. 27, 1899	LaSalle	..	276	10 00	
Mar. 16, 1899	No. 1.	..	275	10 00	
May 2, 1899	Union	..	225	10 00	
May 8, 1899	LaSalle	..	270	10 00	
May 16, 1899	Rockwell	..	155	10 00	
June 1, 1899	No. 1.	..	250	10 00	
Oct. 29, 1898	Love & Sons	Wilsman	6	6 00	
Feb. 6, 1899	..	..	6	6 00	
July 18, 1898	Maltby, William	Braidwood	44	6 00	
Oct. 24, 1898	..	..	100	8 00	
Jan. 10, 1899	..	..	90	8 00	

## First District, Statement.—Continued.

Date of Inspection	Name of Firm, Company or Person Operating Mine.	Location of Mine.	Number of men employed.	Inspection fee charged.	Inspection fee paid.
April 24, 1899	Maltby, William	Braidwood	54	\$8 00	
July 13, 1898	M. & H. Zinc Co	LaSalle	70	8 00	\$32 00
Oct. 27, 1898	"	"	70	8 00	
Jan. 23, 1899	"	"	70	8 00	
May 4, 1899	"	"	70	8 00	
Oct. 12, 1898	Marseilles L. & W. P. Co	Marseilles	23	6 00	
Jan. 17, 1899	"	"	28	6 00	
April 25, 1899	"	"	34	6 00	
April 24, 1899	Murphy, John, & Co.	Braidwood	14	6 00	
July 28, 1898	Nelson & Westerland	Streator	6	6 00	
Oct. 22, 1898	"	"	6	6 00	
Feb. 2, 1899	"	"	6	6 00	
June 15, 1899	"	"	6	6 00	
Aug. 10, 1898	Oglesby Coal Co.	Oglesby	236	10 00	
Nov. 21, 1898	"	"	231	10 00	
Feb. 23, 1899	"	"	240	10 00	
April 15, 1899	"	"	234	10 00	
July 6, 1898	Otter Creek Coal Co.	Streator	41	6 00	
July 8, 1898	Pontiac Coal Co	Pontiac	98	8 00	
Oct. 11, 1898	"	"	80	8 00	
Jan. 9, 1899	"	"	125	8 00	
April 19, 1899	"	"	130	8 00	
Oct. 21, 1898	Piney Coal Co.	Streator	7	6 00	
Dec. 17, 1898	Pouk, A. W., & Co.	"	11	6 00	
Feb. 4, 1899	"	"	15	6 00	
Feb. 2, 1899	Price & Jones	"	10	6 00	
April 26, 1899	"	"	10	6 00	
Oct. 12, 1898	Roberts & Francis	"	8	6 00	
Jan. 14, 1899	Robert, Daniel	"	8	6 00	
Jan. 16, 1899	Roberts, Benjamin D	"	17	6 00	
Aug. 26, 1898	Standard Coal Co.	Seneca	11	6 00	
Nov. 23, 1898	"	"	28	6 00	
May 17, 1899	"	"	25	6 00	
June 16, 1899	"	"	21	6 00	
July 22, 1898	Star Coal Co., No. 1.	Streator	91	8 00	
Aug. 4, 1898	" No. 2.	Kangley	242	10 00	
Sept. 19, 1899	" No. 3.	Carbon Hill	274	10 00	
Sept. 20, 1898	" No. 2.	"	415	10 00	
Sept. 27, 1898	" No. 2.	"	F A	10 00	
Oct. 10, 1898	" No. 1.	Spring Hill	81	8 00	
Oct. 13, 1898	" No. 2.	Kangley	196	10 00	
Dec. 2, 1898	" No. 2.	Carbon Hill	415	10 00	
Dec. 10, 1898	" No. 3.	"	250	10 00	
Jan. 7, 1899	" No. 1.	Spring Hill	100	8 00	
Jan. 18, 1899	" No. 2.	Carbon Hill	F A	10 00	
Jan. 24, 1899	" No. 2.	Streator	210	10 00	
Feb. 16, 1899	" No. 3.	Carbon Hill	254	10 00	
Feb. 18, 1899	" No. 2.	"	415	10 00	
Mar. 10, 1899	" No. 1.	"	110	8 00	
April 7, 1899	" No. 3.	Kangley	105	8 00	
April 28, 1899	" No. 2.	"	170	10 00	
May 9, 1899	" No. 3.	Carbon Hill	235	10 00	
May 10, 1899	" No. 2.	"	415	10 00	
May 19, 1899	" No. 1.	"	150	10 00	
July 16, 1898	Streator Clay Mfg Co	Streator	21	6 00	
Oct. 8, 1898	"	"	22	6 00	
Mar. 25, 1899	"	"	21	6 00	
Jan. 9, 1899	"	"	21	6 00	
Oct. 3, 1898	Schultz, Fred	Braceville	6	6 00	
Jan. 29, 1899	"	"	7	6 00	
April 26, 1899	Sowerby, Thos., & Co	Streator	8	6 00	
Aug. 15, 1898	Tasdall Bros.	Nettle Creek	6	6 00	
Feb. 21, 1899	"	"	6	6 00	
Aug. 16, 1898	Telfer, A. W., & Son	Morris	6	6 00	
Nov. 29, 1898	"	"	6	6 00	
Feb. 21, 1899	"	"	7	6 00	
May 24, 1899	"	"	6	6 00	
May 1, 1899	Thomas, William, & Co.	Streator	8	6 00	
Oct. 22, 1898	Thorne, D. W.	"	6	6 00	
Dec. 28, 1898	Tisler, G. H.	Ottawa	7	6 00	
Nov. 16, 1898	Treasure, William	Essex	6	6 00	

*First District, Statement.—Concluded.*

Date of Inspection.	Name of Firm, Person or Company Operating Mine.	Location of Mine.	Number of men employed.	Inspection fee charged.	Inspection fee paid.
Aug. 8, 1898	Walton Bros	Fairbury	33	\$6 00	
Nov. 1, 1898	"	"	36	6 00	
Feb. 7, 1899	"	"	42	6 00	
May 5, 1899	"	"	34	6 00	
Sept. 23, 1898	Wilmington Big Four Coal Co	Coal City	428	10 00	
Dec. 12, 1898	"	"	450	10 00	
Mar. 9, 1899	"	"	550	10 00	
May 26, 1899	"	"	550	10 00	
Sept. 21, 1898	Wilmington M. & Mfg Co	Diamond	461	10 00	
Dec. 5, 1898	"	"	600	10 00	
Mar. 7, 1899	"	"	600	10 00	
May 17, 1899	"	"	500	10 00	
Sept. 21, 1898	Wilmington Star Coal Co	Coal City	115	5 00	
Nov. 3, 1898	"	"	120	5 00	
Jan. 19, 1899	"	"	150	10 00	
April 20, 1899	"	"	155	16 00	
Nov. 28, 1898	William Wood	Morris	6	6 00	
Feb. 20, 1899	"	"	7	6 00	
May 24, 1899	"	"	6	6 00	
Feb. 2, 1899	Wanders, J. H.	Streator	8	6 00	
Total				\$1,598 00	\$56 00

## SECOND DISTRICT.

Aug. 24, 1898	Alden Coal Co	Wanlock	140	\$8 00	\$50 00
Nov. 29, 1898	"	"	135	8 00	
Mar. 7, 1899	"	"	140	8 00	
Feb. 17, 1898	Armentrout, M.	Duncan	8	6 00	
Jan. 23, 1899	Atkinson, Mathew	Kewanee	7	6 00	
Oct. 15, 1898	Bates Bros	"	9	6 00	
May 2, 1899	"	"	7	6 00	
Nov. 18, 1898	Beharelle & Co. A	Orchard Mines	6	6 00	12 00
Jan. 17, 1899	"	"	16	6 00	
May 19, 1899	"	Mapleton	16	6 00	
Feb. 10, 1899	Ball Coal Co	Bartonville	15	6 00	
Jan. 7, 1899	Bartonville Coal Co	"	16	6 00	
May 23, 1899	"	"	16	6 00	
Feb. 6, 1899	Brandt, Wm	Mineral	10	6 00	
June 15, 1899	Black Diamond Coal Coal Co	Coal Valley	6	6 00	
Aug. 19, 1898	Camp Creek Coal Co	Cable	14	6 00	
July 7, 1899	Coal Valley M. Co. No. 2	Sherrard	160	10 00	
Mar. 12, 1899	" No. 2	"	230	10 00	
June 22, 1899	" No. 2	"	185	10 00	
Aug. 19, 1898	" No. 1	Cable	135	8 00	
Dec. 22, 1898	" No. 1	"	100	8 00	
Mar. 14, 1899	" No. 1	"	85	8 00	
June 13, 1899	" No. 1	"	85	8 00	
Oct. 7, 1898	Chi., W. & V. Coal Co	Seatonville	360	10 00	
Jan. 10, 1899	"	"	400	10 00	
April 28, 1899	"	"	350	10 00	
Nov. 3, 1898	Collier Coal Co	Bartonville	30	6 00	18 00
Feb. 10, 1899	Collier Coop. Coal Co	"	25	6 00	
May 12, 1899	"	"	30	6 00	
Nov. 4, 1898	Cusack, M	Edwards	6	6 00	
Feb. 2, 1899	Cutler, F. H	Princeville	10	6 00	
Nov. 11, 1898	Devlin Coal Co	Toluca	450	10 00	
Nov. 25, 1898	"	"	450	10 00	
Jan. 2, 1899	"	"	450	10 00	
April 26, 1899	"	"	450	10 00	
July 15, 1898	Empire Coal Co	Gilchrist	125	8 00	32 00
Nov. 28, 1898	"	"	120	8 00	
Mar. 11, 1899	"	"	100	8 00	
Sept. 7, 1898	Elmwood Coal Co	Elmwood	125	8 00	
Nov. 14, 1898	"	"	115	8 00	
Feb. 16, 1899	"	"	145	8 00	

## Second District, Statement—Continued.

Date of Inspection.	Name of Firm, Company or Person Operating Mine.	Location of Mine.	Number of men employed.	Inspection fee charged.	Inspection fee paid.
Feb. 24, 1899	Eimwood Coal Co.	Elmwood.	\$145	\$8 00	
May 22, 1899			110	8 00	
Oct. 15, 1898	Fleming, J. J.	Kewanee	10	6 00	
Feb. 18, 1898			18	6 00	
Dec. 9, 1898	Foley, W. E.	Mapleton	30	6 00	
May 4, 1899			5	6 00	
Jan. 3, 1899	Fairlie, James	Cambridge	12	6 00	12 00
Sept. 17, 1898	Grant, Peter, Jr.	Peoria	30	6 00	
Nov. 17, 1898			36	6 00	
Mar. 10, 1899			35	6 00	
Nov. 15, 1898	German Coöp. Coal Co.	Orchard Mines	16	6 00	
Aug. 9, 1899			18	6 00	
May 18, 1898	Hayes Coal Co.	Muscataine, Ia.	6	6 00	
Nov. 7, 1898	Henry, Philip	Kewanee	30	6 00	
May 1, 1899			12	6 00	
Sept. 6, 1898	Herdien Coal Co. No. 12	Galva	12	6 00	
Dec. 24, 1898	" " No. 14	Kewanee	60	8 00	
Feb. 15, 1899	" " No. 12	Galva	26	6 00	
Mar. 27, 1899	" " No. 14	"	45	6 00	
June 5, 1899	" " No. 12	"	10	6 00	
Oct. 31, 1898	Higbee, James	Wyoming	11	6 00	
Jan. 19, 1899	Higbee & Robinson	"	10	6 00	
Oct. 28, 1898	Howarth & Taylor	Edwards	12	6 00	
Feb. 25, 1899			20	6 00	
May 29, 1899			20	6 00	
April 20, 1899	Hynd, John	Loding	6	6 00	
April 20, 1899	Jamieson & Allison	"	6	6 00	
Sept. 8, 1898	Kramm, C. B.	Edwards	10	6 00	
Dec. 1, 1898			14	6 00	
Feb. 24, 1899			30	6 00	
May 10, 1899			38	6 00	
Nov. 7, 1898	Kirby, Bernard	Kewanee	16	6 00	
May 1, 1899			8	6 00	
Jan. 7, 1899	Keller & Son, George	Bartonville	16	6 00	
Dec. 22, 1898	Lilliman Bros.	Cable	12	6 00	
Jan. 23, 1899	Lyle, W. H.	Kewanee	9	6 00	6 00
Sept. 22, 1898	Marquette Coal Co.	Marquette	260	10 00	
Oct. 5, 1898		Sparland	40	6 00	
Dec. 13, 1898		Marquette	315	10 00	
Mar. 21, 1899		"	250	10 00	
Jan. 20, 1899		Sparland	60	8 00	
April 7, 1899		"	40	6 00	
Sept. 20, 1898	Minonk C. & T. Co.	Minonk	260	10 00	
Nov. 9, 1898		"	275	10 00	
Nov. 20, 1898		"	275	10 00	
Mar. 24, 1899		"	275	10 00	
April 25, 1899	Minonk Coal Co.	"	270	10 00	
Dec. 24, 1898	McKane & Reed	Galva	8	6 00	
Feb. 7, 1899	Murray, J. H.	"	20	6 00	12 00
Sept. 12, 1898		"	14	6 00	
Sept. 6, 1898	McFall & Tucker	Mineral	10	6 00	
Sept. 9, 1898	Newsam Bros.	Peoria	120	8 00	
Sept. 15, 1898		"	55	8 00	
Sept. 16, 1898		"	45	6 00	
Nov. 17, 1898		"	55	8 00	
Dec. 20, 1898		"	140	8 00	
Jan. 9, 1899		"	135	8 00	
Jan. 18, 1899		"	45	6 00	
Feb. 3, 1899		"	55	8 00	
Feb. 10, 1899		"	135	8 00	
Feb. 28, 1898		"	40	6 00	
April 15, 1899		"	115	8 00	
April 17, 1899		"	35	6 00	
May 13, 1899		"	40	6 00	
Jan. 17, 1899	Potter & Son, L.	Mapleton	8	6 00	
June 15, 1899	Pryce, J. J.	Coal Valley	8	6 00	
Sept. 10, 1898	Reid City C. & M. Co.	Wolcott	45	6 00	
Dec. 9, 1898		"	75	8 00	
Mar. 16, 1899		"	60	8 00	
May 4, 1899		"	45	6 00	
Sept. 16, 1898	Royster & Zeigler	Peoria	30	6 00	

## Second District, Statement—Concluded.

Date of Inspection.	Name of Firm, Company or Person Operating Mine.	Location of Mine.	Number of men employed.	Inspection fee charged.	Inspection fee paid.
Dec. 2, 1898	Royster & Zeigler	Peoria	30	\$5 00	
Mar. 10, 1899	"	"	30	6 00	
Nov. 1, 1898	Reents, Geibold	Kramm	12	6 00	\$6 00
Feb. 27, 1899	"	"	14	6 00	
May 29, 1899	"	"	12	6 00	
Dec. 16, 1898	Roanoke M. Co.	Roanoke	175	10 00	30 00
Mar. 29, 1899	"	"	200	10 00	
Jan. 12, 1899	Riley, Silas W.	Neponset	8	6 00	
Sept. 30, 1898	Schmidt & Sons	Peoria	11	6 00	
May 5, 1899	"	"	7	6 00	
July 14, 1899	Spring Valley Coal Co.	Spring Valley	250	10 00	
Oct. 11, 1898	Spring Valley Coal Co. No. 3.	"	480	10 00	
Feb. 21, 1899	"	"	450	10 00	
Oct. 12, 1898	" No. 2.	"	425	10 00	
Jan. 11, 1899	"	"	580	10 00	
April 6, 1899	"	"	550	10 00	
Nov. 23, 1898	" No. 1.	"	600	10 00	
Feb. 22, 1899	"	"	500	10 00	
May 17, 1899	"	"	550	10 00	
Jan. 17, 1899	Shefler, R. D.	Orchard Mines	7	6 00	
Nov. 1, 1898	Sholt, James	Bartonville	12	6 00	
Mar. 4, 1899	Sholt Bros., No. 3.	Peoria	90	8 00	
Nov. 1, 1898	"	"	65	8 00	
May 9, 1899	" No. 1.	"	25	6 00	
Nov. 15, 1898	"	"	40	6 00	
May 23, 1899	" No. 3.	"	80	8 00	
April 19, 1899	Silvis & Silvis	Carbon Cliff	14	6 00	
Dec. 6, 1898	Sheffield M. Co.	Sheffield	60	8 00	
June 9, 1899	"	"	25	6 00	
" 16, 1899	Stoddard & Summerson	Coal Valley	25	6 00	
" 16, 1899	Summerson, John	"	12	6 00	
April 22, 1899	Vicary Bros.	Peoria	20	6 00	
Dec. 27, 1898	"	"	30	6 00	
July 18, 1899	Wantling & Son	Pottstown	70	8 00	
Nov. 2, 1898	"	"	70	8 00	
Jan. 31, 1899	"	"	75	8 00	
May 10, 1899	"	"	75	8 00	
July 30, 1898	Wolland Bros.	Bartonville	9	6 00	
May 5, 1899	"	"	7	6 00	
Oct. 4, 1898	Wenona Coal Co.	Wenona	160	10 00	
Feb. 1, 1899	"	"	200	10 00	
May 31, 1899	"	"	130	8 00	
Oct. 8, 1898	Whitebreast Fuel Co.	Ladd	350	10 00	
Jan. 14, 1899	"	"	375	10 00	
May 16, 1899	"	"	375	10 00	
Dec. 5, 1898	Williamson, Z.	Sheffield	6	6 00	
Nov. 3, 1898	Wolschlag's Coop. C. Co.	Peoria	45	6 00	
Mar. 17, 1899	"	"	45	6 00	
June 3, 1899	"	"	45	6 00	
Jan. 23, 1899	Wasley, Henry	Kewanee	12	6 00	
	Totals		.....	\$1,180 00	\$178 00

## THIRD DISTRICT.

July 21, 1898	Astoria C. & M. Co.	Astoria	55	\$8 00	
Nov. 19, 1898	"	"	80	8 00	
Jan. 19, 1899	"	"	94	8 00	
April 18, 1899	"	"	75	8 00	
Oct. 17, 1898	Aldgren, E.	E. Galesburg	10	6 00	
Dec. 14, 1898	Anderson, N. A.	Wataga	14	6 00	
Mar. 20, 1899	"	"	12	6 00	
Aug. 30, 1898	Bath, Isaac	Lewistown	7	6 00	
Oct. 12, 1898	Back & Co., Thos.	Norris	28	6 00	
Jan. 10, 1899	"	"	32	6 00	

## Third District, Statement—Continued.

Date of Inspection.	Name of Firm, Company or Person Operating Mine.	Location of Mine.	Number of men employed.	Inspection fee charged.	Inspection fee paid.
July 7, 1898	Canton Coal Co.	Canton	19	86 00	
Oct. 10, 1898	"	"	19	6 00	
Jan. 11, 1899	"	"	35	6 00	
Apr. 19, 1899	"	"	32	6 00	
July 7, 1898	Canton Union C. Co.	"	18	6 00	
Oct. 4, 1898	"	"	30	6 00	
Jan. 9, 1899	"	"	53	8 00	
Apr. 7, 1899	"	"	42	6 00	
Sept. 21, 1898	Cline & Shaw.	Fiatt	15	6 00	
Dec. 12, 1898	"	"	25	6 00	
Feb. 24, 1899	"	"	22	6 00	
May 9, 1899	"	Galesburg	16	6 00	
July 7, 1898	Colchester C. & M. Co.	Colchester	60	8 00	
Oct. 18, 1898	"	"	60	8 00	
Jan. 18, 1899	"	"	50	8 00	
Apr. 12, 1899	"	"	55	6 00	
Dec. 16, 1898	Clifford, Geo.	Oneida	12	6 00	
7, 1898	Cook & Gilmore.	Alexis	9	6 00	
Mar. 14, 1899	"	"	10	6 00	
Dec. 2, 1898	Corsepins, G. W.	Galesburg	10	6 00	
Feb. 21, 1899	"	"	8	6 00	
Nov. 29, 1898	Dudley, Z. F.	Knoxville	9	6 00	
July 14, 1898	Egerton Coal Co.	Colchester	45	6 00	
Apr. 11, 1898	Egerton Bros.	"	25	6 00	
Aug. 8, 1898	Essex, Geo. W.	Soperville	20	6 00	
Dec. 2, 1898	"	"	30	6 00	
Feb. 22, 1899	"	"	14	6 00	
May 15, 1899	"	"	10	6 00	
July 11, 1898	Farmington Coal Co.	Farmington	70	8 00	
Oct. 11, 1898	"	"	58	8 00	
Jan. 31, 1899	"	"	52	8 00	
May 11, 1899	"	"	80	8 00	
July 11, 1898	Findley Coal & Coke Co.	"	17	6 00	
Oct. 14, 1898	"	"	28	6 00	
Jan. 24, 1899	"	"	37	6 00	
May 3, 1899	"	"	30	6 00	
31, 1899	Howat Bros.	Canton	9	6 00	
July 22, 1898	Jarvis, T. H.	Astoria	9	6 00	
Feb. 6, 1899	Jarvis Coal Co.	"	25	6 00	
Apr. 17, 1899	"	"	32	6 00	
Dec. 14, 1898	Jacobson & Son, J.	Wataga	8	6 00	
Aug. 16, 1898	Kerr, W. M.	Rushville	25	6 00	
Nov. 14, 1898	"	"	9	6 00	
Feb. 7, 1899	"	"	11	6 00	
May 19, 1899	"	"	7	6 00	
Aug. 12, 1898	Laws, J. M.	Cuba	30	6 00	
Nov. 16, 1898	"	"	30	6 00	
Feb. 23, 1899	"	"	38	6 00	
Apr. 24, 1899	"	"	30	6 00	
Aug. 30, 1898	Lowery & Kinnoman	Lewistown	7	6 00	
Nov. 4, 1898	"	"	8	6 00	
July 27, 1898	Meehan, P. H.	Breeds	25	6 00	
Oct. 31, 1898	"	"	24	6 00	
Feb. 16, 1899	"	"	25	6 00	
July 15, 1898	Meredith Bros.	Augusta	9	6 00	
Oct. 19, 1898	"	"	23	6 00	
Jan. 19, 1899	"	"	20	6 00	
Apr. 12, 1899	"	"	24	6 00	
Nov. 25, 1898	Maplewood C. Co.	Farmington	38	6 00	
Jan. 23, 1899	"	"	57	8 00	
Dec. 6, 1898	Murphy & Redmond	Monmouth	7	6 00	
Mar. 13, 1899	"	"	8	6 00	
Dec. 8, 1898	McCartney, C. F.	Alexis	10	6 00	
Mar. 15, 1899	"	"	9	6 00	
June 22, 1899	"	"	7	6 00	
Dec. 15, 1898	McGovern, Jas.	Oneida	10	6 00	
Sept. 23, 1898	Nappin, David	Farmington	9	6 00	
Nov. 25, 1898	"	"	9	6 00	
Mar. 8, 1899	"	"	10	6 00	
May 2, 1899	"	"	8	6 00	
Apr. 28, 1899	Norris Coal Co.	Norris	23	6 00	

## Third District, Statement—Concluded.

Date of Inspection.	Name of Firm, Company or Person Operating Mine.	Location of Mine.	Number of men employed.	Inspection fee charged.	Inspection fee paid.
June 14, 1899	Newsam Bros.	Farmington	60	88 00	
Nov. 2, 1898	Parcell, Thos.	Canton	9	6 00	
Jan. 5, 1899	"	"	12	6 00	
Aug. 16, 1898	Ross & Woodward	Soperville	9	6 00	
July 13, 1898	Rundle & Rippletoe	Colchester	20	6 00	
Oct. 18, 1898	"	"	55	8 00	
Jan. 17, 1899	"	"	70	8 00	
Apr. 11, 1899	"	"	70	8 00	
Dec. 1, 1898	Reed & Pendergast	Soperville	15	6 00	
Feb. 21, 1899	"	"	14	6 00	
May 16, 1899	"	"	8	6 00	
July 30, 1898	Sunday Creek C. Co.	Middle Grove	52	8 00	
Oct. 25, 1898	"	"	65	8 00	
Jan. 30, 1898	"	"	82	8 00	
Apr. 26, 1898	"	"	70	8 00	
Dec. 7, 1898	Simcox, John	Alexis	7	6 00	
Mar. 14, 1899	"	"	8	6 00	
June 22, 1899	"	"	6	6 00	
Aug. 9, 1898	Taylor, James	Wataga	6	6 00	
Aug. 19, 1898	Taylor & Peck	Cuba	25	6 00	
Nov. 17, 1898	"	"	33	6 00	
Feb. 15, 1899	" No. 1	"	35	6 00	
May 22, 1899	" No. 1	"	24	6 00	
Feb. 25, 1899	" No. 2	"	7	6 00	
May 24, 1899	" No. 2	"	8	6 00	
Dec. 13, 1898	Taylor Bros.	Wataga	14	6 00	
Mar. 21, 1899	"	"	14	6 00	
Oct. 7, 1898	Turner Bros.	Lewiston	10	6 00	
Feb. 2, 1899	"	"	21	6 00	
Apr. 8, 1899	"	"	11	6 00	
July 6, 1898	Whitebreast Fuel Co.	Dunfermline	200	10 00	
Oct. 6, 1898	"	"	240	10 00	
Jan. 6, 1899	"	"	245	10 00	
Apr. 5, 1899	"	"	220	10 00	
July 18, 1898	"	St. David	75	8 00	
Oct. 3, 1898	"	"	100	8 00	
Jan. 4, 1899	"	"	131	8 00	
Apr. 6, 1899	"	"	140	8 00	
Nov. 2, 1898	Wages Bros & Murphy	Canton	6	6 00	
Dec. 1, 1898	Woodward, Wm.	Soperville	16	6 00	
Feb. 22, 1899	"	"	14	6 00	
May 16, 1899	"	Galesburg	8	6 00	
	Total			8804 00	

## FOURTH DISTRICT.

Nov. 12, 1898	Athens Coal Co.	Athens	130	\$10 00	
Mar. 1, 1899	"	"	117	10 00	
May 5, 1899	"	"	125	10 00	
Aug. 23, 1898	Bonnett, A. H.	Snider	16	6 00	
Dec. 1, 1898	"	Pilot	16	6 00	
June 6, 1899	"	Blount	12	6 00	
Dec. 23, 1898	Blake, A. C.	E. Peoria	53	8 00	
Mar. 21, 1899	"	"	30	6 00	
Apr. 4, 1899	"	"	42	6 00	
Dec. 22, 1898	Bohlander Bros.	Pekin	17	6 00	
Mar. 23, 1899	"	"	11	6 00	
June 7, 1899	"	"	8	6 00	
Oct. 13, 1898	Brookside Coal Co.	Grave Creek	70	8 00	
Oct. 15, 1898	"	"	140	10 00	
Nov. 23, 1898	"	"	80	8 00	
Jan. 31, 1899	" No. 2	"	80	8 00	
Feb. 22, 1899	" No. 1	"	130	10 00	
Apr. 22, 1899	"	"	125	10 00	
May 15, 1899	" No. 1	"	104	10 00	
June 20, 1899	" No. 2	"	140	10 00	

## Fourth District, Statement—Continued.

Date of Inspection.	Name of Firm, Company or Person Operating Mine.	Location of Mine.	Number of men employed.	Inspection fee charged.	Inspection fee paid.
Nov. 14, 1898	Bunting Bros.	Grape Creek	14	\$ 6 00	
Mar. 4, 1899	"	"	9	6 00	
Mar. 20, 1899	Bacon Bros.	E. Peoria	8	6 00	
Mar. 22, 1899	Butler Bros.	Pekin	14	6 00	
Apr. 28, 1899	"	"	9	6 00	
July 7, 1898	Consolidated Coal Co.	Fairmount	82	8 00	
Nov. 21, 1898	"	"	84	8 00	
Mar. 16, 1899	"	"	108	10 00	
May 23, 1899	"	"	72	8 00	
Sept. 12, 1898	Cruikshanks & Sons	Chenoa	8	6 00	
Mar. 20, 1899	"	E. Peoria	10	6 00	
Oct. 10, 1898	Catlin Coal Co.	Catlin	130	10 00	
Mar. 6, 1899	"	"	150	10 00	
Apr. 13, 1899	"	"	170	10 00	
Apr. 17, 1899	"	"	161	10 00	
Dec. 10, 1898	Chicago & K. C. Coal Co.	Petersburg	190	10 00	
Feb. 8, 1899	"	"	130	10 00	
June 8, 1899	"	"	66	8 00	
Mar. 24, 1899	Citizen's Coal Co.	Lincoln	75	8 00	
Nov. 30, 1898	"	"	94	8 00	
Dec. 14, 1898	"	"	110	10 00	
May 11, 1899	"	"	80	8 00	
Feb. 15, 1899	Colfax C. & M. Co.	Colfax	51	8 00	
June 16, 1899	"	"	30	6 00	
Sept. 9, 1898	Decatur Coal Co.	Niantic	68	8 00	\$30 00
Sept. 22, 1898	"	"	72	8 00	
Feb. 9, 1899	"	Decatur	135	10 00	
Feb. 14, 1899	"	"	156	10 00	
May 2, 1899	" No. 1	"	90	10 00	
May 3, 1899	" No. 2	"	110	10 00	
Dec. 8, 1898	Denton, Wm.	Petersburg	10	6 00	
Feb. 7, 1899	Denton, Wm.	Petersburg	10	6 00	
Dec. 16, 1898	Dolring & Co., W. F.	East Peoria	11	6 00	
Dec. 15, 1898	East Peoria Coal Co.	"	40	6 00	
Feb. 20, 1899	"	"	43	6 00	
Mar. 20, 1899	"	"	40	6 00	
May 12, 1899	"	"	23	6 00	
Dec. 6, 1898	Ellsworth, J. W.	Glenburn	185	10 00	30 00
Oct. 22, 1898	Economy Coal Co.	Danville	35	6 00	
Feb. 2, 1899	"	"	125	10 00	
April 26, 1899	"	"	125	10 00	
Feb. 15, 1899	Ewing & Pitts.	Colfax	14	6 00	
June 16, 1899	East Colfax Coal Co.	"	39	6 00	
Sept. 8, 1898	Greenview Coal Co.	Greenview	70	8 00	
May 10, 1899	Greenview C. & M. Co.	"	81	8 00	
Dec. 22, 1898	Grant & Sons, L.	Pekin	35	6 00	
Mar. 23, 1899	"	"	20	6 00	
May 18, 1899	Glenburn Coal Co.	Glenburn	48	6 00	
Sept. 3, 1898	Himrod Coal Co.	Danville	225	10 00	
Nov. 11, 1898	"	Westville	118	10 00	
Dec. 2, 1898	"	"	225	10 00	
Dec. 5, 1898	"	"	230	10 00	
Mar. 7, 1899	" No. 1	"	250	10 00	
Mar. 15, 1899	" No. 2	"	190	10 00	
May 1, 1899	"	"	131	10 00	
May 20, 1899	" No. 1	"	225	10 00	
Mar. 21, 1898	Hanson & Co., A.	East Peoria	45	6 00	
May 31, 1899	"	"	40	6 00	
Feb. 13, 1899	Hewitt, C. H.	Chenoa	11	6 00	
Nov. 15, 1898	Ill. Coal & M. Co.	Bloomington	40	6 00	6 00
Nov. 28, 1898	Jenkins, D. A.	Danville	12	6 00	
Oct. 5, 1898	Kellyville Coal Co.	Westville	252	10 00	
Nov. 10, 1898	"	"	330	10 00	
Nov. 12, 1898	"	"	310	10 00	
Mar. 8, 1899	" No. 3	"	300	10 00	
Mar. 14, 1899	" No. 2	"	320	10 00	
April 24, 1899	"	"	320	10 00	
May 24, 1899	"	"	272	10 00	
June 14, 1899	" No. 2	"	280	10 00	
April 28, 1899	King & Grossweiler	Pekin	8	6 00	



## Fourth District, Statement—Concluded.

Date of Inspection.	Name of Firm, Company or Person Operating Mine.	Location of Mine.	Number of men employed.	Inspection fee charged.	Inspection fee paid.
Nov. 16, 1898	Lincoln Coal Co	Lincoln	110	\$10 00	
Dec. 14, 1898	"	"	135	10 00	
Mar. 21, 1899	"	"	135	10 00	
June 29, 1899	"	"	80	10 00	
Dec. 23, 1898	Little & Co., E.	Peoria	38	6 00	
Oct. 21, 1898	Lloyd, E.	Danville	10	6 00	
July 18, 1898	Muncie Coal Co.	Muncie	60	8 00	
July 27, 1898	"	"	60	8 00	
Oct. 3, 1898	"	"	44	6 00	
Oct. 11, 1898	"	"	46	6 00	
Mar. 18, 1899	"	"	30	6 00	
April 10, 1899	"	"	29	6 00	
April 19, 1899	"	"	31	6 00	
June 2, 1899	"	"	18	6 00	
Dec. 16, 1899	Mushbaugh, J.	East Peoria	14	6 00	
Feb. 10, 1899	McLean Co. Coal Co.	Bloomington	350	10 00	
May 4, 1899	"	"	160	10 00	
April 6, 1899	Mt. Pulaski M. Co.	Mt. Pulaski	26	6 00	
Sept. 3, 1898	O'Connell John.	Grape Creek	56	8 00	
Oct. 14, 1898	"	"	52	8 00	
Jan. 30, 1899	"	"	45	6 00	
April 20, 1899	"	"	49	6 00	
Dec. 16, 1898	Progressive Coal Co.	East Peoria	20	6 00	
Feb. 20, 1899	"	"	18	6 00	
Dec. 21, 1898	Ratliff, I.	Ashland	14	6 00	
Dec. 8, 1898	South Mountain Coal Co.	Petersburg	14	6 00	
Feb. 7, 1899	"	"	17	6 00	
April 7, 1899	"	"	12	6 00	
May 9, 1899	Tallula Coal Co.	Tallula	18	6 00	
Feb. 16, 1899	Union Coal & M. Co.	Mt. Pulaski	31	6 00	
July 20, 1898	Westville Coal Co.	Westville	225	10 00	
Oct. 7, 1898	"	"	230	10 00	
Dec. 12, 1898	"	"	225	10 00	
Feb. 4, 1899	"	"	260	10 00	
Mar. 29, 1899	"	"	185	10 00	
May 22, 1899	"	"	225	10 00	
May 27, 1899	"	"	200	10 00	
Feb. 6, 1899	Wabash Coal Co., No. 2	Athens	130	10 00	
April 8, 1899	"	"	160	10 00	
Total.....				\$1,030 00	\$60 00

## FIFTH DISTRICT.

Aug. 12, 1898	Auburn Coal Co.	Auburn	15	\$6 00	
Nov. 3, 1898	"	"	15	6 00	
Jan. 16, 1899	"	"	16	6 00	
April 13, 1899	"	"	20	6 00	
Oct. 11, 1898	Assumption C. & M. Co.	Assumption	118	10 00	
Feb. 21, 1899	"	"	130	10 00	
May 17, 1899	"	"	76	8 00	
Aug. 30, 1898	Barelay Coal Co.	Barelay	110	10 00	
Oct. 27, 1898	Barelay Coal & M. Co.	"	115	10 00	
Feb. 28, 1899	"	"	104	10 00	
June 3, 1899	"	"	95	8 00	
Sept. 26, 1898	Bates & Co., W. H.	Winchester	40	6 00	\$6 00
June 20, 1899	"	Hes Junction	40	6 00	
July 22, 1898	Black Diamond C. & T. Co.	Springfield	70	8 00	
Oct. 12, 1898	"	"	75	8 00	
Feb. 9, 1899	"	"	95	8 00	
April 25, 1899	"	"	90	8 00	
Feb. 21, 1899	Baker, Leroy	Edinburg	18	6 00	
Feb. 17, 1899	Bunker Hill C. Co.	Bunker Hill	14	6 00	

## Fifth District, Statement—Continued.

Date of Inspection.	Name of Firm, Company or Person Operating Mine.	Location of Mine.	Number of men employed.	Inspection fee charged.	Inspection fee paid.
Aug. 11, 1898	Cantrill Coöp. C. Co.	Cantrill	40	86 00	
Nov. 2, 1898	"	"	75	8 00	
Jan. 17, 1899	"	"	80	8 00	
April 5, 1899	"	"	85	8 00	
July 29, 1898	Capital Coöp. C. Co. No. 2	Springfield	60	6 00	
Sept. 7, 1898	" No. 1	"	27	6 00	
Nov. 14, 1898	" No. 1	"	25	6 00	
" 14, 1898	" No. 2	"	18	8 00	
Feb. 6, 1899	" No. 1	"	25	6 00	
" 6, 1899	" No. 2	"	80	8 00	
April 10, 1899	" No. 1	"	25	6 00	
" 10, 1899	" No. 2	"	25	6 00	
July 8, 1898	Carlville Coal Co.	Carlville	50	6 00	
Oct. 3, 1898	"	"	55	6 00	
Dec. 22, 1898	"	"	59	6 00	
Mar. 28, 1899	"	"	95	8 00	
May 9, 1899	"	"	90	8 00	
Sept. 27, 1898	Chatham Coal Co.	Chatham	44	6 00	
Dec. 5, 1898	"	"	34	6 00	
Mar. 23, 1899	"	"	30	6 00	
May 29, 1899	"	"	30	6 00	
Sept. 22, 1898	Chicago-Virden C. Co.	Virden	15	6 00	
Nov. 30, 1898	" No. 2	"	135	8 00	
Dec. 13, 1898	" No. 1	"	118	10 00	
Jan. 9, 1899	" No. 1	"	170	10 00	
April 12, 1899	" No. 1	"	180	10 00	
" 13, 1899	" No. 2	Auburn	175	10 00	
Jan. 16, 1899	" No. 2	"	168	10 00	
July 28, 1898	Citizens' C. & M. Co. A.	Springfield	120	10 00	
" 28, 1898	" B.	"	45	6 00	
Nov. 15, 1898	" A.	"	122	10 00	
" 15, 1898	" B.	"	90	8 00	
Jan. 19, 1899	" B.	"	90	8 00	
" 19, 1899	" A.	"	95	8 00	
April 26, 1899	" A.	"	81	8 00	
" 26, 1899	" B.	"	70	8 00	
June 22, 1899	" B.	"	82	8 00	
" 23, 1899	" A.	"	75	8 00	
Sept. 7, 1898	Clear Lake Coöp. C. Co.	Bissell	61	6 00	
Dec. 6, 1898	"	"	60	6 00	
Mar. 24, 1899	"	"	75	8 00	
May 31, 1899	"	"	84	8 00	
July 7, 1898	Coffeen C. & C. Co.	Coffeen	120	10 00	
Oct. 10, 1898	"	"	160	10 00	
Feb. 3, 1899	"	"	155	10 00	
May 2, 1899	"	"	155	10 00	
July 9, 1898	Consolidated Coal Co. Hornsby	Hornsby	68	6 00	
Nov. 16, 1898	"	"	105	10 00	
Feb. 16, 1899	"	"	91	8 00	
July 13, 1898	" Gillespie	Gillespie	110	10 00	
Nov. 18, 1898	"	"	125	10 00	
Feb. 2, 1899	"	"	125	10 00	
May 3, 1899	"	"	120	10 00	
July 15, 1898	"	Mt. Olive	230	10 00	
Nov. 23, 1898	" No. 8	"	225	10 00	
Mar. 10, 1899	" No. 8	"	200	10 00	
May 4, 1899	" No. 8	"	202	10 00	
Sept. 14, 1898	" No. 6	Staunton	250	10 00	
Nov. 17, 1898	" No. 6	"	270	10 00	
Mar. 17, 1899	" No. 6	"	165	10 00	
April 20, 1899	" No. 5	"	245	10 00	
Sept. 23, 1898	" No. 7	"	115	10 00	
Nov. 17, 1898	" No. 7	"	150	10 00	
Mar. 16, 1899	" No. 7	"	165	10 00	
April 21, 1899	" No. 7	"	170	10 00	
Nov. 23, 1898	" No. 10	Mt. Olive	200	10 00	
Mar. 9, 1899	" No. 10	"	220	10 00	
May 5, 1899	" No. 10	"	175	10 00	
Dec. 28, 1898	Edinburg Coal Co.	Edinburg	12	6 00	
May 26, 1899	"	"	40	6 00	
July 18, 1898	Girard Coal Co.	Girard	70	8 00	

## Fifth District, Statement—Continued.

Date of Inspection.	Name of Firm, Company or Person Operating Mine.	Location of Mine.	Number of men employed.	Inspection fee charged.	Inspection fee paid.
Oct. 4, 1898	Girard Coal Co.	Girard	125	\$10 00	
Feb. 15, 1899	"	"	120	10 00	
April 6, 1899	"	"	119	10 00	
Feb. 15, 1899	Greenridge Coal Co.	"	125	10 00	
April 7, 1899	"	"	125	10 00	
July 14, 1898	Hillsboro Coal Co.	Hillsboro	106	10 00	
Nov. 25, 1898	"	"	118	10 00	
Jan. 27, 1899	"	"	135	10 00	
May 15, 1899	"	"	70	8 00	
Aug. 12, 1898	Horse Creek Coal Co.	Pawnee	9	6 00	
Oct. 12, 1888	Junction Mining Co.	iles Junction	75	8 00	
Feb. 9, 1899	Junction C. & M. Co.	Springfield	90	8 00	
April 25, 1899	"	"	82	8 00	
July 6, 1898	Litchfield M. & M. Co.	Litchfield	20	6 00	
" 6, 1898	Litchfield M. & P. Co.	"	80	6 00	
Nov. 21, 1898	"	"	55	6 00	
" 21, 1898	"	"	26	6 00	
Jan. 13, 1899	"	"	55	6 00	
April 4, 1899	"	"	52	6 00	
Aug. 12, 1898	Madison Coal Co.	Mt. Olive	220	10 00	
Dec. 8, 1898	" No. 5	"	220	10 00	
Mar. 8, 1899	" No. 5	"	180	10 00	
May 6, 1899	" No. 5	"	225	10 00	
Dec. 2, 1898	Montgomery Coal Co.	Paisley	60	6 00	\$12 00
April 3, 1899	"	"	48	6 00	
Dec. 1, 1898	Moweaqua M. & Mfg Co.	Moweaqua	160	10 00	20 00
Mar. 22, 1899	"	"	120	10 00	
May 16, 1899	"	"	116	10 00	
July 20, 1898	Neil, Wm. & Co.	Bunker Hill	8	6 00	
Nov. 29, 1898	Nilwood Carbon Coal Co.	Nilwood	20	6 00	
Mar. 27, 1899	"	"	40	6 00	
May 8, 1899	"	"	40	6 00	
Nov. 29, 1898	O'Garra, King & Co.	Girard	75	8 00	
Sept. 19, 1898	Penwell C. & M. Co.	Pana	41	6 00	36 00
Dec. 14, 1898	"	"	125	10 00	
Jan. 23, 1899	"	"	160	10 00	
Mar. 3, 1899	"	"	202	10 00	
June 12, 1899	"	"	210	10 00	
Oct. 7, 1898	Pana Coal Co.	"	35	6 00	94 00
Mar. 3, 1899	" No. 1	"	110	10 00	
June 14, 1899	" Nos. 1 and 2	"	115	10 00	
Aug. 26, 1898	Riverton Coal Co.	Riverton	200	10 00	
Oct. 28, 1898	"	"	225	10 00	
Feb. 22, 1899	" No. 1	"	9	6 00	
" 23, 1899	" No. 2	"	230	10 00	
May 24, 1899	" No. 1	"	10	6 00	
" 24, 1899	" No. 2	"	225	10 00	
Dec. 27, 1898	Raymond Coal Co.	Raymond	15	6 00	
Aug. 9, 1898	Sangamon Coal Co.	Springfield	125	10 00	
Nov. 12, 1898	"	"	125	10 00	
Feb. 8, 1899	"	"	140	10 00	
April 28, 1899	"	"	95	8 00	
Aug. 30, 1898	Spaulding Coal Co.	Spaulding	110	10 00	
Oct. 27, 1898	"	"	94	8 00	
Feb. 28, 1899	"	"	110	10 00	
June 2, 1899	"	"	90	8 00	
Aug. 10, 1898	Springfield C. M. & T. Co.	Springfield	106	10 00	
Oct. 8, 1898	"	"	120	10 00	
Jan. 17, 1899	"	"	166	10 00	
April 25, 1899	"	"	80	8 00	
Aug. 9, 1898	Springfield Coöp. Coal Co.	"	125	10 00	
Nov. 11, 1898	"	"	93	8 00	
Feb. 20, 1899	"	"	95	8 00	
April 27, 1899	"	"	69	8 00	
Sept. 8, 1898	Springfield & P. P. Coal Co.	Ridgely	26	6 00	
Oct. 31, 1898	"	Pleasant Plains	25	6 00	
April 11, 1899	"	"	18	6 00	
Aug. 10, 1898	Springfield Iron Co.	Ridgely	110	10 00	
Nov. 11, 1898	"	"	120	10 00	
Jan. 18, 1899	"	"	110	10 00	
April 27, 1899	"	"	112	10 00	

## Fifth District, Statement—Concluded.

Date of Inspection.	Name of Firm, Company or Person Operating Mine.	Location of Mine.	Number of men employed.	Inspection fee charged.	Inspection fee paid.
July 22, 1898	Springfield Junction C. Co	Hes Junction	80	\$8 00	
26, 1898	Springside C. & M. Co	Pana.	11	6 00	\$120 00
Aug. 31, 1898	"	"	63	6 00	
Dec. 20, 1898	"	"	110	10 00	
Jan. 23, 1899	"	"	110	10 00	
Mar. 4, 1899	"	"	110	10 00	
June 13, 1899	"	"	105	10 00	
Sept. 1, 1898	Starne's C. M. Co.	Springfield	96	8 00	
Nov. 4, 1898	"	"	110	10 00	
Feb. 7, 1899	"	"	110	10 00	
April 28, 1899	"	"	120	10 00	
Sept. 20, 1898	Taylorville C. Co	Taylorville	245	10 00	40 00
Oct. 5, 1898	"	"	265	10 00	
Feb. 21, 1899	"	"	245	10 00	
May 25, 1899	"	"	235	10 00	
July 19, 1898	Thomas Pressed Brick Co.	Golden Eagle	16	6 00	
May 19, 1899	"	"	17	6 00	
Sept. 12, 1898	Viriden Coal Co.	Viriden	34	6 00	
Dec. 12, 1898	"	"	120	10 00	
April 17, 1899	"	"	120	10 00	
Aug. 26, 1897	Wabash Coal Co.	Dawson	90	8 00	
Oct. 18, 1898	"	"	116	10 00	
Feb. 22, 1899	"	"	111	10 00	
May 23, 1899	"	"	102	10 00	
July 29, 1898	Williamsville Coal Co.	Williamsville	60	6 00	
Oct. 29, 1898	"	"	55	6 00	
June 1, 1899	"	"	50	6 00	
July 25, 1898	Woodside Coal Co.	Springfield	80	8 00	
Oct. 26, 1898	"	"	90	8 00	
Jan. 30, 1899	"	"	110	10 00	
April 24, 1899	"	"	80	8 00	
July 27, 1898	West End Coal Co.	"	60	6 00	
Nov. 1, 1899	"	"	30	8 00	
Feb. 29, 1899	"	"	86	8 00	
May 22, 1899	"	"	68	8 00	
	Total			\$1,644 00	\$328 00

## SIXTH DISTRICT.

Aug. 3, 1898	Advance Coal Co.	Marissa	9	\$6 00	
Jan. 21, 1899	"	"	6	6 00	
May 31, 1899	"	"	8	6 00	
Aug. 23, 1898	Belleville & O'Fallon C. Co.	Belleville	45	6 00	
Jan. 23, 1899	"	"	26	6 00	
Sept. 9, 1898	Breese Coal Co.	Breese	175	6 00	
Dec. 24, 1899	"	"	175	10 00	
April 27, 1899	"	"	160	10 00	
Nov. 29, 1898	Beatty, Jas.	Mascoutah	8	6 00	
	Consolidated Coal Co.—				
July 22, 1898	Pittsburg mine	Belleville	12	6 00	
25, 1898	White Oak mine	Marissa	35	6 00	
Aug. 19, 1898	Trenton mine	Trenton	100	10 00	
Aug. 30, 1898	Heintz Bluff mine	Collinsville	72	8 00	
Sept. 12, 1898	Rose Hill mine	Belleville	20	6 00	
12, 1898	Schureman mine	"	50	8 00	
Oct. 25, 1898	Abbey No. 3	Collinsville	122	10 00	
26, 1898	Troy mine	Troy	55	8 00	
26, 1898	Brookside mine	"	54	8 00	
Nov. 10, 1898	Breese mine	Breese	90	8 00	
Nov. 14, 1898	Schureman mine	Belleville	50	8 00	
17, 1898	White Oak mine	Marissa	50	8 00	
28, 1898	Green Mt. mine	Belleville	45	6 00	
Dec. 22, 1898	Trenton mine	Trenton	120	10 00	
an. 21, 1899	Marissa mine	Marissa	30	6 00	

## Sixth District Statement—Continued.

Date of Inspection.	Name of Firm, Company or Person Operating Mine.	Location of Mine.	Number of men employed.	Inspection fee charged.	Inspection fee paid.
Consolidated Coal Co.—Concluded.					
Feb. 6, 1899	Pittsburg mine	Belleville	15	\$6 00	
" 6, 1899	Knecht mine	"	15	6 00	
" 14, 1899	Gartside No. 4 mine	"	45	6 00	
" 20, 1899	White Oak mine	Marissa	50	6 00	
Mar. 9, 1899	Richland mine	Belleville	26	6 00	
" 11, 1899	Breese mine	Breese	85	8 00	
" 24, 1899	Troy mine	Troy	60	8 00	
" 25, 1899	Abbey No. 3 mine	Collinsville	120	10 00	
" 27, 1899	Trenton mine	Trenton	75	8 00	
" 29, 1899	Rose Hill mine	Belleville	39	6 00	
May 11, 1899	Heinz Bluff	Collinsville	90	8 00	
" 18, 1899	White Oak mine	Marissa	60	8 00	
" 31, 1899	Marissa mine	"	30	6 00	
June 12, 1899	Gartside, No. 4 mine	Belleville	43	6 00	
" 26, 1899	Abbey, No. 3 mine	Collinsville	120	10 00	
Sept. 7, 1898	Crown Coal & Tow Co.	Belleville	18	6 00	
Feb. 2, 1899	"	"	50	8 00	
June 13, 1899	"	"	75	8 00	
Dec. 19, 1898	Centralia M. & Mfg. Co.	Centralia	100	10 00	\$18 00
May 17, 1899	"	"	155	10 00	
Mar. 16, 1899	"	"	150	10 00	
Aug. 24, 1898	Donk Bros. Coal Co.	Belleville	50	8 00	
Feb. 13, 1899	"	"	78	8 00	
June 20, 1899	"	"	90	8 00	
Sept. 8, 1898	Dutch Hollow Coal Co.	Freeburg	25	6 00	
Nov. 21, 1898	Dutch Hollow Coal Co.	Freeburg	31	6 00	
Mar. 6, 1899	"	"	38	6 00	
Dec. 15, 1898	Dutch Hill Coal Co.	New Athens	12	6 00	
Mar. 15, 1899	"	"	12	6 00	
Aug. 16, 1898	Ebel, August	Belleville	8	6 00	
" 3, 1898	Eureka Coal Co.	Marrissa	8	6 00	
Jan. 21, 1899	"	"	6	6 00	
Sept. 8, 1898	Freeburg M. Co.	Freeburg	14	6 00	
Nov. 21, 1898	"	"	22	6 00	
Mar. 6, 1899	"	"	13	6 00	
July 22, 1898	Glendale Coal Co.	Belleville	60	8 00	
Oct. 4, 1898	"	"	60	8 00	
Jan. 10, 1899	Glendale C. & M. Co., No. 2	"	20	6 00	
Feb. 21, 1899	" No. 1	"	80	8 00	
Mar. 29, 1899	" No. 2	"	20	6 00	
May 22, 1899	" No. 1	"	65	8 00	
Mar. 13, 1899	Germantown C. Co.	Germantown	7	6 00	6 00
Aug. 11, 1898	Hartman, Chas.	Belleville	15	6 00	
Jan. 23, 1899	"	"	20	6 00	
Sept. 19, 1898	Highland Coal Co.	"	39	6 00	18 00
Dec. 4, 1898	"	"	40	6 00	
May 24, 1899	"	"	30	6 00	
Aug. 16, 1898	Hippard Coal Co.	"	39	6 00	
Nov. 22, 1898	"	"	50	8 00	
Mar. 9, 1899	"	"	42	6 00	
May 29, 1899	"	"	42	6 00	
Aug. 16, 1898	Humboldt Coal Co.	"	26	6 00	
Feb. 21, 1899	"	"	25	6 00	
June 20, 1899	"	"	28	6 00	
Oct. 6, 1898	Henrietta Coal Co.	Edwardsville	30	6 00	
Mar. 14, 1899	"	"	45	6 00	
Oct. 6, 1898	Home Trade Coal Co.	"	6	6 00	12 00
Mar. 14, 1899	"	"	10	6 00	
Aug. 30, 1898	Independent Coal Co.	Collinsville	40	6 00	18 00
Oct. 11, 1898	"	"	40	6 00	
Mar. 24, 1899	"	"	50	6 00	
July 25, 1898	Johnson Coal Co.	Marissa	30	6 00	
Nov. 17, 1898	"	"	30	6 00	
Feb. 20, 1899	"	"	30	6 00	
May 18, 1899	"	"	30	6 00	
July 23, 1898	Johnson C. & M. Co.	Belleville	29	6 00	
" 6, 1898	Kalb Coal Co.	Mascouta	65	8 00	
Nov. 29, 1898	"	"	62	8 00	
April 10, 1898	"	"	70	8 00	
Oct. 12, 1898	Kimnundy Coal Co.	Kimnundy	60	8 00	

## Sixth District, Statement.—Continued.

Date of Inspection.	Name of Firm, Company or Person. Operating Mine.	Location of Mine.	Number of men employed.	Inspection fee charged.	Inspection fee paid.
Feb. 1, 1899	Kinmundy Coal Co	Kinmundy	40	86 00	
April 8, 1899			57	8 00	
July 11, 1898	Lebaun Coal & M. Co	Lebanon	30	6 00	
Dec. 20, 1898			60	8 00	
April 15, 1898			60	8 00	
Aug. 3, 1898	Lillardorf, D.	Marissa	18	6 00	
Oct. 11, 1898	Lunaghi Coal Co	Collinsville	80	8 00	
Mar. 25, 1899			96	8 00	
Jan. 10, 1899	Lenz Coal & M. Co	Belleville	34	6 00	
May 20, 1899			20	6 00	
July 20, 1898	Madison Coal Co., No. 2	Glen Carbon	209	10 00	
20, 1898	No. 4		129	10 00	
Oct. 6, 1898	No. 3	Edwardsville	30	6 00	
Nov. 1, 1898	No. 2	Glen Carbon	200	10 00	
Jan. 30, 1899	No. 4		160	10 00	
Mar. 14, 1899	No. 3	Edwardsville	85	8 00	
April 26, 1899	No. 2	Glen Carbon	220	10 00	
June 5, 1899	No. 4		210	10 00	
July 6, 1898	Moser, Jacob, Coal Co.	Rentchler	16	6 00	
Jan. 24, 1899			20	6 00	
April 24, 1899			10	6 00	
July 18, 1898	Mt. Olive & Staunton C. Co	Staunton	80	8 00	
Nov. 4, 1898			120	10 00	
Feb. 3, 1899			140	10 00	
April 20, 1899			140	10 00	
Aug. 17, 1898	Mo. & Ill. Coal Co	Rentchler	40	6 00	
Nov. 15, 1898	(St. Clair)	Freeburg	56	8 00	
15, 1898	(Wilderman)	Wilderman	58	8 00	
Jan. 24, 1899		Rentchler	32	6 00	
April 24, 1899			45	6 00	
May 26, 1899			60	8 00	
Sept. 20, 1898	Muren Coal Co	Belleville	87	8 00	
Dec. 13, 1898			91	8 00	
June 2, 1899	Muren Coal & Ice Co.		60	8 00	
Nov. 4, 1898	Murphy Coal Co.		6	6 00	
Sept. 26, 1898	Oak Hill Coal Co		22	6 00	
Dec. 13, 1898			25	6 00	
Feb. 14, 1899			20	6 00	
May 21, 1899			25	6 00	
July 23, 1899	Oakland Coal Co		40	6 00	
Dec. 5, 1898			45	6 00	
May 2, 1899			40	6 00	
July 21, 1898	Odin Coal Co	Odin	130	10 00	
Oct. 24, 1898			100	10 00	
Mar. 7, 1899			150	10 00	
May 16, 1899			150	10 00	
Aug. 17, 1898	Ogden Bros. Coal Co.	Rentchler	17	6 00	
April 24, 1899			10	6 00	
July 5, 1898	O'Fallon C. & M. Co.	O'Fallon	70	8 00	
Dec. 20, 1898			58	8 00	
April 25, 1899			54	8 00	
Jan. 1, 1898	Pittinger & Davis M. & M. Co.	Centralia	168	10 00	
April 29, 1899			175	10 00	
Sept. 19, 1898	Reinecke Coal Co.	Belleville	17	8 00	
Nov. 22, 1898	(Conrad)		75	8 00	
May 24, 1899			50	8 00	
Oct. 10, 1898	Ruby C. & M. Co.	Caseyville	34	6 00	
Aug. 27, 1898	Salem Coal Co.	Salem	17	6 00	
Dec. 2, 1898			24	6 00	
Mar. 4, 1899			30	6 00	
April 7, 1899			6	6 00	
Sept. 7, 1898	Skellett Coal Co.	Belleville	33	6 00	
Jan. 9, 1899			35	6 00	
Aug. 10, 1898	Summers, Jos	Smithboro	17	6 00	
Dec. 22, 1898	Summit Coal Co	Belleville	17	6 00	
Jan. 13, 1899	Smithboro Coal Co.	Smithboro	25	6 00	
Oct. 31, 1898	Sorento M. & Mfg Co	Sorento	100	10 00	
Mar. 20, 1899	Sorento P. & M. Co.		160	10 00	
June 27, 1899			150	10 00	
Feb. 23, 1899	Sandoval Coal Co	Sandoval	200	10 00	

## Sixth District, Statement—Concluded.

Date of Inspection.	Name of Firm, Company or Person Operating Mine.	Location of Mine.	Number of men employed.	Inspection fee charged.	Inspection fee paid.
June 24, 1899	Sandoval Coal Co .....	Sandoval .....	200	\$10 00	.....
Jan. 9, 1899	Summit C. & Mfg Co. ....	Birkner .....	30	6 00	.....
Aug. 8, 1898	Taylor, Jos., (Mentor) .....	Ridge Prairie .....	65	6 00	.....
Aug. 8, 1898	" .....	O'Fallon .....	75	8 00	.....
Oct. 10, 1898	" .....	" .....	65	8 00	.....
Dec. 16, 1898	" (Mentor) .....	" .....	65	8 00	.....
April 5, 1899	" .....	" .....	70	8 00	.....
April 5, 1899	" (Mentor) .....	" .....	66	8 00	.....
Nov. 14, 1898	Taylor Bros. ....	Belleville .....	6	6 00	.....
Aug. 5, 1898	Tirri & Sons C. Co .....	Lenzburg .....	5	6 00	.....
Sept. 27, 1898	" .....	" .....	13	6 00	.....
Dec. 15, 1898	" .....	" .....	25	6 00	.....
Mar. 15, 1899	" .....	" .....	18	6 00	.....
May 23, 1899	" .....	" .....	25	6 00	.....
Aug. 19, 1898	Trenton C. L. & P. Co. ....	Trenton .....	76	8 00	.....
Dec. 22, 1898	" .....	" .....	96	8 00	.....
Mar. 27, 1899	" .....	" .....	85	8 00	.....
Aug. 23, 1898	Walnut Hill Coal Co .....	Birkner .....	25	6 00	.....
Nov. 28, 1898	" .....	" .....	40	6 00	.....
May 19, 1899	" .....	" .....	40	6 00	.....
Totals .....			.....	\$1,328 00	\$81 00

## SEVENTH DISTRICT.

Oct. 24, 1898	Barber & Bro. ....	Tamaroa .....	15	\$6 00	.....
July 15, 1898	Barnard, William .....	Cutler .....	16	6 00	.....
Nov. 30, 1898	" .....	" .....	42	6 00	.....
Feb. 2, 1899	" .....	" .....	42	6 00	.....
April 10, 1899	" .....	" .....	45	6 00	.....
Aug. 15, 1898	Big Muddy C. & C. Co .....	DeSoto .....	54	8 00	.....
Mar. 13, 1899	" .....	" .....	106	10 00	.....
Sept. 9, 1898	Big Muddy C. & I. Co., No. 7 .....	Herrins .....	125	10 00	.....
Oct. 27, 1898	" (Harrison) .....	Murphysboro .....	115	10 00	.....
" 28, 1898	" No. 6 .....	" .....	106	10 00	.....
Nov. 22, 1898	" No. 5 .....	" .....	150	10 00	.....
Dec. 1, 1898	" No. 7 .....	Herrins .....	150	10 00	.....
Feb. 4, 1899	" (Harrison) .....	Murphysboro .....	130	10 00	.....
" 6, 1899	" No. 5 .....	" .....	200	10 00	.....
" 15, 1899	" No. 6 .....	" .....	120	10 00	.....
Mar. 10, 1899	" No. 7 .....	Herrins .....	180	10 00	.....
April 24, 1899	" No. 5 .....	Murphysboro .....	175	10 00	.....
May 26, 1899	" (Harrison) .....	" .....	125	10 00	.....
June 5, 1899	" No. 6 .....	" .....	170	10 00	.....
" 22, 1899	" No. 7 .....	Herrins .....	200	10 00	.....
July 21, 1898	Boyd Coal & Coke Co. No. 1 .....	Sparta .....	54	10 00	.....
" 21, 1898	" No. 2 .....	" .....	22	8 00	.....
Dec. 17, 1898	" No. 1 .....	" .....	43	6 00	.....
" 17, 1898	" No. 2 .....	" .....	14	6 00	.....
Feb. 3, 1899	" No. 1 .....	" .....	48	6 00	.....
" 3, 1899	" No. 2 .....	" .....	15	6 00	.....
June 24, 1899	" No. 1 .....	" .....	53	6 00	.....
" 24, 1899	" No. 2 .....	" .....	18	8 00	.....
July 23, 1898	Brown & Borwell .....	Cutler .....	20	6 00	.....
Nov. 30, 1898	" .....	Conant .....	32	6 00	.....
Feb. 2, 1899	" .....	" .....	34	6 00	.....
April 10, 1899	" .....	" .....	27	6 00	.....
July 5, 1898	Brown & Son .....	Pineknayville .....	90	6 00	.....
Nov. 29, 1898	" .....	" .....	105	6 00	.....
Jan. 31, 1899	" .....	" .....	95	10 00	.....
April 7, 1899	" .....	" .....	90	8 00	.....
Aug. 24, 1898	Burnside Coal Co. ....	New Burnside .....	25	8 00	.....
Dec. 3, 1898	Borders, Wm. R. ....	Percy .....	21	6 00	.....
Feb. 4, 1899	" .....	" .....	19	6 00	\$12 00
April 11, 1899	" .....	" .....	26	6 00	.....
Dec. 19, 1898	Bruegeman, J. F. ....	Nashville .....	14	6 00	.....
Sept. 10, 1898	Carterville Coal Co. ....	Carterville .....	106	6 00	.....
Dec. 10, 1898	" .....	" .....	104	10 00	.....

## Seventh District, Statement—Continued.

Date of Inspection.	Name of Firm, Company or Person Operating Mine.	Location of Mine.	Number of men employed.	Inspection fee charged.	Inspection fee paid.
Feb. 21, 1899	Carterville Coal Co.	Carterville	140	\$10 00	
May 27, 1899			120	10 00	
Aug. 22, 1898	Crawford, A. W.	Lake Creek	75	8 00	
Oct. 7, 1898	"	"	55	8 00	
Nov. 21, 1898	"	"	50	8 00	
Jan. 16, 1899	"	Tamaroa	17	6 00	
April 27, 1899	Coulterville M. Co.	Coulterville	45	6 00	
May 8, 1899	"	"	40	6 00	
Mar. 15, 1899	Crab Orchard Coal Co.	Marion	37	6 00	
June 1, 1899	"	"	25	6 00	
July 18, 1898	DuQuoin Union Coal Co., Enterprise.	DuQuoin	70	8 00	
Aug. 10, 1898	" Browning.	"	104	10 00	
Oct. 24, 1898	" Egyptian.	"	30	6 00	
Nov. 17, 1898	" Browning.	"	125	10 00	
Dec. 15, 1898	" Enterprise.	"	80	8 00	
Jan. 16, 1899	" Egyptian.	"	45	6 00	
Feb. 17, 1899	" Browning.	"	115	10 00	
Mar. 7, 1899	" Enterprise.	"	79	8 00	
April 29, 1899	" Browning.	"	90	8 00	
May 1, 1899	" Enterprise.	"	65	8 00	
Oct. 6, 1898	"	Sparta	125	10 00	
May 23, 1899	DuQuoin Coöper. Coal Co.	DuQuoin	15	6 00	
July 16, 1898	Donk Bros. C. & C. Co.	Tilden	40	6 00	
Oct. 8, 1898	"	"	38	6 00	
Jan. 23, 1899	"	"	58	8 00	
Mar. 6, 1899	"	"	63	8 00	
May 10, 1899	"	"	54	8 00	
Dec. 13, 1898	Davenport Coal Co.	Harrisburg	75	8 00	
April 21, 1899	"	Ledford	113	10 00	
Feb. 16, 1899	Dempster C. & M. Co.	Sato	16	6 00	\$6 00
May 25, 1899	Dick Coal Co., Robert	Carterville	8	6 00	
Dec. 14, 1898	Equality Coal Co.	Equality	58	8 00	
Sept. 12, 1898	Gartside Coal Co. No. 1.	Murphysboro	26	6 00	
12, 1898	" No. 3.	"	60	8 00	
Oct. 4, 1898	" No. 1.	"	36	6 00	
" 4, 1898	" No. 3.	"	53	8 00	
" 12, 1898	" No. 4.	"	75	8 00	
Jan. 28, 1899	" No. 1.	"	30	6 00	
Jan. 28, 1899	" No. 3.	"	60	8 00	
Feb. 18, 1899	"	"	75	8 00	
April 17, 1899	" No. 1.	"	32	6 00	
17, 1899	"	"	75	8 00	
May 26, 1899	" No. 4.	"	72	8 00	
Sept. 19, 1898	Goalby & Son, W. G.	Percy	26	6 00	
Dec. 20, 1898	"	"	32	6 00	
Feb. 22, 1899	"	"	36	6 00	
April 27, 1899	" No. 2.	"	36	6 00	
Nov. 16, 1898	Greenwood & Davis.	DuQuoin	130	10 00	
Jan. 30, 1899	"	"	125	10 00	
May 8, 1899	"	"	90	8 00	
July 15, 1898	Horn Colliery Co.	"	100	8 00	
Nov. 26, 1898	"	"	160	10 00	
Jan. 25, 1899	"	"	125	10 00	
June 3, 1899	"	"	200	10 00	
Dec. 13, 1898	Harrisburg C. & M. Co.	Harrisburg	41	6 00	24 00
April 21, 1899	"	"	35	6 00	
July 27, 1898	Ill. Fuel & Power Co., No. 2.	Roseboro	20	6 00	
Aug. 1, 1898	" No. 3.	Sparta	13	6 00	
Dec. 2, 1898	" No. 3.	"	26	6 00	
Feb. 9, 1899	" No. 3.	"	17	6 00	
Mar. 20, 1899	"	"	24	6 00	
May 5, 1899	" No. 3.	"	24	6 00	
Dec. 28, 1898	I. C. Coal & Salt Co.	St. Johns	116	10 00	
Jan. 26, 1899	"	"	135	10 00	
April 6, 1899	"	"	126	10 00	
July 29, 1898	Jupiter M. Co.	DuQuoin	60	8 00	
12, 1898	Kuhn, A.	DuBois	35	6 00	
Dec. 5, 1898	"	"	46	6 00	
July 26, 1898	Murphysboro B. M. C. Co.	Sato	51	8 00	
Feb. 16, 1899	"	"	40	6 00	



*Seventh District, Statement—Concluded.*

Date of Inspection.	Name of Firm, Company or Person Operating Mine.	Location of Mine.	Number of men employed.	Inspection fee charged.	Inspection fee paid.
July 6, 1898	Morris Bros. & Co.	DuQuoin	52	88 00	
Dec. 16, 1898	"	"	55	8 00	
Feb. 24, 1899	"	"	55	8 00	
May 2, 1899	"	"	53	8 00	
Aug. 15, 1898	Muddy Valley M. & Mfg. Co.	Hallidayboro	200	16 00	
Oct. 11, 1898	"	"	200	10 00	
Feb. 13, 1899	"	"	250	10 00	
May 16, 1899	"	"	175	10 00	
July 19, 1898	Murray, Hugh	Nashville	97	8 00	
Mar. 8, 1899	Murray, Alex	"	20	6 00	
June 23, 1899	"	"	30	6 00	
July 11, 1898	Mt. Vernon Coal Co.	Mt. Vernon	30	6 00	
Oct. 3, 1898	"	"	40	6 00	
Feb. 8, 1899	"	"	70	8 00	
Sept. 23, 1898	Ohio Valley C. & C. Co.	Marion	49	6 00	
Dec. 23, 1898	"	"	47	6 00	
Mar. 16, 1899	"	"	70	8 00	
June 2, 1899	"	"	68	8 00	
Nov. 25, 1898	Ohio & Miss. V. C. & M. Co., No. 1	"	60	8 00	
" 25, 1898	" No. 2	"	95	8 00	
Mar. 16, 1899	"	"	125	10 00	
June 2, 1899	"	"	125	10 00	
July 12, 1898	Pope Mining Co.	DuQuoin	35	6 00	
Nov. 19, 1898	"	"	33	6 00	
Jan. 27, 1899	"	"	38	6 00	
May 16, 1899	"	"	44	6 00	
Dec. 21, 1898	Porter, J. C.	"	24	6 00	
Feb. 20, 1899	"	"	28	6 00	
Dec. 20, 1898	Roseboro Coal Co.	Percy	40	6 00	
Feb. 14, 1899	"	"	28	6 00	
July 26, 1898	Sato Coal & M. Co.	Sato	18	6 00	
Feb. 16, 1899	"	"	30	6 00	
May 9, 1899	"	"	18	6 00	
July 30, 1898	Scott-Wilson Coal Co., No. 1	Carterville	80	8 00	
Oct. 5, 1898	"	"	74	8 00	
Jan. 24, 1899	"	"	61	8 00	
May 11, 1899	"	"	40	6 00	
Aug. 24, 1898	" No. 2	Fredonia	60	8 00	
Oct. 5, 1898	"	"	70	8 00	
Jan. 15, 1899	"	"	65	8 00	
April 5, 1899	"	"	65	8 00	
July 5, 1898	St. Louis & Big Muddy Coal Co.	Carterville	250	10 00	10 00
Nov. 2, 1898	"	"	280	10 00	
Mar. 14, 1899	"	"	300	10 00	
May 25, 1899	"	"	200	10 00	
July 11, 1898	Sun Coal & Coke Co.	Sunfield	15	6 00	
Dec. 16, 1898	"	"	56	8 00	
Feb. 24, 1899	"	"	56	8 00	
May 2, 1899	"	"	54	8 00	
Nov. 23, 1898	Turner & Faust Co.	Pinckneyville	16	6 00	
Feb. 2, 1899	"	"	18	6 00	
April 8, 1899	"	"	12	6 00	
Aug. 8, 1898	Wild & Gill	Murphysboro	13	6 00	
Oct. 27, 1898	"	"	20	6 00	
Mar. 9, 1899	"	"	15	6 00	
May 27, 1899	"	"	12	6 00	
Aug. 25, 1898	Willis C. & M. Co.	Willisville	8	8 00	
Dec. 3, 1898	"	"	65	8 00	
Jan. 18, 1899	"	"	96	8 00	
April 11, 1899	"	"	80	8 00	
Feb. 1, 1899	Western Anthracite Coal Co.	Sparta	130	10 00	
May 12, 1899	"	"	140	10 00	
Mar. 15, 1899	Williamson Co. Coal Co.	Lake Creek	73	8 00	
June 1, 1899	"	"	70	8 00	
Total.....				\$1,350 00	852 00

## REVISED MINING LAW.

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Through the medium of the Bureau the representatives of the miners' and operators' organizations of this State, practically agreed upon the present revision of our mining law. It was enacted without opposition by both branches of the last general assembly, and became operative July 1, 1899.

Aside from eliminating much that was ambiguous and inconsistent, resulting from numerous amendments to the old laws, many changes and some new features were added. The principal changes may be cited as follows:

Requiring all mines, irrespective of their capacity, to be in charge of certificated mine managers, mine examiners and hoisting engineers, where the services of the last mentioned class are necessary; and authorizing the State Mining Board to revoke certificates. In addition to the copies of the mine maps furnished the inspectors, one is required to be filed with the recorder of the county in which the mine is located. Every mine is required to have an escapement shaft or underground connection between it and some other contiguous mine; changing the time within which such escapement or connection shall be made, from a maximum limit of two years, under the old law, to nine months in the case of the deepest mines.

The number of men permitted to work in any mine not having an escapement, can not, under any circumstances, exceed ten, and then only for the purpose of completing the escapement or connection. This provision removes the limitation of the old law, which practically placed all mines employing less than six men outside of the inspection service. Requiring each escapement shaft opened subsequent to the law taking effect, to be provided with a substantial stairway, set at an angle not greater than forty-five degrees, with hand-rails, platforms, etc. Inspection once a week of all escapement shafts and passageways leading thereto, or connections with contiguous mine. Changing the designation of fire boss to mine examiner. Giving the Board of Labor Commissioners the power to change Inspection Districts. Providing for the necessary traveling expenses of the inspectors, and requiring the State to furnish, upon the requisition of the secretary of the Bureau of Labor, blanks, blank books, stationery, test weights, instruments, etc., for the use of the inspectors. Increasing the time of the sessions of the State Mining Board from 80 to 100 days in each year, and the compensation from \$3 to \$5 per day,

exclusive of necessary traveling expenses. Making it a misdemeanor for any operator or other employer of labor who refuses to furnish the agents of the Bureau with information concerning the wages or conditions of their employes. Authorizing the appointment by the board of supervisors or county commissioners, of county inspectors of mines in any county in the State where coal is produced; in the former Act county inspectors were authorized only in counties producing 800,000 tons or more per annum. No room to be opened in advance of the air current, and cross-cuts not more than sixty feet apart. Operator to furnish safety lamps when required, also stretchers and blankets for the use of injured workmen.

The above comprises the principal changes provided for in the present law. They are all in the interest of the workmen, and provide for a more perfect and effective system of inspection. As previously noted, much of the labor incident to this revision, devolved upon the Commissioners of Labor. They were aided in this work by the experience of other mining states and countries. While the period of its enforcement has been brief, it has thoroughly demonstrated the wisdom of the change, and fully rewarded the unselfish labors of those engaged in its preparation. The principal feature omitted from the old law is that relating to inspection fees. As amended in 1895, the law provided that the owners of coal mines should pay a fee for the inspection of their mines. This varied according to the size of the mine, and the number of men employed. By common consent of all parties in interest, this clause of the law was not included in the revision. It was the unanimous opinion that the State, assuming supervision over the coal mines, should pay the salaries of its inspectors, and defray the expenses incident thereto.

Following is the text of the law as revised:

## MINES AND MINING.

## COAL MINES.

## REVISION OF LAW RELATING TO COAL MINES.

- § 1. (a) Maps or plans of mines, (b) surface surveys, (c) underground survey, (d) for every seam, (e) separate map for surface, (f) dip, (g) copies for inspectors and recorders, (h) annual surveys, (i) abandoned mines, (j) special survey, (k) penalty for failure.
- § 2. Main shaft, (a) sinking, subject to inspection, (b) passage way around the bottom, (c) gates at top, (d) general equipment.
- § 3. Escapement shaft, (a) two places of egress, (b) unlawful to employ more than ten men until escapement shaft is completed, (c) passageways to escapement, (d) distance from main shaft, (e) buildings on surface between shafts, (f) equipment, (g) obstructions in, (h) inspection of, (i) communication with adjacent mine, unlawful to close.
- § 4. Engine and boiler house, location, fire-proof, equipment.
- § 5. Powder to be stored in fire-proof building.
- § 6. State Mining Board, appointment, duty, term, supplies, meetings, rules for examination.
- § 7. (a) Examination, inspectors, (b) names certified to Governor, (c) appointment, (d) examination of mine managers, (e) hoisting engineers, (f) mine examiners.
- § 8. (a) Certificates issued by board, contents, (b) register of, (c) effect of, (d) foreign, (e) unlawful to employ any but certificated miners, (f) hoisting engineers, (g) mine examiners, exceptions, mine managers to act as mine examiners, mine manager's certificate exchanged for mine examiner's certificate, (h) cancellation of certificates.
- § 9. Fees for examination and certificates.
- § 10. Compensation of board, secretary's salary, how drawn.
- § 11. (a) Division of State into inspection districts, (b) changes may be made in boundaries of districts, new districts.
- § 12. Inspectors, (a) bonds, (b) instruments to be furnished by State, (c) duties, (d) authority to enter mines, (e) procedure in case of objections, (f) notices to be posted, (g) *ex-officio* scaler of weights, (h) State to furnish testing weights, (i) annual reports, (j) publication of reports, supplies furnished by Secretary of State, employers of labor to assist in procuring statistics for publication, penalty for failure.
- § 13. Compensation of inspectors, how drawn.
- § 14. Removal of inspectors, petition for, hearing.
- § 15. Counties to appoint county inspectors as assistants, duties, must hold State certificate, compensation.
- § 16. Mine managers' duties.
- § 17. Hoisting engineers' duties.
- § 18. Mine examiners' duties.
- § 19. Ventilation, (a) amount of air to be kept in circulation, (b) measurements, (i) inspector may order men out of mine when air is insufficient.
- § 20. Powder or explosives, (a) prohibits storing in mines, amount allowed each man, care of while in mines, (b) manner of handling, (c) none but copper tools to be used in charging, (d) use of squibs, (e) exploding blasts, (f) missed shots, (g) sprinkling dusty mines.

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| <p>§ 21. Places of refuge to be cut in side walls, size, distance apart, storing material in prohibited.</p> <p>§ 22. Children and females prohibited from working.</p> <p>§ 23. Hoisting signals.</p> <p>§ 24. Weighing and weighmen, (a) operator to furnish scales, (b) duties and oaths of weighmen, (c) check weighmen permitted, paid by miners, duties.</p> <p>§ 25. Boundaries, ten-foot limit, approaching old works.</p> <p>§ 26. Notice to inspectors of accidents, sinking shafts, abandoning mines, etc.</p> <p>§ 27. Accidents, (a) duties of inspectors, operator to keep record of on blanks furnished by inspectors, (b) coroner's inquest, (c) inspector to investigate cause of accident.</p> | <p>§ 28. Men on cages, (a) top and bottom man, (b) lights on landings, (c) speed of cages, tools and timber prohibited on except for repairs, (d) right of way for men to come out.</p> <p>§ 29. Safety lamps, (a) operator to furnish in case of fire damp, (b) care of.</p> <p>§ 30. Operator to have on hand blankets, stretchers and bandages for use in case of accidents.</p> <p>§ 31. Caution to miners unlawful to injure shaft, safety lamp, instruments, etc.</p> <p>§ 32. Operators to post rules not inconsistent with this act.</p> <p>§ 33. Penalty for violation of any of the provisions of this act.</p> <p>§ 34. Defines terms, (a) mine, coal mine, (b) excavations or workings, (c) shaft, (d) slope or drift, (e) operator, (f) inspector, (g) mine manager, (h) mine examiner.</p> |
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AN ACT to revise the laws in relation to coal mines and subjects relating thereto, and providing for the health and safety of persons employed therein.

SECTION 1. *Be it enacted by the People of the State of Illinois, represented in the General Assembly:*

#### MAPS OR PLANS OF MINES.

**MAPS NECESSARY.** (a) That the operator of every coal mine in this State shall make, or cause to be made, an accurate map or plan of such mine, drawn to a scale not smaller than two hundred feet to the inch, and as much larger as practicable, on which shall appear the name, the state, county and township in which the mine is located, the designation of the mine, the name of the company or owner, the certificate of the mining engineer or surveyor as to the accuracy and date of the survey, the north point and the scale to which the drawing is made.

**SURFACE SURVEY.** (b) Every such map or plan shall correctly show the surface boundary line of the coal rights pertaining to each mine, and all section or quarter section lines or corners within the same; the lines of town lots and streets, the tracks and side-tracks of all railroads, and the location of all wagon roads, rivers, streams, ponds, buildings, landmarks and principal objects on the surface.

**UNDERGROUND SURVEY.** (c) For the underground workings said maps shall show all shafts, slopes, tunnels or other openings to the surface or to the workings of a contiguous mine; all excavations, entries, rooms and cross-cuts; the location of the fan or furnace and the direction of the air currents; the location of pumps, hauling engines, engine planes, abandoned works, fire walls and standing water; and the boundary line of any surface outcrop of the seam.

**MAP FOR EVERY SEAM.** (d) A separate and similar map drawn to the same scale in all cases, shall be made of each and every seam,

which, after the passage of this act, shall be worked in any mine, and the maps of all such seams shall show all shafts, inclined planes or other passageways connecting the same.

**SEPARATE MAP FOR THE SURFACE.** (e) A separate map shall also be made of the surface whenever the surface buildings, lines or objects are so numerous as to obscure the details of the mine workings if drawn upon the same sheet with them, and in such case the surface map shall be drawn upon transparent cloth or paper, so that it can be laid upon the map of the underground workings, and thus truly indicate the local relations of lines and objects on the surface to the excavations of the mine.

**THE DIP.** (f) Each map shall also show by profile drawing and measurements, in feet and decimals thereof, the rise and dip of the seam from the bottom of the shaft in either direction to the face of the workings.

**COPIES FOR INSPECTORS AND RECORDERS.** (g) The originals or true copies of all such maps shall be kept in the office at the mine, and true copies thereof shall also be furnished to the State Inspector of Mines for the district in which said mine is located, and shall be filed in the office of the recorder of the county in which the mine is located, within thirty days after the completion of the same. The maps so delivered to the inspector shall be the property of the State and shall remain in the custody of said inspector during his term of office, and be delivered by him to his successor in office; they shall be kept at the office of the inspector and be open to the examination of all persons interested in the same, but such examination shall only be made in the presence of the inspector, and he shall not permit any copies of the same to be made without the written consent of the operator or the owner of the property.

**ANNUAL SURVEYS.** (h) An extension of the last preceding survey of every mine in active operation shall be made once in every twelve months prior to July 1 of every year, and the result of said survey, with the date thereof, shall be promptly and accurately entered upon the original maps and all copies of the same, so as to show all changes in plan or new work in the mine, and all extensions of the old workings to the most advanced face or boundary of said workings which have been made since the last preceding survey. The said changes and extensions shall be entered upon the copies of the maps in the hands of the said inspector and recorder within thirty days after the last survey is made.

**ABANDONED MINES.** (i) When any coal mine is worked out or is about to be abandoned or indefinitely closed, the operator of the same shall make or cause to be made a final survey of all parts of such mine, and the results of the same shall be duly extended on all maps of the mine and copies thereof, so as to show all excavations and the most advanced workings of the mine, and their exact relation to the boundary or section lines on the surface.

**SPECIAL SURVEY.** (j) The State Inspector of Mines may order a survey to be made of the workings of any mine, and the results to be extended on the maps of the same and the copies thereof, whenever,

in his judgment, the safety of the workmen, the support of the surface, the conservation of the property or the safety of an adjoining mine requires it.

**PENALTY FOR FAILURE.** (*k*) Whenever the operator of any mine shall neglect or refuse, or, for any cause not satisfactory to the mine inspector, fail, for the period of three months, to furnish to the said inspector and recorder, the map or plan of such mine, or a copy thereof, or of the extensions thereto, as provided for in this act, the inspector is hereby authorized to make or cause to be made, an accurate map or plan of such mine at the expense of the owner thereof, and the cost of the same may be recovered by law from the said operator in the same manner as other debts by suit in the name of the inspector and for his use, and a copy of the same shall be filed by him with said recorder

#### THE MAIN SHAFT.

§ 2. **SINKING SUBJECT TO INSPECTION.** (*a*) Any shaft in process of sinking, and any opening projected for the purpose of mining coal shall be subject to the inspection of the State Inspector of Mines for the district in which said shaft or opening is located.

**PASSAGEWAY AROUND THE BOTTOM.** (*b*) At the bottom of every shaft and at every caging place therein, a safe and commodious passageway must be cut around said landing place to serve as a traveling way by which men or animals may pass from one side of the shaft to the other without passing under or on the cage.

**GATES AT THE TOP.** (*c*) The upper and lower landings at the top of each shaft, and the opening of each intermediate seam from or to the shaft, shall be kept clear and free from loose materials, and shall be securely fenced with automatic or other gates, so as to prevent either men or materials from falling into the shaft.

**GENERAL EQUIPMENT.** (*d*) Every hoisting shaft must be equipped with substantial cages fitted to guide-rails running from the top to the bottom. Said cages must be safely constructed; they must be furnished with suitable boiler-iron covers to protect persons riding thereon from falling objects; they must be equipped with safety catches. Every cage on which persons are carried must be fitted up with iron bars or rings in proper place and sufficient number to furnish a secure hand-hold for every person permitted to ride thereon. At the top landing, cage supports, where necessary, must be carefully set and adjusted so as to act automatically and securely hold the cages when at rest.

#### THE ESCAPEMENT SHAFT.

§ 3. **TWO PLACES OF EGRESS.** (*a*) For every coal mine in this State whether worked by shaft, slope or drift, there shall be provided and maintained, in addition to the hoisting shaft, or other place of delivery, a separate escapement shaft or opening to the surface, or an

underground communicating passageway between every such mine and some other contiguous mine, such as shall constitute two distinct and available means of egress to all persons employed in such coal mine.

The time allowed for completing such escapement shaft or making such connections with an adjacent mine, as is required by the terms of this act, shall be three months for shafts 200 feet or less in depth, and six months for shafts less than 500 feet and more than 200 feet, and nine months for all other mines, slopes or drifts or connections with adjacent mines. The time to date in all cases from the hoisting of coal from the main shaft.

**UNLAWFUL TO EMPLOY MORE THAN TEN MEN.** (b) It shall be unlawful to employ at any one time more men than in the judgment of the inspector is absolutely necessary, for speedily completing the connections with the escapement shaft or adjacent mine; and said number must not exceed ten men at any one time for any purpose in said mine until such escapement or connection is completed.

**PASSAGeways TO ESCAPEMENT.** (c) Such escapement shaft or opening, or communication with a contiguous mine as aforesaid, shall be constructed in connection with every seam of coal worked in such mine, and all passageways communicating with the escapement shaft or place of exit, from the main hauling ways to said place of exit, shall be maintained free of obstruction at least five feet high and five feet wide. Such passageways must be so graded and drained that it will be impossible for water to accumulate in any depression or dip of the same, in quantities sufficient to obstruct the free and safe passage of men. At all points where the passageway to the escapement shaft, or other place of exit, is intersected by other roadways or entries, conspicuous sign boards shall be placed, indicating the direction it is necessary to take in order to reach such place of exit.

**DISTANCE FROM MAIN SHAFT.** (d) Every escapement shaft shall be separated from the main shaft by such extent of natural strata as may be agreed upon by the inspector of the district and the owner of the property, but the distance between the main shaft and escapement shaft, shall not be less than 300 feet without the consent of the inspector, nor more than 300 feet without the consent of the owner.

**BUILDINGS ON THE SURFACE.** (e) It shall be unlawful to erect any inflammable structure or building in the space intervening between the main shaft and the escapement shaft on the surface, or any powder magazine, in such location or manner as to jeopardize the free and safe exit of the men from the mine, by said escapement shaft, in case of fire in the main shaft buildings.

**STAIRWAYS OR CAGES.** (f) The escapement shaft at every mine shall be equipped with safe and ready means for the prompt removal of men from the mine in time of danger, and such means shall be a substantial stairway set at an angle not greater than forty-five degrees, which shall be provided with hand-rails and with platforms or landings at each turn of the stairway.



In any escapement shaft which may, at the time of the passage of this act, be equipped with a cage for hoisting men, such cage must be suspended between guides and be so constructed that falling objects can not strike persons being hoisted upon it. Such cage must also be operated by a steam hoisting engine, which shall be kept available for use at all times, and the equipment of said hoisting apparatus shall include a depth indicator, a brake on the drum, a steel or iron cable and safety catches on the cage.

**OBSTRUCTIONS IN SHAFT.** (*g*) No accumulation of ice, nor obstructions of any kind shall be permitted in any escapement shaft, nor shall any steam, or heated or vitiated air be discharged into said shaft; and all surface or other water which flows therein shall be conducted by rings or otherwise to receptacles for the same, so as to keep the stairway free from falling water.

**WEEKLY INSPECTIONS.** (*h*) All escapement shafts and the passages leading thereto, or to the works of a contiguous mine, must be carefully examined at least once a week by the mine manager, or a man specially delegated by him for that purpose, and the date and findings of such inspection must be duly entered in the record book in the offices at the mine. If obstructions are found, their location and nature must be stated together with the date at which they are removed.

**COMMUNICATION WITH ADJACENT MINE.** (*i*) When operators of adjacent mines have, by agreement, established underground communication between said mines, as an escapement outlet for the men employed in both, the roadways to the boundary on either side shall be regularly patrolled and kept clear of every obstruction to travel by the respective operators, and the intervening door shall remain unlocked and ready at all times for immediate use.

When such communication has once been established between contiguous mines, it shall be unlawful for the operator of either mine to close the same without the consent both of the contiguous operator and of the State Inspector for the district: *Provided*, that, when either operator desires to abandon mining operations, the expense and duty of maintaining such communication shall devolve upon the party continuing operations and using the same.

#### THE ENGINE AND BOILER HOUSE.

§ 4. **LOCATION.** (*a*) Any building erected after the passage of this act, for the purpose of housing the hoisting engine or boilers at any shaft, shall be substantially fire-proof, and no boiler house shall be nearer than sixty feet to the main shaft or opening or to any building or inflammable structure connecting therewith.

**BRAKE ON DRUM.** (*b*) Every hoisting engine shall be provided with a good and sufficient brake on the drum, so adjusted that it may be operated by the engineer without leaving his post at the levers.

**FLANGES.** (*c*) Flanges shall be attached to the sides of the drum of any engine used for hoisting men, with a clearance of not less than four inches when the whole rope is wound on the drum.

**CABLE FASTENINGS.** (*d*) The ends of the hoisting cables shall be well secured on the drum, and at least two and a half laps of the same shall remain on the drum when the cage is at rest at the lowest caging place in the shaft.

**INDICATOR.** (*e*) An index dial or indicator, to show at all times the true position of the cages in the shaft, shall be attached to every hoisting engine for the constant information and guidance of the engineer.

**SIGNALS.** (*f*) The code of signals as provided for in this act, shall be displayed in conspicuous letters at some point in front of the engineer when standing at his post.

**GAUGES.** (*g*) Every boiler shall be provided with a steam gauge, except where two or more boilers are equipped and connected with a steam drum, properly connected with the boilers to indicate the steam pressure, and another steam gauge shall be attached to the steam pipe in the engine house, the two to be placed in such positions that both the engineer and firemen can readily see what pressure is being carried. Such steam gauges shall be kept in good order and adjusted and be tested as often at least as every six months.

**SAFETY VALVES.** (*h*) Every boiler or battery of boilers shall be provided with a safety valve of sufficient area for the escape of steam, and with weights and springs properly adjusted.

**INSPECTION OF BOILERS.** (*i*) All boilers used in generating steam in and about coal mines shall be kept in good order, and the operator of every coal mine where steam boilers are in use shall have said boilers thoroughly examined and inspected by a competent boiler-maker or other qualified person, not an employé, of said operator, as often as once in every six months, and oftener if the inspector shall deem it necessary, and the result of every such inspection shall be reported on suitable blanks to said inspector.

#### THE POWDER HOUSE.

§ 5. All blasting powder and explosive material must be stored in a fire-proof building on the surface, located at a safe distance from all other buildings.

#### THE STATE MINING BOARD.

§ 6. **MANNER AND PURPOSE OF APPOINTMENT.** (*a*) For the purpose of securing efficiency in the mine inspection service, and a high standard of qualification in those who have the management and operation of coal mines, the State Commissioners of Labor shall appoint a board of examiners, to be known as the State Mining Board, whose duty it shall be to make formal inquiry into and pass upon the practical and technical qualifications and personal fitness of men seeking appointments as State Inspectors of Mines, and of those seeking certificates of competency as mine managers, as hoisting engineers and as mine examiners. This board shall be composed of

five members, two of whom shall be practical coal miners; one an expert mining engineer, and who shall, when practicable, be also a hoisting engineer, and two shall be coal operators.

**DATE AND TERM OF APPOINTMENT.** (b) Their appointment shall date from July 1, 1899, and they shall serve for a term of two years, or until their successors are appointed and qualified; they shall organize by the election of one of their number as president, and some suitable person, not a member, as secretary, after which they shall all be sworn to a faithful performance of their duties.

**SUPPLIES FURNISHED BY SECRETARY OF STATE.** (c) The Secretary or State shall assign to the use of the board suitably furnished rooms in the State House for such meetings as are held at the capitol, and shall also furnish whatever blanks, blank-books, printing and stationery the board may require in the discharge of its duties.

**FREQUENCY OF MEETINGS.** (d) The board shall meet at the capitol in regular session on the second Tuesday in September of the year 1899, and biennially thereafter, for the examination of candidates for appointment as State Inspectors of Mines. For the examination of persons seeking certificates of competency as mine managers, hoisting engineers and mine examiners, the board shall hold meetings at such times and places within the State as shall, in the judgment of the members, afford the best facilities to the greatest number of probable candidates. Special meetings may also be called by the Commissioners of Labor, whenever, for any reason, it may become necessary to appoint one or more inspectors. Public notice shall be given through the press or otherwise, announcing the time and place at which examinations are to be held.

**RULES OF PROCEDURE.** (e) The examinations herein provided for shall be conducted under such rules, conditions and regulations as the members of the board shall deem most efficient for carrying into effect the spirit and intent of this act. Such rules, when formulated, shall be made a part of the permanent record of the board, and such of them as relate to candidates shall be published for their information, and governance prior to each examination; they shall also be of uniform application to all candidates.

#### EXAMINATIONS.

§ 7. **FOR INSPECTORS.** (a) Persons coming before the State Mining Board as candidates for appointment as State Inspectors of Mines must produce evidence satisfactory to the board that they are citizens of this State, at least thirty years of age, that they have had a practical mining experience of ten years, and that they are men of good repute and temperate habits; they must also submit to and satisfactorily pass an examination as to their practical and technical knowledge of mining engineering and mining machinery and appliances, of the proper development and operation of coal mines, of ventilation in mines, of the nature and properties of mine gases, of the geology of the coal measures in this State and of the laws of this State relating to coal mines.

**NAMES CERTIFIED TO THE GOVERNOR.** (b) At the close of each examination for inspectors the board shall certify to the Governor the names of all candidates who have received a rating above the minimum fixed by the rules of the board as properly qualified for the duties of inspectors.

**INSPECTORS APPOINTED.** (c) From those so named the Governor shall select and appoint seven State inspectors of mines, that is to say, one inspector for each of the seven inspection districts provided for in this act, or more, if, in the future, additional inspection districts shall be created, and their commissions shall be for a term of two years from October first: *Provided*, that any one who has satisfactorily passed two of the State examinations for inspectors, and who has served acceptably as State Inspector for two full terms, upon making written application to the board setting forth the facts, shall also be certified to the Governor as a person properly qualified for appointment. But no man shall be eligible for appointment as a State Inspector of Mines who has any pecuniary interest in any coal mine, either as owner or employé.

**FOR MINE MANAGERS.** (d) Persons coming before the board for certificates of competency as mine managers must produce evidence satisfactory to the board that they are citizens of this State, at least twenty-four years of age, that they have had at least four years practical mining experience, and that they are men of good repute and temperate habits; they must also submit to and satisfactorily pass such an examination as to their experience in mines and in the management of men, their knowledge of mine machinery and appliances, the use of surveying and other instruments, the properties of mine gases, the principles of ventilation and the specific duties and responsibilities of mine managers, as the board shall see fit to impose.

**FOR HOISTING ENGINEERS.** (e) Persons seeking certificates of competency as hoisting engineers must produce evidence satisfactory to the board that they are citizens of the United States, at least twenty-one years of age, that they have had at least two years experience as fireman or engineer of a hoisting plant, and are of good repute and temperate habits. They must be prepared to submit to and satisfactorily pass an examination as to their experience in handling hoisting machinery, and as to their practical and technical knowledge of the construction, cleaning and care of steam boilers, the care and adjustment of hoisting engines, the management and efficiency of pumps, ropes and winding apparatus, and their knowledge of the laws of this State in relation to signals and the hoisting and lowering of men at mines.

**FOR MINE EXAMINERS.** (f) Persons seeking certificates of competency as mine examiners must produce evidence satisfactory to the board that they are citizens of this State, at least twenty-one years of age, and of good repute and temperate habits. They must be prepared to submit to and satisfactorily pass an examination as to their experience in mines generating dangerous gases, their practical and technical knowledge of the nature and properties of fire-damp, the

laws of ventilation, the structure and uses of the safety lamp, and the laws of this State relating to safeguards against fires from any source in mines.

#### CERTIFICATES.

§ 8. ISSUED BY THE BOARD. (a) The certificates provided for in this act shall be issued under the signatures and seal of the State Mining Board, to all those who receive a rating above the minimum fixed by the rules of the board; such certificates shall contain the full name, age and place of birth of the recipient, and the length and nature of his previous service in or about coal mines.

REGISTER TO BE PRESERVED. (b) The board shall make and preserve a record of the names and addresses of all persons to whom certificates are issued, and at the close of each examination shall make report of the same to the Commissioners of Labor, who shall cause a permanent register of all certificated persons to be made and kept for public inspection in the office of the State Bureau of Labor Statistics in the State capitol.

EFFECT OF CERTIFICATES. (c) The certificates provided for in this act shall entitle the holders thereof to accept and discharge the duties for which they are thereby declared qualified, at any mine in this State, where their services may be desired.

FOREIGN CERTIFICATES. (d) The board may exercise its discretion in issuing certificates of any class, but not without examination, to persons presenting, with proper credentials, certificates issued by competent authority in other states.

UNLAWFUL TO EMPLOY OTHER THAN CERTIFICATED MINE MANAGERS. (e) It shall be unlawful for the operator of any coal mine to employ, or suffer to serve, as mine manager at his mine, any person who does not hold a certificate of competency issued by a duly authorized Board of Examiners of this State: *Provided*, that whenever any exigency arises by which it is impossible for any operator to secure the immediate services of a certificated mine manager, he may place any trustworthy and experienced man, subject to the approval of the State Inspector of the district, in charge of his mine, to act as temporary mine manager for a period not exceeding thirty days.

UNLAWFUL TO EMPLOY OTHER THAN CERTIFICATED HOISTING ENGINEER. (f) It shall be unlawful for the operator of any mine to employ, or suffer to serve, as hoisting engineer for said mine, any person who does not hold a certificate of competency issued by a duly authorized Board of Examiners of this State, or permit any other to operate his hoisting engine except for the purpose of learning to operate it, and then only in the presence of the certificated engineer in charge, and when men are not being hoisted or lowered: *Provided*, that whenever any exigency arises by which it is impossible for any operator to secure the immediate services of a certificated hoisting engineer, he may place any trustworthy and experienced man, subject to the approval of the State Inspector of the district in charge of his engines, to act as temporary engineer, for a period not to exceed thirty days.

**UNLAWFUL TO EMPLOY OTHER THAN CERTIFICATED MINE EXAMINERS.** (g) It shall be unlawful for the operator of any mine to employ, or suffer to serve, as mine examiner, any person who does not hold a certificate of competency issued by the State Mining Board: *Provided*, that any one holding a mine manager's certificate may serve as mine examiner. Any one holding a certificate as fire boss, on presentation of the same to the State Mining Board, may have it exchanged for a mine examiner's certificate.

**CANCELLATION OF CERTIFICATES.** (h) The certificate of any mine manager, hoisting engineer or mine examiner, may be cancelled and revoked by the State Mining Board whenever it shall be established to the satisfaction of said board that the holder thereof has become unworthy of official endorsement, by reason of violations of the law, intemperate habits, manifest incapacity, abuse of authority, or for other causes satisfactory to said board: *Provided*, that any person against whom charges or complaints are made shall have an opportunity to be heard in his own behalf. And he shall have thirty days notice in writing of such charges.

#### FEES FOR EXAMINATIONS.

§ 9. An applicant for any certificate herein provided for, before being examined, shall register his name with the secretary of the board, and file with him the credentials required by this act, to-wit: An affidavit as to all matters of fact establishing his right to receive the examination, and a certificate of good character and temperate habits signed by at least ten of the citizens who know him best in the place in which he lives.

Each candidate, before receiving the examination, shall pay to the secretary of the board the sum of one dollar as an examination fee, and those who pass the examination for which they are entered, before receiving their certificates, shall also pay to the secretary the further sum of two dollars each as a certificate fee. All such fees shall be duly accounted for by the board, and covered into the State treasury at the close of each fiscal year.

#### PAY OF THE BOARD.

§ 10. The members of the State Mining Board shall receive as compensation for their services the sum of five dollars each per day, for a term not exceeding one hundred days in any one year, and whatever sums are necessary to reimburse them for such traveling expenses as may be incurred in the discharge of their duties.

The salary of the secretary shall be determined by the board, but shall in no case exceed the sum of one thousand dollars per annum, and he shall be reimbursed for any amounts expended for actual and necessary traveling expenses in the discharge of his duties. All such salaries and expenses of the board and of its secretary shall be paid upon vouchers duly sworn to by each and approved by the president of the board and by the Governor, and the Auditor of Public Ac-

counts is hereby authorized to draw his warrants on the State Treasurer for the amounts thus shown to be due, payable out of any money in the treasury not otherwise appropriated.

#### INSPECTION DISTRICTS.

§ 11. BOUNDARIES DEFINED. (a) The State shall be divided into seven inspection districts, as follows:

The first district shall be composed of the counties of Boone, McHenry, Lake, DeKalb, Kane, DuPage, Cook, LaSalle, Kendall, Grundy, Will, Livingston, and Kankakee.

The second district shall be composed of the counties of Jo Daviess, Stephenson, Winnebago, Carroll, Ogle, Whiteside, Lee, Rock Island, Henry, Bureau, Mercer, Stark, Putnam, Marshall, Peoria, and Woodford.

The third district shall be composed of the counties of Henderson, Warren, Knox, Hancock, McDonough, Schuyler, Fulton, Adams, and Brown.

The fourth district shall be composed of the counties of Tazewell, McLean, Ford, Iroquois, Vermilion, Champaign, Piatt, DeWitt, Macon, Logan, Menard, Mason, and Cass.

The fifth district shall be composed of the counties of Pike, Scott, Morgan, Sangamon, Christian, Shelby, Moultrie, Douglas, Coles, Cumberland, Clark, Edgar, Montgomery, Macoupin, Greene, Jersey, and Calhoun.

The sixth district shall be composed of the counties of Monroe, St. Clair, Madison, Bond, Clinton, Fayette, Marion, Effingham, Clay, Jasper, Richland, Crawford, and Lawrence.

The seventh district shall be composed of the counties of Washington, Jefferson, Wayne, Edwards, Wabash, White, Hamilton, Franklin, Perry, Randolph, Jackson, Williamson, Saline, Gallatin, Hardin, Pope, Johnson, Massac, Union, Alexander, and Pulaski.

HOW CHANGES MAY BE MADE. (b) Provided, that the Commissioners of Labor, may, from time to time, make such changes in the boundaries of said districts as may, in their judgment, be required in order to distribute more evenly the labors and expenses of the several inspectors of mines, but this provision shall not be construed as authorizing the board to increase the number of districts.

#### CHANGES IN THE BOUNDARIES OF INSPECTION DISTRICTS OF THE STATE.

At a meeting of the Board of Commissioners of Labor held in June, 1899, under the provision of Section 11 of the mining law, the boundaries of the Second, Third, Fourth and Fifth Inspection Districts were changed and made as follows, to take effect July 1, 1899:

The Second District shall be composed of the counties of Jo Daviess, Stephenson, Winnebago, Carroll, Ogle, Whiteside, Lee, Rock Island, Henry, Bureau, Mercer, Stark, Putnam, Marshall, Henderson, Warren and Knox.

The Third District shall be composed of the counties of Hancock, McDonough, Schuyler, Fulton, Peoria, Tazewell, Adams, Cass, Mason and Menard.

The Fourth District shall be composed of the counties of Woodford, McLean, Ford, Iroquois, Vermilion, Champaign, Piatt, DeWitt, Macon, Logan, Christian, Shelby, Moultrie, Douglas, Edgar, Clark, Coles and Cumberland.

The Fifth District shall be composed of the counties of Brown, Pike, Scott, Morgan, Sangamon, Moutgomery, Macoupin, Green, Jersey and Calhoun.

The First, Sixth and Seventh Districts remain unchanged.

#### DUTIES OF INSPECTORS.

§ 12. BOND. (a) Those who receive appointment as State Inspectors of Mines must, before entering upon their duties as such, take an oath of office, as provided for by the constitution, and enter into a bond to the State in the sum of five thousand (5,000) dollars, with sureties to be approved by the governor, conditioned upon the faithful performance of their duties in every particular as required by this act; said bond, with the approval of the governor endorsed thereon, together with the oath of office, shall be deposited with the Secretary of State.

INSTRUMENTS. (b) For the more efficient discharge of the duties herein imposed upon them, each inspector shall be furnished at the expense of the State, with an anemometer, a safety lamp, and whatever other instruments may be required in order to carry into effect the provisions of this act.

EXAMINATIONS OF MINES. (c) State Inspectors of mines shall devote their whole time and attention to the duties of their office, and make personal examination of every mine within their respective districts, and shall see that every necessary precaution is taken to insure the health and safety of the workmen employed in such mines, and that the provisions and requirements of all the mining laws of this State are faithfully observed and obeyed and the penalties for the violation of the same promptly enforced.

AUTHORITY TO ENTER. (d) It shall be lawful for State Inspectors to enter, examine and inspect any and all coal mines and the machinery belonging thereto at all reasonable times by day or by night, but so as not to obstruct or hinder the necessary workings of such coal mine, and the operator of every such coal mine is hereby required to furnish all necessary facilities for making such examination and inspection.

PROCEDURE IN CASE OF OBJECTION. (e) If any operator shall refuse to permit such inspection or to furnish the necessary facilities for making such examination and inspection, the inspector shall file his affidavit, setting forth such refusal, with the judge of the circuit court in said county in which said mine is situated, either in term time or vacation, or, in the absence of said judge, with the master in chancery in said county in which said mine is situated, and obtain an order on such owner, agent or operator so refusing as aforesaid, commanding him to permit and furnish such necessary facilities for the inspection of such coal mine, or to be adjudged to stand in contempt of court and punished accordingly.

NOTICES TO BE POSTED. (f) The State Inspector of Mines shall post up in some conspicuous place at the top of each mine visited and inspected by him, a plain statement of the condition of said mine, showing what, in his judgment, is necessary for the better protection of the lives and health of persons employed in said mine; such state-



ment shall give the date of inspection and be signed by the inspector. He shall also post a notice at the landing used by the men stating what number of men will be permitted to ride on the cage at one time, and at what rate of speed men may be hoisted and lowered on the cages. He must observe especially that a proper code of signals between the engineer and top man and bottom man is established and conspicuously posted for the information of all employés.

**SEALER OF WEIGHTS.** (*g*) State Inspectors of Mines are hereby made *ex-officio* sealers of weights and measures in their respective districts, and as such are empowered to test all scales used to weigh coal at coal mines. Upon the written request of any mine owner or operator, or of ten coal miners employed at any one mine, it shall be his duty to try and prove any scale or scales at such mine against which complaint is directed, and if he shall find that they, or any of them do not weigh correctly he shall call the attention of the mine owner or operator to the fact, and direct that said scale or scales be at once overhauled and readjusted so as to indicate only true and exact weights, and he shall forbid the further operation of such mine until such scales are adjusted. In the event that such tests shall conflict with any test made by any county sealer of weights, or under and by virtue of any municipal ordinance or regulation, then the test by such mine inspector shall prevail.

**TEST WEIGHTS.** (*h*) For the purpose of carrying out the provisions of this act each inspector shall be furnished by the State with a complete set of standard weights suitable for testing the accuracy of tack scales and of all smaller scales at mines: said test weights to be paid for on bills of particulars, certified by the Secretary of State and approved by the Governor. Such test weights shall remain in the custody of the inspector for use at any point within his district, and for any amounts expended by him for the storage, transportation or handling of the same, he shall be fully reimbursed upon making entry of the proper items in his quarterly expense voucher.

**INSPECTORS' ANNUAL REPORTS.** (*i*) Each State Inspector of Mines shall, at the close of the official year, to-wit: after June 30, of every year, prepare and forward to the Secretary of the Bureau of Labor Statistics a formal report of his acts during the year in the discharge of his duties, with any recommendations as to legislation he may deem necessary on the subject of mining, and shall collect and tabulate upon blanks furnished by said Secretary all desired statistics of mines and miners within his district to accompany said annual report.

**REPORTS TO BE PUBLISHED.** (*j*) On the receipt of said inspectors' reports the Secretary of the Bureau of Labor Statistics shall proceed to compile and summarize the same as a report of said bureau, to be known as the Annual Coal Report, which shall be duly transmitted to the Governor for the information of the General Assembly and the public. The printing and binding of said reports shall be provided for by the Commissioners of State Contracts in like manner and in like number as they provide for the publication of other official reports to the Governor.

The Secretary of State shall furnish to said inspectors, upon the requisition of the Secretary of the State Bureau of Labor Statistics, whatever instruments, blanks, blank books, stationery, printing and supplies may be required by said inspectors in the discharge of their official duties; said instruments to be paid for on bills of particulars, certified by the Secretary of State and approved by the Governor.

It shall be the duty of every coal operator and every employer of labor in this State to afford to the State Commissioners of Labor, or their representatives, every facility for procuring statistics of the wages and conditions of their employés for the purpose of compiling and publishing statistics of labor and of social and industrial conditions within the State as required by law. Any person who shall hinder or obstruct the investigation of the agents of the commissioners, or shall neglect or refuse, for a period of ten days, to furnish the information called for by the schedules of the commissioners as provided above, shall be adjudged guilty of a misdemeanor and be subjected to a fine of one hundred dollars.

#### PAY OF INSPECTORS.

§ 13. Each State Inspector of Mines shall receive as compensation for his services, the sum of eighteen hundred dollars per annum, and for his traveling expenses the sum actually expended for that purpose, in the discharge of his official duties, both to be paid quarterly by the State Treasurer, on warrants of the Auditor of Public Accounts, from the funds in the treasury not otherwise appropriated; said expense vouchers shall show the items of expenditures in detail, with sub-vouchers for the same so far as it is practicable to obtain them. Said voucher shall be sworn to by the inspector and be approved by the Secretary of the Bureau of Labor Statistics and the Governor.

#### REMOVAL OF INSPECTORS.

§ 14. Upon a petition signed by not less than three coal operators, or ten coal miners, setting forth that any State Inspector of Mines neglects his duties, or that he is incompetent, or that he is guilty of malfeasance in office, or guilty of any act tending to the injury of miners or operators of mines, it will be lawful for the Commissioners of Labor of this State to issue a citation to the said inspector to appear, at not less than fifteen days' notice on a day fixed, before them, when the said commissioners shall proceed to inquire into and investigate the allegations of the petitioners; and if the said commissioners find that the said inspector is neglectful of his duty, or that he is incompetent to perform the duties of said office, or that he is guilty of malfeasance in office, or guilty of any act tending to the injury of miners or operators of mines, the said commissioners shall declare the office of inspectors of said district vacant, and a properly qualified person shall be duly appointed, in the manner provided for in this act, to fill said vacancy.

## COUNTY INSPECTORS.

§ 15. The County Board of Supervisors or of Commissioners in counties not under township organization, of any county in which coal is produced, upon the written request of the State Inspector of Mines for the district in which said county is located, shall appoint a County Inspector of Mines as assistant to such State inspector; but no person shall be eligible for appointment as county inspector who does not hold a State certificate of competency as mine manager, and the compensation of such county inspector shall be fixed by the county board at not less than three dollars per day, to be paid out of the county treasury.

The State inspector may authorize any county inspector in his district to assume and discharge all the duties and exercise all the powers of a State inspector in the county for which he is appointed, in the absence of the State inspector; but such authority must be conferred in writing and the county inspector must produce the same as evidence of his powers upon the demand of any person affected by his acts; and the bond of said State inspector shall be holden for the faithful performance of the duties of such assistant inspector.

## DUTIES OF MINE MANAGERS AND MINERS.

§ 16. (a) The mine managers shall instruct employés as to their respective duties, and shall visit and examine the various working places in the mine as often as practicable. He shall always provide a sufficient supply of props, caps and timber delivered on the miners' cars at the usual place where demanded, as nearly as possible, in suitable lengths and dimensions for the securing of the roof by the miners, and it shall be the duty of the miner to properly prop and secure his place with materials provided therefor.

VENTILATION. (b) It shall be the duty of the mine manager to see that cross-cuts are made at proper distances apart to secure the best ventilation at the face of all working places, and that all stoppings along air-ways are properly and promptly built. He shall keep careful watch over all ventilating apparatus and the air-currents in the mine, and in case of accident to fan or machinery by which the currents are obstructed or stopped, he shall at once order the withdrawal of the men and prohibit their return until thorough ventilation has been re-established.

AIR-CURRENTS AND OUTLET PASSAGE-WAYS. (c) He shall measure or cause to be measured the air-current with an anemometer at least once a week at the inlet and outlet, and shall keep a record of such measurements for the information of the inspector. Once a week he shall make a special examination of the roadways leading to the escapement shaft or other opening for the safe exit of men to the surface, and shall make a record of any obstructions to travel he may encounter therein, together with the date of their removal.

**HANDLING EXPLOSIVES.** (*d*) He shall give special attention to and instructions concerning the proper storage and handling of explosives in the mine, and concerning the time and manner of placing and discharging the blasting shots, and it shall be unlawful for any miner to fire shots except according to the rules of the mine. In dusty mines he must see that all hauling roads are frequently and thoroughly sprinkled. He must also see that all dangerous places, above and below, are properly marked, and that danger signals are displayed wherever they are required.

**CARE OF ROPES, CAGES, ETC.** (*e*) The mine manager or superintendent must have special attention given to the condition of the hoisting ropes; they must be carefully and frequently scrutinized. Before the men are lowered in the morning the soundness of the ropes must be tested by hoisting the cages. He must also have the cages, safety catches, pumps, sumps and stables examined frequently; he must have the mine examined every morning by the mine examiner before the men are allowed to go to work, and know that the top man and bottom man are on duty, and that sufficient lights are maintained at the top and bottom landings when the men are being hoisted and lowered.

**EARLY AND LATE DUTY.** (*f*) The mine manager or his agent shall be at his post at the mine when the men are lowered into the mine in the morning for work; he shall by some device keep a record of the number of men lowered either for a day or night shift, and he or his agent shall remain at night until all the men employed during the day shall have been hoisted out.

**MAY HAVE ASSISTANTS.** (*g*) In mines in which the works are so extensive that all the duties devolving on the mine manager can not be discharged by one man, competent persons may be designated and appointed as assistants to the mine manager who shall exercise his functions, under his instructions.

#### DUTIES OF HOISTING ENGINEERS.

§ 17. **CONSTANT ATTENDANCE.** (*a*) The hoisting engineer at any mine shall be in constant attendance at his engine or boilers at all times when there are workmen underground.

**OUTSIDERS EXCLUDED.** (*b*) The engineer shall not permit any one to enter or loiter in the engine room, except those authorized by their position, or duties to do so, and he shall hold no conversation with any officer of the company or other person while the engine is in motion or while his attention is occupied with the signals. A notice to this effect shall be posted on the door of the engine house.

**CARE OF ENGINE AND BOILERS.** (*c*) The engineer or some other properly authorized employé must keep a careful watch over the engine, boilers, pumps, ropes and winding apparatus. He must see that his boilers are properly supplied with water, cleaned and inspected at frequent intervals, and that the steam pressure does not exceed the limit established by the boiler inspector; he shall frequently try the safety valves and shall not increase the weights on

the same; he shall observe that the steam and water gauges are always in good order, and if any of the pumps, valves or gauges become deranged or fail to act he shall promptly report the fact to the proper authority.

**SIGNALS.** (*d*) The engineer must thoroughly understand the established code of signals, and these must be delivered in the engine room in a clear and unmistakable manner, and when he has the signal that men are on the cage he must work his engine only at the rate of speed hereafter specified in this act.

**HANDLING OF ENGINE.** (*e*) The engineer shall permit no one to handle or meddle with any machinery under his charge, nor suffer any one who is not a certificated engineer to operate his engine, except for the purpose of learning to operate it, and then only in the presence of the engineer in charge, and when men are not on the cage.

#### DUTIES OF MINE EXAMINERS.

§ 18. **TO ENTER AND EXAMINE ALL PLACES.** (*a*) A mine examiner shall be required at all mines. His duty shall be to visit the mine before the men are permitted to enter it, and, first, he shall see that the air-current is traveling in its proper course and in proper quantity. He shall then inspect all places where men are expected to pass or to work, and observe whether there are any recent falls or obstructions in rooms or roadways, or accumulations of gas or other unsafe conditions. He shall especially examine the edges and accessible parts of recent falls and old gobs and air-courses. As evidence of his examination of all working places, he shall inscribe on the walls of each, with chalk, the month and the day of the month of his visit.

**TO POST DANGER NOTICES.** (*b*) When working places are discovered in which accumulations of gas, or recent falls, or any dangerous conditions exist, he shall place a conspicuous mark thereat as notice to all men to keep out, and at once report his finding to the mine manager.

No one shall be allowed to remain in any part of the mine through which gas is being carried into the ventilating current, nor to enter the mine to work therein, except under the direction of the mine manager, until all conditions shall have been made safe.

**TO MAKE DAILY RECORD.** (*c*) The mine examiner shall make a daily record of the conditions of the mine, as he has found it, in a book kept for that purpose, which shall be preserved in the office for the information of the company, the inspector and all other persons interested, and this record shall be made each morning before the miners are permitted to descend into the mine.

#### VENTILATION.

§ 19. Throughout every coal mine there shall be maintained currents of fresh air sufficient for the health and safety of all men and

animals employed therein, and such ventilation shall be produced by a fan, or some other artificial means.

**AMOUNT OF AIR REQUIRED.** (a) The quantity of air required to be kept in circulation and passing a given point shall be not less than 100 cubic feet per minute for each person and not less than 600 cubic feet per minute for each animal in the mine, measured at the foot of the downcast, and this quantity may be increased at the discretion of the inspector whenever, in his judgment, unusual conditions make a stronger current necessary. Said currents shall be forced into every working place throughout the mine, so that all parts of the same shall be reasonably free from standing powder smoke and deleterious air of every kind.

**MEASUREMENTS.** (b) The measurements of the currents of air shall be taken with an anemometer at the foot of the downcast, at the foot of the upcast, and at the working face of each division or split of the air-current. And a record of such measurements shall be made and preserved in the office, as elsewhere provided for in this act.

**AIR CURRENTS TO BE SPLIT.** (c) The main current of air shall be so split, or subdivided, as to give a separate current of reasonably pure air to every hundred men at work, and the inspector shall have authority to order separate currents for smaller groups of men, if, in his judgment, special conditions make it necessary.

**VENTILATION OF STABLE.** (d) The air current for ventilating the stable shall not pass into the intake air-current for ventilating the working parts of the mine.

**SELF-CLOSING DOORS.** (e) All permanent doors in mines, used in guiding and directing the ventilating currents, shall be so hung and adjusted so as to close automatically.

**TRAPPERS.** (f) At all principal door-ways, through which cars are hauled, an attendant shall be employed for the purpose of opening and closing said doors when trips of cars are passing to and from the workings. Places for shelter shall be provided at such door-ways to protect the attendants, from being injured by the cars while attending to their duties.

**CROSS-CUTS.** (g) Cross-cuts shall be made not more than sixty feet apart, and no room shall be opened in advance of the air-current.

**STOPPINGS.** (h) When it becomes necessary to close cross-cuts connecting the inlet and outlet air-courses in mines generating dangerous gases, the stoppings shall be built in a substantial manner with brick or other suitable building material laid in mortar or cement, if practicable, but in no case shall they be built of lumber except for temporary purposes.

**AUTHORITY OF INSPECTOR.** (i) Whenever the inspector shall find men working without sufficient air, he shall at once give the mine manager or operator notice and a reasonable time in which to restore the current, and upon his or their refusal or neglect to act promptly, the inspector may order the endangered men out of the mine.

## POWDER AND BLASTING.

§ 20. No blasting powder or other explosives shall be stored in any coal mine, and no workingman shall have at any time more than one twenty-five pound keg of black powder in the mine, nor more than three pounds of high explosives.

PLACE AND MANNER OF STORING. (a) Every person who has powder or other explosives in a mine, shall keep it or them in a wooden or metallic box or boxes securely locked, and said boxes shall be kept at least ten feet from the track, and no two powder boxes shall be kept within fifty feet of each other, nor shall black powder and high explosives be kept in the same box.

MANNER OF HANDLING. (b) Whenever a workman is about to open a box or keg containing powder or other explosive, and while handling the same he shall place and keep his lamp at least five feet distant from said explosive and in such position that the air current can not convey sparks to it, and no person shall approach nearer than five feet to any open box containing powder or other explosive with a lighted lamp, lighted pipe or other thing containing fire.

COPPER TOOLS. (c) In the process of charging and tamping a hole no person shall use any iron or steel pointed needle. The needle used in preparing a blast shall be made of copper and the tamping bar shall be tipped with at least five inches of copper. No coal dust nor any material that is inflammable or that may create a spark shall be used for tamping, and some soft material must always be placed next to the cartridge or explosive.

USE OF SQUIBS. (d) A miner who is about to explode a blast with a manufactured squib shall not shorten the match, saturate it with mineral oil nor ignite it except at the extreme end; he shall see that all persons are out of danger from the probable effects of such shot, and shall take measures to prevent any one approaching, by shouting "fire!" immediately before lighting the fuse.

NOT MORE THAN ONE SHOT AT A TIME. (e) Not more than one shot shall be ignited at the same time in any one working place, unless the firing is done by electricity or by fuses of such length that neither of the shots will explode in less than three minutes from the time they are lighted. When successive shots are to be fired in any working place in which the roof is broken or faulty, the smoke must be allowed to clear away and the roof must be examined and made secure between shots.

MISSED SHOTS. (f) No person shall return to a missed shot until five minutes have elapsed, unless the firing is done by electricity, and then only when the wires are disconnected from the battery.

DUSTY MINES. (g) In case the galleries, roadways or entries of any mine are so dry that the air becomes charged with dust, the operator of such mine must have such roadways regularly and thoroughly sprayed, sprinkled or cleaned, and it shall be the duty of the inspector to see that all possible precautions are taken against the occurrence of explosions which may be occasioned or aggravated by the presence of dust.

## PLACES OF REFUGE.

§ 21. ENGINE PLANES. (a) On all single track hauling roads wherever hauling is done by machinery, and on all gravity or inclined planes in mines, upon which the persons employed in the mine must travel on foot to and from their work, places of refuge must be cut in the side wall not less than three feet in depth and four feet wide, and not more than twenty yards apart, unless there is a clear space of at least three feet between the side of the car and the side of the road, which space shall be deemed sufficient for the safe passage of men.

On every such road which is more than 100 feet in length a code of signals shall be established between the hauling engineer and all points on the road.

A conspicuous light must be carried on the front car of every trip or train of pit-cars moved by machinery, except when such trip is on an inclined plane.

MULE ROADS. (b) On all hauling roads or gangways on which the hauling is done by draft animals, or gangways whereon men have to pass to and from their work, places of refuge must be cut in the side wall at least two and a half feet deep, and not more than twenty yards apart; but such places shall not be required in entries from which rooms are driven at regular intervals not exceeding twenty yards, and whenever there is a clear space of two and one-half feet between the car and the rib, such space shall be deemed sufficient for the safe passage of men.

All places of refuge must be kept clear of obstructions, and no material shall be stored nor allowed to accumulate therein.

## BOYS AND WOMEN.

§ 22. No boy under the age of fourteen years, and no woman, or girl of any age shall be permitted to do any manual labor in or about any mine, and before any boy can be permitted to work in any mine he must produce to the mine manager or operator thereof an affidavit from his parent or guardian or next of kin, sworn and subscribed to before a justice of the peace or notary public, that he, the said boy, is fourteen years of age.

## SIGNALS.

§ 23. At every mine operated by shaft and by steam power, means must be provided for communicating distinct and separate signals to and from the bottom man, the top man and the engineer. The following signals are prescribed for use at mines where signals are required.

From the Bottom to the Top. One bell shall signify to hoist coal or the empty cage, and also to stop either when in motion.

Two bells shall signify to lower cage.



Three bells shall signify that men are coming up; when return signal is received from the engineer, men will get on the cage and the cager shall ring one bell to start.

Four bells shall signify to hoist slowly, implying danger

Five bells shall signify accident in the mine and a call for a stretcher.

Six bells shall call for a reversal of the fan.

From the Top to the Bottom. One bell shall signify: All ready, get on cage.

Two bells shall signify: Send away empty cage.

*Provided*, that the operator of any mine may, with the consent of the inspector, add to this code of signals in his discretion, for the purpose of increasing its efficiency or of promoting the safety of the men in said mine, but whatever code may be established and in use at any mine, must be conspicuously posted at the top and at the bottom and in the engine room for the information and instruction of all persons concerned.

#### WEIGHING AND WEIGHMEN.

§ 24. SCALES. (a) The operator of every coal mine where miners are paid by the weight of their output, shall provide at such mine suitable and accurate scales of standard manufacture for the weighing of such coal, and a correct record shall be kept of all coal so weighed, and said record shall be open at all reasonable hours to the inspection of miners and others interested in the product of said mine.

WEIGHMAN. (b) The person authorized to weigh the coal and keep the record as aforesaid shall, before entering upon his duties, make and subscribe to an oath before some person duly authorized to administer oaths, that he will accurately weigh and carefully keep a true record of all coal weighed, and such affidavit shall be kept conspicuously posted at the place of weighing.

CHECK WEIGHMAN. (c) It shall be permitted to the miners at work in any coal mine to employ a check-weighman at their option and at their own expense, whose duty it shall be to balance the scales and see that the coal is properly weighed, and that a correct account of the same is kept, and for this purpose he shall have access at all times to the beam box of said scales, and be afforded every facility for verifying the weights while the weighing is being done. The check-weighman so employed by the miners, before entering upon his duties, shall make and subscribe to an oath before some person duly authorized to administer oaths, that he will faithfully discharge his duties as check-weighman, and such oath shall be kept conspicuously posted at the place of weighing.

## BOUNDARIES.

§ 25. TEN-FOOT LIMIT. (a) In no case shall the workings of any mine be driven nearer than ten feet to the boundary line of the coal rights pertaining to said mine, except for the purpose of establishing an underground communication between contiguous mines, as provided for elsewhere in this act.

APPROACHING OLD WORKS. (b) Whenever the workings of any part of a mine are approaching old workings, believed to contain dangerous accumulations of water or of gas, the operator of said mine must conduct the advances with narrow work, and maintain bore holes at least twenty feet in advance of the face of the work, and such side holes as may be deemed prudent or necessary.

## NOTICE TO INSPECTORS.

§ 26. Immediate notice must be conveyed to the inspector of the proper district by the operator interested:

First. Whenever an accident occurs whereby any person receives serious or fatal injury.

Second. Whenever it is intended to sink a shaft, either for hoisting or escapement purposes, or to open a new mine by any process.

Third. Whenever it is intended to abandon any mine or to reopen any abandoned mine.

Fourth. Upon the appearance of any large body of fire damp in any mine, whether accompanied by explosion or not, and upon the occurrence of any serious fire within the mine or on the surface.

Fifth. When the workings of any mine are approaching dangerously near any abandoned mine, believed to contain accumulations of water or of gas.

Sixth. Upon the accidental closing or intended abandonment of any passageway to an escapement outlet.

## ACCIDENTS.

§ 27. DUTY OF INSPECTOR. (a) Whenever loss of life or serious personal injury shall occur by reason of any explosion, or of any accident whatsoever, in or connected with any coal mine, it shall be the duty of the person having charge of said mine to report that fact, without delay, to the inspector of the district in which the mine is located, and the said inspector shall, if he deem necessary from the facts reported, and in all cases of loss of life, immediately go to the scene of said accident and render every possible assistance to those in need.

It shall moreover be the duty of every operator of a coal mine to make and preserve for the information of the inspector, and upon uniform blanks furnished by said inspector, a record of all injuries sustained by any of his employes in the pursuance of their regular occupations.

**CORONER'S INQUEST.** (b) If any person is killed by any explosion, or other accident, the operator must also notify the coroner of the county, or in his absence or inability to act, any justice of the peace of said county, for the purpose of holding an inquest concerning the cause of such death. At such inquest the inspector shall offer such testimony as he may be possessed of, and may question or cross question any witness appearing in the case.

**INVESTIGATION BY INSPECTOR.** (c) The inspector may also make any original or supplemental investigation which he may deem necessary, as to the nature and cause of any accident within his jurisdiction, and shall make a record of the circumstances attending the same, and of the result of his investigations, for preservation in the files of his office. To enable him to make such investigation he shall have power to compel the attendance of witnesses, and to administer oaths or affirmations to them, and the cost of such investigations shall be paid by the county in which such accident has occurred, in the same manner as the costs of coroners inquests are paid.

#### MEN ON CAGES.

§ 28. **TOP MAN AND BOTTOM MAN.** (a) At every shaft operated by steam power, the operator must station at the top and at the bottom of such shaft, a competent man charged with the duty of attending to signals, preserving order, and enforcing the rules governing the carriage of men on cages. Said top man and bottom man shall be at their respective posts of duty at least a half hour before the hoisting of coal begins in the morning, and remain for half an hour after hoisting ceases for the day.

**LIGHTS ON LANDINGS.** (b) Whenever the hoisting or lowering of men occurs before daylight or after dark, or when the landing at which men take or leave the cage is at all obscured by steam or otherwise, there must always be maintained at such landing a light sufficient to show the landing and surrounding objects distinctly. Likewise, as long as there are men underground in any mine, the operator shall maintain a good and sufficient light at the bottom of the shaft thereof, so that persons coming to the bottom may clearly discern the cage and objects in the vicinity.

**SPEED OF CAGES AND OTHER REGULATIONS.** (c) Cages on which men are riding shall not be lifted or lowered at a rate of speed greater than six hundred feet per minute, except with the written consent of the inspector. No person shall carry any tools, timber or other materials with him on a cage in motion, except for use in repairing the shaft, and no one shall ride on a cage containing either a loaded or empty car. No cage having an unstable or self-dumping platform shall be used for the carriage of men or materials, unless the same is provided with some convenient device by which said platform can be securely locked, and unless it is so locked whenever men or materials are being conveyed thereon. No coal shall be hoisted in any shaft while men are being lowered therein.

**RIGHTS OF MEN TO COME OUT.** (d) Whenever men who have finished their day's work, or have been prevented from further work, shall come to the bottom to be hoisted out, an empty cage shall be given them for that purpose, unless there is an available exit by slope or by stairway in an escapement shaft, and providing there is no coal at the bottom ready to be hoisted.

#### SAFETY LAMPS.

§ 29. **OPERATOR MUST FURNISH.** (a) At any mine where the inspector shall find that fire-damp is being generated so as to require the use of a safety lamp in any part thereof, the operator of such mine, upon receiving notice from the inspector, that one or more such lamps are necessary to the safety of the men in such mine, shall at once procure and keep for use such number of safety lamps as may be necessary.

**MINE MANAGER MUST CARE FOR.** (b) All safety lamps used for examining mines and for working therein shall be the property of the operator, and shall remain in the custody of the mine manager or other competent person, who shall clean, fill, trim, examine and deliver the same, locked and in safe condition, to the men, upon their request, when entering the mine, and shall receive the same from the men at the end of their shift. But miners shall be responsible for the condition and proper use of safety lamps when in their possession.

#### STRETCHERS AND BLANKETS.

§ 30. At every mine where fifty men are employed underground it shall be the duty of the operator thereof to keep always on hand, and at some readily accessible place, a properly constructed stretcher, a woolen and waterproof blanket, and a roll of bandages in good condition and ready for immediate use for binding, covering and carrying any one who may be injured at the mine. When two hundred or more men are employed in any mine, two stretchers and two woolen and two waterproof blankets, with a corresponding supply of bandages, shall be provided and kept on hand. At mines where fire-damp is generated there shall also be provided and kept in store a suitable supply of linseed or olive oil, for use in case men are burned by an explosion.

#### CAUTION TO MINERS.

§ 31. It shall be unlawful for any miner, workman, or other person knowingly or carelessly to injure any shaft, safety lamp, instrument, air course or brattice, or to obstruct or throw open any air-way, or carry any open lamp or lighted pipe or fire in any form into any place worked by the light of safety lamps, or within five feet of any open powder, or to handle or disturb any part of the hoisting machinery, or open any door regulating an air current and not close the same, or to enter any part of the mine against caution, or to use

other than copper needles and copper tipped tamping bars, or to disobey any order given in pursuance of this act, or to do any wilfull act whereby the lives or health of persons working in the mines or the security of the mine or the machinery thereof is endangered.

§ 32. It shall be the duty of every operator to post, on the engine house and at the pit top of his mine, in such manner that the employes in the mine can read them, rules not inconsistent with this act, plainly printed in the English language, which shall govern all persons working in the mine. And the posting of such notice, as provided, shall charge all employes of such mine with legal notice of the contents thereof.

#### PENALTIES.

§ 33. Any wilful neglect, refusal or failure to do the things required to be done by any section, clause or provision of this act, on the part of the person or persons herein required to do them, or any violation of any of the provisions or requirements hereof, or any attempt to obstruct or interfere with any inspector in the discharge of the duties herein imposed upon him, or any refusal to comply with the instructions of an inspector given by authority of this act, shall be deemed a misdemeanor punishable by a fine not exceeding five hundred dollars, or by imprisonment in the county jail for a period not exceeding six months, or both, at the discretion of the court: *Provided*, that in addition to the above penalties, in case of the failure of any operator to comply with the provisions of this act in relation to the sinking of escapement shafts and the ventilation of mines, the State's attorney for the county in which such failure occurs, or any other attorney, in case of his neglect to act promptly, shall proceed against such operator by injunction without bond, to restrain him from continuing to operate such mine until all legal requirements shall have been fully complied with.

Any inspector who shall discover that any section of this act, or part thereof, is being neglected or violated, shall order immediate compliance therewith, and in case of continued failure to comply, shall, through the State's attorney, or any other attorney, in case of his failure to act promptly, take the necessary legal steps to enforce compliance therewith through the penalties herein described.

If it becomes necessary, through the refusal or failure of the State's attorney to act, for any other attorney to appear for the State in any suit involving the enforcement of any provision of this act reasonable fees for the services of such attorney shall be allowed by the board of supervisors, or county commissioners, in and for the county in which such proceedings are instituted.

For any injury to person or property, occasioned by any wilful violations of this act, or wilful failure to comply with any of its provisions, a right of action shall accrue to the party injured for any direct damages sustained thereby; and in case of loss of life by reason of such wilful violation or wilful failure as aforesaid, a right of action shall accrue to the widow of the person so killed, his lineal heirs or adopted children, or to any other person or persons

who were, before such loss of life, dependent for support on the person or persons so killed, for a like recovery of damages for the injuries sustained by reason of such loss of life or lives, not to exceed the sum of five thousand dollars.

#### DEFINITIONS.

§ 34. MINE. (*a*) In this act the words "mine" and "coal mine," used in their general sense, are intended to signify any and all parts of the property of a mining plant, on the surface or underground, which contribute, directly or indirectly, under one management, to the mining or handling of coal.

EXCAVATIONS OR WORKINGS. (*b*) The words "excavations" and "workings" signify any or all parts of a mine excavated or being excavated, including shafts, tunnels, entries, rooms and working places, whether abandoned or in use.

SHAFT. (*c*) The term "shaft" means any vertical opening through the strata which is or may be used for purposes of ventilation or escapement, or for the hoisting or lowering of men and material in connection with the mining of coal.

SLOPE OR DRIFT. (*d*) The term "slope" or "drift" means any inclined or horizontal way, opening or tunnel to a seam of coal to be used for the same purposes as a shaft.

OPERATOR. (*e*) The term "operator" as applied to the party in control of a mine in this act, signifies the person, firm or body corporate who is the immediate proprietor as owner or lessee of the plant, and, as such, responsible for the condition and management thereof.

INSPECTOR. (*f*) The term "inspector" in this act signifies the State Inspector of Mines, within and for the district to which he is appointed.

MINE MANAGER. (*g*) The "mine manager" is the person who is charged with the general direction of the underground work, or both the underground and outside work of any coal mine, and who is commonly known and designated as "mine boss," or "foreman" or "pit boss."

MINE EXAMINER. (*h*) The "mine examiner" is the person charged with the examination of the condition of the mine before the miners are permitted to enter it, and who is commonly known, and has been designated in former enactments as the "fire-boss."

APPROVED April 18, 1899, in force July 1, 1899.

The following laws relating to the mining industry were not affected by the revision and continue in force:

**MINERS TO BE PAID FOR ALL COAL MINED.**

§ 1. Miners to be paid in lawful money for all coal mined.

§ 2. Mine inspectors to investigate and enforce the law.

§ 3. Penalty for violation of this act.

*AN ACT to provide for the payment of coal miners for all coal mined by them, and providing additional duties for mine inspectors.*

**SECTION 1.** *Be it enacted by the People of the State of Illinois, represented in the General Assembly:* That every person engaged in mining coal for any corporation, company, firm or individual, shall be paid in lawful money of the United States for all coal mined and loaded into the mine car by such person for such corporation, company, firm or individual, including lump, egg, nut, pea and slack, or such other grades as said coal may be divided into, at such price as may be agreed upon by the respective parties.

§ 2. It shall be the duty of the mine inspector to ascertain whether or not the provisions of section one of this act are being complied with in his district, and if he shall find that any corporation, company, firm or individual are violating the provisions of section one of this act, it shall be his duty to at once have instituted suit in the name of the People of the State of Illinois, in some court of competent jurisdiction, for the recovery of the penalty provided for in this act, and it shall be the duty of the State's attorney of the county in which such suit is brought, when notified by the mine inspector, to prosecute such suit as provided by law in other State cases.

§ 3. Every corporation, company, firm or individual violating the provisions of this act shall be fined not less than twenty-five nor more than two hundred dollars for each offense. [Approved June 3, 1897. in force July 1, 1897.]

**MINERS—QUALIFICATION OF.**

§ 1. Miner desiring to work by himself in mine must have two years experience.

§ 2. Penalty for violation of this act.

*AN ACT in relation to the safety and the competency of coal miners, and to punish for infraction of the same*

**SECTION 1.** *Be it enacted by the People of the State of Illinois, represented in the General Assembly:* That from and after the passage of this act every person desiring to work by himself in rooms of coal mines in this State shall first produce satisfactory evidence to the mine manager of the mine in which he is employed, or desires to be employed, that he has worked at least two (2) years with or as a practical miner. Until said applicant has so satisfied the mine manager of the mine in which he seeks such employment of his competency, he shall not be allowed to mine coal, unless accompanied by some competent coal miner, until he becomes duly qualified.

§ 2. Any violation of section one (1) of this act shall work a forfeiture of the certificate of the manager of the mine where any such party or parties are employed. [Approved June 7, 1897, in force July 1, 1897.]

OILS TO BE USED IN COAL MINES.

<p>§ 1a. Quality of oils to be used.</p> <p>b Testing of oils, requirements.</p> <p>c How gravity obtained.</p> <p>d Allowances to be made.</p> <p>e All barrels or packages to be branded.</p> <p>f Other material may be used in place of oil.</p>	<p>§ 2a. Only oils described to be used.</p> <p>b Operators and miners liable for using other oils, penalty.</p> <p>c Quantity sold limited in five barrels, penalty.</p> <p>d Violations of the law, how prosecuted.</p> <p>e Inspector's duties, information to be filed.</p>
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AN ACT *to prohibit the use of certain oils in coal mines, and penalties for infraction of same.*

SECTION 1. *Be it enacted by the People of the State of Illinois, represented in the General Assembly: a* That only pure animal or vegetable oil, or other oil as free from smoke as a pure animal or vegetable oil, and not the product or by-product of rosin, and which shall on inspection comply with the following test, shall be used for illuminating purposes in the mines of this State:

*b* All such oil must be tested at 60 degrees Fahrenheit. The specific gravity of the oil must not exceed 24 degrees Tagliabue. The test of the oil must be made in a glass jar one and five-tenths inches in diameter by seven inches in depth. If the oil to be tested is below 45 degrees Fahrenheit in temperature, it must be heated until it reaches about 80 degrees Fahrenheit; and should the oil be above 45 degrees and below 60 degrees Fahrenheit, it must be raised to a temperature of about 70 degrees Fahrenheit, when, after being well shaken, it should be allowed to cool gradually to a temperature of 60 degrees Fahrenheit, before finally being tested.

*c* In testing the gravity of the oil, the Tagliabue hydrometer must be, when possible, read from below, and the last line which appears under the surface of the oil shall be regarded as the true reading. In case the oil under test should be opaque or turbid, one-half of the capillary attraction shall be deemed and taken as the true reading.

*d* Where the oil is tested under difficult circumstances, an allowance of one-half degree may be made for possible error in parallax before condemning the oil for use in the mine.

*e* All oil sold to be used for illuminating purposes in the mines of this State shall be contained in barrels or packages branded conspicuously with the name of the dealer, the specific gravity of the oil, and the date of shipment.

*f* It is *provided, however*, that any material that is as free from smoke and bad odor and of equal merit as an illuminant as a pure animal or vegetable oil may be used at the pleasure of mine operators and miners.



§ 2. *a* Any person or persons, firm or corporation which ships any oil contained in any barrel or barrels, package or packages, which are not branded as prescribed in section one of this act, said oil to be used for illuminating purposes in coal or other mines; and any person or persons, firm or corporation, which sells any oil other than that prescribed in section one, to be used for illuminating purposes in coal or other mines:

*b* And any person or persons, firm or corporation having in charge the operation or running of any mine which, in a mine under his or its charge, uses or permits the use of any oil other than that prescribed in section one; and any miner or mine employé who uses, with a knowledge of its character, in any mine of this State, any oil other than that prescribed in section one of this act, shall be fined not less than five nor more than fifty dollars:

*c* And any individual, firm, company or corporation which sells any oil other than that prescribed in section one of this act, in a quantity exceeding five barrels at one sale, to be used for illuminating purposes in coal or other mines, shall be fined not less than twenty-five nor more than one hundred dollars.

*d* Justices of the peace shall have jurisdiction to try any violations of this act. Every person convicted of a second or other offense against this act, in addition to the fine before provided shall be sentenced to the county jail not less than ten days nor more than ninety days.

*e* It shall be the duty of the inspector of mines in each district to notify the State's attorney of the respective county of any violations of the above provisions. And the State's attorney shall prosecute as in other cases of misdemeanors. [Approved April 30, 1895; in force July 1, 1895.]

§ 3. No claims made under this act shall be paid until after the expiration of the time in which to present such claims. And if the funds realized on the property seized be insufficient to pay the total claims presented, then such funds shall be prorated on such claims. [Approved June 21, 1895, in force July 1, 1895.]

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WAGES OF MINERS AND LABORERS AT COAL MINES LIENS ON ALL PROPERTY.

§ 1. All laborers or coal miners have lien on all property for labor performed, how secured.

*AN ACT to protect laborers and miners for labor performed in developing and working in coal mines.*

SECTION 1. *Be it enacted by the People of the State of Illinois, represented in the General Assembly:* That every laborer or miner who shall perform labor in opening and developing any coal mine, including sinking shafts, constructing slopes or drifts, mining coal and the like, shall have a lien upon all the property of the person, firm or corporation owning, constructing or operating such mine, used in the construction or operation thereof, including real estate,

buildings, engines, cars, mules, scales and all other personal property, for the value of such labor for the full amount thereof, upon the same terms, with the same rights and to be secured and enforced as mechanics' liens are secured and enforced. [Approved June 21, 1895, in force July 1, 1895.]

#### WEIGHING COAL AT THE MINES.

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| <p>§ 1. Standard scales must be provided.</p> <p>§ 2a. All coal must be carefully weighed, correct record to be kept for inspection.</p> <p style="padding-left: 2em;">b Weighman, oath to be posted at scales.</p> <p>§ 3a. Miners may employ check-weighman, duties and privileges.</p> <p style="padding-left: 2em;">b Check-weighman, qualifications, oath to be posted at scales.</p> | <p>§ 4. Construction of scales by any person for fraudulent weighing or recording or connivance therein by weighman, penalty.</p> <p>§ 5. Penalties for failure to comply with law or obstructing its requirements.</p> <p>§ 6. Repealing clause.</p> |
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AN ACT to provide for the weighing of coal at the mines, and to repeal a certain act therein named.

SECTION 1. *Be it enacted by the People of the State of Illinois, represented in the General Assembly:* That the owner, agent or operator of every coal mine in this State at which the miners are paid by weight, shall provide at such mines suitable and accurate scales of standard manufacture, for the weighing of all coal which shall be hoisted or delivered from such mines.

§ 2. *a* All coal so delivered from such mines shall be carefully weighed upon the scales as above provided, and a correct record shall be kept of the weight of each miner's car, which record shall be kept open at all reasonable hours for the inspection of all miners or others pecuniarily interested in the product of such mine.

*b* The person designated and authorized to weigh the coal and keep such record shall, before entering upon his duties, make and subscribe to an oath before some magistrate or other officer authorized to administer oaths, that he will accurately weigh and carefully keep a true record of all coal delivered from such mine, and such oath shall be kept conspicuously posted at the place of weighing.

§ 3. *a* It shall be lawful for the miners employed in any coal mine in this State to furnish a check-weighman at their own expense, whose duty it shall be to balance the scales and see that the coal is properly weighed, and that a correct account of the same is kept; and for this purpose he shall have access at all times to the beam box of said scale, and be afforded facilities for the discharge of his duties while the weighing is being performed.

*b* The agent employed by the miners as aforesaid to act as check-weighman shall, before entering upon his duties, make and subscribe to an oath before some officer duly authorized to administer oaths,

that he will faithfully discharge the duties of check-weighman; such oath shall be kept conspicuously posted at the place of weighing. [As amended and approved June 16, 1891.]

§ 4. Any person, company or firm having or using any scale or scales for the purpose of weighing the output of coal at mines, so arranged or constructed that fraudulent weighing may be done thereby, or who shall knowingly resort to or employ any means whatsoever by reason of which such coal is not correctly weighed or reported in accordance with the provisions of this act, or any weighman or check-weighman who shall fraudulently weigh or record the weights of such coal, or connive at or consent to such fraudulent weighing and recording, shall be deemed guilty of a misdemeanor, and shall, upon conviction, for each offense be punished by a fine of not less than two hundred dollars (\$200) nor more than five hundred dollars (\$500), or by imprisonment in the county jail for a period not to exceed sixty (60) days, or by both such fine and imprisonment, proceedings to be instituted in any court of competent jurisdiction.

§ 5. Any person, owner or agent operating a coal mine in this State, who shall fail to comply with the provisions of this act, or who shall obstruct or hinder the carrying out of its requirements, shall be fined for the first offense not less than fifty dollars (\$50) nor more than two hundred dollars (\$200); for the second offense not less than two hundred dollars (\$200) nor more than five hundred dollars (\$500), and for the third offense not less than five hundred dollars (\$500), or to be imprisoned in the county jail not less than six months nor more than one year: *Provided*, that the provisions of this act shall apply only to coal mines whose product is shipped by rail or water.

§ 6. That an act entitled "An act to provide for the weighing of coal at the mines," approved June 14, 1883, in force July 1, 1883, as amended and approved June 29, 1885, in force July 1, 1885, be and the same is hereby repealed.

APPROVED June 16, 1887, in force July 1, 1887.



## ILLINOIS FREE EMPLOYMENT OFFICES.

1899.

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Considerable space was devoted in the last biennial report of this Bureau to a review of the operation of free employment offices. In support of the demand for a law providing for such agencies in Illinois, particular reference was made to the effects of similar legislation in other states and foreign countries where the system had been adopted. Much valuable data was obtained, all of which emphasized not only the wisdom, but the increasing necessity of the State attempting through such means to meet and alleviate the varied wants of the unemployed. Some of the principal reasons urged in favor of the State assuming such functions, was the direct benefit to the community resulting from increased employment, without cost either to those requiring or desiring labor, and to protect those honestly seeking employment from the vicious practices of the private employment system, which, to all intents and purposes, has its counterpart only in the *padrone* and thrives by imposing upon the ignorance and necessities of the unemployed poor.

Investigation has revealed instances where creatures devoid of conscience have opened employment offices, and taken fees required for registration, without even pretending to secure employment. To the frequent eager inquiries of the robbed was repeated the same lie. Fortunately, all have not reached such villainous depths. In common justice to the modern pretensions of mankind, let it be said that the majority of private agents are willing to make some little effort in exchange for the last dollar of the applicant, and find no small measure of encouragement in the prospect that if successful in obtaining employment, they will later reap a rich reward through the well known method of graduated assessments upon the wages of

their victims. As a means of eradicating, or at least minimizing evils of this character, existing particularly in all great industrial centers, the last General Assembly of this State enacted the following law:

### ILLINOIS FREE EMPLOYMENT OFFICES.

*AN ACT to create free employment offices in cities of certain designated populations, and to provide for the maintenance, management and control of the same, and to prevent private imitations of the name of the same and regulating private employment agencies.*

SECTION 1. *Be it enacted by the People of the State of Illinois, represented in the General Assembly:* That free employment offices are hereby created as follows: One in each city of not less than fifty thousand population, and three in each city containing a population of one million or over, for the purpose of receiving applications of persons seeking employment, and applications of persons seeking to employ labor. Such offices shall be designated and known as Illinois Free Employment Offices.

§ 2. Within sixty days after this act shall have been in force, the State board of commissioners of labor shall recommend, and the Governor, with the advice and consent of the Senate, shall appoint a superintendent and assistant superintendent and a clerk for each of the offices created by section 1 of this act, and who shall devote their entire time to the duties of their respective offices. The assistant superintendent or the clerk shall in each case be a woman. The tenure of such appointment shall be two years, unless sooner removed for cause. The salary of each superintendent shall be \$1,200 per annum, the salary of such assistant superintendent shall be \$900 per annum. The salary of such clerks shall be \$800 per annum, which sums, together with proper amounts for defraying the necessary costs of equipping and maintaining the respective offices, shall be paid out of any funds in the State treasury not otherwise appropriated.

§ 3. The superintendent of each such free employment office shall, within sixty days after appointment, open an office in such locality as shall have been agreed upon between such superintendent and the secretary of the bureau of labor statistics as being most appropriate for the purpose intended; such office to be provided with a sufficient number of rooms or apartments to enable him to provide, and he shall so provide, a separate room or apartment for the use of women registering for situations or help. Upon the outside of each such office, in position and manner to secure the fullest public attention, shall be placed a sign which shall read in the English language, Illinois Free Employment Office, and the same shall appear either upon the outside windows or upon signs in such other languages as the location of such office shall render advisable. The superintendent of each such free employment office shall receive and record in books kept for that purpose names of all persons applying for employment or help, designating opposite the name and address of each applicant the character of employment or help desired. Separate registers for applicants for employment shall be kept, showing the age, sex,

nativity, trade or occupation of each applicant, the cause and duration of non-employment, whether married or single, the number of dependent children, together with such other facts as may be required by the bureau of labor statistics to be used by said bureau: *Provided*, that no such special registers shall be open to public inspection at any time, and that such statistical and sociological data as the bureau of labor may require shall be held in confidence by said bureau, and so published as not to reveal the identity of any one: *And, provided*, further, that any applicant who shall decline to furnish answers to the questions contained in special registers shall not thereby forfeit any rights to any employment the office might secure.

§ 4. Each such superintendent shall report on Thursday of each week to the State bureau of labor statistics the number of applications for positions and for help received during the preceding week, also those unfilled applications remaining on the books at the beginning of the week. Such lists shall not contain the names or addresses of any applicant, but shall show the number of situations desired and the number of persons wanted at each specified trade or occupation. It shall also show the number and character of the positions secured during the preceding week. Upon receipt of these lists, and not later than Saturday of each week, the secretary of the said bureau of labor statistics shall cause to be printed a sheet showing separately and in combination the lists received from all such free employment offices; and he shall cause a sufficient number of such sheets to be printed to enable him to mail, and he shall so mail, on Saturday of each week, two of said sheets to each superintendent of a free employment office, one to be filed by said superintendent and one to be conspicuously posted in each such office. A copy of such sheet shall also be mailed on each Saturday by the secretary of the State bureau of labor statistics to each State inspector of factories and each State inspector of mines. And it is hereby made the duty of said factory inspectors and coal mine inspectors to do all they reasonably can to assist in securing situations for such applicants for work, and describe the character of work and cause of the scarcity of workmen, and to secure for the free employment offices the coöperation of the employers of labor in factories and mines. It shall be the duty of such factory inspectors and coal mine inspectors to immediately notify the superintendent of free employment offices of any and all vacancies or opportunities for employment that shall come to their notice.

§ 5. It shall be the duty of each such superintendent of a free employment office to immediately put himself in communication with the principal manufacturers, merchants and other employers of labor, and to use all diligence in securing the coöperation of the said employers of labor, with the purposes and objects of said employment offices. To this end it shall be competent for such superintendents to advertise in the columns of daily newspapers for such situations as he has applicants to fill, and he may advertise in a general way for the coöperation of large contractors and employers in such trade journals or special publications as reach such employers, whether such trade or special journals are published within the State of

Illinois or not: *Provided*, that not more than four hundred dollars or as much thereof as shall be necessary, shall be expended by the superintendent of any one such office for advertising any one year.

§ 6. It shall be the duty of each such superintendent to make report to the State bureau of labor statistics annually, not later than December first of each year, concerning the work of his office for the year ending October first of same year, together with a statement of the expenses of the same, including the charges of an interpreter when necessary, and such reports shall be published by the said bureau of labor statistics annually with its coal report. Each such superintendent shall also perform such other duties in the collection of statistics of labor, as the secretary of the bureau of labor statistics may require.

§ 7. No fee or compensation shall be charged or received, directly or indirectly, from persons applying for employment or help through said free employment offices; and any superintendent, assistant superintendent or clerk who shall accept, directly or indirectly, any fee or compensation from any applicant, or from his or her representative, shall be deemed guilty of a misdemeanor, and, upon conviction shall be fined not less than twenty-five nor more than fifty dollars and imprisoned in the county jail not more than thirty days.

§ 8. In no case shall the superintendent of any free employment office created by this act, furnish or cause to be furnished, workmen or other employes to any applicant for help whose employes are at that time on strike, or locked out; nor shall any list of names and addresses of applicants for employment be shown to any employer whose employes are on strike or locked out; nor shall such list be exposed where it can be copied or used by an employer whose employes are on strike or locked out.

§ 9. The term "applicant for employment" as used in this act shall be construed to mean any person seeking work of any lawful character, and "applicant for help" shall mean any person or persons seeking help in any legitimate enterprise; and nothing in this act shall be construed to limit the meaning of the term work to manual occupation, but it shall include professional service, and any and all other legitimate services.

§ 10. No person, firm or corporations in the cities, designated in section 1, of this act, shall open, operate or maintain a private employment agency for hire, or where a fee is charged to either applicants for employment or for help, without first having obtained a license from the Secretary of State, which license shall be two hundred dollars per annum, and who shall be required to give a bond to the people of the State of Illinois in the penal sum of one thousand dollars, for the faithful performance of the duties of private employment agent; and no such private agent shall print, publish, or paint on any sign, window, or newspaper publication, a name similar to that of the Illinois Free Employment Offices. And any person, firm or corporation violating the provisions of this act, or any part thereof, shall be deemed guilty of a misdemeanor and upon conviction shall be fined not less than fifty nor more than one hundred dollars.



§ 11. Whenever, in the opinion of the board of commissioners of labor, the superintendent of any free employment office is not duly diligent or energetic in the performance of his duties, they may summon such superintendent to appear before them and show cause why he should not be recommended to the Governor for removal, and unless such cause is clearly shown the said board may so recommend. In the consideration of such case an unexplained low percentage of positions secured to applicants for situations and help registered, lack of intelligent interest and application to the work, or a general inaptitude or inefficiency shall be considered by said board a sufficient ground upon which to recommend a removal. And if, in the opinion of the Governor, such lack of efficiency can not be remedied by reproof and discipline, he shall remove as recommended by said board: *Provided*, that the Governor may at any time remove any superintendent, assistant superintendent or clerk for cause.

§ 12. All such printing, blanks, blank books, stationery and postage as may be necessary for the proper conduct of the business of the offices herein created shall be furnished by the Secretary of State upon requisition for the same made by the secretary of the bureau of labor statistics.

APPROVED April 11, 1899. In force July 1, 1899.

By the provisions of Section 1 of the Act, free offices are confined to cities containing fifty thousand population, and authorizing three offices in each city containing one million population or over. This provision limits, for the present, the operation of such agencies to the City of Chicago. When the forthcoming census is taken, probably other cities in the State will show the necessary population entitling them to a free employment office. Aside from the many requirements of the law which are common to similar enactments of other states, some new and important features are added. Attention is particularly directed to the provisions of Sections 8 and 10. In the former, the superintendent is prohibited from exhibiting any list of names and addresses of applicants for employment, to any employer whose workmen are on strike or locked out. This provision was inserted from a consideration of the rights of organized labor, and justly estops the State from becoming an agency in the hands of designing men, for the purpose of reducing wages. By the latter section, all persons, firms or corporations conducting a private agency for hire, are required to file a bond and pay a fee of \$200 per annum. It was believed that the effect of this provision would permit only the more reputable concerns to operate, and that they ultimately would disappear as a result of the free agencies.

As required by Section 2 of the law the commissioners of labor recommended and the governor appointed the following named persons for the respective positions:

North Side office, Wm. E. Goodman, Supt.; Thomas Devinish, Asst. Supt.; Mrs. J. C. Schaufel, Clerk.

South Side office, George W. Geary, Supt.; John Felker, Asst. Supt.; Miss Margaret E. May, Clerk.

West Side office, F. E. Erickson Supt.; P. J. Meaney, Asst. Supt.; Miss Mary Henneberry, Clerk.

In conformity with the provisions of the law herein referred to, the Secretary of this Bureau, in conjunction with the Superintendents and their assistants, selected the following locations as being the most suitable to conduct the business of the free employment offices:

North Side, 234 Chicago avenue.

South Side, 44 Congress street.

West Side, 28 Ogden avenue.

These offices were opened with appropriate ceremonies August 2, 1899. Anticipating that the ordinary demands on such agencies in the City of Chicago would exceed those of any city where similar work had been undertaken, provision was made in the law for two assistants to the Superintendent. Experience early demonstrated that the help provided was inadequate to perform the work and keep the detailed records required. Extra help was temporarily assigned, and very much to the regret of those charged with the preparatory work, some of the records and forms were reduced in order to bring the offices more nearly within their respective appropriations. In view of the unexpected volume of business, the amounts allowed by the legislature for the maintenance of the respective offices should have been more than doubled. Under the circumstances a deficit can not be avoided if the departments are to continue, and the friends of this latest humanitarian departure must look to the next General Assembly to make good the shortage, presenting as a sufficient reason for the granting of the request, the splendid results of their brief existence.

Section 6 of the law requires each superintendent to make report to the Bureau annually, not later than December 1, of each year, concerning the work of his office for the year ending October 1, of the same year, with a statement of the expenses of the same; said reports to be published by the Bureau in connection with its annual Coal Report. On account of the date on which these offices were opened, this report is but a partial one, covering only a period of nine weeks from August 2 to October 1, 1899, but is designated as the First Annual Report. From the returns made by the superintendents, it is shown that the following number of applications for employment were filed in each of the offices, to October 1, 1899:

TABLE I.—*The Combined Business of the Three Offices for Nine Weeks, August 2 to October 1, 1899.*

OFFICES.	APPLICATIONS FOR EMPLOYMENT.			APPLICATIONS FOR HELP.	
	Number Filed.	Number of Positions Secured.	Number Unfilled.	Number Filed.	Number Unfilled.
North Side Office—Males .....	2,909	1,189	1,720	2,688	1,499
North Side Office—Females .....	989	823	166	1,339	516
Totals .....	3,898	2,012	1,886	4,027	2,015
South Side Office—Males .....	4,350	1,705	2,645	2,514	809
South Side Office—Females .....	1,331	1,150	181	1,751	601
Totals .....	5,681	2,855	2,826	4,265	1,410
West Side Office—Males.....	2,566	858	1,708	901	43
West Side Office—Females .....	952	772	180	1,177	405
Totals .....	3,518	1,630	1,888	2,078	448
Three offices, 9 weeks—Males.....	9,825	3,752	6,073	6,103	2,351
Three offices, 9 weeks—Females .....	3,272	2,745	527	4,267	1,522
Grand totals .....	13,097	6,497	6,600	10,370	3,873

From this table it will be observed that during the brief period embraced by the report there were received at all of the offices 9,825 applications for male, and 3,272 for female employment, a total of 13,097. During the same time the number of applications for help filed were, for males, 6,103; females, 4,267, a total of 10,370.

It is further shown that of the applications for employment, 3,752 males and 2,745 females, or a total of 6,497, obtained situations through the agencies. The number of applications of both sexes for labor exceeds by 2,727 the applications for help, while the number furnished with positions is less by 3,873 than the entire number of those applying for help. This presents, on the one hand, a surplus of labor, and on the other, the evident inability of the offices to completely furnish all the kinds of labor required. By far the greatest per cent of applications for labor unprovided for relates, as the superintendents' reports show, to positions of a somewhat confidential nature, as clerks, watchmen, and others of a similar class. Of the entire number of male applications for employment, 38.2 per cent secured positions; while 62 per cent of all applications for male

help were filled. Of the applications for female labor 84 per cent secured situations, and 64.3 per cent of all applications for help of this class were filled.

Combining both male and female applications for employment, it is shown that 50 per cent have been supplied with positions, and of all applications for help 62.7 per cent have been filled.

Measured by the work performed, the South Side office ranks first, due principally to the fact of its location in the central or business section of the city. Compared with the North Side office, it received, during the nine weeks here considered, 1,783 more applications for employment of all kinds, and furnished 843 more situations. Of the 4,027 applications for help received during this period at the North Side office, 2,015 remained unfilled, while of the 4,265 similar applications made at the South Side office, but 1,410 remained unfilled. The per cent of places secured through the West Side office is about equal to that of the others, although the number registering for employment is considerably less. Of the total applications for employment, positions were obtained for 51 per cent at the North and South Side offices; the West Side office secured places for 46 per cent of those applying for employment.

In the following table of percentages is reported the positions secured and help furnished through each, and for all the offices.

TABLE II.—*Percentages of Positions Secured and Help Furnished, Both Male and Female.*

OFFICES.	PERCENTAGES OF POSITIONS SECURED APPLICANTS FOR EMPLOYMENT.			PERCENTAGES OF HELP FURNISHED APPLICANTS.		
	Male.	Female.	Both male and female.	Male.	Female.	Both male and female.
North Side .....	40.9	83.2	51.6	44.2	61.5	49.9
South Side .....	39.2	86.4	50.3	67.8	65.7	66.9
West Side .....	33.4	81.1	46.3	95.2	65.6	78.4
The three offices .....	38.2	83.9	49.6	61.5	64.3	62.7

The compensation paid to applicants of both sexes furnished employment, whether by the day, week or month, appears in the table following:

TABLE III.—Average Wages Paid to Applicants Furnished Employment by the Three Offices, August 2 to October 1, 1899.

MALES.

CHARACTER OF OCCUPATIONS.	WAGES.		
	Per day.	Per week.	Per month.
Agents.....	1	1	1
Architects.....		\$16 to \$20	
Bakers.....	\$1.60	8 to 14	
Barbers.....	2.00	7 to 12	
Barnmen.....			*\$15, \$20, \$25, \$30
Bartenders.....		6 to 12	*25
Bicycle workers.....		9 to 12	
Bill clerks.....		6 to 9	
Blacksmiths.....	2.25, 2.50, 3.50		
Blacksmith helpers.....	1.50		
Boilermakers.....	2.25 to 3.00		
Bookbinders.....		8 to 12	
Bookkeepers.....			40 to 60
Box makers.....	1.75 to 2.25		
Brass finishers.....	2.50 to 3.00		
Bricklayers.....	4.00		
Buggy washers.....			25 to 35
Butchers.....		8 to 12	
Butlers.....		6 to 10	*20
Canvassers.....	1	16	1
Car builders.....	2.10		
Car cleaners.....	1.60		
Candy makers.....		8 to 12	
Carpenters.....	2.10, 2.30, 2.50		
Cashiers.....		8 to 12	
Clerks.....		5 to 15	
Clerks and salesmen.....		6 to 12	
Coal heavers.....	1.75		
Coachmen.....			*20, 25, 40
Collectors.....		8 to 10	
Cooks.....		5, 6 to 12	
Conductors.....	1.87½		
Dishwashers.....		*4, 5, 6 to 7	
Draftsmen.....		15 to 25	
Drill press men.....	1.60		
Drivers.....	1.50		
Druggists, clerks.....		6 to 10	
Electricians.....		8 to 15	
Elevator men.....		6 to 9	37 to 50
Engineers.....			25, 40, 60, 65
Errand boys.....		3, 4, 5, 6	
Express messenger.....			60
Factory hands.....		5 to 12	
Florists.....		8 to 12	
Farm hands.....			*18 to 25
Folders.....		6 to 8	
Firemen.....			25 to 55
Gardners.....		9	*20
Hod carriers.....	2.00		
Housemen.....		3 to 6	*10 to 22
Iron workers.....	2.00, 2.50, 3.50		
Janitors.....			20, 30, 40, 75
Kitchen work.....		3.50 to 6	*12 to 20
Laborers.....	1.25, 1.50, 2.00, 2.25		
Laundrymen.....		9	20 to 35
Lime mixer.....			
Machinists.....	2.25 to 3.00	10 to 15	
Merchants.....		8 to 15	
Molder helpers.....	1.50 to 2.00		
Motermen.....	2.10		40
Molders.....	2.50 to 3.00		
Nurses.....		8, 10 to 15	
Oilers.....		7 to 10	
Packers.....		5 to 10	
Painters.....	2.00, 2.50 to 3.00		
Paper hangers.....	2.00 to 3.00		
Photographers.....		12 to 15	

## Average Wages Paid.—Table III.—Concluded.

## MALES—Concluded.

CHARACTER OF OCCUPATIONS.	WAGES.		
	Per day.	Per week.	Per month.
Plumbers.....	\$2.50 to 4.00		
Polishers.....		\$12 to 14	
Porters.....		*4 to 5, 9, 10	
Pressmen.....		8 to 12, 15	
Printers.....		9 to 15	
Railroad men.....	1.75 to 2.25		
Salesmen.....		9 to 15	\$30 to 100
Shipping clerk.....		7 to 12	
Solicitors.....	†		†
Steam fitters.....	3.25 to 4.00		
Stenographers.....		8 to 15	
Tailors.....		5, 12 to 16	
Teamsters.....		8 to 12	
Timekeepers.....		8 to 12	
Tinsmiths.....	2.00, 2.75, 3.25		
Truckmen.....	1.50		
Upholsterers.....		12	
Vegetable men.....			*15
Vise hands.....		10.50	
Waiters.....		*5, 8 to 12	
Watchmen.....			30 to 50
Whitewasher.....	1.50		
Wholesale men.....		6 to 12	
Window washers.....		9 to 14	
Wood finishers.....	2.25		
Wood workers.....		8 to 12	

\* With board.  
† With commissions.

‡ Commissions.  
§ Twenty-five cents per hour.

## FEMALES.

CHARACTER OF OCCUPATIONS.	WAGES.		
	Per day.	Per week.	Per month.
Addressers.....		\$5 to \$8	
Barbers.....		8 to 12	
Bookkeepers.....		7 to 12	
Canvassers.....	‡	‡	‡
Cashiers.....		5.00 to 9.00	
Chambermaids.....		3.00 to 4.50	*\$12
Clerks.....		3.50 to 9.00	
Cooks.....		*4.00 to 10.00	
Copyists.....		6.00 to 8.00	
Day workers.....	1.00 to 1.50		
Dishwashers.....		*3.00 to 5.00	
Dressmakers.....		6.00 to 12.00	
Factory workers.....		3.00 to 6.00	
General work.....		*2.50 to 5.00	
Housekeepers.....		3.00 to 7.00	
Housework.....		2.00 to 6.00	
Janitresses.....			20 to 35
Kitchen work.....		*4.00 to 6.00	
Lady's maid.....		5.00 to 8.00	
Laundresses.....	1.00 to 1.50	4.00, 5.00, 8.00	
Nurses.....		*2.50, 3.00, 9.00	
Pantry work.....		*4.00 to 5.00	
Saleswomen.....		4.00 to 8.00	
Scrubwomen.....	1.00 to 1.50		*15
Seamstresses.....	1.00 to 1.75	*5.00 to 7.00	
Second work.....		*3.00 to 5.00	
Stenographers.....		6.00, 8.00, 12.00	
Teachers.....			40
Waitresses.....		4.00 to 7.00	*15 to 20

\* With board, \$3.00 to \$4.00 per week.  
† With board and room.

‡ In private family with board and room.  
§ Commissions.

Some idea of the diverse character of the service seeking employment will be gathered from the following tables, which gives in detail the number of applications filed for male and female labor at all of the offices, and the number and character of positions secured.

TABLE IV.—*Showing the combined work of the three offices; applications for employment filed and employment secured. Nine weeks, August 2 to October 1, 1899.*

### MALES.

CHARACTER OF OCCUPATIONS.	APPLICATIONS FOR EMPLOYMENT FILED.			Total.	EMPLOYMENT SECURED.			Total.
	North Side Office.	South Side Office.	West Side Office.		North Side Office.	South Side Office.	West Side Office.	
Agents .....		2	3	5				6
Any occupation .....			49	49				6
Apprentices .....			49	49				5
Architects .....	3	1		4				
Auctioneers .....			1	1				
Bakers .....	19	8	3	30	5	2	1	8
Barbers .....	4	23	6	33	2		3	5
Barnmen .....	24	96	1	121	33	55		88
Bartenders .....	31	50	27	108	3	6	4	13
Bell boys .....	2		4	6				
Bicycle workers .....	6	5	3	14				
Bill clerks .....		23	1	24		2		2
Blacksmiths .....	14	24	16	54	11	2	2	15
Blacksmith helpers .....	2			2				1
Boiler makers .....	2	1		3				
Bookbinders .....	2	1	2	5				
Bookkeepers .....	46	89	15	150				
Boxmakers .....	2	2	2	6				
Brass finishers .....		1	1	2				
Bricklayers .....	3	10	4	17		4		4
Butchers .....	16	9	15	40			6	8
Butlers .....	2	8		10	1	2		3
Cabinet makers .....	1		1	2				
Can makers .....	1			1				
Candy makers .....	2	1		3				
Canvassers .....	13	6	2	21	6	1		7
Car builders .....					15			15
Car cleaners .....	2			2	2			2
Carpenters .....	45	59	62	169	13	5	6	24
Carriage washers .....		6	1	7		2	1	3
Cash boys .....			1	1				
Cashiers .....		24	2	26		1		1
Chefs .....								
Cigarmakers .....	3		2	5				
Circular distributors .....			2	2			1	1
Clerical work .....			149	149			2	2
Clerks .....	301	162		463	21	2		23
Coachmen .....	37	42	25	104	2	3	6	11
Coal heavers .....					19			19
Coal miners .....			1	1				
Coal weighers .....			1	1				
Collectors .....	7	18	34	59		1	1	2
Companions .....	1			1				
Cooks .....	49	97	25	171	11	52	13	76
Coopers .....	1		1	1				
Conductors .....			4	4	1			1
Core makers .....	1		3	4				
Cupola tenders .....	1		2	3			1	1
Dishwashers .....	44	74	4	122	40	29	6	75
Draughtsmen .....	1	2	1	4				
Drill press men .....	13		7	20	1			1
Drivers .....	115			115	24			24





Work of the Three Offices—Table IV—Concluded.

CHARACTER OF OCCUPATIONS.	APPLICATIONS FOR EMPLOYMENT FILED.			Total.	EMPLOYMENT SECURED.			Total.
	North Side Office.	South Side Office.	West Side Office.		North Side Office.	South Side Office.	West Side Office.	
Stock keepers.....			7	7				
Stone cutters.....	1		4	5				
Stone masons.....	3			3				
Tailors.....	2	6	2	10	1			1
Teachers.....	3	5	4	12				
Teamsters.....	122	105	181	408	64	52	45	161
Telegraphers.....		1	2	3				
Tile roofers.....								
Time keepers.....	3	29	3	35		2		2
Tinsmiths.....	2	2	1	5	1			1
Tool makers.....			2	2				
Truckmen.....			5	5	1			1
Undertakers.....	1		1	2				
Upholsters.....	2	1	5	8			2	2
Vegetable men.....					1			1
Vest makers.....	1			1				
Vise hands.....	13		4	17	3			3
Wagon makers.....	1			1				
Waiters.....	28	70	8	106	15	58	3	76
Watchmakers.....	1			1				
Watchmen.....	120	155	195	470	11	3	4	18
Whitewashers.....	3			3	1			1
Wholesale men.....		48	45	93		42	3	45
Window dressers.....	1			1				
Window washers.....	1	9		10		9		9
Wood finishers.....	4			4	1			1
Wood workers.....		15	20	35			5	5
Yardmen.....			2	2			4	4
Not classified.....	16	9	24	49				
Totals—152 positions.....	2,909	4,350	2,566	9,825	1,189	1,705	588	3,752

TABLE V.—Showing the combined work of the three offices, applications for employment filed and employment secured. Nine weeks August 2 to October 1, 1899.

## FEMALES.

CHARACTER OF OCCUPATIONS.	APPLICATIONS FOR EMPLOYMENT FILED.			Total.	EMPLOYMENT SECURED.			Total.
	North Side Office.	South Side Office.	West Side Office.		North Side Office.	South Side Office.	West Side Office.	
Addressers.....			6	6				
Apprentices.....			1	1				
Attendants.....			1	1				
Barbers.....		1		1				
Bookkeepers.....	4	7	3	14				
Bottle labelers.....			1	1				
Canvassers.....		2	1	3				
Cash girls.....			1	1				
Cashiers.....	6	3	10	19				
Chambermaids.....	41	106	43	193	51	92	30	173
Clerks.....	66	104	16	186	7	7	6	20
Companions.....	2		1	3				
Cooks.....	75	132	56	263	99	121	78	298
Copyists.....			5	5				
Daywork.....	117		128	245	24		54	78
Dining room help.....			26	26			35	35

Work of the Three Offices—Table V.—Concluded.

CHARACTER OF OCCUPATIONS.	APPLICATIONS FOR EMPLOYMENT FILED.			Total.	EMPLOYMENT SECURED.			Total.
	North Side Office.	South Side Office.	West Side Office.		North Side Office.	South Side Office.	West Side Office.	
Dishwashers.....	14	67	17	98	24	62	20	106
Domestics.....			255	255			345	345
Dressmakers.....		16	7	23		1		1
Factory work.....	25	12	29	66	15	1	27	43
General work.....	288			288	298			298
Governesses.....	2		1	3				
Housekeepers.....	50	18	56	124	16	3	17	36
Housework.....		423		423		659		659
Janitresses.....	4	14	8	26		3	1	4
Kitchen help.....	47	44	15	106	66	33	12	111
Lady's maid.....		2		2				
Laundresses.....	40	57	13	110	66	32	15	113
Mail order help.....			2	2				
Matrons.....			3	3				
Milliners.....			1	1				
Nurses.....	55	44	49	148	17	17	18	52
Office work.....			46	46				
Pantry work.....	3			3	3			3
Photographers.....	1			1				
Printers.....	1		1	2				
Proof readers.....			1	1				
Reception service.....	3			3				
Saleswomen.....		7		7	7	2		9
Scrub women.....	2	89		91	10	33		43
Seamstresses.....	8	26	17	51	9	6	11	26
Second work.....	85	24	35	204	43	13	75	131
Solicitors.....	1			1				
Stenographers.....	9	9	20	38	1	1	2	4
Teachers.....	1	1	4	6				
Waitresses.....	36	112	21	169	67	64	26	157
Wrappers.....			1	1				
Not classified.....			1	1				
Totals—48 positions.....	989	1,331	952	3,272	823	1,150	772	2,745

It will be observed that of the 152 different male classes applying for employment, but comparatively few represent recognized trades or occupations; the greater portion of the unfilled applications are made by persons seeking places as clerks, bookkeepers, coachmen, collectors, salesmen, errand boys, watchmen, porters, etc. This rather numerous element illustrates the common tendency in human nature to appropriate the places involving the least physical exertion; they are also the most difficult to obtain, as those requiring such service hesitate about assigning strangers to the duties of positions of a somewhat confidential nature. Neither should it be assumed that all applicants in this class represent the unemployed. The superintendents in charge of these offices report that a considerable per cent were employed at the date of filing their applications, and hoped by so doing to secure better positions. By far the most numerous and needy class is that representing the common laborers for whose special benefit the offices were organized. An examination

of the returns for this class of labor show that these demands have been quite fully met. Of the 2,171 laborers making application, 2,170 were supplied with places. During the period covered by this report 1,557 more applications for help of this character were filed than were supplied, indicating an unusual demand for this class of service.

It frequently occurs in the reports of these offices, and particularly in the table relating to female applicants, where the number furnished with particular places exceed the number applying for them. This apparent discrepancy is explained by applicants accepting other employment than that for which they made application. The tables following show the age periods of the different applicants:

TABLE VI.—*Age Periods of Male Applicants for Employment—  
Nine Weeks, August 2 to October 1, 1899.*

Offices.	Under 20 years.	20 but under 30 years.	30 but under 40 years.	40 but under 50 years.	50 but under 60 years.	60 years and over.	Not re- ported.	Total.
North Side.....	309	1,163	809	395	215	17	1	2,909
South Side.....	646	1,392	1,116	648	484	64	.....	4,350
West Side.....	296	803	605	431	285	56	.....	2,566
Totals.....	1,251	3,448	2,530	1,474	984	137	1	9,825

TABLE VII.—*Age Periods of Female Applicants for Employment—  
Nine Weeks, August 2 to October 1, 1899.*

Offices.	Under 20 years.	20 but under 30 years.	30 but under 40 years.	40 but under 50 years.	50 but under 60 years.	60 years and over.	Not re- ported.	Total.
North Side.....	156	338	180	127	40	2	146	989
South Side.....	399	620	272	36	4	.....	.....	1,331
West Side.....	183	349	228	124	47	21	.....	952
Totals.....	738	1,307	680	287	91	23	146	3,272

The table following shows the sex, number and nationality of those registering for employment:

TABLE VIII.—*Nationality of Applicants for Employment at the Three Offices—Nine Weeks—August 2 to October 1, 1899.*

NATIONALITY.	MALES.				FEMALES.			
	North Side Office.	South Side Office.	West Side Office.	Total.	North Side Office.	South Side Office.	West Side Office.	Total.
American.....	1,497	2,635	1,568	5,700	401	690	590	1,681
Armenian.....			3	3				
Austrian.....	21	154	15	190	3	6		9
Bavarian.....	2			2				
Belgian.....	4		1	5				
Bohemian.....	4	62	36	102	3	77	1	81
Canadian.....	64	161	62	287	8	36	23	67
Danish.....	12	57	39	108	7	13	8	28
English.....	64	157	98	319	24	52	27	103
French.....	8	84	5	97	8	16	1	25
German.....	506	313	220	1,039	125	81	65	271
Greek.....	4	26		30		2		2
Hebrew.....			7	7				
Hollander.....	9	49	14	72			3	3
Hungarian.....	4		4	8	3			3
Irish.....	119	277	179	575	119	161	116	396
Italian.....	10	55	11	76		11	1	12
Norwegian.....	37	47		84	13	23		36
Polish.....	23		24	47		37	2	39
Prussian.....	3			3				
Russian.....	12	36	4	52		17		17
Scandinavian.....			197	197			96	96
Scotch.....	30	94	52	176	15	22	13	50
Spanish.....						2		2
Swede.....	247	107		354	113	81		194
Swiss.....	16	23	9	48		4	1	5
Syrian.....			1	1				
Turk.....	4		2	6				
Welsh.....		13	11	24			5	5
Not reported.....	209		4	213	147			147
Totals.....	2,909	4,350	2,566	9,825	989	1,331	952	3,272

The most suggestive feature in connection with the facts here presented is the striking preponderance of Americans. This class, it will be noticed, represents considerably more than one half the entire number of all other applicants combined. It is sometimes easier to discover a fact than to assign a reason for it. While the statistician is not expected to solve sociological problems, it is patent that whatever the cause operating to produce these results, the American, in the modern process of industrial displacement, has been and is the principal sufferer. In certain specialized occupations he has surrendered to the superior force of his foreign competitor.

While much of the hard, disagreeable work of the world has, in the ordinary course of industrial evolution, been committed to other hands, and many new avenues opened for the employment and utilization of native genius and energy, still the simple story of these

figures burden the brain with the impression that, in the struggle of human life, many have been ignored and neglected, and not without regret is it noted, that in the world's busy places, seeking employment, are found in greatest numbers, the representatives of a superior race.

As a partial explanation of the excess of Americans, compared with other nationalities, applying for employment, it may be proper to suggest that they predominate among the class of applicants seeking to obtain clerical positions, and probably represent the remnant of that portion of the population which years ago rushed to the large cities, in the hope of securing sinecure employment. They rank among the so-called educated classes whose wits have proved unequal to their wants, and whose necessities constitute a standing rebuke to that system of vicious instruction which induce men to regard the occupation of the common laborer as something less than honorable.

Following will appear the reports of each of the three superintendents, showing in detail the work accomplished by them, from the date of opening the offices, August 2, to October 1, 1899. Following these will be found a general summary, giving the combined business of all of the offices.

ILLINOIS FREE EMPLOYMENT OFFICE,  
NORTH SIDE OFFICE, 234, 234½ CHICAGO AVENUE,  
CHICAGO, October 1, 1899.

HON. DAVID ROSS, *Secretary Bureau of Labor Statistics, Springfield, Illinois:*

SIR:—In compliance with section 6 of the law establishing free employment offices, I submit herewith the first report of this office, extending from August 2 to October 1, 1899. It will be noticed that the business of the office, during the brief period which it covers, has by far exceeded our most sanguine expectations. You will appreciate the fact that all the work done by the private employment offices is obtained principally through the medium of advertising in the Chicago newspapers; on account of our limited appropriation we have not expended anything in advertising.

There are several things that in a way come into this office, outside of our regular work of procuring employment. The Civic Federation of Chicago have just found us out and are beginning to send us deserving people in search of employment, and I am happy to say that all that have been sent have been properly taken care of. The Bureau of Associated Charities of the city has sent us several cases, all of which were immediately cared for. There have been several other cases of one kind and another that have needed the most prompt attention in the way of charity, and all of the employés of this office have at once become interested. I am pleased to report that in every instance we have been able to give immediate relief without extra expense to the State.

In this report you will observe a great number of applications for help that we have not been able to fill. This is the old case of supply and demand, and in this particular the supply was very short. At times we have large demands for certain kinds of help, as at the present time we cannot supply molders, tinsmiths nor butchers to meet the demand. We are receiving calls from all over the country for this class of help.

As the seasons change the demands for help in the several avocations change, and I believe if we had sufficient funds to enable us to use the newspapers for advertising purposes, we would be much better able to help the employer and employé. The only demands for help we have had that have remained unsupplied since the opening of this office is for farm hands and laborers; the principal trouble is, that Chicago farm hands do not know how to milk a cow, and every farm hand we have had a call for is wanted for this kind of work.

While my experience in the employment agency work is limited, I think some changes in the law should be made, and shall take the opportunity of submitting some recommendations in my next annual report. Following this report will be found an itemized statement of the expenses incident to equipping and maintaining the office from August 2 to October 1, 1899.

Respectfully submitted,

W. E. GOODMAN, *Supt.*

## ILLINOIS FREE EMPLOYMENT OFFICES.

NORTH SIDE OFFICE, 234 CHICAGO AVENUE.

Table giving the Character of the Positions Applied for, both for Employment and for Help, the Number of Positions Secured and the Number Remaining Unfilled:

## MALES.

CHARACTER OF POSITIONS.	APPLICATIONS FOR EMPLOYMENT.			APPLICATIONS FOR HELP.	
	Number Filed.	Number of Positions Secured.	Number Unfilled.	Number Filed.	Number Unfilled.
Architect.....	3			3	
Bicycle worker.....	6			6	
Bartender.....	31	3		28	3
Barber.....	4	2		2	1
Barnman.....	24	33		33	
Blacksmith.....	14	11		3	13
Blacksmith helpers.....	2	1		1	6
Bookkeeper.....	46			46	
Baker.....	19	5		14	1
Box maker.....	2			2	
Bookbinder.....	2			2	
Boiler maker.....	2			2	
Bricklayer.....	3			3	
Butcher.....	16			16	1
Butler.....	2	1		1	
Bell boy.....	2			2	
Candy maker.....	2			2	
Can maker.....	1			1	
Canvasser.....	13	6		7	1
Car cleaner.....	2	2		3	1
Carpenters.....	48	13		35	18
Car builders.....		15			35
Cigarmaker.....	3			3	
Clerks.....	301	21		280	15
Collectors.....	7			7	
Coachmen.....	37	2		35	1
Coal heavers.....		19			21
Cooks.....	49	11		38	8
Companion.....	1			1	
Coalminers.....					75
Cupola tender.....	1			1	
Core maker.....	1			1	
Cabinet maker.....	1			1	
Chef.....					1
Conductor.....		1			2
Driver.....	115	24		91	8
Dranghtsman.....	1			1	
Drill press hand.....	13	1		12	
Druggist.....	3			3	
Dyer.....	1			1	
Dishwasher.....	44	40		4	1
Electrical lineman.....	2			2	6
Elevator man.....	24	6		18	2
Engineer.....	49	7		42	6
Electrician.....	14			14	
Errand boy.....	45	24		21	4
Florist.....	1			1	
Farm hands.....	83	83			35
Factory hands.....	96	10		86	5
Firemen.....	57	11		46	9
Gardener.....	7	1		6	1
Houseman.....	86	71		15	70
Iron worker.....	50	7		3	1
Janitor.....	112	9		103	9
Kitchen work.....	12	18			18
Laborers.....	730	534		196	1,109
Laundryman.....	12	5		7	5
Lime mixer.....					1
Locksmith.....	1			1	
Machinist.....	113	12		101	1

## North Side Office—Males—Concluded.

CHARACTER OF POSITIONS.	APPLICATIONS FOR EMPLOYMENT.			APPLICATIONS FOR HELP.	
	Number Filed.	Number of Positions Secured.	Number Unfilled.	Number Filed.	Number Unfilled.
Metal worker.....	2	.....	2	2	2
Molder's helpers.....	1	.....	2	10	8
Motorman.....	2	1	1	.....	.....
Music teacher.....	2	.....	2	.....	.....
Machine hands.....	16	.....	16	.....	.....
Nickel plater.....	3	.....	3	.....	.....
Nurse.....	4	1	3	1	.....
Organ builder.....	11	.....	11	.....	.....
Painter.....	43	7	36	15	8
Polisher.....	6	.....	6	.....	.....
Porters.....	98	41	57	51	10
Pressman.....	10	1	9	1	1
Printer.....	17	.....	17	.....	.....
Plumber.....	14	.....	14	.....	.....
Packer.....	10	.....	10	.....	.....
Plasterer.....	1	.....	1	.....	.....
Photographer.....	1	.....	1	.....	.....
Stone cutter.....	1	.....	1	.....	.....
Stone mason.....	3	.....	3	.....	.....
Salesman.....	26	27	.....	117	90
Stenographer.....	6	.....	6	.....	.....
Steam fitter.....	3	.....	3	.....	.....
Shoemaker.....	7	.....	7	.....	.....
Steward.....	3	.....	3	.....	.....
Sawyer.....	7	.....	7	.....	.....
Solicitor.....	12	.....	12	4	4
Shipping clerk.....	3	1	.....	-	1
Teacher.....	3	.....	3	.....	.....
Teamster.....	122	64	58	79	15
Tailors.....	2	1	1	7	6
Tinsmith.....	2	1	1	2	1
Truckman.....	.....	1	.....	1	.....
Timekeeper.....	3	.....	3	.....	.....
Tile roofer.....	.....	.....	.....	1	1
Upholsterers.....	2	.....	2	.....	.....
Undertaker.....	1	.....	1	.....	.....
Vise hands.....	13	3	10	2	.....
Vest maker.....	1	.....	1	.....	.....
Vegetable man.....	.....	1	.....	1	.....
Watchman.....	120	11	109	11	.....
Waiter.....	28	15	13	18	3
Window dresser.....	1	.....	1	1	1
Wood finisher.....	4	1	3	3	2
Watchmaker.....	1	.....	1	.....	.....
Window washer.....	1	.....	1	.....	.....
Whitewasher.....	3	1	2	10	9
Wagon maker.....	1	.....	1	.....	.....
Not classified.....	16	.....	16	.....	.....
Total.....	2,909	1,189	1,775	2,688	1,516
Positions secured applicants who applied for other positions.....	.....	.....	55	.....	.....
Total.....	2,909	1,189	1,720	2,688	1,516
Help furnished not applied for.....	.....	.....	.....	.....	17
Total—104 positions.....	2,909	1,189	1,720	2,688	1,499



## North Side Office—Continued.

## FEMALES.

CHARACTER OF POSITIONS.	APPLICATIONS FOR EMPLOYMENT.			APPLICATIONS FOR HELP.	
	Number Filed.	Number of Positions Secured.	Number Unfilled.	Number Filed.	Number Unfilled.
Bookkeeper.....	4		4		
Clerk.....	67	7	59	6	
Cooks.....	75	99		140	41
Chambermaid.....	44	51		48	
Companion.....	2		2		
Cashier.....	6		6		
Day work.....	117	24	93	29	5
Dishwasher.....	14	24		41	17
Factory work.....	25	15	10	27	12
General work.....	288	298		628	330
Governess.....	2		2		
Housekeeper.....	50	16	34	22	6
Janitress.....	4		4		
Kitchen work.....	47	66		65	
Laundress.....	40	66		78	12
Nurse.....	55	17	38	26	9
Office work.....				2	2
Photographer.....	1		1		
Pantry work.....	3	3		3	
Printer.....	1		1		
Reception service.....	3		3		
Second work.....	85	43	42	55	12
Seamstress.....	2	9		23	14
Scrub woman.....	2	10		12	2
Stenographer.....	9	1	8	1	
Solicitors.....	1		1		
Saleswoman.....		7		10	3
Teacher.....	1		1		
Waitresses.....	36	67		123	56
Totals.....					
Positions secured applicants who had applied for other positions.....	989	823	309	1,339	521
			143		
Totals.....	989	823	166	1,339	521
Help furnished not applied for.....					5
Totals—29 positions.....	989	823	166	1,339	516

## RECAPITULATION.

NORTH SIDE OFFICE, October 1, 1899.

	APPLICATIONS FOR EMPLOYMENT.			APPLICATIONS FOR HELP.	
	Number Filed.	Number of Positions Secured.	Number Unfilled.	Number Filed.	Number Unfilled.
Males.....	2,909	1,189	1,720	2,688	1,499
Females.....	989	823	166	1,339	516
Totals.....	3,898	2,012	1,886	4,027	2,015

*Expense Account North Side Office, to October 1, 1899.*

Office furniture.....	\$551 50
Office safe.....	300 00
Signs.....	41 60
Moving safe.....	20 00
Office rent, July 15 to October 1.....	175 00
Postal cards.....	30 00
Postage.....	50 00
Insurance on property.....	18 00
Janitor.....	37 50
Clerical service.....	376 00
Printing.....	4 50
Telephone rent and tolls.....	32 20
Expressage.....	1 35
Rent, typewriter.....	8 00
Office supplies and expenses.....	35 76
<b>Total.....</b>	<b>\$1,694 01</b>

## ILLINOIS FREE EMPLOYMENT OFFICES,

SOUTH SIDE OFFICE, 44 CONGRESS ST.

CHICAGO, October 1, 1899.

HON. DAVID ROSS, *Secretary Bureau of Labor Statistics, Springfield, Illinois:*

SIR:—Complying with section 6 of the act of the General Assembly creating the Illinois Free Employment Offices, I beg to herewith submit the first report of the business of this office for nine weeks, August 2 to October 1, 1899, together with some interesting data taken from the applications for employment; also the expense account of this office for the same period.

If there is any doubt as to the necessity of these offices, the following report should remove it from the minds of the most skeptical; a fair idea can be obtained for the need of offices of this kind by the general benefit conferred upon those whom they were designed to aid and benefit—the employer and employé.

To those who were active in the work of encouraging and establishing these offices, there is every reason for congratulation, as the work they have accomplished is ten-fold greater in volume than any one could have anticipated, and it now seems remarkable that they remained so long unestablished.

Many reasons were advanced for the legislature taking this step; one of the main ones was the outrageous practices perpetrated on helpless working people by private agencies, robbing them of their last dollar and oftentimes sending them on long journeys in quest of employment that never existed. The State, in aiding and protecting this helpless class, has performed its real function, that of protection, in a most satisfactory manner.

Recognizing the peculiar industrial conditions existing in all large cities, Chicago, while always the scene of industrial activity, has generally contained a large element of the unemployed, which can be turned into an undesirable, if not a dangerous class, when industrial equilibrium is disturbed. These free offices, in the procuring of employment for this class, will eliminate this in a great measure.

As the work already performed has more than justified the creating of these free offices, many additional resources are needed to render them still more effective, and will no doubt be supplied by the next legislature.

The apparent large number of applicants filing applications and failing to obtain employment is susceptible of explanation; when applicants have applied for common labor they readily found employment, but when they applied for some special position and would not accept any other, it was very difficult to secure such applicants the particular position applied for.

It was found that many of these applicants at the time they applied for employment were not idle, but their object in filing an application was to secure some better or more satisfactory employment.

The daily newspapers, when these offices were opened, were very liberal in their news columns, giving us a great deal of advertising, which induced many people from the surrounding country and adjoining states to send applications for employment in Chicago, which, under the law, we were compelled to register on our books. It is as hard to keep people from flocking to large cities as it is to keep the moth from the candlelight. The activity in the business of large cities appears to be the magnet that attracts people from the outside.

The work of this office, since its establishment, has been carried on with great difficulty, owing to the limited appropriation, as the expenses for maintaining the office two months will show. It was found necessary to have additional clerical help to properly carry out the law in regard to these offices, twenty-four hours after they were opened.

Following is a report of the South Side office and the necessary expense of furnishing and maintaining the same from August 2 to October 1, 1899.

Very respectfully,

GEO. W. GEARY,  
Superintendent.

## ILLINOIS FREE EMPLOYMENT OFFICES,

SOUTH SIDE OFFICE, 41 CONGRESS STREET, CHICAGO.

*Table giving the character of positions applied for, both for employment and for help, the number of positions secured and the number remaining unfilled.*

### MALES.

CHARACTER OF POSITIONS.	APPLICATIONS FOR EMPLOYMENT.			APPLICATIONS FOR HELP.	
	Number Filed.	Number of Positions Secured.	Number Unfilled.	Number Filed.	Number Unfilled.
Agents .....	2		2		
Architects .....	1		1		
Bakers .....	8	2	6	3	1
Barbers .....	23		23		
Barnen .....	96	55	41	57	2
Bartenders .....	50	6	44	10	4
Bicycle workers .....	5		5		
Bill clerks .....	23	2	21	2	
Blacksmiths .....	24	2	22	2	
Boilermakers .....	1		1		
Bookbinders .....	1		1		
Bookkeepers .....	89		89		
Boxmakers .....	2		2		
Brass finishers .....	1		1		
Bricklayers .....	10	4	6	56	52
Butchers .....	9	2	7	3	1
Butlers .....	8	2	6	3	1
Candy makers .....	1		1		
Canvassers .....	6	1	5	2	1
Carpenters .....	59	5	54	27	22
Carriage workers .....	6	2	4	3	1
Cashiers .....	24	1	23	2	1

## South Side Office—Males—Concluded.

CHARACTER OF POSITIONS.	APPLICATIONS FOR EMPLOYMENT.		APPLICATIONS FOR HELP.	
	Number Filed.	Number of Positions Secured.	Number Unfilled.	Number Filed. Unfilled.
Clerks.....	162	2	160	3 1
Coachmen.....	12	3	39	3
Collectors.....	18	1	17	2 1
Cooks.....	97	52	45	71 19
Dishwashers.....	74	29	45	69 38
Draftsmen.....	2		2	
Drug clerks.....	33		33	2 2
Dry goods clerks.....	75		75	
Electricians.....	31	1	30	1
Elevator men.....	76	16	60	22 6
Engineers.....	103	11	92	18 7
Errand boys.....	162	37	125	64 27
Express messengers.....	1		1	
Factory hands.....	10		10	
Farm hands.....	101		101	
Florists.....	1		1	
Firemen.....	61	13	48	17 1
Folders.....	1		1	
Gardeners.....	1	1		
Grocery clerks.....	67	3	64	3
Hod carriers.....	1	3		52 49
Housemen.....	130	36	94	50 14
Iron workers.....	5		5	
Janitors.....	229	14	215	32 18
Kitchen work.....	32	8	24	14 6
Laborers.....	1,302	1,089	213	1,526 437
Laundrymen.....	2	2		3 1
Machinists.....	59	18	41	20 2
Machine hands.....	6		6	
Merchants.....	7	1	6	1
Molders' helpers.....	3		3	
Motormen.....	1		1	
Nurses.....	22	6	16	7 1
Oilers.....	2	1	1	1
Packers.....	33	12	21	20 8
Painters.....	53	8	45	12 4
Paper hangers.....	6	2	4	4 2
Photographers.....	5		5	
Plumbers.....	7		7	
Polishers.....	11		11	
Porters.....	146	71	75	119 48
Pressmen.....	3	1	2	1
Printers.....	12	2	10	4 2
Railroadmen.....	17	2	15	2
Salesmen.....	104	6	98	7 1
Shipping clerks.....	61	1	60	1
Silvermen.....	1	1		1
Solicitors.....	28	1	27	2 1
Steamfitters.....	3		3	
Stenographers.....	30		30	1 1
Stewards.....	7	1	6	1
Tailors.....	6		6	
Teachers.....	5		5	
Teamsters.....	105	52	63	61 9
Telegraphers.....	1		1	
Timekeepers.....	29	2	27	2
Tinsmiths.....	2		2	
Upholsterers.....	1		1	
Waiters.....	70	58	12	64 6
Watchmen.....	155	3	152	3
Wholesale men.....	48	42	6	47 5
Window washers.....	9	9		1 3
Wood workers.....	15		15	
Not classified.....	9		9	
Totals.....	4,350	1,705	2,647	2,514 899
Positions secured applicants who had applied for other positions.....			2	
Total—90 positions.....	4,350	1,705	2,645	2,514 899

## SOUTH SIDE OFFICE--FEMALES.

CHARACTER OF POSITIONS.	APPLICATIONS FOR EMPLOYMENT.			APPLICATIONS FOR HELP.	
	Number Filed.	Number of Positions Secured.	Number Unfilled.	Number Filed.	Number Unfilled.
Addressers .....	6		6		
Barbers .....	1		1		
Bookkeepers .....	7		7		
Canvassers .....	2		2		
Cashiers .....	3		3		
Chambermaids .....	106	92	14	181	89
Clerks .....	104	7	97	11	4
Cooks .....	132	121	11	218	97
Copyists .....	5		5		
Dishwashers .....	67	62	5	116	54
Dressmakers .....	16	1	15	1	
Factory workers .....	12	1	11	1	
Housekeepers .....	18	3	15	4	1
Housework .....	423	659		820	161
Janitresses .....	14	3	11	4	1
Kitchen help .....	44	33	11	123	90
Lady's maid .....	2				
Laundresses .....	57	32	25	38	6
Nurses .....	44	17	27	33	16
Saleswomen .....	7	9	5	5	3
Scrub women .....	89	33	56	82	49
Seamstresses .....	26	6	20	8	2
Second work .....	24	13	11	17	4
Stenographers .....	9	1	8	1	
Teachers .....	1		1		
Waitresses .....	112	64	48	88	24
Totals .....	1,331	1,150	417	1,751	601
Positions secured applicants who had applied for other positions .....			236		
Totals—27 positions .....	1,331	1,150	181	1,751	601

## RECAPITULATION.

SOUTH SIDE OFFICE, October 1, 1899.

	APPLICATIONS FOR EMPLOYMENT.			APPLICATIONS FOR HELP.	
	Number Filed.	Number of Positions Secured.	Number Unfilled.	Number Filed.	Number Unfilled.
Males .....	4,350	1,705	2,645	2,514	809
Females .....	1,331	1,150	181	1,751	601
Totals .....	5,681	2,855	2,826	4,265	1,410

*Expense Account of South Side Office, August 2 to October 1, 1899.*

Rent for office from July 15 to October 1.....	\$250 00
Office furniture .....	500 17
Carpenter work in fitting office.....	98 00
Insurance on office furniture .....	11 45
Postage .....	60 00
Signs and painting office.....	44 10
Toilet supplies.....	4 50
Awning .....	16 00
Numbering machine and rubber stamps.....	18 10
Electric fan .....	36 00
Wiring and equipment for light and power .....	40 82
Rent for light and power.....	35 51
Typewriter and desk .....	62 00
Western Union, clock rent .....	2 00
Rent for telephone .....	42 70
Copy press and stand .....	13 55
Water filter.....	3 00
Janitor and miscellaneous supplies.....	11 38
Salary for stenographer.....	80 00
Salary for janitor .....	30 00
Extra clerks.....	178 00
<b>Totals.....</b>	<b>\$1,539 68</b>

## ILLINOIS FREE EMPLOYMENT OFFICES,

WEST SIDE OFFICE, 28 OGDEN AVENUE.

CHICAGO, October 1, 1899.

HON. DAVID ROSS, *Secretary, Bureau of Labor Statistics, Springfield, Illinois:*

SIR:—In compliance with section 6 of an act of the General Assembly creating the Illinois Free Employment Offices, I have the honor to submit to you the first report of the work of this office, for nine weeks, August 2 to October 1, 1899, also my expense account.

Very respectfully,

F. E. ERICKSON,  
*Superintendent.*

## ILLINOIS FREE EMPLOYMENT OFFICES.

WEST SIDE OFFICE, 28 OGDEN AVENUE, CHICAGO.

*Table giving the character of positions applied for, both for employment and for help; the number of positions secured and the number remaining unfilled.*

## MALES.

CHARACTER OF POSITIONS.	APPLICATIONS FOR EMPLOYMENT.			APPLICATIONS FOR HELP.	
	Number Filed..	Number of Positions Secured.	Number Unfilled.	Number Filed.	Number Unfilled.
Agents .....	3		3		
Any occupation .....	49	6	43	6	
Apprentices .....	49	5	44	6	1
Auctioneer .....	1		1		
Bakers .....	3	1	2	1	
Barbers .....	6	3	3	4	1
Barn men .....	1		1		
Bartenders .....	27	4	23	6	2
Bell boys .....	4		4		
Bicycle workers .....	3		3		
Bill clerks .....	1		1		
Blacksmiths .....	16	2	14	5	3
Bookbinders .....	2		2		
Bookkeepers .....	15		15	1	1
Box makers .....	2		2		
Brass finishers .....	1		1		
Bricklayers .....	4		4		
Butchers .....	15	6	9	6	
Cabinet makers .....	1		1		
Canvassers .....	2		2	1	1
Carpenters .....	62	6	56	6	
Carriage washers .....	1	1		1	
Cashiers .....	2		2		
Cash boys .....	1		1		
Cigarmakers .....	2		2		
Circular distributors .....	2	1	1	1	



## West Side Office—Males—Continued.

CHARACTER OF POSITIONS.	APPLICATIONS FOR EMPLOYMENT.		APPLICATIONS FOR HELP.		
	Number Filed.	Number of Positions Secured.	Number Unfilled.	Number Filed.	Number Unfilled.
Clerical .....	149	2	147	2	
Coal miner .....	1		1	1	1
Coachmen .....	25	6	19	7	1
Coal weigher .....	1		1		
Collectors .....	34	1	33	2	1
Conductors .....	4		4		
Cooks .....	25	13	12	17	4
Coopers .....	1		1		
Cupola tenders .....	2	1	1	1	
Core makers .....	3		3		
Dish washers .....	4	6		6	
Draftsmen .....	1		1		
Drill-press men .....	7		7		
Druggists .....	4		4		
Electricians .....	15	1	14	1	
Electrotypers .....	1		1		
Elevator men .....	21	2	19	2	
Engineers .....	66		66		
Errand boys .....	75	7	68	7	
Factory hauls .....	94		94		
Foremen .....	7		7		
Farm hands .....	58	28	30	33	5
Flouring mill .....	1		1		
Foundry men .....	1		1		
Firemen .....	50	1	49	1	
Furnace tenders .....		1		1	
Gardeners .....	2		2		
Harness cleaners .....		2		2	
Harness makers .....	1		1		
Housemen .....	63	35	28	38	3
Hostlers .....	22	18	4	19	1
Hotel clerks .....	13		13		
Ice cream makers .....				1	1
Iron workers .....	1		1		
Janitors .....	98	13	85	13	
Kitchen work .....	5	4	1	4	
Laborers .....	439	547		558	11
Lathers .....	2		2		
Laundry men .....	4	1	3	2	1
Locksmith .....	5		5		
Machinists .....	80	2	78	2	
Masons .....	3		3		
Metal workers .....	7		7		
Nurses .....	5	1	4	1	
Oilers .....	2		2		
Packers .....	24	4	20	4	
Painters .....	58	9	49	9	
Paper hangers .....	3	2	1	2	
Photographers .....	1		1		
Plasterers .....	4	1	3	1	
Plumbers .....	4		4		
Porters .....	53	29	24	31	2
Printers .....	24		24		
Punch press hands .....	6		6		
Railroad men .....	9	8	1	8	
Railroad laborers .....	20		20		
Salesmen .....	111	3	108	3	
Sawyers .....	4	5		5	
Shipping clerks .....	39	1	38	1	
Shoemakers .....	3	2	1	2	
Steam fitters .....	7		7		
Stenographers .....	4		4		
Stock farm hand .....		1		1	
Stock keepers .....	7		7		
Stone cutters .....	4		4		
Tailors .....	2		2		
Teachers .....	4		4		
Teamsters .....	181	45	136	46	1
Telegraphers .....	2		2		

## West Side Office—Males—Concluded.

CHARACTER OF POSITIONS.	APPLICATIONS FOR EMPLOYMENT.			APPLICATIONS FOR HELP.	
	Number Filed.	Number of Positions Secured.	Number Unfilled.	Number Filed.	Number Unfilled.
Time keepers .....	3		3		
Tinsmiths .....	1		1		
Tool makers .....	2		2		
Truckmen .....	5		5		
Undertakers .....	1		1		
Upholsterers .....	5	2	3	2	
Vise hands .....	4		4		
Waiters .....	8	3	5	4	1
Watchmen .....	195	4	191	5	1
Wholesale men .....	45	3	42	3	
Wood workers .....	20	5	15	5	
Yardmen .....	2	4		4	
Not classified .....	24		24		
Total .....	2,566	858	1,825	901	43
Positions secured applicants who had applied for other positions .....			117		
Total—107 positions .....	2,566	858	1,708	901	43

## FEMALES.

CHARACTER OF POSITIONS.	APPLICATIONS FOR EMPLOYMENT.			APPLICATIONS FOR HELP.	
	Number Filed.	Number of Positions Secured.	Number Unfilled.	Number Filed.	Number Unfilled.
Apprentices .....	1		1		
Attendants .....	1		1		
Bookkeepers .....	3		3		
Bottle labelers .....	1		1		
Canvassers .....	1		1		
Cash girls .....	1		1		
Cashiers .....	10		10		
Chambermaids .....	43	30	13	34	4
Clerks .....	16	6	16	6	
Companion .....	1		1		
Cooks .....	56	78		93	15
Copyist .....	1		1		
Day workers .....	128	54	74	58	4
Dining room help .....	26	35		37	2
Dishwashers .....	17	20		25	5
Domestics .....	255	345		699	354
Dress makers .....	7		7		
Factory workers .....	29	27	2	28	1
Governess .....	1		1		
Housekeepers .....	56	17	39	17	
Janitresses .....	8	1	7	1	
Kitchen help .....	15	12	3	13	1
Laundresses .....	13	15		15	
Mail order help .....	2		2		
Matrons .....	3		3		
Milliners .....	1		1		
Nurses .....	49	18	31	22	4
Office work .....	46		47		
Printers .....	1		1		
Proof reader .....	1		1		
Seamstresses .....	17	11	6	11	
Second work .....	95	75	20	87	12
Stenographers .....	20	2	18	3	1

*West Side Office—Females—Concluded.*

CHARACTER OF POSITIONS.	APPLICATIONS FOR EMPLOYMENT.		APPLICATIONS FOR HELP.		
	Number Filed.	Number of Positions Secured.	Number Unfilled.	Number Filed.	Number Unfilled.
Teachers.....	4		4		
Waitresses.....	21	26		28	2
Wrapper girls.....	1		1		
Not classified.....	1		1		
Total.....	952	772	311	1,177	405
Positions secured applicants who applied for other positions.....			131		
Totals—36 positions.....	952	772	180	1,177	405

## RECAPITULATION, WEST SIDE OFFICE, OCTOBER 1, 1899.

	APPLICATIONS FOR EMPLOYMENT.		APPLICATIONS FOR HELP.		
	Number Filed.	Number of Positions Secured.	Number Unfilled.	Number Filed.	Number Unfilled.
Males.....	2,566	858	1,708	901	43
Females.....	952	772	180	1,177	405
Totals.....	3,518	1,630	1,888	2,078	448

*Expense Account, West Side Office, August 2 to October 1, 1899.*

Rent of office, July 15 to October 1, 1899.....	\$112 50
Janitor, July 15 to October 1, 1899.....	75 00
Office furniture, etc.....	1,231 30
Stenographer.....	15 00
Clerical work, extra.....	80 50
Total.....	\$1,514 30

## SUMMARY

*Of the Three Free Employment Offices for Nine Weeks to October 1, 1899, by Character of Positions.*

## MALES.

CHARACTER OF POSITIONS.	APPLICATIONS FOR EMPLOYMENT.			APPLICATIONS FOR HELP.	
	Number Filed.	Number of Positions Secured.	Number Unfilled.	Number Filed.	Number Unfilled.
Agents .....	5		5		
Any occupation.....	49	6	43	6	
Apprentices .....	49	5	44	6	1
Architects .....	4		4		
Auctioneers.....	1		1		
Bakers .....	30	8	22	10	2
Barbers .....	33	5	28	7	2
Barnmen .....	121	88	42	90	2
Bartenders.....	108	13	95	19	6
Bell boys.....	6		6		
Bicycle workers.....	14		14		
Bill clerks .....	24	2	22	2	
Blacksmiths .....	54	15	39	31	16
Blacksmith helpers .....	2	1	1	7	6
Boilermakers .....	3		3		
Bookbinders .....	5		5		
Bookkeepers.....	150		150	1	1
Boxmakers.....	6		6		
Brass finishers .....	2		2		
Bricklayers .....	17	4	13	56	52
Butchers .....	40	8	32	10	2
Butlers .....	10	3	7	3	1
Cabinetmakers .....	2		2		
Canmakers.....	1		1		
Candymakers.....	3		3		
Canvassers .....	21	7	14	9	2
Car builders .....		15		50	35
Car cleaners .....	2			3	1
Carpenters.....	169	24	145	64	40
Carriage washers .....	7	3	4	4	1
Cash boys.....	1		1		
Cashiers .....	26	1	25	2	1
Chefs.....				1	1
Cigarmakers.....	5		5		
Circular distributors.....	2	1	1	1	
Clerical work.....	149	2	147	2	
Clerks .....	463	23	440	18	1
Coalmen .....	104	11	93	13	2
Coal heavers.....		19		40	21
Coal miners.....	1		1	76	76
Coal weighers .....	1		1		
Collectors .....	59	2	57	4	2
Companions .....	1		1		

## Summary of the Three Offices- Continued.

## MALES Continued.

CHARACTER OF POSITIONS.	APPLICATIONS FOR EMPLOYMENT.		APPLICATIONS FOR HELP.		
	Number Filed.	Number of Posi- tions Secured.	Number Unfilled.	Number Filed.	Number Unfilled.
Cooks.....	171	76	95	167	31
Coopers.....	1		1		
Conductors.....	4	1	4	3	2
Coremakers.....	4		4		
Cupola tenders.....	3	1	2	1	
Dishwashers.....	122	75	49	114	39
Draughtsmen.....	4		4		
Drill pressmen.....	20	1	19	1	
Drivers.....	115	24	91	32	8
Drug clerks.....	33		33	2	2
Druggists.....	7		7		
Dry goods clerks.....	75		75		
Dyers.....	1		1		
Electricians.....	60	2	58	2	
Electrical linemen.....	2		2	6	6
Electrotypers.....	1		1		
Elevator men.....	121	24	97	26	6
Engineers.....	218	18	200	24	7
Errand boys.....	282	68	214	99	31
Express messengers.....	1		1		
Factory hands.....	296	10	190	15	5
Farm hands.....	242	111	131	151	40
Firemen.....	168	25	143	27	4
Florists.....	2		2		
Flouring mill hands.....	1		1		
Folders.....	1		1		
Foremen.....	7		7		
Foundry men.....	1		1		
Furnace tender.....		1		1	
Gardeners.....	10	2	8	2	
Grocery clerks.....	67	3	64	3	
Harness cleaners.....		2		2	
Harness makers.....	1		1		
Hod carriers.....	1	3		52	49
Hostlers.....	22	18	4	19	1
Hotel clerks.....	13		13		
Housemen.....	279	112	137	138	17
Ice cream makers.....				1	1
Iron workers.....	16	7	9	8	1
Janitors.....	439	36	403	54	18
Kitchen work.....	49	30	25	36	6
Laborers.....	2,471	2,170	469	3,727	1,557
Lathers.....	9		9		
Laundrymen.....	18	8	10	10	2
Lime mixer.....				1	1
Locksmiths.....	6		6		
Machine hands.....	22		22		
Machinists.....	252	32	220	35	3
Masons.....	3		3		
Merchants.....	7	1	6	1	
Metal workers.....	9		9	2	2
Molder helpers.....	4	2	3	10	8
Motormen.....	3	1	2	1	
Music teachers.....	2		2		
Nickle platers.....	3		3		
Nurses.....	31	8	23	9	1
Oilers.....	4	1	3	1	
Organ builders.....	11		11		
Packers.....	67	16	51	24	8
Painters.....	154	24	130	36	12
Paper hangers.....	9	4	5	6	2
Photographers.....	7		7		
Plasterers.....	5	1	4	1	
Plumbers.....	25		25		
Polishers.....	17		17		

## Summary of the Three Offices—Continued.

## MALES—Concluded.

CHARACTER OF POSITIONS.	APPLICATIONS FOR EMPLOYMENT.			APPLICATIONS FOR HELP.	
	Number Filed.	Number of Positions Secured.	Number Unfilled.	Number Filed.	Number Unfilled.
Porters.....	297	141	156	201	60
Pressmen.....	13	2	11	2	1
Printers.....	53	2	51	4	2
Punch press hands.....	6		6		
Railroad laborers.....	20		20		
Railroad men.....	26	10	16	10	
Salesmen.....	241	36	205	127	91
Sawyers.....	11	5	7	5	
Shipping clerks.....	100	3	98	3	
Shoemakers.....	10	2	8	2	
Silver men.....	1	1		1	
Solicitors.....	40	1	39	6	5
Steamfitters.....	13		13		
Stenographers.....	40		40	1	1
Stewards.....	10	1	9	1	
Stock farm hands.....		1		1	
Stockkeepers.....	7		7		
Stonecutters.....	5		5		
Stonemasons.....	3		3		
Tailors.....	10	1	9	7	6
Teachers.....	12		12		
Teamsters.....	408	161	247	186	25
Telegraphers.....	3		3		
Tile roofers.....				1	1
Timekeepers.....	35	2	33	2	
Tinsmiths.....	5	1	4	2	1
Toolmakers.....	2		2		
Truckmen.....	5	1	5	1	
Undertakers.....	2		2		
Upholsterers.....	8	2	6	2	
Vegetable men.....		1		1	
Vestmakers.....	1		1		
Vise hands.....	17	3	14	2	
Wagonmakers.....	1		1		
Waiters.....	106	76	30	86	10
Watchmakers.....	1		1		
Watchmen.....	470	18	452	19	1
Whitewashers.....	3	1	2	10	9
Wholesale men.....	93	45	48	50	5
Window dressers.....	1		1	1	1
Window washers.....	10	9	1	12	3
Wood finishers.....	4	1	3	3	2
Wood workers.....	35	5	30	5	
Yard men.....	2	4		4	
Not classified.....	49		49		
Totals.....	9,825	3,752	6,247	6,103	2,368
Positions secured applicants who had applied for other places.....			174		
Help furnished not applied for.....					17
Totals for 9 weeks.....	9,825	3,752	6,073	6,103	2,351

## Summary of the Three Offices—Concluded.

## FEMALES.

CHARACTER OF POSITIONS.	APPLICATIONS FOR EMPLOYMENT.			APPLICATIONS FOR HELP.	
	Number Filled.	Number of Positions Secured.	Number Unfilled.	Number Filled.	Number Unfilled.
Addresses	6		6		
Apprentices	1		1		
Attendants	1		1		
Barbers	1		1		
Bookkeepers	14		14		
Bottle labelers	1		1		
Canvassers	3		3		
Cash girls	1		1		
Cashiers	19		19		
Chambermaids	193	173	27	263	93
Clerks	186	20	166	23	4
Companions	3		3		
Cooks	263	298	11	451	153
Copyists	6		6		
Day work	245	78	167	87	9
Dining room help	26	35		37	2
Dishwashers	98	106	5	182	76
Domestics	255	345		699	354
Dressmakers	23	1	22	1	
Factory work	66	43	23	56	13
General work	288	298		628	330
Governesses	3		3		
Housekeepers	124	36	88	43	7
House work	433	659		820	161
Janitresses	26	4	22	5	1
Kitchen help	106	111	14	201	91
Lady's maids	2		2		
Laundresses	110	113	25	131	18
Mail-order help	2		2		
Matrons	3		3		
Milliners	1		1		
Nurses	148	52	96	81	29
Office work	46		46	2	2
Pantry work	3	3		3	
Photographers	1		1		
Printers	2		2		
Proof-reader	1		1		
Reception service	3		3		
Saleswomen	7	9	5	15	6
Scrubwomen	91	43	56	94	51
Seamstresses	51	26	26	42	16
Second work	204	131	73	159	28
Solicitors	1		1		
Stenographers	38	4	34	5	1
Teachers	6		6		
Waitresses	169	157	48	239	82
Wrappers	1		1		
Not classified	1		1		
Totals	3,272	2,745	1,037	4,267	1,527
Positions secured applicants who had applied for other positions			510		
Help furnished not applied for					5
Totals for 9 weeks	3,272	2,745	527	4,267	1,522















