

**CONYNGHAM DISASTER**

Shortly after 6 o'clock A. M. April 26, ten men were killed at the Conyngham colliery of the Delaware and Hudson Company, by the breaking of the rope in the shaft in which the men are lowered to and hoisted from their work. Several cage loads of workmen had already descended to their work. These ten men in their turn stepped upon the cage. The cage had just about reached the Hillman landing where most of them intended to get off. The engineer had slackened the speed and was about to stop when the rope parted. The safety catches failed to work and the cage dropped to the bottom of the shaft, a distance of about 400 feet.

The engineer in charge of the engine at the time was William Cunningham, a man of many year's experience as an engineer. He said that all went well until he was about to stop the engine, when he felt a jerk on the engine, and the rope, which is usually drawn taut by the weight of the cage, hung slack. He knew instantly that something was wrong. A few moments later word came up through the speaking tube from the footman that the cage with its load of human freight had struck the bottom with a terrific crash. A rescuing party of officials and workmen labored for several hours before they finally succeeded in extricating all of the bodies from the tangled mass of wreckage.

The question arises, why did the safety catches on the cage fail to work? I must say that I was greatly deceived in them. At the Delaware shaft of the Delaware and Hudson Company, where I was foreman for a number of years, the same kind of safety catches was used upon the cage. I had often seen them tested and they never failed to work satisfactorily.

These safety catches were what are called the quadrants. They are made of brass, with a row of teeth around the outer rim. They are adjusted by means of rubber springs through which the draw-bolt on the cage passes. If the rope breaks or becomes detached from the cage, they are supposed to wedge and grip tight upon the guides in an instant. There are four of these quadrants on each cage, or two to each guide, opposite each other.

Why they did not grip the guides and hold the cage on the morning in question is in my opinion due to one of two causes:

1st. That the safety catches on that cage were out of order at the time of the accident; or,

2nd. If they were not out of order, they were not safety catches such as the law requires that will be effective under any condition that may arise in hoisting shafts.

As to the first condition, we have the sworn testimony of John Moore, carpenter, and Thomas Ruddy and Harry Mills, engineers, whose duty it was to examine and keep in good order these safety catches, that they had examined them and that they were in good working condition.

As to the second condition, it was shown by the testimony of Mr. Thomas, who was looking at the cage as it was coming to the Hillman landing, that when the rope broke, the cage disappeared in an instant, showing conclusively that the safety catches failed absolutely to act. The guides at the point where the cage was when

the rope broke were in good condition, but they showed no signs of the safety catches having taken hold of them. This was a surprise to us all.

After the accident a great many opinions were expressed by different persons as to why the catches failed to work. The opinion most expressed was that the piece of rope hanging to the cage had held the catches taut and therefore they could not grip the guides as their inventor intended they should. If this theory be true then it must be acknowledged that the safety catches are not equal to all emergencies that may arise in our shafts.

I had intended, after being notified by the Chief of the Department of Mines, to test all the cages in the shafts in my district, and to test some of them under about the same conditions as prevailed at the Conyngham shaft at the time of this accident, namely, to drop a cage when several hundred feet of rope were attached to it. But when I spoke to some of the superintendents about doing this they were loath to do it. They felt that it would not be right for me as a Mine Inspector to cause them any more trouble or expense than operators were subjected to in other inspection districts. I had to acknowledge that their point was well taken, and as I had no authority to compel them to furnish pieces of rope of different lengths, I was compelled to abandon my idea of making such tests. The problem whether a piece of rope attached to the cage and falling with the cage will hold the safety catches taut and prevent them from taking hold is so far as I know at the present time unsolved.

Since this disaster, I doubt whether superintendents, foremen and intelligent mining men generally believe that if a cage loaded with men were descending a shaft and the rope were to break, or the cage become detached, the cage would stop in its descent.

In my experience in testing safety catches, I have found that if the cage does not stop the very instant it is cut loose it generally goes to the bottom. There seems always to be a reason for this. Sometimes something about the catches breaks, or the catches having small teeth get filled up with wood from the guides, or pieces break out of the guides, and when this happens the cage gets a start and generally lands upon the bottom.

After the above explanation of my experience in testing the safety catches, it will be seen how unlikely it would be for a heavy cage loaded with men going down some of our shafts as fast as they do sometimes, to be caught by the safety catches. In my opinion it seems nearly impossible for the reason that the heavy weight and the momentum of the cage going down would cause something to break or give way.

Even if the catches did hold fast and the cage stop suddenly, the result to the men would be the same as if the cage had struck the bottom hard. The chances are that they would all be injured or possibly killed by being thrown off the cage into the shaft. It is evident that all the dangers to which we are subjected in going up and down our hoisting shafts are not eliminated by the safety catches.

I have no wish to create any unnecessary alarm among mining people. Some of the safety devices now in use are the best that the market affords, but the question arises: Are they given proper attention? Every person whose duty it is to look after them should

do so without fear or favor, and according to law. If he does this he should have nothing to fear, but on the contrary he should have the thanks of his employers and of the men who must ride upon the cages.

The two best safety devices are:

1st. To always keep good ropes in shafts where men are hoisted or lowered. 2nd. To employ good and careful engineers, and not allow them to be overworked, men, who when hoisting or lowering men will run their engines as the law requires. If these two safety devices were adopted, there would scarcely be an accident of this kind.

The officials in charge of the mine always sincerely deplore any serious accident. The Mine Inspectors also regret them exceedingly and sympathize with the victims and their friends. But regret and sympathy amount to nothing to the victims, or to widows and orphans. What is needed is more strict oversight. If the provisions of the mine law were carefully followed, as the law intended they should be, there would be fewer accidents.

Take for instance the accident at the Conyngham. It shows plainly that the law had not been fully complied with, for what reason I am unable to explain. There were four men, three engineers and one carpenter, delegated by the foreman to look after the ropes and cages in this shaft. At the inquest, three of these men swore that they had examined this particular rope on the day before the accident, and that they could not see any broken strands in it. Yet when the rope broke the next day, there were numerous broken strands to be plainly seen on both ends back along from where the rope parted. I do not think that all of these broken strands had been broken between the time of their examination and the accident. It seems to me that these broken strands must have been visible to any one examining the rope for several days before the accident, and if they were, then all of those men whose duty it was to examine the rope and report its condition to the foreman, failed to do their duty, both to themselves and the company employing them, and also to the unfortunate victims and others who were compelled to ride upon this cage.

The only explanation that I can give as to why these men did not see those broken strands was, that they did not examine it as carefully as they should, and the reason they reported it in good condition, was that they took it for granted that as it was used only to lower and hoist men there would be no danger of it breaking. Of course this is only my supposition and I may be wrong.

I was sick at the time of the accident, and told them to notify Mine Inspector P. M. Boyle, who would assume my duties in the case. Mr. Boyle arrived at the colliery a short time after the accident and assisted in getting the bodies out. He notified Coroner Dodson to hold an inquest. There were several sessions before all the testimony was secured.

The verdict was as follows:

#### Verdict of Coroner's Jury

We, the jury, do say, that from the circumstances connected with this case and the evidence, that Frank Royal came to his death from being hurled down the shaft of the Conyngham mine, in North Wil-

kes-Barre, of the Delaware and Hudson Coal Company, on April 26, 1905, owing to the breaking of the rope and the dogs not working while the cage was descending. We are unable to determine from the evidence the cause of the breaking of the rope. We further find from the evidence given at the various hearings that the company had incompetent men to inspect this rope. We, the undersigned jurors, recommend that the company adopt some other method than the one now in use for testing the dogs, as the present method has proved inadequate. We further recommend that engineers, where men are to be lowered or hoisted, be required to be on duty but eight hours at one time, and we heartily approve of the method of employing engineers as recommended by Mine Inspector Martin in the Wilkes-Barre Record of February 28, 1905.

D. W. DODSON, Coroner.  
JACOB EVANS,  
JOHN CRAWFORD,  
FRANK CASTERLINE,  
THOMAS P. WILLIAMS,  
CHARLES CUNNINGHAM,  
JAMES HALL,

Jurors.

#### CONDITION OF COLLIERIES

The condition of the collieries in this district is good in regard to ventilation, except in a few instances.

It seems as if some foremen do not consider that it is necessary that all parts of a mine should be kept in good condition, especially as to ventilation. I have often found fault with the ventilation, but of course the foremen always have some excuse to offer, such as: "We expect to get a certain heading through so that the air will be better;" or, "The doors have been left standing open somewhere, which affects the ventilation badly. They know, however, that they have no one to attend to the doors properly. Numerous other excuses are also offered.

In my opinion it should not be necessary for any foreman to make excuses for the proper ventilation of any part of a mine, as required in Article 12, Rule 3, of the Anthracite mine law.

The mine foreman under this rule has charge of all matters pertaining to ventilation, and the speed of the ventilator is particularly under his charge and direction; and any superintendent who shall cause him to disregard the provision of the law shall be amenable in the same manner as the mine foreman.

#### IMPROVEMENTS

##### LEHIGH AND WILKES-BARRE COAL COMPANY

##### Hollenback No. 2 Colliery

Outside—Brick oil house; brick power house.

Inside—No. 18 Tunnel Red Ash to Top Red Ash; No. 19 Tunnel Red Ash to Top Red Ash.