The miners in the employ of the Petersburg Coal Co. struck on the 28th of April, because the company would not recognize a checkweighman appointed by the men at that time. The company claimed that the man chosen was not in their employ, and requested the men to select some one who was, which they refused to do until June 22, when they agreed to resume work, the objectionable check-weighman having left in the meantime. Before resuming operations the company presented a yearly contract of prices for signatures, which was signed without further delay. Time lost, 7 weeks. Number of men involved, 75.

Kramm's miners, at Kramm's Station, Peoria county, struck on the 6th of May to reinstate five men, who were discharged for sending out dirty coal. The result was Mr. Kramm closed up the mine for the summer. Number of men involved, 40.

The miners in the employ of the Ellsworth Coal Co., Danville, struck on the 17th of March to regain 10 cents per ton, which was taken off Feb. 1. The following are the facts relating thereto: The miners of this company had been working under a yearly contract price of 80 cents per ton, which expired Nov. 1, 1884. There being no contract presented by the company for the ensuing year, the price remained the same until Feb. 1, 1885, when the company notified the miners of a reduction of 10 cents per ton, thus making it 70 cents per ton, the same as is paid to the Grape Creek miners in the same vicinity. This was accepted by the men after a two days' parley, and they were working on this scale when the Staunton and Mt. Olive miners, working for the same company, came out on a strike and demanded a suspension of the company's mines at Danville. On the 17th of March the miners at Danville accordingly made a demand for a restoration of the 10 cents per ton lost Feb. 1. The company refused to accede to their wishes, which resulted in a prolonged but quiet strike, the solution of which is still pending, with no prospect of an immediate settlement. The number of men involved in this instance was 321.\*

Following this will be found brief mention of the mines of each county, and of the improvements which have been inaugurated or completed where they have been found necessary.

Finally, a list is given of those who have been killed or injured during the year in this district, while pursuing their vocations in and about the mines.

All of which is respectfully submitted,

#### JOHN ROLLO,

Inspector 3d district.

#### VERMILION COUNTY.

In this county there have been in operation in the past year 39 mines, and 16 strippings, which have produced 423,860 tons of coal, from seams Nos. 6 and 7 of the Illinois section. The former has

69

an average thickness of six feet, eight inches, and is worked somewhat extensively at Grape Creek, five miles south of Danville. Sand bars are occasionally met with in this seam, that cut out the coal entirely, and which invariably give off large volumes of water, necessitating the use of larger pumps than are generally used in this district, for the draining of mines. Seam No. 7 will average six feet in thickness and is very regular, has much less water to contend with, and is being worked extensively at Danville and other places north and west of that point. The strata overlying both seams bear a striking resemblance to each other, both being scapstone of a slipping nature, not affording a safe roof, and involving great cost for timber where the coal is taken out. The following are the more important mines in the county.

The Ellsworth Coal Co. is operating four large mines within a radius of two miles from Danville.

## MINE No. 1.

This is a drift, the pillars of which are nearly drawn, but an opening has been made in the five acres adjoining, belonging to W. Reese, which will prolong operation. The mine was found in good condition.

James Jones, Sup't; W. D. Reese, Mine Manager.

## MINE No. 2.

This is a shaft 74 feet deep, with general equipment good. The ventilating current in this mine was split so as to air three separate sections, but there was not a large enough volume. The fan located at the air shaft, being a four foot "Murphy," was too small as the new shaft No. 4 was also depending on it, the two shafts being connected by an entry one-third of a mile long. This has been remedied by the company. They have sunk an escapement shaft at No. 4, and erected an eight foot Champion fan on top, which will ventilate No. 4 and part of No. 2, and give all the air necessary.

James Jones, Sup't; D. W. Murray, Mine Manager.

#### MINE No. 3.

This is a shaft 103 feet deep, located on the I. B. & W. R. R. This mine was in good order, aired with two separate currents, furnishing 240 cubic feet of air per man on the north split, and 128 cubic feet per man on the south. A fire occurred at this mine on the night of May 6, which consumed all the frame work on top, and several feet of curbing in the shaft. The origin of the fire is unknown. No effort has been made to rebuild.

Jeremiah Morin, Sup't and Mine Manager.

#### MINE No. 4.

This shaft was originally sunk to a seam 310 feet deep, which has since been abandoned, and the seam now worked is the same

<sup>\*</sup> This strike has since been settled upon the company's terms.

as at the other mines, 71 feet deep. When visited there were few rooms being worked. The ventilation of this mine is assured by an eight foot Champion fan on top of air shaft.

James Jones, Sup't and Mine Manager.

### THE GRAPE CREEK COAL AND COKE CO.

This company is operating five mines, located in and around Grape Creek, five miles south of Danville, on a branch of the C. & E. I. R. R. Nos. 1, 2 and 4 are drifts, not likely to last much longer, as the pillars are now being drawn. The ventilation and roadways were found good in each of them.

## MINE No. 3.

This is a shaft 18 feet deep, sunk at the base of a hill, the workings of which extend nearly one mile into the interior. The ventilation is good, maintained by a furnace, which consumes on an average  $2\frac{1}{2}$  tons of coal daily. The equipment of the mine is good. Double doors have been placed on the main entry at the bottom, to prevent the air from going direct to the furnace, before reaching the men.

John Beattie, Sup't; T. J. Roberts, Mine Manager.

# MINE No. 5.

This is a shaft 125 feet deep, sunk on the higher lands, and has a good equipment throughout. Ever since the explosion from firedamp in this mine, in 1883, a fireman examines the mine every morning with a safety lamp, before the men go down, but seldom detects any firedamp. The volume of air passing in this mine measures 31.500 cubic feet per minute, produced by a Champion fan 6 feet in diameter, each side of the mine being aired with separate currents well distributed. There are five mining machines of the Yock pattern operated in this mine, which are fed from a compresser from Port Carbon, Penn., having a steam cylinder 24x36. and air cylinder 22x36. The operator of each machine receives \$2.25, and shovelers \$1.75 per day, and they are expected to mine two rooms 25 feet wide and four feet undercut, which will turn out about 40 tons of coal per day. The loaders receive 40 cents per ton for loading and blasting. Three men are engaged throwing back dirt minings after the machines have finished mining the room, each being paid \$1.50 per day. Six men are employed timbering and laying track in rooms, three of them receive \$2.00 per day, and the others being considered helpers, are paid \$1.50 each.

John Beattie, Sup't; David Watkins, Mine Manager.

### THE KELLY MINE.

This is a shaft 96 feet deep, located two miles southwest of Grape Creek, on the C. & E. I. R. R. This mine was in poor condition when first visited. The entries were unsafe for travel, requiring much timber, and the traveling road to the escapement shaft was obstructed. There were no safety catches nor covers on cages, and the air was poorly distributed. On measuring the air at the bottom of the down-cast it was found to be 7,100 cubic feet, which was ample if properly distributed, but on trying to get a measurement at the face, there was not enough to overcome the friction of the instrument, the air having leaked through the stoppings before reaching the men. I notified Mr. Kelly as to what improvements were necessary, and on my third visit found them completed, except safety catches, which will be put on as soon as new cages and stronger guides are put in place, which have been ordered. In the meanwhile the men were obliged to climb the escape shaft. I have since learned by letter from Mr. Kelly that new guides, cages and safety catches are put on, and also double doors at the bottom.

Michael Kelly, Proprietor and Superintendent; John Doughty, Mine Manager.

There are six shafts and one slope, supplying local trade, situated between Catlin, on the Wabash R. R., and Oakwood, on the I., B. & W. R. R., operated by Shock, Hodges, Emmett, France Bros., Woodward, Sr., Woodward, Jr., and Thomas. The mines are ventilated by furnaces on top of shafts, connected by drift from air chambers, but the air was poorly distributed and heavily charged with carbonic acid gas. The operators were notified to improve the ventilation by closing up old rooms, and by keeping the furnaces fired, which had been very much neglected. They were also instructed to place guards around openings. All of them have now secured escapements except, V. Shock, who had allowed his shaft to cave in for lack of curbing, prior to my visit, and he is now engaged in opening it. These mines all have sheds, in which are stored from 500 to 1,000 tons of coal during the summer, for which is found a ready sale in the fall. Daniel France's mine has not been worked any during the year, owing to the lack of an escapement and some other improvements.

Phillips and Tucker's and Samuel Swisher's shafts are located ten miles north of Danville, and depend on local trade. The former have finished an escapement, while the latter is sinking one, and has it nearly finished. They were notified to place guards around shaft openings. The ventilation is good in Phillips and Tucker's mine, but poorly conducted in Swisher's. The best of the small mines around Danville is J. E. Lloyd's. He has his mine in splendid order, working by double entry, and with good ventilation, displaying a management throughout that is worthy of imitation by those adjoining.

# TAZEWELL COUNTY.

This county contains six mines, which have produced 23,779 tons of coal, all from seam No. 5, which averages four feet five inches in thickness. They have good roofs, and very little water to contend with.