16 of the county of Colfax, in the Territory of New Mexico, find that the deceased came to his death by reason of his carelessness in the Blossburg mine, in the town of Gardiner, N. Mex., by being killed by electric wires.

C. F. PETERSON, Justice of the Peace. C. P. Johnston, H. L. TAPLIN, J. JENKINS. LEE BOGARDUS, THOMAS GREGORY, JOSEPH JACKSON,

June 8, 1899.—Hugo Shultz, a German, miner and timberman, about 55 years of age, was injured in the Blossburg mine. He was timbering on the main entry and neglected to pull down some loose rock, and the accident occurred while moving a prop to reset same. When he removed the prop, the slate fell on him and broke a blood vessel. He was carried home and died about 9 o'clock p. m. from internal No coroner's jury. hemorrhage.

#### GALLUP MINE.

December 6, 1898.—Franz Cadiz, an Austrian, miner, 40 years of age, was injured in the Gallup mine, on No. 15 left entry, room No. 7. He and his partner were dropping a car of coal down the plane. The deceased was in front and his partner behind the car. The car stuck, and deceased asked his partner to loosen the sprags, which his partner did, but neglected to put them back in. He was then unable to hold back the car, and, being in front of it, was run against another car that was in front of him, lacerating his leg. The deceased was taken to the hospital and died on December 10 from the effects of his injuries. No coroner's jury.

### LUCAS MINE.

October 6, 1898.—Tranquilino Martinez, a Mexican, slate picker, aged 12 years, was injured in the breaker of the Lucas mine. The deceased fell into the pea-coal chute, where he was smothered, breathing only once after being taken out. No coroner's jury.

## COOK AND WHITE MINE.

July 26, 1898.—Jose Tenario, a Mexican, miner, 35 years of age, was injured in the Cook and White mine by a fall of slate. He was working in No. 2 raised plane on second left entry, room No. 5, when a fall of rock occurred in the room, fracturing and dislocating the spinal column of the deceased, from the effects of which he died at about 8 o'clock a.m. Deceased left wife and two children. No coroner's jury.

December 14, 1898.—Robert Johnson, an American, trapper, aged 14 years, was injured in the Cook and White by falling under a pit car and having his body

mashed, killing him instantly. No coroner's jury.

June 29, 1899.—Thomas Foster, jr., English, driver, aged 21 years, was injured in the Cook and White mine. He was employed as driver and fell off his loaded trip, the

cook and white mine. He was employed as driver and fell off his loaded trip, the cars running over him and killing him instantly. No coroner's jury.

April 21, 1899.—On this date, at about 11.50 o'clock a.m., a gas explosion occurred in the Cook and White mine, causing the death of Fred Aira, an Italian, miner, 32 years of age; also, the death of John Piva, an Italian, miner, aged 39 years; also, the death of John Sienowesky, a Polander, miner, 35 years of age; also, the death of Adam Jerosewiez, a Polander, miner, aged 35 years; and also the death of Francis E. Watts, an American driver aged 16 years are Watts, an American, driver, aged 16 years.

### REPORT OF GAS EXPLOSION.

April 21, 1899.—On this date a fatal gas explosion occurred in the Cook and White mine. At the time the explosion occurred I was inspecting the mines which are located in Colfax County, and did not receive the news of the explosion until 9 o'clock a. m., the following morning, April 22. I started on the first train, at 12 m., for Madrid, N. Mex., arriving there at 9 o'clock p. m. on the same day. Upon my arrival at the mine I asked the superintendent of the mine, James Duggan, where the explosion had occurred. He informed me that the explosion had occurred in or at the face of the third left entries; he also teld me that on account of the satholt. at the face of the third left entries; he also told me that on account of the setbolt, which fastens the eccentric rod to the valve stand of the engine, becoming loose, caused the engine which drives the fan to stop. He also told me that the bodies

were all recovered in about three hours after the explosion had occurred; he also stated that two naked lamps were found by the side of the two bodies which had been found in the third left back entry. I then asked him if he could go down into the mine and make an examination of the entries at once. He informed me that there was no work being done in the mine that night, but that men would be working in the entries the following day (Sunday), repairing the stoppings which were

blown out by the explosion; also timbering and cleaning up the entries.

On Sunday, April 23, I entered the mine and went down into the third left main entry and tried to get as far as the face of the entries, but, on account of the condition of the entries, I could not get to the face. I found that a number of sets of timbers and all the stoppings along the line of the entries had been blown out by the force of the explosion. I also found four of the stoppings on the slope above the entrance to the third left main entry had been badly shattered, and found that the force of the explosion had traversed across the slope and into the third right entry, breaking down a door which is about 150 feet from the entrance of the third right entry on the slope. I then ordered the pit boss to keep the men at work day and night until the work of timbering, clearing the entries, and repairing the stoppings were completed.

On the 24th of April I again visited the third left entry, but could not get to the

face of the workings

On April 28 I was informed that the stoppings had been repaired up as far as the last crosscut in the entries. I then went down into the mine and went in as far as the last crosscut on the third left main entry, and found the main entry full of gas from the crosscut up to the face of the workings, and ordered the men to do no more work until all the men were out of the mine. At 5 o'clock p.m., when all the men were out of the mine, we commenced the work of bratticing the entry with canvas from the crosscut up to the face of the entry, so as to force the air up to the face and clear it of gas. At 6.30 p.m. the work was completed and I found one of the safety lamps which had been used by one of the men who had been killed, near the face of the entry. I also found that all the props on which the brattice had been nailed before the explosion had occurred were standing, but the brattice had been blown After the work of bratticing had been completed, I tested the face of the entry for gas with my safety lamp, and although feeders of gas were generating from the face of the coal, I could scarcely find a trace of gas with my lamp. I also visited the back entry, which is the main air course, and could only get a trace of gas at the face of this entry. On the following day, April 29, I again visited the entries and examined them thoroughly, and found another safety lamp in the third left main entry. The lamps which I found were in good condition. On this date I took air measurements and in the last crosscut found 6,480 cubic feet of air traveling per minute; at face of back entry, 3,630 cubic feet; and at face of main entry, 5,850 cubic The main entry is driven 65 feet beyond the crosscut, and the back entry is driven 68 feet, and the entries are driven about 1,060 feet in length from the slope, which is the main intake or air course for the entries.

I called on Samuel Bailey who was employed as driver in the third right entry at the time of the explosion, and he stated that, at about 11.30 a. m., on April 21, Francis E. Watts, who was then employed as driver in the third left entry, came over into the third right entry and told him (Bailey) that the men in the third left entry were using naked lights, while he (Watts) was compelled to use a safety lamp; and that when any of the bosses came around where the miners were working, the miners in the third left entry would blow out their naked lights and cover the lamps with dirt.

Frank Sherbly, who was working on the night shift in the third left back entry, says that when he finished work on the morning of the 21st, there was no gas in the

entry and that the ventilation was splendid.

Eli Perritt, who was working in the back entry with Frank Sherbly, says that he (Perritt) finished work in the entry about 5 a.m. on the morning of the 21st, and when he left the entry in the morning there was no gas at the face of the entry; he further says that the entry was bratticed up to within 8 feet of the face of the workings and everything was in good condition.

George Pugh, who was employed as fire boss in the Cook and White mine, says that he was in the third left entries on April 20, at 1.55 a.m., and found just a very little gas at the face of the back and main entries, but says that there was not enough gas to burn a person if ignited; he further says that the ventilation was splendid and that both entries were bratticed up to within 8 feet of the workings.

Joseph Haske, who was employed as fire boss in the Cook and White mine, says that he was in the third left entries on the morning of the 21st at about 3.30 a.m. and found a very small amount of gas at the face of the entries, and that the air was good and the entries were in good condition.

Henry Aira and Dominick Aira, who are brothers of Fred Aira, deceased, worked in the third left main entry on the night shift, and they say that when they finished their shift at 5.20 a. m on the morning of the 21st there was no gas of any consequence in the entry. I then asked them how their shots were lighted, and they told me that their shots were lighted by opening their safety lamps and using the naked

This was strictly against the rules.

J. G. Campbell, who was employed in the Cook and White mine as fire boss, says that on the 14th day of April, while he was making his rounds through the mines, he caught Fred Aira, who was killed by the explosion, using a naked light in the third left main entry, and ordered him (Aira) not to use a naked light any more in that place, as it was strictly against the rules; he further stated that the entries were in good condition and the ventilation was splendid.

William H. Graham, who was employed by the Cerrillos Coal Railroad Company as foreman of the Cook and White mine, says that about 9.30 a. m. on April 21, he was in at the face of the third left entries and found no gas, and found the ventila-

tion good and the entries in splendid condition.

James Duggan, who was employed as superintendent of the Cerrillos Coal Railroad Company, says that about 11.50 a. m. on April 21, a man came running to him and told him that No. 1 fan was stopped, and that he (Duggan) immediately ran as fast as he could to the fan house and as he was passing the main slope, which is the intake of the mine, told the rope rider and his assistant to place canvas over the mouth of the slope, and as soon as he (Duggan) reached the fan house he immediately saw what had caused the fan to stop. He states the cause as follows:

The setbolt that fastens the eccentric rod to the valve stem of the engine became loose, causing the engine to stop, and as the fan is run by a belt from the engine the fan also stopped; the superintendent also states that he got the fan and engine to running almost immediately after arriving at the fan house; that just as he got the fan started the explosion occurred. I called the engineer who was running the engine and looking after the fan and asked him how long the fan was stopped, and he told me that it could not have been more than six or seven minutes. The superintold me that it could not have been more than six or seven minutes. tendent, James Duggan, stated that he immediately went down into the mine and organized a rescuing party, and found that the explosion had occurred in the third That by using canvas brattice on the stoppings they soon got into the entries and found the bodies of the four men and boy who had been killed by the explosion, namely, Fred Aira, John Piva, John Sienowesky, Adam Jerosewiez, and Francis E. Watts, and further stated that naked lamps were found by the bodies of Adam Jerosewiez and John Sienowesky, which were found in the third left back entry and out at the last slant on the entry, which is 114 feet from the face of the entry

William H. Graham, foreman, also stated that the lamps were found beside the bodies of the above-mentioned men. I asked Mr. Graham who found the lamps, and he told me that he found one and Mr. Duggan found the other; he further stated that the two safety lamps, which the miners used in this entry, were found near the face of

No. 1 fan is a double 6-foot Murphey fan and ventilates the workings of the mine on the left side of the slope, the air being split at the bottom of the slope. No ventilates the workings of the right side of the mine on the right of the slope.

On my last inspection of the mine previous to the explosion, on March 23, I took an air measurement in the last crosscut which is driven at the face of the third left entries, and I measured 9,680 cubic feet of air traveling per minute through the

crosscut, but no work was being done in the entry at this time.

The result of my investigation of the cause of the explosion was the conclusion in my mind that on account of No. 1 fan stopping and the canvas being put over the mouth of the slope the intake was then through the air course from No. 1 fan down through the workings of the mine, on the left of the slope, and in through the third left main entry through the crosscut and out by way of the third left back entry, across the slope and into the third right back entry or air course at the bottom of the right side of the slope, and out through by way of No. 3 fan on the right side. That as No. 1 fan was stopped and the air circulating from No. 1 fan around, as stated above, any gas that was generating throughout the workings on the left side of the mine would naturally be carried around with the air down to the third left entries, and as some gas was generating at the face of the third left entries, considerable gas may have accumulated at the face of the entries during the time No. 1 fan was stopped and before the canvas was placed over the mouth of the slope, and when the air returned down through the face of the workings and into the face of the third left entries, it would carry the gas which accumulated with it out through the third left back entry; and, as the naked lights were discovered at the side of the bodies found in this entry, it is my opinion that the gas was ignited by the naked lights at the point where the bodies were found in the third left back entry, and that the force of the explosion traversed back through by way of the third left main entry, as all the stoppings were blown out into the third left back entry. The men had strict instructions to use only safety lamps, and I am led to believe, from the information received, that they were using naked lights.

In conclusion, I would say that had the men been using safety lamps I feel satis-

fied that no explosion would have occurred.

# Copy of report of coroner's jury.

TERRITORY OF NEW MEXICO, Santa Fe County, 88:

We, the undersigned justice of the peace and jury, who sat upon the inquest held this 22d day of April, 1899, on the bodies of Adam Jerosewiez, John Sienowskey, John Piva, Fred Aira, and F. E. Watts, found in precinct 19 of the county of Santa Fe, find that the deceased came to their deaths by reason of concussion and after-damp in the third left entries of the Cook and White mine, in the town of Madrid, Santa Fe County, New Mexico, on the 21st day of April, 1899.

Gus J. Johnson, Justice of the Peace. James McGlanghli, J. S. CAMPBELL, FELIX MURPHY, PAT BRADLEY, FRANK SHERBLY, FRANK FRANKEN,

Jurors.

Table of nonfatal accidents.

Name of mine.	Date.	Name.	Character of injury.	Cause.
Otero mine, Gallup, N. Mex	Dec. 2, 1898		Fracture of femur.	
	Dec. 3, 1898	Peter Giacomino	Fractures of fe-	Do.
	Nov. 28, 1898	Antonio Sanchez .	mur and patella.	Dailman aans
Gallup mine, Gallup, N. Mex	May 12, 1899			
	June 2, 1899	Tohn Shoridan	Leg lacerated Knee cap frac-	Falling.
	,		tured.	ŭ
	June 6, 1899	Joe Cortez	Compound frac- ture of leg.	Fall of coal.
Crown Point mine, Gallup, N. 'Mex.	Aug. 4, 1898	Francis Wenette	Dislocation verte- bra.	Fall of rock.
·	June 6, 1899	Anton Kivlaic	Lacerated foot	Fall of coal.
Catalpa mine, Gallup, N. Mex.	June 7, 1899	Chas. Breen	Mashed leg	Pit cars.
Blossburg mine, Gardiner, N.	Mar. 2, 1899	Jno. M. Knight	Broken rib	Fall of slate.
Mex.		Union and annual con-	District the state of the state	2 411 01 0111001
	June 13, 1899	William Lark	Broken leg	Pit cars.
	June 23, 1899	John Pattie	do	Fall of slate.
Lucas mine, Madrid, N. Mex	Nov. 17, 1898	James Dule	Partial dislocation of vertebra.	Fall of rock.
	Jan. 1, 1899	Harry Childs	Ribs fractured	Do.
Cook and White, Madrid, N. Mex.	Sept. 1, 1898		Cut in groin	
White Ash mine, Madrid, N. Mex.	Oct. 6, 1898	Antonio Velia	Fractured leg	Fall of coal.

# RECORD OF NON-FATAL ACCIDENTS.

### OTERO MINE.

December 2, 1898.—Mike Sackach, a Slav, miner, age 22 years, was injured by a fall of rock on the Holmes entry of the Otero mine. He was sitting on end gate of car going up the entry when a piece of rock weighing about 100 pounds fell from the roof, striking him between the hip and knee, causing a fracture.

\*December 3, 1898.—Peter Giacomino, an Italian, miner, age 29 years, was injured in

the Otero mine by a fall of coal at the face of his room.

November 28, 1808.—Antonio Sanchez, a Mexican, car man, age 24 years, was injured on railroad track below tipple. He was coupling two cars and got caught between the bumpers, having his fingers lacerated.

# GALLUP MINE.

May 12, 1899.—James Love, an American, miner, age 29 years, received an injury in No. 11, left entry, room No. 9. The coal fell upon his foot while he was taking down coal, causing contused lacerated wound on right leg.

June 2, 1899.—John Sheridan, an American, driver, age 22 years, was injured in the Gallup mine. He was running to sprag his trips of loaded cars. He stumbled and fell on his knee with such force that he broke his knee cap.

June 6, 1899.—Joe Cortez, an Italian, miner, age 32 years, was injured in the Gallup mine on No. 11, left entry, room No. 6. He was in the act of undermining the coal, when a piece of coal fell on his leg, causing a compound fracture.