

ADVENTURES  
IN THE MINES,  
OR  
PERILS UNDERGROUND.

BY  
T. T. O'MALLEY.

The Great Mining Disasters of the World  
from 1812 to the present time,  
Recorded and Described  
in Vivid Pictures.



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**BY**

**T. T. O'MALLEY.**

## INTRODUCTION.

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**T**O the brave and hardy miners, among whom the author has passed his life, this work is dedicated. Whether it fills a long felt want or not remains for them and the public to decide.

In searching for such information as this work contains the author found it very difficult to secure it, as the only place it was to be had was out of the reach of those working in and around the mines; and it had no existence whatever, as far as the general public was concerned, prior to the passing of laws creating the office of Mine Inspectors. It seemed that such information should be put into the hands of miners and the public, and after a great deal of labor and expense the author gives to the world this work for acceptance and encouragement, or rejection, criticism and discouragement.

For the miner it is intended to be of value for future reference. And, as it contains something of importance from every known mining region, it may, perhaps, recall to the mind of many some incident in which they took part, or some friend of bygone days who met his fate in some of the accidents so vividly portrayed. For that reason it should be found in every miner's home.

To the public it will convey some idea of the conditions surrounding the miner in his efforts to provide daily bread for himself and those dependent on him. It may also put him before the public in a light in which it seldom sees him, and may perhaps do something towards creating a sentiment that will see to it that he gets fair play, and have laws passed that will remove some of the causes that brought about the terrible disasters that its pages record. If it does this, part of its mission will have been fulfilled and the author's wish gratified.

The descriptions given are taken from every source within reach of the author, and which no effort has been spared to secure. The files of the National Labor Tribune, of Pittsburgh, Pa., have contributed valuable material; so has the Tri-Weekly Record, of Mahanoy City, Pa. Andrew Roy's "Coal Mines" has furnished some important matter, and of late years, the reports of the Mine Inspectors have given a great deal of information. The daily press has also been used, and those papers giving the most vivid and reliable description have been clipped and the proper credit given. The accounts have been given as found, and, as it is not the intention of this work to censure or glorify any one connected with the disasters or the efforts at rescue, the names of all, as far as possible, have been suppressed.

Relying on the merits of the work to commend itself, I remain, in the cause of humanity,

T. T. O'MALLEY.

CANTON, O., September, 1891.



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# ADVENTURES IN THE MINES

## OR

### PERILS UNDERGROUND.

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#### CHAPTER I.

#### MEMOIRS OF A MINER.

ACCIDENTS AND INCIDENTS OF TWENTY YEARS' MINING IN THE BLACK COUNTRY—MISREPRESENTATIONS ABOUT THE GIRLS WHO WORK AT THE MINES—HURLED TO DEATH—CRUSHED BENEATH THE WEIGHT OF THE EARTH—THE STORY OF THE MINER WHO WOULD WORK ONLY AT NIGHT, AND WHO DID THE LABOR OF TEN MEN—DISCOVERY OF HIS SECRET AND THE LITTLE DEVILS THAT HELPED HIM DIG COAL—NARROW ESCAPES.

**T**HE Black Country is that part of South Staffordshire, England, which comprises the towns of Wolverhampton, Bliston, Wednesbury, West Bromwich, Wallsall, Willenhall and the mining villages surrounding them; so called from the smoke and soot of its blast furnaces, rolling-mills and mines. Any night a person could stand on the high heaps of pit dirt, between Portobello and Bilston, and see the glare of lights from furnaces and mills in a semi-circle extending twelve to fifteen miles, and could hear the crash of the ponderous hammers as they shaped the iron for the rolls, and the hum of the rolls from any of the above named towns.

Speaking from an experience of twenty years' residence, I wish to correct a misstatement made by Robert P. Porter, in his fifth letter of "Bread Winners Abroad," where he says: "About the mines and furnaces and around the heaps of slag in the Black Country may be seen by the glare of the furnaces by night and day the stolid, animal faces of the women with, shoeless feet and uncovered legs and arms begrimed with clotted filth, assisting the men in their work. Indeed, savage-featured, reckless, dirty men and women, whose main enjoyment seems fighting and carousing, form the chief attractions of this rich mining and manufacturing district.

Men who go with clean cloth shirts to the pit every Monday morning, and who make it very unpleasant for one of their number who by chance may go to work with a dirty shirt on Monday by plainly and loudly insinuating to him about having a dirty wife, if married, or too miserable to pay his wash-woman, if single, cannot be held up as dirty. Any one standing on the roads to the collieries, where the girls work on the pit-tops, would find it very hard to find any of those "stolid, animal-faced women, with shoeless feet and uncovered legs begrimed with clotted filth" as they went to and from their work. On the contrary, they would find them comfortably and cleanly clothed, with clean, white, coarse cloth aprons to cover their clothes while at work, and good strong leather shoes and woolen stockings, and as fair to look on as the average woman, rather fairer than those penned in factories and cotton-mills. Any of their number going to work in dirty or unbecoming

clothes would soon be dubbed a dirty clout. This seems a digression, perhaps, from the subject of the heading of this letter, but as these men and women will form some part of it I think it nothing but right that those reading of them should know something of their real characters, and not trust to misrepresentation, even if it is done to uphold protective tariff.

The miners of the Black country were not as well provided with improved machinery during the period of which I write—1850 to 1870—as they have been since, and a description of them will be necessary to understand the cause of some of the accidents. The shafts are all round, seven and one-half to eight feet in diameter.

The frame is made of two twelve-inch uprights, eighteen to twenty feet long, firmly joist into fourteen-inch bottom pieces, and is supported by the same size timber, joist in the same bottom pieces, and is braced and held near the top by a twelve-inch cross-piece and two ten-inch braces, the bottom pieces being held in place by four twelve-inch pieces, the proper length, make the frame solid, so that it can be moved or raised, as is often done when the dumping-ground is scarce. The pulley is from four and a half to six feet in diameter, with six or eight-inch tread and three-and-a-half-inch flange.

The hoisting-chain is made of three-quarter-inch iron by three-eighths thick, and it takes three lengths of these to make a chain, which are fastened and held together by hard wooden cleats, making the chain nearly four inches wide.

The skips to hoist the dirt in are of two kinds, the bow and the tackler, and are of iron, from three and

a half to five and a half feet long and three to four feet wide. Bowskips are so called because of the bow, from four to six feet high, bolted underneath, by which they are drawn out of the shaft. Tackler-skips are made with four iron rings, or tugs, being fastened on the corners, to which are hooked the tacklers, that are fastened to a big iron ring, in which the hook of the hoisting-chain is put when they are to be hoisted. As the skips are not more than six inches deep in the body, four to seven iron rings, made out of seven-inch light plate-iron, just a size less than the skip, are used on the skips to make them hold a big load.

As many as five pits, and, in some instances, seven, are attached to one engine, and, as they are generally in all directions, some cannot be seen by the engineer. These are called blind pits. As the chain is not heavy enough to draw its own weight from the engine, iron dollies from 1,000 to 1,500 pounds' weight are attached to the end of the chain about seven feet above the hook to act as balance weights.

In order to land the material when it comes to the top of the shaft, an eight-inch studding about eighteen feet long is put over the edge of the shaft on each side, and is bolted down to three of the cross-pieces mentioned as holding the bottom pieces of the frame in place. On these are put angle iron rails for the wagon, which is strongly made to cover the whole top of the shaft, to run on. The wagon is covered with boiler iron plate, and is higher at the center, so that when the sharp wheels of the skip rest on it, as soon as it is unhooked from the chain, it will run into the guide plates that run it on to the rails and to the dump.

The first accident that comes under my notice happened in the month of March, 1840, in Bull Plack colliery. My father and seven boys got into a tackler skip to go down in the morning, the boys generally being the first to go down, with one or two men along. The engineer pulled them up off the wagon to let the banks-man pull it from under them, but being a blind pit, he did not wait any signal from them, but began to let them down before the wagon was clear from under. The skip caught on the cage of the wagon, and in swinging off swung to the side of the shaft and two wheels caught on the angle iron rail and held there. The position of those in the skip was perilous in the extreme, the chain still going down, their heads were soon below their feet; they held with grip-like vises onto the tacklers as only men can when death stares them in the face.

So terrible had become their position that thirty strong men who were looking at them turned their backs toward them rather than see them go down to death. One man soon recovered from the stupor which had come over them and was quick to act; clasping the upright of the frame with both arms he got down to the rail with his feet, and, firmly bracing himself with one foot, with the other he gave the skip a sharp push, and with a "Hold fast, lads!" sent it down the shaft to the end of the chain, which by this time was down below them fifteen to twenty feet, making the fall from thirty to forty feet.

The jerk from the rail as the skip was loosened from its hold, caused one of the tacklers to become unhooked from it, and as the skip reached the end of the chain, it sidened for a moment, which threw one of

the boys to the bottom of the shaft 250 feet below them. At the same time the loose tackler in its swinging caught another of the boys across the back, and as he was jerked from his hold and was falling backward, threw him into the bottom of the skip, thus saving his life.

My father on seeing the skip holding fast and the heavy dollies going below them, firmly gripped the iron ring to which the tacklers were attached with one hand and threw his other arm around the four tacklers, and braced himself for the ordeal he knew was inevitable, the dragging of the skip from its hold by the weight of the chain as it went below them, so that when the skip was pushed loose, keeping his presence of mind, he was prepared to act as occasion required. As soon as he saw that one of the tacklers was loose he threw his weight on the opposite corner by changing his foothold. In doing this one of the boys, who had held their positions until the skip was righted, fell against him and was falling down the shaft when he caught him and threw him inside of the tacklers at the same time speaking words of encouragement to all the boys, and as the skip was swinging from side to side of the shaft he had to stand on one foot and with the other steady the skip and prevent it from catching against the brick work that lined the shaft.

As they were nearing the bottom they heard the boy that had fallen moan once, but by the time they reached him he was dead. By this time they had got signals to and from the engineer, and when they had got the dead boy in the skip he was ready to obey their signals, and having made all the tacklers secure the



signal was given to hoist away slowly, which was done; but now that the danger was over my father found that several of the boys needed his attention so much that he could hardly give any to the dead boy. With the dead boy's head against his knees and his arms around the living ones, that ride up the shaft that morning was among the most terrible experiences of his life of forty-five years, mining.

In Bagnall Bros.' colliery, Bentley Hay, the winter of 1850, a big seven-ring skip loaded with iron ore was being landed on the wagon at the top of one of the shafts. One of the girls climbed the rings to unhook the chain from the bow; as soon as she had unhooked the skip the wagon tilted and ran back, turning the skip with the girl on it back into the shaft, while two others narrowly escaped the same fate by jumping back from the wagon as it started to run back. Although the skip turned over with the girl under it, the dust of the débris had partly settled, and the men who worked at the bottom of the shaft, and who had run on hearing the clatter of the turning skip, accompanied by the terrible screams of those on top as they saw the poor girl go down to death, had got back to the bottom, when they saw her fall with a dull thud before their eyes. No sign of life could be seen when they picked her up.

On the 28th of December, 1851, my father met with an accident that came as near ending his life as it was possible and live after it. He was working at what was called a diamond-ore vein, in the Barker Bros.' Moseley Hole Colliery. The vein was only two feet thick, and he was in the act of drawing and re-

setting props, preparatory to mining the ore, and packing the dirt in what is commonly called "the gob" to keep up the roof, as the solid was being taken away in a long-wall work. In setting his props he had noticed a break in the roof, and had set two props to catch the solid (as he thought, having sounded the roof), and was in the act of setting the third, and had got the prop somewhat tight, when, bringing all his power to the sledge, he hit a blow as hard as he could. As soon as he struck the prop the roof gave away over him, breaking the caps of the two props he had already set, and bore him beneath its weight.

His fellow-workmen being near soon responded to his gurgling cry for help, as it crushed his head between his legs. But the mass being so great—six feet long, three feet wide and over two feet thick—and the place being so low, they could not relieve him until they got more help from other parts of the pit; which they soon got, and with six crow-bars raised it from him just as his breath was leaving his body and he had given up all hope of ever being taken out alive.

He was taken home, and the colliery doctor with two others were there as soon as he was to attend to him. On examination they gave him up and told him to make all arrangements he had to and prepare himself for death, as it was only a question of a few weeks at the furthest.

One of the surgeons who was present, and who was at that time just rising into prominence as one of the cleverest surgeons of his day, differed from the other two doctors, who were a great deal older than him, and would not give him up, but asked that the case

be put into his hands, and he to have permission to call in any and all the help he would need, which was readily granted, the others claiming he had a hopeless case.

It may be well to remark here that every colliery in South Staffordshire had an accident fund attached to it under the control of the owners, and six cents per week was deducted from the men's wages and three from boys. Out of this they received a weekly stipend as long as they were unable to work, and a doctor was allowed them, or as many as were needed, who were paid out of this fund. If the family desired additional doctors to those provided, which was very seldom, they were allowed to call in any one they chose to act with the colliery doctor.

This young doctor gave his entire time to this case for three weeks, and in that time he told him that he would live many years, though he would never be able to do any work, but he would be able to walk around. It was found that two joints of his backbone had been dislocated, and protruded from the rest about an inch and a half, without cutting or injuring the spinal cord. It had reduced his height over an inch, and, though he walked stooped after he got well, in eight months my father commenced to work in the mines again, and dug coal up to the day before he died, in August, 1878.

In the early fifties a man called "Mike, the Navy," got his leg broke while loading a skip at the face of the workings. He was taken home in a wagon and was not long there before the doctor arrived. The doctor called on some of the men present to assist him to get the leg in a position to have the splints

put on. Two of them took hold of Mike by the body, and the biggest man there took hold of the leg with the doctor.

They gave the leg a sharp pull which made it crack as the bone came to place, and made him give a yell that could be heard for some distance. While the doctor was bandaging the leg Mike yelled out to the man who had pulled on it, "Oh, Tom, 'Tom, get the ax and chop the head o' me! I'd soon live as die."

#### THE GHOST OF BAGLEY'S PIT.

Near Duck Lane, Bilston, is a pit, known as Bagley's Pit, that has never been worked any in the memory of the younger miners, and the reason given is the following story: Joe Bagley went there to mine, or hole, which is done by piece-work. He was not there long before there was some work needed to be done at night, so that the loaders would have enough coal to last them all the next day. Bagley and two others were told off for the night shift, but it being a holiday time his comrades did not show up, and he went to work by himself, and, though not being considered above the average workman, he did the work that was intended for the three.

After this he always endeavored to get work to do at night, by himself, and when he had to work many days in the daytime he was always growling and dissatisfied, as then he did no better than other men. Finally he got the doggy (Boss) to agree to let him have all the work he could at night by himself, and as it made no difference to the doggy so that the work was done who did it, he was glad to get rid of his continual growling in this way. The

first week he kept up the work of three men, the second four, and so on every week until he was doing the work of seven men. In a short time the men working days began to run short of work, and began to complain of him doing so much and they having so little to do. The doggy called his attention to it, but he held him to his agreement. The amount of work he was doing soon began to be the talk of the colliery, and some of the men began to swear out that he must be getting help from old Nick, as he could not do any more than other men when he worked with them.

At last some of the men, determined to watch him and see how it was that he did so much work. Three of them agreed to go together one Sunday night that he was at work, and got the engineer to go and let them down. Two went down, and the third stopped on top to give the signal to the engineer to pull them up when they had satisfied their curiosity. Quietly and noiselessly they approached the corner of the entry from which he worked, and as it was close on midnight everything was so quiet that the slightest noise was like a roar. Judge their surprise as they came near on hearing a number of picks going as quick as arms could use them. So busy were the workers that they did not hear them approach, and as they looked they saw by the sulphurous light that surrounded them, in all shapes and sizes, more little men than they could count. They held their breath as they heard one of them say: "Bump him, Bagley; he peeps." To make themselves sure, they both took another look, and saw Bagley in the midst of the throng, and before

they had time to draw back they heard several voices exclaim, "Bump 'em, Bagley; they're peepin!" And without further ceremony they started for the bottom of the shaft as fast as they could go, but not before they heard Bagley yell out: "After 'em and catch 'em!"

With hair on end and cold sweat running from every pore, they reached the bottom, and with a yell, as though it was their last, they called out, "Hoist away" as they heard the roar and clatter of Bagley and his crew after them. Not one moment too soon did the engineer, though ready and waiting for them, hoist them up, for before they were many yards up the shaft picks and shovels came flying up after them, some striking the bottom of the skip under them and some went up past them and fell without touching them.

When it was found that they had escaped, the most horrible yells and unearthly noises were heard below, and then came the piercing screams of Bagley for mercy and help; before they reached the top they heard a roar as though some of the roof had fallen, and then all was quiet. They reached the top as near dead as alive, and as they reached the landing safely, one of them fainted away and while the engineer and their comrades were bringing him to, the other told the horrible tale of what they had seen and heard.

On Monday morning when the men went down to work, not knowing of the scene of the night before, they found some roof had fallen and began to clear it away, while the doggy went to see if Bagley had done work yet. They had not been shoveling long before one of them saw a human foot; knowing Bagley was the only man

at work, they concluded that he had got through his work and was asleep when the roof came on him, and crushed his body into a shapeless mass. By the time they had got him out the doggy came back and reported that he had started and done enough work for ten men, but it looked as though he had left it in a hurry. They took his body home, and the pit was idle, as they generally are from the time a man is killed until he is buried. Before he was buried and the pit ready to start, the tale of the two men was spread by themselves, their comrade and the engineer, and from that day to this the pit has never worked a day, but with chain and pulleys rusting and the frame going to decay, it is still pointed out as Bagley's Pit.

One of the most heartrending, distressing and disastrous accidents that is reported in the annals of the Black Country happened on a bright July morning in 1853, at a pit in Bunker Hill Colliery, Portobello. One of the Sunday-schools of the village was having an excursion to Dudley Castle, and a boy named Richard Bowen, about seventeen years old, wanted to go along with them. His father, who was doggy at the pit where he worked, knowing he would have to put a man in his place if he went and then not get the work done as well, would not let him go; but promised at some other time when there would be an excursion he would stop the pit a day and let all the boys go. Seeing this did not mollify him or make him better pleased about going to work, but still muttering that he would go, his father threatened that if he did not show up in time for work he would make him sorry for it, and went to work, leaving the boy to follow him. After he went his

mother began talking to him, and the result was that he said he would go to work, but muttered: "Father will wish he had let me go before night."

When he got to the pit the young men and boys, knowing that he had set his mind on going—having talked about it the week before, and knowing his willful temper—said: "Hello, Dick, thought you were going to Dudley Castle this morning?" "The old man cu'd'ner get along wi'out yer, could he?" "Who'd drive Jerry if you went?" "The old man knows a thing or two and wu'd'ner let you go, wa'd he; now, own up?"

"No, he wouldn't; but I'll bet a shillin' he'll wish he had before night. The next time I want to go any w're I'll bet he'll let me go."

By this time they were getting ready to go down, and Dick, with five other boys, his father and two other men, were the first to go down—eight men going down the next time. The eight men had not got more than half way down when those on top felt the earth beneath them tremble, followed by a terrible explosion below, and saw clouds of dust and smoke and the skip and men come flying out of the shaft. The skip was blown completely over the top of the pulley, taking the chain and four of the men with it to the engine house, which was close.

Two of the men were blown clear of the shaft, one of them falling nearly one hundred yards away, and two of them fell back down the shaft. So terrible was the explosion that it was heard for a mile around, and as the pit-heap was high, men who were just going down a pit a mile and a half away saw the skip and men come out of the shaft. It is useless to say



that no pits in that vicinity worked that day and colliers from every direction were there in a short time to give every possible assistance, while thousands of women and children thronged the pit-heap and the fields around it. Those among them having loved ones working at the pit pushed themselves forward and filled the air with piteous wailing, assisted by the women and children near them.

No time was lost in gathering those together who were on top, and preparations made to go down and look after those below. And while the skip and chain were being got back over the pulley, many theories were advanced as to the cause of the explosion, many declaring it to be gas, but as gas had never generated to any great quantity before, it was strange, and no solution could be found, until they went below and found evidences of the fact, and those who heard recalled to mind, only too vividly, young Bowen's words: "There'll somebody wish I had gone to Dudley Castle before night."

On reaching the bottom they found skips, rings, rails, timbers and tools blown in all shapes. They passed on. Reaching the stables they found them caved in. On they went, some in one entry, and some in another. One party soon found one of the men dead in the entry, his clothes burned partly, and a hole in the back of his head showing the brains oozing out. A little further on, near the face of the workings, they saw Robert Bowen, the doggy, with a skip blown over on top of him and his neck across one of the rings under him. This completed their search, and they returned.

The other party found the other man with his shirt

half over his head, in the act of pulling it off, beneath some timbers that had been blown down and dirt that had fallen on him, quite dead. This completed the search for the men, and they returned, taking the dead man with them, to help the other party to search for the boys, who it was thought, would be in or about the stables.

On examining the trap-door, which was not far from the stables, they found it was blown from the hinges against the side of the entry, and some dirt had fallen from the roof against it, fastening it. They soon got the door away and found the little trapper boy behind it, to their surprise and joy, still alive, though unconscious. They soon brought him to, two of the men bringing him to the top as quick as possible in order that he might get fresh air, leaving their comrades down to be joined by others in their search for the dead boys, and to bring the men to the top.

The cause of the explosion can best be told in the words of the boy himself, the only one that could give it: "When Bob Bowen gave us all our candles he told Dick to attend to the candle-box, and give the rest of the men their candles when they came down; and then he went away, and so did the other men; the boys went to gear their horses, and I went to put my candles away behind the door. Just before I got to the door I saw Dick stoop down in the candle-box and get the key of the powder case. I thought he was going to get some powder to lay a train on the rail, and made haste to put up my candles so I could go and get some of it. I just got behind the door, and saw a big flash of light all

around, and then I felt the door slam against me, and I don't remember any more."

Young Bowen had set fire to the powder magazine in his mad, reckless desire for revenge and spite, leaving bereaved parents, lonely widows and helpless orphans to curse the day that he was born.

The four boys and the horses were got from the stable, where they were crushed to death by the fall of the roof, caused by the explosion so near them. All that was ever found of Bowen was one foot, one arm, with the coat sleeve on it, part of his coat and his cap.

The pit was started after that, but never proved a success, and was shut down and has never worked since. It is said to be haunted, and the watchman of that colliery up to 1867 or 1868 would tell you that a man could be seen going down the shaft, with candle in hand, any dark night, and though he has often gone from the engine house to try and see what it looked like he could never get near it, nor could he get his dog to get away from his heel from the moment it was in sight until it had disappeared, while he could hardly hold him when there was any-one around the colliery.

Young Bowen proved himself to be terribly in earnest, and nothing could be more true than his words: "Somebody'll wish I was let go to Dudley Castle before night."

In the winter of 1853-4, on a very wet, blustering day, a young girl who was working at a mine, in Sparrows' field, Moseley Hole, had a narrow escape from a terrible death. She was pushing an empty skip to the pit-top from the dirt dump, and as the rails were

wet it ran easy. Before she was aware of it, she was on the guide plate, and before she could let go the skip went into the shaft, dragging her with it. She let one scream as she was dragged into the shaft, which was one hundred and twenty yards deep, and those who saw her go, shuddered at the thought of her horrible death and pictured her mangled body as it would be brought up.

But, strange to say, she did not fall in the bottom of the shaft with the skip, nor for several seconds after it, and when the men picked her out of the bottom she had life in her, but was unconscious, and was so until they brought her to the top, when she shuddered as she opened her eyes, and went into a faint again.

She was taken home, and on examination it was found that she had not a bruise on her, the terror of her falling being the cause of her fainting. When asked, she said she remembered nothing after she felt herself going, except trying to loose the skip and screaming.

As it had been raining, she had on a long flannel coat (called smock) that covered her body down to her feet. The shaft being an upcast and the rush of wind from the falling skip, it was supposed, got under the smock coat and the rest of her clothes, filled her out like a balloon, and as she was fortunate enough not to turn over, prevented her from falling with much force, and saved her life.

One bright morning in the harvest of 1854, as some coal-miners were going to work, they saw a greenhorn Irishman lying asleep in a field near the pit where they worked. His sickle and little bundle

were evidence that he had come over to reap the harvest, and that he had been drinking was plain to be seen.

The question was how to play a joke on him and what kind? It was soon decided. Several of them took him up and carried him to the pit, and as it was time to go down they placed him in the skip and took him with them and placed him in a stable, while they went to their work.

About nine o'clock they all came to the stable to eat their breakfast and to see how he was. While they were eating and talking he awoke, rubbed his eyes and looked around on the blackened faces around him, the dark gloom dimly lit by a few candles, making it seem more dismal. At last he spoke, as though to himself: "In the name of the Father, Son and Holy Ghost, what kind of a place is this that I am in?" No answer. With eyes bursting from their sockets and terror spreading all over his face, he exclaimed "Och, mille murther, what place is this? In the name of God, where am I?" "In hell," answered a deep hollow voice.

"Lord have mercy on my poor soul, an' let me out of this," he prayed piteously.

"Out of hell there's no redemption," again from the hollow voice.

"Oh, don't say that—don't tell me I'm in hell! Ye don't look like divils; ye look like min. If ye're not min, what are ye?"

"We're devils and we're here to torment you for all eternity!" came in hollow mocking tones, followed by a chorus of ha-ha-has.

"Och, wurrasthru! wurrasthru! What'll I do at

all, at all! What'll my poorould father an' mother do now widout me, now I'm gone? Shure I never did harm to mortal man, woman or child in all my life. Och, why did I come to the curse o' God country, England, for at all, at all?"

In the Irish cry, while sobs now and then shook his body, he kept on moaning and bewailing his sad fate.

Seeing that he was well scared, and that the joke was about over, they concluded to go back to their work, as they would be done at dinner and take him up again. As they were leaving him the hollow voice said to him: "Lay down there, now, and don't stir, or you will bruise yourself, and the pain you suffer here will be a thousand times greater than on earth."

It is needless to say that he very readily obeyed, and whether it was darkness, the soft bed or the drink that overcame him, he fell asleep, and when they came to take him up they found him snoring as hard as man could do. They took him by the arm and shook him awake, when the hollow voice again spoke, and said, "Now, you're in hell, come and see what it looks like."

He got up and followed without a word, and they took him to the bottom of the shaft and ordered him to get in the middle of the skip on his knees, and they all got around him. When he got to the top and was landed, he looked around him dazed, and at last fell on his knees and thanked God and his blessed mother that he could see the blessed sunlight once more. Those around him looked on without speaking. At last he got up and said: "What place is that?" "A coal shaft." "And what do ye do down

there?" "We dig the coal and send it up." "An' is that where ye work every day?" "Yes." "Well if hell is any worse than that I am well rid of it. Come along with me and we'll have a jug o' drink, for I have seen as much of a coal shaft as will do me the rest of my life, an' I'm much obliged to ye, 'an hope we'll get better acquainted before we part."

The rest of the day was spent in getting acquainted with each other and the beer jug, and the greenhorn was thankful that his being in hell was no more than a joke.

There is a good story told of two young men who went in a mine on a Sunday evening to get coal to load on Monday, as the pit was going to run. They had been at work some time when they heard a voice in sepulchral tones say, "Young men, quit your work and leave this place at once!" The hair on their heads began to assume the position of quills on the back of the fretful porcupine. Before they had time to make up their minds what to do, another voice in more hollow tones than the first said, "Work on, young men ; your time has about come anyway! and was followed by a mocking "Ha, ha, ha," by several voices in chorus, and chains began to rattle most dreadfully. Not a light was to be seen, nor a body, though the voices sounded close to them. It is useless to say that these young men left that room in a hurry with the cold sweat pouring from every pore in their bodies, and have never attempted to work on Sunday since, whether they had coal or not. It has been rumored that the mine is haunted on Sunday since that. It would be a good thing if all the mines were haunted on Sundays.

LIVES LOST THROUGH THE CARELESSNESS OF ENGINEERS  
—CUT OFF BY A FLOOD OF WATER—HOW A LIFE WAS  
SAVED—A PARSON'S AMAZEMENT—THE HAUNTED  
MINE.

Although it is generally known that women worked in the mines in England in former times, we cannot find any one that has known of them working regularly in the mines since 1840 in the Black Country.

The woman that is known as the last one that worked in the mines there is Susan Wantling, better known as Shucky. In the early fifties her husband, Jack, and another man were to go to work one Sunday night to set some timbers and clear some dirt out of the main entry at the pit where they worked. For some reason the other man could not go to work, and, as it was necessary to have the work done in order that the pit could work the next day, the "butty" of the pit sent word to Jack to be sure and go to work and do what he could. When the time to go to work came, Shucky put up food for the night for herself, as well as Jack, and got ready to go with him. Seeing what she had done he said: "Why, Shucky, wat's mean? Wat's put all that fittal up for, an' wat's put the dress an' ap'rn on for?" "I'm puttin' fittal up for me, as well as thee. I'm goin' to work wi' yo' to-night to help put them timbers up." "But thee mus'ner; thee cos'nt help me." "Caw't I? I'm as big as thee, an' as strong, an' can lift them timbers up as well as thee." "Arh! but wat'll people say 'bout thee goin' to work all night wi' me?" "I dow care w'at they sa'n. It's no use thee talkin',



our Jack, I'm goo'in', an' that settles it." And it did, as Jack knew from experience.

The greatest explosion of gas that took place in the time mentioned was in the Leg o' Mutton Pit, near Moseley Hole, in 1855. Seven men and three boys went down to work one Monday morning in the spring, and, knowing that there was gas generated in the pit, the doggy prepared to examine it, taking his candle with him part of the way, intending to put it out when nearer the face of the workings. Before he got very far in the main entry, however, he lit the gas, which exploded with terrible force, burning the doggy and two other men and two of the boys to death, and severely burning the others.

One of the men, in a pit near Bilston, fired the gas in one part of the workings, and fell, escaping being badly burned. Although it did not burn any one it made explosion sufficient to blow out all the lights in that part of the pit, and blew one man down on his face. The warm wind coming against his back frightened him, and he lay there moaning and bellowing that he was roasted. Some of the men coming to him picked him up to take him out, thinking that he was. But contrary to men who are generally burned with gas, and who never waited for a light, but started for the bottom of the shaft on a run, he never stirred, which caused the men to examine him, and they found he was not even singed, and that the gas did not come within a hundred feet of him.

Five men were at work one night in the Millfield Colliery, when the water broke in from the shaft, completely surprising them, and drove them from their work to the highest point in the pit. The water,

filling all the places around, was fast encroaching on their limited space, when it choked itself by reaching the level of the roof on the bottom, and did not quite reach them. It was not discovered until the men came to work next morning, and though, considering the height it had reached in the shaft, very little hope was entertained of ever getting them alive, water barrels were started and pumps put in to get the water out as soon as possible, to get their bodies if they could not save them.

For four days and five nights they watched and waited on relief. Seeing themselves imprisoned, with very little hope of ever being rescued alive, they resigned themselves to their fate, but concluded to make a fight for existence as long as possible. They apportioned the food they had with them for their night's meals into as small rations as possible to sustain them, and they also concluded to make the candles they had with them last as long as possible to give them light, so they only kept one candle burning. After what seemed almost an age to them in their loneliness, they noticed that the water that had been so still since it had stopped rising on them began to move, as if disturbed by something. This seemed to surprise them at first, and they did not know what to think; but they closely watched the water's edge for some time, and saw the movement was regular. This caused hope to rise in their hearts, as they judged it to be caused by the water barrel going up and down.

This gave them great encouragement, and they began to speak words of cheer to each other and tell tales of their own experience at different times of

their lives. They also established watches to be relieved at intervals to watch the water, while others slept. Long did they watch and did not notice the water lower any, and they began to think the hopes that had arisen were false ones, although the movement of the water still kept regular.

The last ration of food was divided, the last candle was lit, and as it burned low and no perceptible difference made in the water, some began to give way to despair. But the cooler, calmer minds kept them in check, and bid them hope that help was nearer than perhaps they thought. It is evident that there was something being done for their relief or the water would not be so disturbed. At last the only candle left flickered away in a feeble glare, and darkness, such as none but those who have worked in the mines can realize, set in upon them. It seemed they could no longer watch the water or reckon the hours as they passed, and though they could not do the latter, they found a means for the former by putting a stone in the water and telling the depth around it. They had not been left in darkness very long, though it seemed long to them, before they felt the water receding. This gave them renewed hope and fresh courage to bear patiently for a while longer, and after what seemed an age to them without light, by following the water toward the shaft as it receded, they got a glimpse of daylight at the shaft, which almost made some of them delirious with joy. When it was known that they were all alive, renewed efforts were made to reduce the water so that they could be got out, which was done in a few hours. On the morning

of the fifth day after they went down they were brought safely to the top, and blankets provided to wrap them in.

As soon as they got into the hovel and the doctors were ministering to them, the oldest man of the number asked for some tobacco, that he might have a smoke. The doctors denied him, when he said: "Wun'ner yo' let me have just a whiff, doctor, I feel hungry for a smoke." "No." "Eh, lads, hard's the weather when poor oud Sammy Darlin canner have a smoke."

Many lives were lost through the engineer's pulling the skip to and over the pulley when there were men on it. The worst accident that ever happened of this kind was at the Blue-Fly pit, in Whitehouse Field, in the fall of 1858. Ten men, six of whom were young men, got in the skip to go down, and, as the shaft was deep, the engine ran very fast. The engineer pulled them from the wagon to let it be pulled from under them, clear of the shaft. Forsome cause he never stopped, but the skip went to and over the pulley. Three of the young men, seeing where they were going, jumped, two of them jumping clear of the shaft, one of whom broke his leg. The third slipped on the guide-plate and fell backward into the shaft. Another man clasped his arms around the upright of the frame, swung himself clear and was saved. Two of them caught the cross-piece, near the pulley, but one was pulled from his position by some of the other men clasping him in their fall as the skip went over, thus dragging him down to death. The other held on until he was rescued from his perilous position, making four out of

ten saved from a horrible fall to death and eternity.

It soon spread like wildfire, and the scenes on top of that shaft that morning were too painful to picture with a pen. The engineer was arrested, but it required no jury to try him or judge to pass sentence. In two weeks he was confined in the county mad house a raving maniac, all the time yelling, "They're putting their hands out for me to save them, and I can't, I can't."

#### HOW A LIFE WAS SAVED.

Some men were at work one night in a pit near Willenhall, owned by Bradley Brothers, better known as the "Forty Thieves," for the high-handed way they robbed the men that worked for them. It was an iron-ore mine, and the men were loosening the dirt from off and around the ore and packing it in the gob. This is called "holeing and building up." Before the dirt was put in the gob it was necessary to draw posts that had been set for resetting, as they were very expensive and could not afford to be lost, and as they were sometimes crushed down in the bottom by the heavy weight upon them it was often a difficult task to take them out.

One man was getting a post out near where there had been a cave in the roof, and it was very broken and heavy on the posts, crushing the post deep in the bottom. He had cut the dirt away from around it and under it. Just as he was cleaning the dirt from under it with his hand, the weight crushed it suddenly down on his fingers and imprisoned him. As the post gave way the weight of the roof on it

caused it to reel, and the roof it had been holding up was falling with it. Although the men with him pulled at him with all their strength to drag him from under the falling roof that would crush and bury him beneath it, they could not move him, and were about to leave him to save themselves from that fate, when one of the number grasped an ax that was near, and with a terrific blow cut the fingers clean off, and he was dragged away just as the roof gave way, and the falling dirt rolled to his feet.

#### AN AMAZED PARSON.

In Wolverhampton there lived one of the most notorious miners of that place. One day he was met by the parson of St. Matthew's Church as he was coming home from work, who, after some conversation, asked him if he could read or write. "Noa," he answered. "Well, my good man, if you will come to the parsonage I will learn you to read and write and it shall not cost you anything," said the parson. "Cas't thee hole an' build up," replied he. "No," answered the parson. "Well, if thee't cum to our pit I'll learn thee to hole an' build up, an' wo' charge thee a'pe'ny, ayther." With that he turned away and left the parson looking at him somewhat amazed.

#### SENT TO PENAL SERVITUDE.

About the last man that was killed by being pulled over the pulley was a young man named Cris Evans, son of the owner of the pit, near the Willenhall and Wolverhampton road, in 1859. Young Evans and a man named Bickley and his son were going to work

one Saturday night. When pulling them from the wagon the engineer pulled them up quicker than he generally did, which attracted their attention. Seeing they were going to the pulley, and there was no sign of the skip stopping, the elder Bickley caught the upright and called out, "Jump, lads!" and then swung himself clear. Young Bickley jumped clear of the shaft, but fell on his face and knocked one of his eyes out. Evans caught the cross-piece, but, not being able to get proper hold of it, as he swung from the skip he fell into the shaft, which crushed every bone in his body and left it like a pulp. The engineer did not stop the engine until he had dragged the skip several yards from the shaft. Seeing what he had done, he ran from the engine house, but was caught, tried, found guilty of man-slaughter and sent to penal servitude.

#### IMPROVEMENTS.

In 1859, stringent mining laws were passed, and the inspectors of the mines given power of attorney to prosecute any violations of them. The drawing-skip was abolished for hoisting or letting men down the shaft, and a generally round, flat skip, without wheels, with tacklers properly welded on it and covered by an iron bonnet, was used as much safer. This has since been abolished and the cage, with smooth and firmly braced guiding rods, is now generally used.

Girls were forbidden to go within a certain distance of the shaft, which prevented them from being drawn in and down to death, so that for the last fifteen or eighteen years the loss of life from want of neces-

sary safeguards has been very light in mining in the Black Country.

Working in the mines of that part was a man named Tetsy Hyde, a natural and very clever ventriloquist, who played many a trick on his fellow-miners, who did not know him, or for a moment forgot his powers. Many a time, when the holers were waiting for sharp picks, and in a hurry to get them, he has, by imitating a boy in the entry, sent them helter-skelter to the bottom after them, and has many a time got the advantage of having the first pick of them, when they did come, by his repeatedly fooling those he was working with. Many a cursing he has got for it, too; and some mornings after a club meeting, and the men, while talking together at their work in the morning, would like the pit to stop that day, he has sent them to the bottom of the shaft by imitating some of the boys in calling them out, and as he was not too fond of work himself, he would deny up and down that it was him who called them out, as he knew that when they went to the bottom of the shaft to go up it was rare that they would go back to work again.

Once he went to a pit where no one knew him, and one morning when the Doggy and the men were talking before starting to work, the Doggy thought he heard a moan in the air course, which was near, and which was also a water course to another shaft. He says: "Hush, lads, what's that?" and they all heard it very faintly. On going near they plainly heard what they thought the dying moans and feeble calls for help of some one, and started down the air course to give the desired help. They went a long way, but



still did not seem to be getting any nearer to where the moans came from. The Doggy and several others went up to their waists in water to try and get to the dying man, but still they were as far off as ever. At last fear and superstition began to overcome them, and they declared the pit haunted, and every man went to the bottom and went up. When they went on top, the Butty, that owned the pit, swore at them and called them all fools and idiots for coming up for such nonsense. He swore he would go down and soon banish the ghost, and asked some of them to go down with him that he might show them how foolish they had been. At last Hyde very reluctantly volunteered to go with him. Whether the fear shown by Hyde when getting ready to go down had influence over him, or the fact of the men coming up with such declaration affected him, it is hard to say. But the sounds heard by the Butty as they neared the bottom made him call out as loud as he could to pull them up, which was done.

That settled it: the pit was haunted. But as it was a very valuable and good-paying mine the Butty would not abandon it, but requested the men to get work elsewhere—that he would get a preacher, a friend of his, to come next day and lay the ghost, so that they could work in peace. The next day the preacher came there and told the men, who had all come to know and hear of the ghost being laid, how foolish they were to allow such superstition to get away with them. He went to go down, but not a man would go with him. At last Hyde again stepped forward and offered his services, which were very readily accepted. But the preacher did not quite

reach the bottom, as he was told from below "to prepare to meet his doom ; that that place was sacred to those there, and they would allow no intrusion." Not being ready to meet his doom or desirous of intruding on those below, he yelled for God's sake to pull him up.

The bravery of Hyde was commented on all over the colliery, as being the only man in the company who had the courage to go down with the Butty and the preacher, and when they came up again he was as cool as a cucumber, while they were as white as a sheet and trembled like a leaf. Some one told the engineer, who knew him, about it, and he sent for the Butty, and asked him if such a man was working at the pit, and was told he was. He then told the Butty to go down himself or with others and leave Hyde on top, and he would find no ghosts down below. It took more than persuasion to make the Butty believe that it was Hyde that was the ghost, and he volunteered to go himself if he would get a man to run the engine, which the Butty consented to do. It is needless to say that no ghosts were found in the pit when the ventriloquist was on top. But Hyde could never get work in any pit in that colliery.

#### REMARKABLE ESCAPE.

While working in a pit in Solly's field, the coal of which was from twelve to fifteen feet thick, and got in three seams, sometimes four, I saw as remarkable an escape as man ever met with. A man named Tom Hamson and another were engaged getting some top coal, which was very valuable, the most valuable in that part, and about eighteen inches thick. The coal

had been cut to the rock above it on each side. But a piece of coal, called a spurn, had been left to hold the coal up in each cutting. The two men were taking out these spurns to let the coal drop. Hamson told the other man to go back and he would cut his side clear and let the weight break the other side, then neither would run too much risk. He did, and as soon as Hamson cut his side the coal and rock gave way with a report like a clap of thunder. As we saw it give way as quick as he was able to jump, our hearts were in our mouths, and a cry went out as we thought we saw a huge piece of rock, about five or six tons' weight, fall across his legs and bury him past all help until resurrection day.

But judge our joy upon all being quiet to hear him call out, "All right, lads." The stone that we thought buried him saved him. It fell on its end, and the top of it rested against the coal on the rib, and having presence of mind when he felt it coming near his shoulders he crouched near the rib, and had room to crawl from under it and past other rocks and coal.

The last skip that was ever pushed into the pit, causing loss of life, was at Gough and France's, Priestfield Colliery, between Willenhall and Darlaston, in 1865. The tackler skip had been sent down and five men were coming up, when the banksman went to push a skip toward the shaft, intending to change it to another track at the guide-plate. But before he was aware of it the big bow skip, with seven rings on, went down the shaft on the men who were coming and were by this time over half way up. The shout given by the banksman, and the rattle of the

rings and skip, made them hold fast and crouch themselves for something. But for all that, three of the men were knocked out of the tackler skip and hurled to death down the shaft, and the other two came to the top more dead than alive. The banksman was arrested for manslaughter, but got off on trial. After that safety gates were attached to the wagon on all shafts, so that when the wagon was clear of the shaft the gates were around it.

A great loss of life was caused by boys, in pits where the engineer was not kept busy, riding on the hook some distance up the shaft, and the engineer not finding any load on would let them back, not wanting to go without a load on the hook. But sometimes getting signals from other pits would go right to the top. The boys, unfortunate in getting on that time, would find themselves going up too far to drop and not being able to hold until they reached the top, or until the wagon was pushed under them, would fall a lifeless mass in the bottom.

There was a young man named John Horner worked at a pit of this kind. With the size of a man, and over twenty years old, he had but the wit of a boy. He had joined the militia, and had just come back from annual drill, bringing with him a broad military belt, and was at the bottom of the shaft boasting about his belt. Some of the boys soon concocted a plan to play a joke on him, and as they were talking to him managed to back him as near the shaft as possible, with his back to it, while another took the hook and just as it was starting away slipped it under Johnny's belt, sending him up the shaft with it. He let out a roar like an Indian

when he felt he was going, and spluttered and yelled like mad, while the boys below were splitting themselves laughing at him as they saw him, spread out like a frog in a pond, kicking and plunging himself about up the shaft. He was soon let down again, however, and the boys released him.

#### A BROKEN LEG.

A wooden-legged young man hung on the skips at the bottom of a shaft in Solly's Field. One bright Monday morning in the summer of 1868, while passing between two loaded skips, one of the drivers came out with a skip and jammed the skips against his wooden leg, breaking it. In a joke, he yelled, "Oh, my leg's broke!" Without waiting or thinking, the driver ran into the face of the workings, telling the men at the top of his voice, that Peggy had his leg broke. Thinking that it was his natural leg, the men came out as fast as they could, pitying his misfortune. But judge their surprise to see him sitting aside and cutting a pick-handle to fit in the socket of his wooden leg. They would not go back to work, or even let him finish the pick-handle, but allowed that one leg in a day was enough to break, and took him up on top, and from there took him to a tavern close by, where they helped him fix his wooden leg.

HOW A DESERTER MADE HIS ESCAPE—GOOD MORNING, BENNY—GOING UP A SHAFT WITH FULLY TWO TONS' WEIGHT ON HIS FINGER—A PAINLESS AND PEACEFUL DEATH.

The miners of the Black Country have very little respect for the minions of the law, and a policeman is the lowest human being belonging to the human family in their estimation, while a soldier is very little above him.

If a man was outlawed by the police he could always be confident of assistance from them, and deserters from the army only had to announce that fact when every effort would be made to throw the police and detectives off their track.

About the time of the Crimean war a deserter came to Moseley Hole and got work at a pit in Sparrows' Field. He was not there long before a government detective got onto his track and found out the pit where he worked. In order to make the capture sure he took a policeman with him to the pit to stay on top while he with the buttie went down. The driver being at the bottom just ready to go into the face of the workings, the buttie asked him if the man was at work that day, and was answered that he was, and the driver started away. By the time the detective got to where he worked he was told by the men that he had gone to another part of the pit. The detective, knowing the policeman was on top, thought that if he escaped him by getting around the pit and going up he would be going out of the frying-pan into the fire, so took his time and thoroughly searched the pit, but could not find him, and thinking he had gone up and fallen into the hands

of the policeman went on top. But judge his surprise on finding that he had not come up.

He went down again and searched in vain. The bird had flown from under his hands. When the driver saw the strange man with the butty, and was asked the question about the man being at work, he lost no time in getting to him and telling him of the fact. The man, knowing he was wanted and the punishment he would receive if caught, went through the air-course to another pit, and, thinking there would be a policeman on the top there also, was filled up in a bow-skip and went up with the dirt all around him, so that he could not be seen. When reaching the dirt-dump the girls around the skip were surprised and somewhat frightened by a voice coming from inside the skip telling them to go slow and not dump the skip when they came to the dump. They were soon led to understand what was the matter, and instead of dumping the skip over, as usual, they all stood as close as possible around it while they took off the rings and helped him out, and aided him to escape. He was never heard of after that by police or detectives.

When the law demandng two weeks' notice to be given before leaving or discharging came into effect, butties generally paid little or no attention to it. It was finally brought into prominence and used by a boy about fourteen years old, but who was very small for his age. He had been discharged without notice to give place to a boy of a friend of the butty, whose name was Benny Wootton. But, although discharged, the boy came to the pit in time for work every morning for two weeks, when

this conversation between the boy and the butty was repeated every morning:

"Good-mornin', Benny."

"Mornin', my lad."

"Any work for me this mornin', Benny?"

"No, my lad."

"Good mornin', Benny."

"Good-mornin', my lad."

And the boy would then turn away and go home. When pay-day came the boy came for his wages as though he had worked. Benny seeing him, said: "Why, what's thee want?" "I want my wages, Benny."

"Thee'st done no work. What's want wages for? Get away from here, and quick, too, or I'll kick thee away."

"Yo'd better not, Benny; but I'll go wi'out kickin', Good-day, Benny."

On Monday afternoon Benny received a summons to appear before His Honor the Mayor at ten o'clock next morning, when he had to pay the boy two full weeks' wages and the cost of the court. From that time the law has been respected and observed on both sides, and "Good-mornin', Benny," became a by word after that.

One morning, in the spring of 1862, the boys who worked in Bunker Hill Colliery, were playing around the pit top, chasing each other in their game. A boy about sixteen years old, while running across the wagon, which was wet, slipped and went head-foremost into the pit, seemingly to death, while those who stood around and looked on were horrified. But fortunately in his fall he went toward the rail on which



the wagon ran, and, with his hands outstretched, he caught the angle iron rail with a grip like a vise, and saved himself, and held on until he was rescued from his perilous position, and went down and worked that day as though such a thing had not happened.

While some boys were playing hide and seek one dinner hour in a pit at the Crescent Colliery, three of them got over some cross-bars in an entry to hide. The boy that was seeking them, not being able to tell who they were in the dark, got his candle and put over the bars where they were, lit some gas that had lodged there above the air. The boys, having nothing but vests on to cover their bodies above the waist, were severely burned about the face, arms, and breast, and the boy that fired the gas was burned as bad as the rest. They had over a mile to go home after they got on top, but from the moment they were landed, it was a handicap all the way, not one of the men coming up with them could keep up the race, but were soon distanced; nor could the doctor, whose office they passed, on hearing from the men what was the matter, catch up to them on horseback.

A loader at the bottom of a shaft, was hooking on a bow-skip in a hurry, after the chain had started. While doing so his little finger got between the hook and the bow, and before he could get it away the hook tightened on it, and though he pulled and snatched as much as he could it could not be pulled out. Realizing that he would be pulled out the shaft by his finger, and perhaps be killed by the skip, in its swinging from side to side, he jumped on top of the skip and was pulled up before his companions knew anything about it. With the weight of fully two

tons on his finger that ride up the shaft was a painful one and cost him his finger.

As painless and peaceful a death as ever came to man took away two men and caused the death of a third, casting a gloom of sadness over the village of Portobello, in September of 1867. The two men went down to change the buckets of the pumps, in the water pit of Priestfield, Portobello Colliery. While doing so they were overcome by the gas known by miners as "choke or white damp." It is non-explosive, and while the lights burn clearly, it steals over the senses and lulls its victims into a heavy, peaceful sleep, from which they never awake in this world, unless they are rescued before it gets full hold of them.

After they had been down over two hours the banksman listened to hear them working, but, though he could see their lights burning, he could not hear them. Being uneasy, he called down to them time and again, but got no reply. At last, becoming alarmed, he went and got help from the other mines and went down. He found them both sitting together, with their backs to the wall of the shaft, and each had his arm around the other's neck, as though asleep in each other's arms. But it was their last and final sleep, from which they never woke to things of earth.

The pumps filling half the shaft, and no chain or skip being on the pit, they had to be pulled up by a capstan turned by a horse, the capstan and rope always being left on water pits for the purpose of letting down and pulling up the sinkers and material for the pumps. There being no skips, horses, made

like a small trapeze, had to be used. As there were only two horses on the rope, the banksman could only bring up one at a time. He therefore lashed one of them to the horse and rope, got on the other himself and called to hoist away, which was slowly done. After he had brought one of them up, being an old man, the younger men objected and protested against him going down again, and volunteered to go down after the other; but it was no use. He would allow no one but himself to go down. He went down and lashed the other dead man to the rope and called to hoist.

When within a few yards of the top he was seen by those looking down to reel and fall backward down the shaft to meet death more horrible than his companions, and let his dead companion reach the top alone.

#### ABOUT FROGS.

Having often read of frogs being found in rocks, I would say that such a thing creates but little surprise among the miners in ore mines of the Black Country, as it is not a rare thing to see frogs jump from a piece of ore, along with the water, when broken. What is known as "ball ore" runs from the size of a foot-ball to several yards long, four feet wide and two feet thick. They are invariably hollow, and contain water in the cell formation of the inside, and I have myself three times seen frogs jump from them, when broken, after being imprisoned for unknown ages.

The first time was when a boy, carrying water at an ore pit at Bunker Hill. I was throwing some water on the face when a man—who had just broken

a stone (as they are called) that he could not roll—called on me to see the frog. When he broke it he saw the head of it sticking out, and as I got to him I saw the frog jump out and hop away. The only remark that was made was: I wonder how he got in there, and how could he live in that stone as long as he has?"

The next was at Harper's Pit, Willenhall. I was helping some girls to unload a skip of ore, and in doing so I rolled a stone from the skip across the rail and broke it. As soon as it was broke a frog jumped from near the center of it. Being curious to see how he would take to water after being imprisoned so long, I caught him and took him to a frog-pond near by and threw him in. He swam around on top of the water a little while, and then his frogship went down out of sight to mingle with his fellow-frogs.

The last I saw released from imprisonment was at a pit in Squire Addenbrooke's Colliery, Darlaston, in the winter of 1867-68. A young man and myself had to stay and work sometimes two or three nights a week, to haul the water from one of the entries and load as many of the empty skips as we could. One night while loading a skip of ore I had to break a very big stone. When I had got it broken both of us plainly saw the frog jump toward us from one of the hollow cells in the stone, out of which some water ran. The young man caught the frog and carried it to the bottom as a curiosity.

The following extraordinary story is told in the *Star*, of Sheffield, England: A find of a very novel and remarkable character took place in the West Retford mine, at Tinsley Park, on Wednesday last. A

coal getter of Earnell, was engaged at a distance of 320 yards from the surface undermining the coal for the purpose of bringing it down. While working with his hand underneath the coal to remove the dust he had loosened with his pick, he felt something so unusual that he proceeded with more care. In a few minutes a lump of coal came away, and lying imbedded in it was a live toad. The sides of its little bed were perfectly smooth, and almost to a hair's breadth its own shape, even to the very finest point of its claws. Booth took it home and did all he could to preserve it, but, unable to survive the change, it died about twenty hours after it was brought out of the pit. The toad, which is black and about three and a half inches in length, is now in the possession of the manager of the Tinsley Colliery, who, as soon as he became aware of the find, endeavored also to secure the piece of coal in which it was found, but that had been broken up and was gone. It would be interesting to know how many thousands of years the little creature had lain so deep down in its black diamond bed in a state of suspended animation, as it must have got there, it is supposed, when the coal was in a very soft state, and when much nearer to the surface than it is now.

The *Colliery Guardian* is responsible for this: "In the Coleford district of the Forest a small colliery has recently been opened, and while a collier was engaged breaking up a fall of block coal he found a toad in the center. It seemed firmly imbedded in the coal, and it was alive. Its form was imprinted upon the face of the mineral, and the animal is still living."

## CHAPTER II.

### BURIED ALIVE.

**T**HE thoughts of being buried alive are not very inviting, and when we read of the horror depicted upon the features of those whose bodies have been taken up, and the position of their bodies in the coffin giving unmistakable evidence of their having been consigned to the grave while life was still in their bodies, our minds are not attracted by such thoughts.

Having been buried three times in the mines in a very short lifetime, I can bear witness that the thoughts entertained in such a condition are not the most pleasant. Having been buried each time in a hurry without shroud or coffin or funeral ceremony, I cannot speak for those who have gone through those formulas. I can only speak from my own experience.

My first experience in being buried alive was in February, 1861, while working in an iron ore mine in the Bunker Hill Colliery, near Portobello, South Staffordshire, England, in that part known as the "Black Country." My work was to carry water to throw on the dirt and clod of the face of the workings, thus softening it and making it easier to mine and get the iron ore down. I had started from the bottom of the shaft where our buckets were filled, in company with a dumb boy. We had to go the same road together until we came to the junction of

two entries, when each would have to go in his own entry to reach that part of the workings attended by him.

Before parting we put down our buckets to rest ourselves and exchange a few words, or rather a few signs, as he talked by signs. We had not been there a minute before each of us noticed some loose dirt falling from near the roof opposite where I was standing, and we looked at each other as though to say, it is well we are here to be able to clear it from the track before the driver comes, thinking only a few shovelfuls were falling. But before we had time to act, or even think, the whole side of the entry—six feet high, twelve feet long, and from eighteen inches to two feet thick—came over on us, completely burying me beneath it, while the dumb boy, standing in his own entry, which was down hill from him, was just out of the reach of the fall, but the dirt scattering in his entry caught him by the legs and knocked him down before he could get away and held him there.

I must have been stunned for a moment after the fall, but not more than that, and I began to call for help with all my might, though I did not expect any one to hear me, as it was one hundred and fifty yards to where the men worked, and as the entries had not much sound in them, I had no idea that the men would hear me at that distance, unless the driver on his way out to the bottom of the shaft might hear me before he came to the fall and would run back and get help. Young as I was, not ten years old, I realized my position, and concluded it was useless in me wasting my breath yelling, so I kept myself quiet and listened to the dumb boy. I have always been

considered a good shouter, and have the reputation of making myself heard when not seen, but that boy, dumb though he was, could outshout me, so I let him shout for both of us. I had often heard him mutter some words when angry, but never heard him plainly articulate a single word; but that day he called "Oh, Lord!" several times as plainly as I ever heard it said, and he did not call it out in a whisper, either.

My thoughts I can well remember. My first were, would more dirt fall and crush me to death before I was got out of there, or if it did not crush me to death in its fall, it might fill up the cracks made in the dirt by the big lumps of clod and stone, and shut off my chances for air so that I would be smothered if not crushed to death. What would my father think, or how would he feel, on finding me, his oldest boy, crushed beneath that dirt, as he worked in the mine, and as I expected would be one of the first to the rescue? Thoughts of mother, sisters and brothers came across my mind in quick succession, and, while I had every hope of being taken out alive, I could not help but think, would they reach me in time?

No vise or mold could be made to encase a person's body as tight as mine was without causing some pain, and yet I felt no pain whatever. We were not there long before help arrived. As it was about 4 o'clock in the afternoon some of the miners had done work and were about to start out when the dumb boy's terrible yells reached their ears, and they started on a run toward the place. Those that had not finished work also ran with them, so that as quick as they



could run one hundred and fifty yards about fifteen men were to the rescue. The dumb boy, being visible, was soon released. Not having heard me they did not know I was there, and were about to go to the bottom of the shaft, and still leave me buried there; but he soon made them understand that I was buried beneath the fall. I soon heard the picks scraping and rooting among the dirt, and I began to call out to them, so that they might know where to search for me.

It did not take long to get the dirt off me, and when they found, by the sound of my voice, that they were getting close to me, they all threw down their picks except one, and began turning over the dirt and stones with their hands, while the man with the pick used it very carefully, and soon stuck the pick into my vest, which was the only thing I had on my body, and I was soon got out, for men with brave but tender hearts and willing hands were there, who took me in their arms and carried me to the bottom of the shaft. So sure were they that every bone in my body was broken that they would not let my father touch me, for fear it would be hard on him to find out how badly I was hurt. But before I got to the shaft I gave them to understand that I was very little hurt and could stand on my legs without much pain, except where my legs lay across the angle iron rails.

The amount of dirt that fell may be judged from the fact that it took two men, shoveling as hard as they could, two hours and a quarter to clear the track so that the wagons could pass. The only reason I can give that every bone in my body was not

broken is that a three-inch oak plank, that had been set some time before over a prop to keep up the roof, reached out about fifteen inches from the side on which I was standing, before the fall, and though it was snapped off as close as though it had been sawed, it checked the weight of the dirt from crushing me beneath it.

On our way home (we lived three miles from the mine) we came to a low stone wall which surrounded a timber yard, about half way between the shaft and where we lived. My father, who had carried me on his back all the way from the shaft, was tired, and we sat down for him to rest. We had not been there long before we saw one of the neighbors come out of a furnace yard opposite with a team and wagon. Knowing it would pass our door, we called on him to stop, but he did not hear us. Seeing that he was not going to stop, I jumped from my father's side, ran after and soon caught up with the wagon and got him to stop until he came up. My father's surprise can better be imagined than described.

My next burial took place in 1866, while working in a coal mine in the same colliery. The coal being about 10 or 11 feet thick, with a seam of dirt about 18 inches thick running about  $5\frac{1}{2}$  feet from the bottom, was got in two veins on the long-wall system. The bottom vein was worked several yards ahead, and the dirt and slack packed tight in the gob, leaving vacant spaces called "wastes," every six or seven yards, down which the top coal was thrown when mined to be loaded. My work was to throw the coal down these wastes after it had been loosened. I had been working in another part of the mine while the

miners were getting the coal loose. Thinking it had been got down I come back to my regular place of work. The miners having started the coal to fall went back to wait until it had fallen, so that when I came back up the waste they did not see me to warn me. I went on, never thinking of danger, but when I got to the top and right under the coal I heard it cracking and crunching down on me. To think was to act. I could not get to the top in time, and to walk back the coal would fall on me and crush me into jelly. I turned and dove down the waste head-first as I would in a river. By that means I expected to beat the coal and get out of the way at the bottom before it caught me, and as the ground under me was nearly all fine dirt and slack, I was not as much afraid of getting hurt by it as the falling coal, besides it was the only thing to do to save myself from instant death. But as quick as I was the coal was to the ground as soon as I was and was soon rolling over me. The biggest lumps being first, the bottom of the waste was soon blocked, so that I could not slide out at the bottom, and I was soon covered over.

My calls for help were soon responded to and I was not there long before I was rescued. I had not much time to think, except while thinking how to get out of the way. The lumps in falling over me tore the flesh off my arms considerably, as they were stretched out in the act of diving, and they still retain the marks as silent witnesses to testify to my narrow escape. Otherwise I was not hurt.

My third, and last, burial, took place in Brown's Orchard Mine, Salineville, Ohio, in September, 1871.

My father and I were working a room together. The coal was about three feet six inches thick, and the roof generally very good. It was the best I have ever seen, as acres have been worked out without leaving a pillar, post or prop of any kind to hold it up, and it has stood that way for months without falling, but occasionally bad places were met with. Our room was in one of those bad places; so bad was it that about eight inches of slate would fall almost as soon as the coal was mined and shot down, and not all the props we could put up would prevent it. As the coal was not very thick we did not try to prevent it as long as it fell easy, for the slate over that was very solid. In time it got so solid that we could no longer pull it down, so we posted it up with good props, and the further we got under it the more solid it got, until we thought it unnecessary to prop it so close to the face of the coal.

One afternoon about the middle of September I fired a shot for the purpose of blasting down some coal. As soon as the shot went off I went back to the face of the room to see what it had done. I was sounding the coal on the face when I noticed bits of slate falling from the roof near the rib—a sure indication that the slate was going to fall. Thinking perhaps it was only a small lump that had been shaken by the shot, I went to the middle of the room to get to where I thought the slate was solid, as I had sounded it a short time before. When I reached the middle of the room to my horror I saw the roof was caving all over me, the whole width of it.

Lightning is slow when compared to a man's thoughts in time of danger. With death staring him

in the face a man does a great deal of thinking in a short time, and those thoughts are generally how to cheat death for that time. When I saw that roof I was satisfied that grim death was staring me in the face and laughing at my thoughts of fooling or beating him out of his prey. Could I beat death even at the risk of two broken legs? This was what I was thinking of.

The posts we had set were not less than twelve feet away, and if I could reach them with my body by a single bound it would be safe at the expense of my legs. While I thought it was only the draw-slate that was going to fall, the room was so full of powder smoke I could not see anything two yards away from the face of the room, and did not know but the whole room was caving in. In that case no power on earth could save me. Was I prepared to die? Could my father get along without me? Every act of my life passed like a panorama before me, my bad deeds seeming most prominent. No one had ever survived after being caught by even the draw-slate, which was eight inches thick in those mines. Still life was sweet and worth an effort. With a prayer to heaven I made one bound for safety. Just as my body was stretched out in the act of springing forward the slate came loose and bore me to the ground, burying me beneath it.

The cry I sent forth for help as the slate bore me down was a cry of despair, and I expected it to be my last one. For though I knew help was near I did not expect to escape without being crushed to jelly, or at least without some broken bones, as there was nothing to break the fall—nothing to save me from the

full weight of it, as the bottom was a hard fire clay, as hard as the slate of the roof. Fortunately I was never stunned for even a moment, and when those who heard my cry for help simultaneous with the fall of slate came to me I was able to direct them.

Though the room was full of powder smoke, so that they could hardly see what slate had fallen, or whether there was more to fall, still on they came, heedless and thoughtless of danger. A human being was under that slate and needed to be got out as soon as possible, and there was no time to stop to investigate—a life might be crushed out under the tons of slate that had fallen if there was any delay. These were the thoughts that brought them to where I was. But being completely buried they could not tell just where I was or what position I was in, but my voice told them about where my head was, and I was begging of them to lift a piece off my head.

When I felt it was on my left side, and the slate in falling broke each side of my body. One piece broke off from my shoulder and lay across my head, imbedding itself into my skull. It was this piece that I wanted them to lift from my head, for while the rest of the slate was crushing my body beneath its heavy weight, that piece seemed to be bursting my skull. But not knowing which piece it was they did not know which to lift first, but by one of them standing on it I told them which it was, and three of them lifted it off me, though they could not do it until by a short jerk in lifting it up they broke it.

It does not take long to read these lines, but quicker than they can be read, or even thought over, it all happened; and in a short time after I was res-

cued, as I sat up and began to cool, a piece of coal fell out from the side of my head, where it was imbedded by the weight that was on my head and bore it to the ground.

The men were expressing wonders that I was not crushed, as others had been, but I began to make light of it, and tell them I was well used to getting buried, and that "those that were born to be hung would never be drowned." As my father was present, I knew it would do him more good to hear me talk like that.

On examination I found that the slate broke off the posts very close, and was over 12 feet long, 26 feet wide and over 8 inches thick, and I was under the center of the fall, and yet, thanks to a Divine Providence, as soon as I got through examining the slate I got up and walked home, and next day walked to town, a full mile from where I lived, and in a few days was at work as well as if nothing had happened. Though I have worked in the mines of Ohio and Pennsylvania since, I have never met with a single accident, and still hope to receive a Christian burial, with all its rites and ceremonies.

## CHAPTER III.

### FELLING EXPLOSION.

**O**N the morning of May 25, 1812, an explosion occurred at the John pit, near the village of Heworth, which shook the earth for nearly half a mile around; and the noise of the blast, in a dull heavy sound, was heard for several miles from the scene of the accident; vast volumes of flames burst forth from the mouth of the shaft, in two heavy discharges, followed by immense discharges of dust and small coal. The corves in the shaft, and also the wooden brattice work used for ventilation, were thrown out of the pit's mouth, while the frame covering the top of the shaft, including the hoisting pulley wheels, were blown and dashed to pieces. The William pit, a water shaft in communication with the John, became involved in the blast, the fire rising from it in great volumes, dashing the frame to pieces, and setting the wood work of the shaft on fire. There were one hundred and twenty-one human beings in the pit when the explosion was heard.

A crowd of agitated people, composed mainly of the mothers, wives and children of the entombed miners, was soon collected around the hoisting shaft. They were almost beside themselves with grief and horror. Some were crying for fathers, some for husbands, and others for brothers, sons, etc. In a short time a number of miners formed themselves into a rescuing party, and resolved to descend



Into the jaws of death,  
Into the mouth of hell,

to attempt the rescue of the forlorn miners.

The rope which had been used in sinking the shaft, was brought forward, and the rescuers were let down the pit.

By noon thirty-two of the entombed men had been got out alive, beside two dead bodies. Three of the rescued, half-grown boys, were so terribly scorched by the explosion that they died in a few hours.

A second party of rescuers consisting of nine persons went down, after dinner, carrying with them a steel mill to shed light from its flying sparks, as it was now impossible to take a burning flame in the mine without causing another explosion. In groping their way towards the place where it was believed the miners, who were at work beyond the reach of the blast would fly, they encountered the after-damp, the product of the explosion. The sparks from the steel mill fell among this mephitic vapor like drops of blood, and the miners, nearly overcome by the deadly influence of the gas, retreated to the bottom of the shaft. They started out again in another course, hoping to rescue some of the entombed men, but before advancing beyond the sixth pillar, were overtaken by a thick cloud of smoke, which spread itself in all directions. Believing the mine to be on fire they concluded that further search would only end in their own destruction, and they returned to the bottom and were safely drawn to the surface. Before they were all rescued, however, a second explosion occurred. The men at the pit bottom threw themselves flat on their faces, to escape the rolling

volume of burning air, and after it had expended its force they rose and were drawn up the shaft.

It was now proposed to shut up the mine and exclude the atmospheric air to avoid any more explosions, as all chance of saving any of the imprisoned miners was now considered hopeless. But this proposition was sternly opposed by the wives, mothers and male relatives of the entombed men, who looked upon it as indirect murder, and an effort was made to organize another body of volunteers to redescend the shaft. The mine viewers and the more cool and intelligent among the miners urged that such action would only result in speedy and inevitable death to the adventurous men, and the idea of descent was abandoned. Many of the wives of the lost miners continued all night around the top of the shaft, hoping against hope to hear their husbands calling up from the bottom.

Next day a last attempt was made by a body of resolute miners to reach the workings, but they soon found that the interior of the mine was impossible of approach and returned to day. The shafts were next filled with a wall of clay seven feet in thickness, to prevent the entrance of fresh air, and the mine was laid dead until the beginning of the next July.

On the fourth of July the shaft was reopened. The mine was a vast magazine of gas, the inflammable air firing on contact with a naked candle at the very mouth of the shaft. A stream of fresh air, produced by a waterfall, was made to flow into the mine, and on the eighth of the month the air had been so far renewed that it was resolved to make the descent of the pit.

A corps of nine miners descended, and passed up the north drift towards the plane-board, lighting their way by the flying sparks from the steel mill. The first body was found near the plane-board. The explorers were seized with superstitious terror, and were afraid to touch it. At length, calling upon the name of God, they moved forward and raised the body on a bier, which they had constructed for this purpose. A further exploration of the mine disclosed a number of other bodies, and the men returned to the top of the shaft to order coffins. As the coffins passed the village the grief of the poor widows became uncontrollable, and loud lamentations filled the air. The heart-broken females rushed to the pit mouth, to await the appearance of their husbands and relatives as they would rise in death through the shaft; but, happily, by representing to them the mutilated appearance of the bodies of the dead and the impossibility of their being recognized, the women were prevailed upon to return home.

Most of the bodies of the dead miners were found lying where they had been thrown in the moment of the explosion. In one place twenty-nine bodies lay together, scorched to the bone. One wanted the head, another an arm, and some were nearly torn to pieces.

The work of raising the dead bodies was continued till the middle of September; most of them were beyond recognition, being terribly mangled and scorched. Those who were recognized were known by their shoes, their belts, or their tobacco boxes, rather than by their features. One of the bodies was never found. All except four were buried in the

churchyard of Hewarth, in one vast grave, and were laid two coffins deep. A neat obelisk, nine feet high, was afterward erected to their memory, upon which the names and ages of the deceased were recorded.

#### ST. HILDA EXPLOSION.

The St. Hilda Pit, South Shields, was the scene of an awful explosion on the 23rd of June, 1839, whereby fifty-one lives were lost.

The first intimation of this sad event was given between eight and nine o'clock in the morning, by a rush of smoke, mixed with small coals, from the down-cast shaft, which was observed by the banks-men. Soon after this, men and boys, to the number of one hundred, were brought up to the mouth of the pit; but all they were capable of explaining was, that there was an explosion in the west working of the mine. Several of these were nearly exhausted from the effects of "choke-damp," but in a short time many of them rallied, and, attended by some other men who had not been in the pit at the time of the explosion, courageously went down again to make what exertions they could to rescue their unfortunate fellow-workmen and relatives who were in the immediate scene of danger and death. Melancholy to relate, not a solitary being was found alive! About eleven o'clock the dead bodies of the unfortunate sufferers began to be brought to bank, to the indescribable grief and anguish of their afflicted relatives and friends, who had crowded to the scene of danger, and made it one of misery, confusion and appalling distress.

The pit being situated within the town of South

Shields, an immense number of persons were quickly collected on the spot, and all seemed struck with dismay at the suddenness of the distressing event which had brought sorrow and death to the homes of so many of their humble and industrious neighbors. It was a distressing spectacle to behold the groups of people assembled in the immediate vicinity of the pit, amongst whom could be easily recognized relatives of all ages of the unfortunate creatures who had been exposed to the appalling danger of this frightful explosion. Mothers waiting to learn the fate of their husbands and children—children for their fathers, and relatives of every degree for their kinsmen—and all displaying the force of natural affection and poignancy of sorrow which fill the human heart in seasons of grief and overwhelming trial.

The viewer of the pit was at the scene of destruction soon after its occurrence, and went down into the mine, where he remained till nearly one o'clock, when he came up for a brief interval for respiration, and then returned to the dismal scene of death, to help and encourage in the rescue of the unfortunate sufferers. The viewer of the Jarrow Colliery, and one of the overmen reached the place about one o'clock, and immediately went down to render assistance. At two o'clock the viewer of Heworth also went down and tendered his services.

Mr. Mather, a wine merchant, who took an active interest in miners, and investigated many mining explosions to find their causes, and who did a great deal to secure legislation in behalf of miners, went down at an early hour and administered to the brave

fellows engaged in searching for the dead bodies such remedies as they stood in need of from prolonged exertion in the suffocating atmosphere. An eye witness of the scene below, he has given a graphic and eloquent description of the awful sight presented, from which the following are extracts:

“The appearance below was that of the grave itself. The men were moving about like specters in thick darkness, with indistinct glimmerings from more than usually bedimmed lamps, seldom uttering a word, except in suppressed tones, and doing their duty to the dying and the dead in a solemn manner that was truly affecting. After passing into the colliery eight or nine hundred yards, the ravages of the explosion were apparent. Proceeding farther from the shaft, the air began to assume the peculiarity of smell that came from the chests of the bodies that had been inflated.

“The deadly gas became stronger and stronger as the locality of the explosion was approached. In one place five dead bodies were met with, which had apparently yielded up the spirit with placid calmness, without one muscle of the face being decomposed. Further on were three more that had been killed by the explosion—their clothes were burnt and torn—the hair singed off—the skin and flesh torn away in several places, with an expression as if the soul had passed away in agony. On going farther, what is called ‘a fall,’ a large mass of the roof and sides, blocking up the passage, arrested the onward course, which, with difficulty having been surmounted, several bodies were found, as if, in their attempts to escape, this barrier had stopped them,

and conceiving it impassable, they had apparently lain down and died.

"In another place we suddenly encountered two men, the one with a light, the other bearing something on his shoulders; it was a blackened mass—a poor dead, burnt boy. Farther on, wagons that had been loaded were met with, turned bottom upwards, and scattered about in various directions. There was also a horse lying dead directly in the passage, with his head turned over his shoulder, as if, in falling, he had made a last effort at escape; he was swollen in an extraordinary manner. At one point we suddenly came among twelve or fifteen men, who had been driven back by the surcharged atmosphere. One poor man being sick and ill, something was given to him to assist his recovery. When asked where he felt most oppressed, he said, in a broken suppressed agony: 'I am not well, sir; I have two sons in there,' pointing to the place he had been driven from in his attempt to recover his children—one was sixteen the other twenty-two years of age.

"In the demeanor of the men, there was a self-devotion and courage that would have ennobled human nature in any rank of life. Their companions were brought out ill, sick, stupefied, and were struck down at their feet with an uncertainty of recovering; yet it produced no hesitation, not a doubt, no flinching, but at once fearlessly the brave fellows moved into the same situation, to go on with the performance of their melancholy exertions.

"One brave man, sick and insensible, was borne out on the shoulders of his comrades, and after he had been a little relieved by medicine that was given to

him, as soon as he could articulate, he desired all to go back directly and leave him lying, 'for now,' said he, 'I am quite well, and no time should be lost.'

"Another noble fellow, who had been relieved by his friends, as soon as his strength was a little restored, started to his feet and said: 'Come, now; let us in again; our place is there; we are of no use sitting here!' And he would have rushed back to the danger he had narrowly escaped, but was prevented."

The poor bereaved friends had the consolation of knowing that no human efforts were wanting to rescue the victims. Everything that courage could accomplish was done. The St. Hilda pit had been working about sixteen years, during the whole of which time there had been no explosions of serious consequence up to the one just recorded. The force of which had knocked down one of the crossings of the pit, which prevented many from escaping.

#### LUND HILL AND BARNSLEY.

The Lund Hill explosion, which occurred on the 19th of February, 1857, was attended with much greater loss of life than any that had previously occurred in the annals of British mining; one hundred and eighty-nine human beings were hurried into eternity by this terrible, heart-rending catastrophe. The miners worked in three shifts, of eight hours each. There were two hundred men and boys in the mine when the blast went off. The earth trembled with the force of the explosion; and the sound, in a dull, low, smothered noise, was heard for several



miles from the shaft mouth. The wives of the miners were busy preparing dinner for their husbands, it being near the hour of noon. They threw down their dinner pails, and rushed wildly to the shaft, too conscious of the awful catastrophe.

A vast cloud of smoke rose from the shaft mouth, which was followed in an hour by a fierce volume of flame that shot high in the air. Horror and consternation seized upon every soul, for fathers, brothers and sons were down in that burning mine. The managers became paralyzed. A meeting was hastily called of neighboring colliery owners, managers and viewers, who recommended as the only means of safety to the mine the closing of the shafts, so as to cut off the air supply from the fire. This seemed like consigning the miners to destruction, but who would dare to attempt the descent of the shaft under the circumstances? No peril, however, can deter the true miner from risking his life to save that of a comrade, and a corps of rescuers was at once organized to go down the shaft as soon as the force of the explosion had become expended.

Nineteen of the entombed men were brought out alive, besides a number of dead. For two hours, amidst the most frightful circumstances, this noble band penetrated the various avenues of the mine, in search of the living and dead. Dense volumes of smoke and blazing pillars cut off all further search, and they returned to the bottom and were brought up to day. The mine was now flooded with water, and when, after many weeks, the shaft was re-entered and the soddened and charred corpses of the lost

miners were sent up to their friends, they were beyond recognition.

#### BARNSELEY.

Another dreadful explosion of fire-damp which occurred in the year 1862, at the Barnsley shaft, in Yorkshire, by which fifty-nine miners lost their lives, and fifteen others were terribly scorched and mutilated, has become a subject of historic interest, mainly because of the time which elapsed from the date of the explosion to the recovery of the slain miners. The mine in question was one of the most extensive collieries in Yorkshire, employing a force of nearly three hundred men and boys underground. On the day of the explosion two hundred and thirty-eight souls were in the mine.

A good state of ventilation prevailed, no less than eighty-five thousand cubic feet of air per minute passing through the workings, in three split divisions. On the morning of the catastrophe, the fire-viewer's report showed but two places in the mine where the safety lamp betrayed the presence of inflammable air. Naked lights were generally used, and blasting the coal with gunpowder was permitted at all points; although in the dip-head board, which yielded fire-damp more copiously than any of the other districts of the mine, the inflammable air had twice caught fire from gunpowder discharges within a week of the explosion.

About ten o'clock on Monday forenoon, the 8th of December, the fire-damp kindled from a shot, and in such force as to set the pillars of the mine on fire. A corps of miners immediately formed themselves into

a subduing party, but they were unable, after half an hour's exertion, to conquer the flames. Overcome with the increasing heat and the vapor emanating from the fire, the miners retreated to communicate with the underground manager. This officer was not in the mine at the time; but his son, a lad of nineteen years of age, placed himself at the head of a fresh party, and commenced building a brick stopping down the roadway, with the object of cutting off the supply of air and smothering the flames. This new party was also driven back, overcome by the heat and noxious gases generated from the burning pillars of coal. As the fire gathered strength, the current of air increased, and every moment added force to the flames. The manager arrived at eleven o'clock, and falling back to a safe distance, recommenced to build a stopping to isolate the air from the burning pillars.

Meanwhile, the news spread through the mine that the pillars were on fire, and numbers of the miners, dreading an explosion of fire-damp, left their work and made haste to get out of the mine. Many others, however, in remote districts, were not informed of the fire, and there were numbers who continued to work on, believing that the fire could be put out without danger to the mine. The manager himself confidently affirmed his ability to subdue the fire, and declared that there was no cause for alarm. He had just succeeded in completing the stopping, when a tremendous explosion took place, which killed him and his whole party at once, and spread death and destruction in the track of the dip-board workings. A scene of indescribable panic and

confusion now spread through the mine. Those beyond the power of the blast commenced the work of retreat to the bottom of the shaft in utter darkness, the force of the explosion having dashed all the air-doors and stoppings to pieces, and blown out every light in the mine. The deadly after-damp spread in all directions; many of the miners bravely held up against its insidious power, and reached the bottom of the shaft in safety, but many others, less fortunate, or less able physically to withstand its noxious power, sank to rest forever amidst the noxious and poisonous elements of the mine.

A corps of noble volunteers had meantime organized on top of the shaft, to attempt the rescue of the inmates of the mine, and by noon were penetrating the interior of the workings. At one o'clock, while this party was still in the shaft, a second explosion, more awful than the first, took place, which, in sweeping through the mine, killed a number of the rescuers. The balance returned in haste to the bottom of the shaft, and were drawn up to the surface. The interior of the mine was now one vast wreck; the ventilation was thoroughly cut off, and the mephitic airs from the burning pillars and exploded fire-damp filled the whole of the dip-board workings, so that no human being could enter and live.

Nothing could be done, and in order to save the mine from repeated explosions and total wreck, it was resolved to submerge the workings by turning a stream of water in the shaft from an adjoining creek. The working miners and relatives of the entombed men, however, demanded the recovery of the bodies of their friends before the work of submergence

should begin; but the mine inspector showed them the utter impossibility of reaching the slain, and that unless the shaft was submerged and the raging fire extinguished, other and still fiercer explosions would follow. The water was then turned in the shaft, and then was made air-tight, so as to shut off any supply of fresh air.

On the 17th of December, an examination of the temperature of the mine was had, when it was resolved to re-open the shafts to attempt the recovery of the lost miners, of whom fifty-nine were still in the mine. A quarter of an hour had scarcely elapsed after this resolution had been adopted, when another explosion, more terrible than any that had preceded it, occurred. The shafts were again closed, and more copious streams of water turned into the mine. Everything lay dead until the middle of February, the water meantime having flooded all the workings and risen up the shaft to a height of twelve feet from the bottom. The pumps were started up on the 14th of February and were kept running night and day. Before the mine was drained, however, so as to admit of the entrance to the dip-board workings where the dead men were lying, the middle of summer had come around. One of the widows had married before the body of her first husband was recovered, and there was witnessed in this case the strange but melancholy spectacle of the second husband assisting in performing the burial rites of his wife's first husband, from the former home of the dead and present home of the living husband.

## CHAPTER IV.

### A MINE DISASTER.

**T**HE sharp clangor of iron clogs beating heavily on the pavement filled the keen frosty air. The shrill steam whistles at the collieries and the parish church clock had just announced the hour of 5 A. M., yet many of the thoroughfares of Coalborough were alive with hurrying forms. With the exception of the street lamps it was pitch-dark, for there was neither star nor moon visible, and the time was mid-November. Standing under a lamp-post one might have noticed that the faces of the men and lads who hurried past were strangely sallow, and many of them had bent backs and bowed legs. The majority of the men slouched along with sullen looks on their unintelligent faces, as though they bitterly resented the fate which forced them from home on such a cold morning. The lads were much merrier than their elders. Little dots of humanity of ten and eleven trudged on their way, some of them whistling, others singing, and all of them with hands buried deep in their breeches pockets and necks and ears swathed in rough woollen comforters. Here and there were to be seen early factory girls, their clean, long aprons seeming snowy white in the faint light.

Yet one miner at least went to work that morning with a bright face and a glad heart. This was Simon Broome, the man of whom this narrative is

to treat. Simon was one of those strong-minded men to be found often enough amongst Lancashire pitmen. Going into the mines at nine, he had passed twenty years there; and when he entered his thirtieth year he was probably the cleverest pitman in Lancashire. Yet his natural ability, added to his wide experience of mining matters, had not profited him in a material sense. He had been a steady youth and sober man, always loving a book better than pigeon flies, dog fights and wrestling matches. Whilst men of infinitely inferior ability—some of whom were unable to pen their own names—had attained to official position as underlookers and managers, he still remained a hewer of the coal. His small progress was due to himself alone, as the following incident will show:

At twenty-five, Simon wooed and won a pretty schoolmistress, and just a week after his marriage he had lost his bosom friend. Jack Grant, who was crushed shapeless by a fall of roof in the mine where they both worked. At the inquest held on the body of his friend, Simon had the bad taste to disregard all the unwritten laws obtaining generally at such inquiries, and tell the truth. He proved that the mass of roof which killed poor Jack had long been known to be unsafe; that the various officials had been told time and again of its dangerous condition, yet persistently neglected to take steps to make it safe. Prior to the inquest the manager hinted that he had a good place empty, and that it was no use making a bad job worse. Simon preferred to tell the truth. He told it, sparing none, and what resulted? A jury composed of tailors, grocers and shoe-sellers,

and so forth, returned a verdict of accidental death, with no one to blame.

After this Simon's troubles began. When his married life was a fortnight old he found himself out of employment. Young, able, strong and hopeful, his dismissal had caused him but little apprehension at first. His conduct at the inquest had attracted to him the attention and censure of the local mine-owners and officials. He found work at other pits, but he always got "bad places." He was subjected to all sorts of petty annoyances by the officials, and his earnings were too small to keep him and his comfortably. He bore his trials with a quiet dignity, striving manfully to live down the prejudice against him. But his pretty wife was delicate; children came, and the octopus arms of debt began to coil around him. At length the climax came. Although he had never smoked in his life, a pipe was found in his jacket pocket one day down the pit. He was summoned before the magistrates—one of whom was part owner of the pit in which Jack Grant was killed—and he was ordered to pay a fine of twenty shillings and costs or to suffer a month's imprisonment.

The fine was paid somehow, and then Simon, swayed by his wife, moved to Coalborough, to escape the persecution which had driven him from his native place, and obtained peaceful employment. Honest, hard-working and capable, possessing industrious habits and ambitious to rise, he found himself entering his thirtieth year in a strange town, almost moneyless, with a delicate wife and a couple of children dependent on him. The bitter curses that formed themselves in this poor fellow's brain ob-



tained no utterance. He bore himself as a man should.

Coalborough is the center of the Lancashire coal field. There pits are deep and numerous. On the very day of his arrival in the town, Simon obtained employment. The following morning we saw him on his way to work, happy that he was in employment again, and hopeful that a few months of steady labor would set him on his feet once more.

A quarter of an hour's steady walking brought Simon to the Dutton Heath collieries. Going to the lamp-shop he obtained a lamp, then he made his way to the bank of the Arley mine pit, where he was to work. The pit-bank was crowded with miners waiting to descend, and Simon sat on the edge of a full "tub," as the small pit wagons are called, until his turn came. An old grey-bearded pitman was seated on another "tub" close by, and from him Simon learned what prices the miners were paid for each ton of coal sent to bank, and how much per yard was paid for driving "strett" places—"strett" being a Lancashire miner's synonym for "narrow."

Suddenly the banksman shouted, "Anny moor gooin' deawn?" and Simon, with the few others remaining on the pit-brow, gathered into the cage. "Le' down!" cried the banksman, and, with the rapidity of a falling body, the big iron cage shot down into the pit's black depths.

After stepping out of the cage at the bottom, Simon paused a moment, and a miner standing by came forward, saying: "Yo're o new un, a con see. Come this road and get your lamp examined."

Simon followed the man into the cabin, where the

firemen were inspecting the lamps to see that no wires were broken in the gauzes and that each was securely locked. When Simon's lamp was examined and locked, the man who had spoken before, and who appeared to be an official of some sort, said: "Did th' gaffer sey wheeur yo' wur gooin'?"

"He said I was to go up the Britannia jig on the south side," replied Simon.

"Oh! Ah know wheeur yo' meeun. Hi! Bob Davies, show this chap that empty place next to Cleck's." Turning to Simon: "Gooa wi' this chap, he'll show yo' t' road."

Bob Davies turned out to be the old miner Simon had conversed with on the pit-bank, and they set off together along a level, going in that direction for half a mile or so, then they turned to the right and ascended an incline, or "jig," for several hundreds of yards more, and when at last Simon reached his working place the perspiration was rolling down his face, for the way along which he had traveled was so low as to necessitate much stooping.

Flinging off his outer garments Simon rested a minute or two to cool himself; then he rose and began to examine his new place as an incoming tenant examines a new habitation.

The Arley seam at Dutton Heath collieries was worked on the "pillar and street" system. In this method narrow headings are first driven to the boundaries, and then the rest of the coal is cleared out, working back towards the shaft, leaving the goaf behind. Simon's place was a "pillar," and along one side of his place stretched the old goaf. Lifting his lamp to the roof to see if it were safe and

free from "breaks," he was astonished to see the light flare suddenly up.

"Gas," he cried, and pulled down the flame of his lamp until there only remained a faint spot of light on the wick. Then there showed inside the gauze a long, pale blue luminous vapor, or "cap" as the miners termed it. Gently moving his lamp downwards the blue vapor disappeared, showing that the "fire-damp," hung in a stratum about a foot thick along the roof. But moving towards the goaf he discovered that the "fire-damp" thickened till it reached the floor of the mine, and the dangerous gas extended far back into the old "waste," where the extraction of the coal had caused the roof to subside in great masses.

The finding of the "fire damp," hardly caused Simon's pulse to quicken. He was fully aware of what would have happened had a single wire in the meshes of the gauze of his Davy lamp been broken. There was sufficient gas there to have destroyed every life in the mine had it been ignited, and a defective lamp, or even a perfect Davy in the hands of an inexperienced person, might have caused a terrible explosion.

In every mine there are officials termed "firemen," whose duty it is to examine all working places prior to the miners entering them. When a place is found to be unsafe through the existence of "fire-damp" or other cause, it is the fireman's business to place a danger signal at the entrance to such place to prevent anyone entering it. Simon's first thought was, "Why has this precaution not been taken?" Then he asked himself if the fireman had examined that

particular place on the previous night as he ought to have done. It would be an easy matter to prove this, for when a fireman visits a place to examine it he writes with chalk on some prominent spot the day of the month and his name or initials to show he has been there.

Looking about the place, Simon found a piece of board on which were scrawled several dates and a man's name—"Ben Yetton." But the latest date was November seventh, and it was now the sixteenth of that month; therefore it was quite plain that this place had not been visited by the fireman for more than a week. Probably the place had been empty since the seventh of November, and the fireman had not troubled himself to examine a place in which no one was working. But Simon thought that this incident spoke clearly as to the character of the system of management in vogue at Dutton Heath Collieries.

About twenty yards farther on Simon could hear another collier working, and to this man he went. As Simon approached, the miner laid down his pick, saying:

"Is it thee that's gooin' t' start in't next place?"

"I should start, but there's a bit o' gas in it, an' I don't like workin' among it."

"Tha'll soon get used to workin' in it if tha stops heer. Th'owd sink is chuck full of gas, but it doesn't matter as lung as it keeps away fro' t' face. Tha'll find some o'er tha yed if tha'll look."

Simon lifted his lamp to the roof, and again the gauze was filled with a pale bluish vapor. Dropping

his lamp to the floor, Simon said: "It seems to make middlin' o' gas."

"It makes a good deal, an' no mistake; 'nough to leet up every shop in Coalbro. That theer owd goaf aback o' thee is just meet like a gasometer. There'll be a rumpus some o' these days if they don't mind."

"Don't they try to shift it?" Simon queried.

"Not um; they ne'er bother abeawt it. They care nowt abeawt a bit o' gas heeur, lad."

"It's not safe allus hangin' there," rejoined Simon. "When a faw o' roof comes it's certain to sweep the gas afoor it, and then if there's anny bad gauzes abeawt there'll be an explosion, sure enough. I don't like th' thowt o' bein' roasted quick; dost tha?"

"Not me; but we shall hev to take awr chance, I reckon," the miner replied philosophically, and he resumed his work.

"There'd be a bother, I think, if th' inspector happened to come and found men workin' so close to this gas. The manager would get fined, or sent to prison."

"Howd tha noise, mon!" the miner cried, angrily. "The inspector, eh? What good are inspectors to us? I've bin workin' int' pit for thirty years, an' neer gotten a glint o' one o' 'em. Hast e'er seen anny o' 'em tha'sel'?"

"I've seen one once, when a mate o' mine was kilt," Simon replied.

"That's just it; stable door's locked after the hawse is stown," the miner retorted, fiercely, and he smote the coal with all his might to work off his passion. Then Simon returned to his own place.

Two or three weeks passed, and Simon's earliest impression as to the inefficiency of the management of the mine was verified. Through conversing with various miners who worked in different parts of the pit he learned that "fire-damp," existed in many places; that the air-ways were in an awful condition through being neglected, and that blasting was permitted even in places where "fire-damp" was common. No miner in the whole pit set understood the danger, which was being incurred continually, better than Simon Broome did. Yet was he loth either to complain to the manager or other officials, or quit the mine altogether. He had suffered so much from outspokenness already that he longed for peace. He did not like leaving the pit, because his place had proved a good one. He was working regularly, and earning on an average forty shillings a week.

But the huge volumes of explosive gas lurking continually in the goaf filled his mind with incessant fears. Most of the miners seemed so habituated to the company of "fire-damp" as to pay no heed to its presence; still there were others who feared the peril they were daily facing, and who, like Simon, did not like quitting the pit altogether on account of the good wages they were obtaining. And matters got worse instead of improving. Several of the miners urged Simon to write an anonymous letter to the Inspector of Mines for the district, calling his attention to the dangerous condition of the mine; but he refrained from taking this step because he held the belief entertained by miners generally that mine owners and mine inspectors were in collusion and he

knew of cases where men who had reported dangerous places had been forced to leave the district, as no one would employ them.

For the fearful condition of the Dutton Heath Arley mine the managemental staff was not solely to blame. Most of the other pits belonging to the same owner were in the same neglected condition as the pit in which Simon worked; but, being less gaseous, they were of course safer. The owner of the Dutton Heath collieries was Jonathan Bowles. He had been a pitman in his youth, and twenty years of industrious and adroit knavery had made him a mine owner. To the outer public Mr. Bowles was a model man, and newspaper scribblers and amateur lecturers pointed him out as a sample of what might be achieved by perseverance and honesty. Only Bowles' workmen knew how hard and exacting he could be. To gain favor in Jonathan Bowles' sight there was only one way for the officials he employed at his pits. To raise plenty of coal cheaply was the one thing he desired, and the officials were told by the manager to cut down expenses as much as possible. Consequently everything went to the bad.

At last an unfortunate accident brought matters to a climax. Two poor fellows were burnt to death by a small explosion of gas caused by a blown-out shot. This determined Simon and a few others who worked near him to leave the pit without delay.

They were carrying out their tools, when they were met by the manager, a coarse, stubborn-headed fellow, named Dick Sampson, who, when he saw the men carrying their tools, exclaimed:

"Where are you taking those to?"

"Home," replied Simon, as the others were silent.

"And who gave you permission to leave without notice?"

"I think notice is not needed," Simon again replied, firmly.

"Why?" asked Sampson, furious with anger.

"Because the pit isn't fit for a dog to be in, and you know it. There will be two hundred instead of two men burned to cinders before long if the pit isn't managed better."

"What's wrong?" Sampson cried, almost mad with rage.

"There's nothing right," Simon retorted. "I've been here three weeks, and there's been gas in my place every day I've worked, and in these men's places the gas has been nearly as bad. Yet, according to the reports made out daily by the firemen, each working place in the pit was free from gas and in good working order."

"How do you know what reports the firemen make out?"

"The reports lie on the cabin table every morning, and I have glanced over them while having my lamp examined. I think you had better let us go without any more bother. I am afraid of my life every day, and will stay here no longer."

"If you don't take back your tools and serve me with fourteen days' notice properly, I'll stop all your wages and summon you for neglect of work. Don't make fools of yourselves. I tell you the pit is as safe as can be—safe enough to use naked lights. I'll show you whether I think it is dangerous or not."

Without another word Sampson unscrewed his



lamp, pulled a pipe from his pocket, lit it, and began to smoke. Simon and the other miners stared at the manager in speechless amazement. Scarcely fifty yards away was the spot where the two miners had been scorched to death only two days before, and the tobacco was glowing like a live coal. It was the act of a madman, imperiling every life in the mine, and was done out of sheer bravado. Doubtless Sampson thought his action would convince the miners that the mine was safe, and cause them to return. The naked light was beside the manager. Had a fall of roof occurred at that moment in any of the adjoining goaves a large volume of "fire-damp" would have been swept on to the flame, and two hundred persons would have been destroyed instantly.

Simon Broome seemed turned to stone when he saw Sampson unlock his lamp and begin to smoke. But his stupefaction was of short duration. Then without a word, he sprang forward, trampled out the naked light, and sent the pipe flying yards away, leaving the broken stem between Sampson's teeth. With a hoarse yell of rage the manager leapt at Simon, they closed, and rolled on the floor fighting like wild animals. Then the miners tore Simon from off Sampson and hurried him away.

The following morning the men belonging to the Arley mine refused to go to work, alleging that the pit was unsafe, and they declined to resume work until the mine had been examined by the government inspector, Mr. Shalford. The miners had been influenced to this decision by Simon Broome. So the pit lay idle for a couple of days, and the inspector was urged to visit

the mine. On the afternoon of the second day a telegram came to the manager from Mr. Shalford saying he was coming down on the 3:25 train.

Mr. Jonathan Bowles was waiting at the station with his carriage when the inspector arrived, and the coal-owner drove Mr. Shalford straight to the Arley mine pit. Then the inspector, Mr. Bowles, and Sampson, the manager, descended together. In half an hour they returned, and Mr. Shalford declared the mine quite safe, after which proceeding he went to dine with his friend, the owner of Dutton Heath collieries.

The following morning the miners resumed work. On the afternoon of that day Simon Broome received two summonses, one for assaulting the manager of Dutton Heath collieries, the other for neglect of work. Both cases were tried the same day, and each case was decided against Simon. None of the miners who had witnessed the affair between Sampson and Broome dared to give evidence against the manager, fearing persecution; and it was useless for Simon to plead that he left his work without due notice because the mine was unsafe, when the magistrates had before them a declaration signed by the Government Inspector of Mines stating the mine to be quite safe.

So Simon was ordered to pay fines and costs amounting in the whole to five pounds, with the option of two months' imprisonment. The money could not be raised in time, and he had to go to prison.

Simon Broome's term of imprisonment would expire in a couple of days, and the town of Coalborough was stirred to its heart with excitement. Not,

however, because the poor unfortunate miner was soon to regain his liberty, but because the election of a parliamentary representative was to take place on the morrow. The old member had died, and the candidates for the vacant seat were Mr. Jonathan Bowles, mine owner, and Mr. Robert Robinson, cotton spinner. The two candidates were the richest men in Coalborough, and each was determined to win, no matter at what cost. On the day of the election every one of Bowles' pits were idle, and all the mine officials, from the fireman to manager, had to canvass for their employer. Beer ran like water that day in Coalborough. To confirmed toppers it seemed like a glimpse of paradise. Before night came every one of Jonathan Bowles' officials were tipsy, for his return was certain. Yet two of these drunken officials had to go to work that night. These were Jonas Smith and Sammy Jones, both firemen at the Arley mine. Their business was to see that the mine was all right and ready for the workmen in the morning.

Just after the poll had been declared in favor of their employer, these two firemen were seen staggering towards their work. Early next morning the shock of a terrible explosion was heard throughout the mine. The Dutton Heath Arley mine had exploded, and swept to eternity two hundred and ten poor souls, and amongst the doomed was the hot-headed manager, Dick Sampson.

Of course the government inspector and the mining engineers soon formulated a theory to account for the terrible disaster. There had been a sudden outburst of gas, which had been ignited by a "blown-

out" shot. But the miners of the district entertained a different belief. They believed that the two firemen fell asleep, being drunk, and did not wake till morning, thus failing to make the usual examination of the mine, and in the morning some poor fellow had walked into an accumulation of "fire-damp," with a naked light probably, and sent himself and two hundred others to a premature tomb.

The terrible disaster struck sorrow to the heart of the nation. A wave of generous sympathy spread over the land. In a few weeks a score of thousands of pounds was collected for the bereaved. A so-called searching inquiry into the causes of the calamity was instituted. The home office sent down a legal gentleman to watch the case, and an independent engineer was deputed to examine the mine and report on it. But as this independent engineer depended for his livelihood on coal-owners, he was not likely to report favorably on the mine. What mine-owner would have employed him again had he stated that the mine was in a deplorable state, and that the explosion was due to bad management?

At the inquiry the inspector said he had been down the pit a few weeks before the explosion, and found it safe. In reality, he was down the pit half an hour, and never left the pit bottom.

When Simon heard the sad intelligence his feelings were terrible. It was maddening to think that he had been sent to prison for leaving the doomed pit. The magistrates had ignored his plea, but his truth had been terribly vindicated. A few months afterwards he came to America, where he became a prosperous citizen.

## CHAPTER V.

### PERILS UNDERGROUND.

**A**T the time the accident (the incidents of which I am about to relate) occurred, our pit was not making more than half-time, and sometimes not that, and on this day of which I am writing the pit was not turning; hence very few of the men were in the pit. However, at the usual time—seven o'clock in the morning—I, with my mate or companion went, to our work, which then lay on the south side of the pit. We were in a face-stall, and consequently some little distance from any other, they being on the ends and going in another direction. My companion, who had other engagements when out of the pit, was desirous of going out at ten o'clock, it being understood we could only get up at ten and twelve, when the pit was not turning. Everything, so far as we knew, was going on as usual. However, at a little before ten we proceeded to dress ourselves, but while in the act of doing so we were surprised at hearing a terrible roar. I at once said to my mate: "Harry, whatever is that? Can you hear it?"

But he had not time to reply before the brattice cloth, which was put for turning the wind-up of the next gate, was violently blown over our heads, and as quickly returned, it having struck the face, which was some distance in advance of the end stall, thus cutting off the air entirely from the range of end

stalls, and thereby saving the lives of some five or six men who were then working in them,

"Harry," says I, "that is an explosion in some part of the pit."

But he could not believe it was, as we heard no report but the terrible roar of wind.

"Come," says I, "we must away from here at once, or we shall be overtaken with afterdamp."

My light, which at the time was well hid behind a set-off in the pack, was preserved, so we started out, passing the range of end stalls until we got to the last, expecting to make our way along a disused horse-road; but to our dismay it was full of afterdamp, which was as upright as a stone wall. I thought it useless to try to make my way through such an amount of damp as that, being then some 900 to 1,000 yards from the shaft, so we turned back again, and went through the fast end face stall, never imagining that there were men safely at work in the end stall. So on we went down the road until we came again to the same position on the traveling horse-road, and there we found ourselves in the same fix.

Being unaware of the nature of the explosion, or the amount of damage done, I felt myself to be in a serious difficulty, not knowing which way to extricate myself. I told my mate of the terrible danger we should have to incur in passing through such a body of stuff; but, whether from fright or what, he seemed not to understand the fearful peril our lives were in. My mate had only come to work with me a fortnight, so I told him to lay hold of my coat behind and follow me for, I meant getting through with my life if possible—instructing him not to speak after we start-

ed, so as not inhale more than ever could help of the deadly stuff that I knew we had to pass through, also bidding him "dout" his light the moment I told him. So, off we went at the best speed we could make under the circumstances, till, as going, I could perceive it still getting hotter, and I ordered him to "dout" his light, blowing out mine at the same time.

Our progress was now more difficult; but on we went, until we arrived at the siding by the side of the incline plane. We were more than ever terrified at finding the fire itself had been there, for we could not bear to put our hands on the tubs that stood in the siding. We found also that the overcast was blown down, and I asked my mate if he believed there had been an explosion now. Scrambling over the débris I followed the line of rails, and thus got into the plane. We there found several obstacles in our way in the shape of timber, &c., but on we went, and had not gone far when I heard a groan. I stood still and listened again. I spoke, to see if any one was near, but not receiving any answer went on.

But we had not gone far when we heard another groan—this time very close to us. I spoke again, and was answered; I knew the voice of the man, and asked him if he knew whereabouts the explosion had taken place; but he, like myself, knew nothing of it, nor was he able to answer my inquiry.

"Have you seen anything of the deputies?" So I said, "Where is your mate, John?" And he said he was just a little higher up. "Can you not get any farther?" said I to him. "No," says he; "I can go no further."

I endeavored to urge him to try and come on his hands and knees, assuring him that to lie there meant to die; but he said he could not come. "Can you come, think you, if I help you?"

But what his answer was I know not, for just then my mate, who up to then, had neither spoken nor moved, asked me if he should sit down a bit. I at once knew that the damp had taken effect on him; and, turning to John again, I urged him to try and follow us, as I now could not assist two of them, my mate being a very stout man. I took hold of him (my mate), and placing his arm around my neck, began again to make the best of my way up the plane; and having no light, we very soon found ourselves falling head-first over something soft, which we found to be Philip, the mate of the man we had just left. I had something to do to get my mate to his feet again, for the damp and excessive heat was fast overpowering him, and I found my burden getting much heavier.

At that place the plane was very steep just before reaching the bank-head; and in climbing that I perceived my legs grow dreadfully tired. On arriving on the bank-head, and trembling under my burden and my own weakening state, we ran along the coal-face, or the side of the horse-road, to the bottom. My head up to then being tolerably clear, we turned in the direction of the pit bottom, but had not gone many yards when Harry said: "Charlie, let me sit down; it's no use, I cannot go any farther."

I forced him on another step or two, when I felt him grasp my hand quite tightly and the whole weight of his body fell on me, and he begged of me not to leave him. Gradually my weakening nature gave way, and



he fell on his back on the floor, still holding my hand. Awful as it seemed to leave my mate to die, I was forced to shake off his hand in order to save my own life. I then made my way towards the shaft, when I came in contact with some timber that had been blown down. How long I lay I cannot say, but the most heartrending scream that ever came from mortal lips partly awoke me from my stupor. I tried to rise, but could not get even on to my elbows, and I sank again to the floor.

After a while I revived again a little, and I heard the scraping of a pony that was lying, sadly burned, between me and the furnace. I was lying not more than fifty yards from the bottom. I tried to rise again, but my strength failed me. I again heard another fearful scream, but could not tell whence it came. After lying sometime longer I was again coming to, when I heard some voices coming towards me, and one of them said, "Charley Colley will be the next" (they, of course, had just passed my mate). I wish my readers to understand that shortly after my falling down, fresh air, which was the result of the prompt action of our underviewer, was blowing over me as I lay. However, had not help come as it did, I must have succumbed to the damp, for after hearing the voices I fell again—this time with my mouth in the dust.

I was at once raised to my feet by the men who had just come up, and the dust cleared from my mouth and nose, and placed close to the bottom, in the fresh air, which soon had the effect of bringing me round sufficiently to stand. In the meantime my deliverers were looking around the shattered bottom,

making their way to the lamp cabin, to see if they could procure sufficient lamps to take us the long journey that we knew we had to make, seeing the condition the shaft was in. After passing the bottom, they came upon a man lying flat on the plates, but a few feet from the bottom, quite dead. I told them of the scream I had heard, and they turned to the "gaffer's" cabin. There on the top of the débris lay the underviewer's son, a very big strong young man, apparently dead; but, on moving him, he proved to be otherwise.

While doing so, again came that horrid scream, which this time told us where the unfortunate sufferer was. They at once made to the cabin again, and found it to be another of the underviewer's sons, entirely buried with the bricks from the cabin roof. He was soon extricated; also the body, quite dead, of the youth that tended to the pumping engine at the bottom. During all this time I had been sitting at the bottom, and was reviving nicely. Several lamps were found from amongst the débris in the lamp cabin and were fortunately unlocked. They were at once lighted from the hand lamp carried by one of the men; and, putting out the hand lamp, we commenced our journey to the top pit, which would be underground nearly a mile and a half. One of us who was burned was supported by two of the men—one going first with a lamp to light them. I followed, and the rest of our deliverers followed behind me to see me all right.

It was found impossible to move the other one from the cabin under the present circumstances. We had not gone far when we came upon a man, a boy, who, after hearing the report, were making their way to

the bottom, but were overcome by the damp. We next came upon a brother of the underviewer's, and a man that worked with him, all quite dead.

After then we met with no more as we were going away from the scene of the accident. On we went, contending with various lots of stagnated damp, and when within 500 or 600 yards from the top pit we met the first batch of explorers, led by the underviewer, accompanied by the colliery doctor, who at once offered us assistance; but we bade them go on to the rescue of the unfortunate one we had left at the bottom. We soon met another gang of explorers, and then I found myself giving way again to the damp inhaled on our journey. One of our own pitmen among the number at once took hold of me and bore me on to the bottom, where stimulants were given to me, and at about half-past two I was safely landed once more on the surface. There were forty-five of my fellow-men lost their lives by the accident.

#### A REMARKABLE STORY.

A Colorado miner, appeared at the Union station, Pittsburgh, Pa., with a ticket to Harrisburgh which Chief Elliot had kindly given him. He was on his way home to Philadelphia, which place he left six years ago to make his fortune in the West. He told a most remarkable tale of recovery from injuries received that would have killed 99 out of every 100 men. Indeed, if his story is correct, the fact that he lives is a miracle. At times he seemed to be wandering in his recital, but in the main the details of his story were consistent. He was a tall, slender man, with one eye crushed in his head. The other also had been severely

hurt, and through sympathy for its mate had almost gone blind. He could only see a faint glimmer, just enough to outline objects before him, and it was with the greatest difficulty that he walked. His face wore a deadly pallor, and it was very evident that he had pulled through a long siege of sickness.

He claimed he was in the Columbia silver mines in February, 1891, when the terrible explosion took place. Ninety-two men were killed outright or died before rescued, and one man besides himself were the only two miners taken out alive. He was pinioned to the floor of the mine by a mass of timbers which fell on him. Fortunately the bed beneath him was soft, and to this he attributes his narrow escape. If the ground had been hard, he would surely have been crushed into a shapeless mass. For eight days and four hours he was an unconscious prisoner, when a rescuing party discovered him, and took him out to the surface with a faint spark of life still in his breast. The men could scarcely believe that he was living, but after a careful examination the physicians noticed some signs which denoted that he had not ceased to breathe. His skull was cracked in several places, but by careful trepanning the effects of the fracture were overcome.

"See," he said, as he took off his old and faded straw hat, "my head is full of silver." Those near him looked at it and could see several ugly scars that bore out his apparently wild statement.

"But that is nothing," he continued, "I can pull a silk handkerchief through my body. A spike in one of the props entered my side, near the stomach, and almost reached through me. Some of my ribs

were so badly broken that one had to be taken out, and the wounds have not yet healed. I see by your face that you don't believe it. Few people will. If I had time I could prove it to you, though. I am not crazy, but telling the truth. While I was in the mine I didn't know anything, and when I came to I was in a hospital. When they told me how they found me and that I was badly hurt I couldn't see how any man could have such an experience and live. But here I am, and if I can get back to old Philadelphia I will gladly stay there for the balance of my days."

To the external view he certainly looked like a badly used up man. He had an ugly scar on his neck where one of the heavy pieces of timber had struck him. His hands were rough and scarred, and people wondered if there was a spot on his body that had escaped injury. He regretted most the loss of his eyesight, but he was thankful he still lived.

**FOR DEAR LIFE—SEVEN HUNDRED FEET STRAIGHT UP  
TO ESCAPE A FLOOD.**

The storm of June, 1891, came near costing the lives of 12 miners who were working in the bottom of the Moulton, Colo., shaft. They comprised the night shift, and were busy at the time sinking the shaft, being down 820 feet. A short distance to the east of the hoist a dam had been constructed to form a reservoir, from which water was taken for the boilers. This dam was strong enough to withstand any ordinary pressure, but was not intended for such a flood as that which came that night.

At ten o'clock a lake had been formed such as had

never before been seen there, and at 10:20 it swept away the dam as if it had been made of straw. The flood swept over the mine, breaking in on the 300, and running down that to the shaft. It began to pour down the shaft in a perfect torrent, almost overwhelming the men who were at work in the sump.

They at once realized that something was wrong, and that the chances for their escape were decidedly slim. There was no time for waiting and deliberation. Only one thing was left for them to do, and that was to climb to the 700, and this they at once proceeded to do.

It was a perilous task climbing up that shaft, with a flood of water pouring upon them from a distance of 500 feet, and in order to make it the men were obliged to throw off all their rubber clothing as they climbed. They also kept a fast hold on the bell cord and thus gave the engineer warning that something was wrong below. Fortunately the engineer in charge of the engine was cool enough not to drop the cage, waiting to hear something in the way of a definite signal. Had he lowered the cage it must have swept every man back in the sump, and would have cut off their last chance of escape. All credit is due the engineer for the coolness he displayed in this trying time.

Finally about half the men reached the 700, and, after waiting a few minutes for the cage at that point, were hoisted out. They went up fully convinced that the others had been lost in that long climb, or had been unable to get started until too late.

They were an anxious crowd while waiting around that shaft, until, in a short time, what seemed ages

to them, the bell announced the joyful intelligence that some at least of the boys had reached the 700 in safety. The cage was lowered again, and when it returned it was found that every man of the twelve was safe. A season of mutual congratulations upon their wonderful escape from what seemed certain death followed.

## CHAPTER VI.

### LOVE IN A COAL MINE.

**T**HE following prize contribution from the pen of Mr. J. Barraclough, Burton-on-Trent, appeared in *Tid Bits* :

Fifty years ago I was working as a collier in the center of the coal-getting district of Yorkshire. In those days colliers' lives were hard lives. Plenty of hard work with little pay, and very often the loss of life for lack of the scientific knowledge now at command. But for all that, nature's feelings would manifest themselves, and thus love, even in grimy collier lads, found an existence not unworthy of the notice of many amongst the higher grades of society. True, there were not the opportunities for love-making which now exist, but then we had troubles which at any rate tried the love of youth far beyond the little frets and worries which are the experience of those who now labor with their hands for the wages of life.

In those days girls as well as lads worked at the pit-bottom, and, dressing like the lads, very often it happened that their sex was disguised. It was maddening for us—collier lads though we were—to see the lasses of our choice at work among the coal-dust, thrusting and pushing corves of coal from morn till night, toiling in a stifling atmosphere, and perhaps hearing foul language and receiving insults and blows throughout the day from their overseers.



One of these girls I had chosen for my future wife. Her name was Rachel Fox. She had entered the pit the same day I did, and that was the day I was six. We had worked together in the same pit for twelve years, so that our love was no sudden outbreak. Often did I stand up for her, and many a pitched battle did I fight in the dark passages of the pit for Rachel's sake. These, however, were dangers which were never likely to weaken our love. No, our love was firm, and it was this love which, just fifty years ago, was the means of saving both our lives.

In many of the Yorkshire pits it is customary to reach the headings, where the coal is being worked, by shafts, and also by what are called day holes, *i. e.*, long passages made in the side of a hill, and descending by a rapid decline to the level of the headings already mentioned. Usually the colliers and their helpers descended by the shaft, and the day-hole was valuable in case of accident. It happened that on the morning of the 10th of August, 1838, we had all descended safely to the bottom of the pit, and had traveled along the headings until we reached the corves ready to be filled with the coal hewn out by the night hands.

Young girls, boys, men and women were all hard at work that day, because a few days' "play" was expected a fortnight further on in order to celebrate the village feast. Overtime was the rule, and so very soon the corves were rapidly filling, in a choking atmosphere, dismally dark, dusty and unbearably hot. We were working some hundreds of feet below the surface. The ventilation, bad at best, became so horribly oppressive that we were aware that a thunderstorm

was near. The sultriness increased, and breathing was a matter of difficulty. Still the work went on.

Just when the oppressive atmosphere was at its worst we heard, in the direction of the mouth of the shaft, an unusual noise. We were accustomed to water trickling down the sides of the shaft, but now it sounded as if a waterfall had been let loose. Some of the party in our heading ran off in the direction of the shaft, taking with them their Davy lamps, and so lessening our number of lights. Rachel and I had determined to stay in the heading in spite of the alarm of our companions. Alas! they never returned to us.

Suddenly we heard the roar of water approaching us. We heard with horror the shrieks of girls and women who had evidently been caught in the torrents descending the shaft. We did not ascertain until hours after the cause of the deluge, but it was proved beyond doubt that the thunderstorm had done its worst immediately over the pit, and that a waterspout had burst and emptied itself into the shaft. But to return. The water around us rapidly deepened. We were gradually pushed farther and farther toward the face of the coal, until we were stopped by contact with the unhewn blocks. Here we clustered, five in number—Rachel and myself, one other girl and two men. We had but two lamps, which gave only a feeble light.

The water was rising, and nothing could be heard but the lap, lap of the waves as they touched the sides of the heading. Suddenly we heard the crash of falling coal, and became aware that the flood was washing away the supports of the roof. The water

was now nearly on a level with the roof of our heading, and as we could not stand upright, escape seemed impossible.

Our horrors were increased by one of the lamps being quenched in the rising water, and our only chance now lay in the lamp which Rachel held. We endeavored to force our way through the water, but so strong was it that our companions were swept off. Their shrieks were heart-rending, but soon the monotonous lap, lap was heard again. We were now the only people alive in this part of the colliery.

We prayed, clasped our hands for support and expressed our last vows. By dint of cautious treading I found the way of the current, and with Rachel following waded along up to the neck in cold, surging water. For a yard or two we were able to force our way, when a dip in the level we were crossing plunged us overhead in water and put out our only remaining light.

Our horrors were now increased tenfold. Absolute darkness everywhere. Still we pushed on, but not for long. Rachel was fast giving out, and unable to bear the terrible strain further. The surface of the water through which we were wading was thick with coal dust, and every now and then we were almost suffocated by swallowing quantities of slime which was continually being washed over us. I managed to stumble against a corve which had been overturned, and to this I dragged Rachel. As to our whereabouts I had not the slightest idea. The darkness was awful, and as for air, we might almost as well have been in a hermetically closed case.

Lost in a pit! What feelings were mine. Hunger

was torturing me. As for the devoted lass by my side, she was unconscious. The thought that she and I should live for a few hours longer only to die a horrible death was unbearable. Silence reigned around, broken only by the fall of coal in some of the workings.

Fortunately for us, the water had long ago ceased to increase, and as it spread through the mine we were happily free from the dangers which hitherto had been ours. I seemed to have lived a lifetime. We were still in two feet of water; but what consolation was it that if it should fall to our lot to stay there until our rescuers should come—when too late? Happy thought—the day hole! Surely that means of escape would be available. But how were we to reach it? No help at hand. No light, and no strength to support any lengthened confinement.

It occurred to me at last to test the current of the water. If I walked along the headings in one direction and found the water at the same or a greater depth, that would surely tell me that the day hole would not be found that way. If, on the other hand, I tried the opposite direction, and found the water decreasing, that would be at least a help in solving the difficulty. My first endeavor was clearly in the wrong direction. I tried again, and soon found the water rapidly decreasing. Here was joy.

To persevere onwards with all my speed was my thought; but to leave Rachel? Should I? She was still unconscious, and after kissing her and propping her up as well as possible, I left her. I counted my steps as I went along in the darkness. Suddenly a small ray of light appeared. I quickened my pace,

and ere long found that I was nearing the entrance to the day-hole. With joy I strode along, still keeping count of my footsteps, and in a few minutes reached the outer world—saved. Help was soon at hand.

In a short time I had the joy of being with my Rachel again. For weeks she was stricken down with fever, resulting from the exposure, terrors and sufferings of the dreadful ordeal through which we had passed.

Our escape was considered miraculous. A large number of dead bodies was found, and sad sights were witnessed in the village churchyard.

After a time Rachel recovered. We were married; and now, thanks to my having left the pit, and having secured some education, I am living comfortably, in my old age, with Rachel, my children and grandchildren, to whom I often relate the story, "How my Rachel and I were lost in a pit."

## CHAPTER VII.

### OAKS COLLIERY, BARNSELY—SINGULAR EXPLOSION IN A SHAFT IN WALES—THE LAST EXPLOSION AT BLANTYRE—LINES ON A FORMER EXPLOSION.

WEDNESDAY morning December 12th, 1866, was dark and dreary as possible, and its memory will never be effaced from the town of Barnsley. The ground was covered with snow and the dark mist hung o'er the earth as though nature itself was in tears over the sad and awful calamity that was about to cast a pall of woe over nearly, if not every house in the town, and send a chill of horror through all the people of not only the United Kingdom, but the civilized world, when they heard of the tremendous explosion that in a few short moments of time blotted out more lives than the most sanguinary battle has done in hours of severe fighting, and stands on record unparalleled by any disaster in all the annals of mining in the loss of life caused by it. For, on that fateful morning, with its addition of the brave explorers and rescuers, who lost their lives the next day in one of the noblest pursuits of man, there was charged to the account of coal mining three hundred and sixty-two human lives.

Not only is it memorable for the loss of life but for the fact that many of the bodies have not been recovered and never will.

The Oaks was about the most gaseous mine on the borders of Yorkshire and Lancashire and as well

ventilated as possible; all the law required was strictly adhered to and perhaps more.

When it was discovered, after the great explosion, that the explorers had a burning mine as well as the gas and deadly after-damp to contend with, the mine was closed up and abandoned for several years. And, when it was reopened it was found that the combination of gas, fire and water had worked such destruction, that going into the old workings to recover the dead bodies was out of the question, and as their funeral sermon had been preached and burial services held on the pit top when the mine was abandoned, the old part of the mine was sealed as close as stone walls and cement could do it, and the coal worked out from other directions, leaving the dead bodies to await the call of Gabriel's trump to resurrection, though in the course of time, as the solid coal was worked around to the former face of the workings, and occasionally holed through, some of the dead bodies of the miners have been found in their working places, where the invisible scythe overcame them and cut them off in peaceful slumber without their knowledge of its presence.

How the mine was exploded or who caused it will forever remain a mystery, as no one escaped to tell. The mine being so gaseous, nothing but the safety lamps were used in working, and in addition to the law governing such mines, which was very strict, the colliery rules in force were still more stringent. One of the most accepted theories is, that it was caused by a blacksmith, who had gone to shoe one of the horses down in the mine, as it happened in a very short time after he went down. It is supposed

that not being able to see by the dim light of the lamp to do his work, in a moment of reckless thoughtlessness, he pricked open the lamp he was using with one of the horseshoe nails, such things being forbidden to be in the possession of any others who worked in the mine.

There is also a story told in connection with the blacksmith's going down the shaft. He had a dog that was always with him in the shop or wherever he went, and had always, previous to that morning, joyfully accompanied him on his trip down the shaft. But that morning when he saw him leave the shop he began to howl and whine very piteously. The blacksmith tried to coax him along, but could not. He then tried to catch him and carry him to the cage, but the dog kept out of his way. The cage being ready he could not keep it waiting and went without him. As soon as the cage was below the surface the dog ran to the shaft and began howling and whining louder and more piteous than before, and ran all around the shaft and from the shaft to the shop and could not be quieted. About what seemed five minutes after the blacksmith went down the explosion occurred.

#### A SINGULAR ACCIDENT IN WALES.

One Tuesday morning in June, 1876, a man descended to oil the pumps in a shaft, carrying a torch with him, and in his descent was watched by a man and a boy at the top of the shaft. When a considerable distance down an explosion ensued, and the fired gas leaping up the shaft killed the two spectators instantly, and sent the machinery on top in



all directions. Most singularly the man who was descending escaped with only a slight burn.

UDSTON MINE, BLANTYRE, SCOTLAND.

A terrible explosion of fire-damp occurred at the Udston coal pit, Blantyre, a village in Lanarkshire, Scotland, May 28, 1887, by which 185 miners were entombed in the pit. The shaft was blocked for some time with *débris* caused by the explosion.

As soon as the fact of the fire became known the miners from all the neighboring collieries hurried to the scene to help in the work of rescue. There were three seams working and the explorers soon cleared the shaft sufficient to allow them to explore the upper seam and rescue, alive, the forty-five miners imprisoned there, but one of them died shortly after being brought to the surface, while many of the others suffered severely from the effects of the fire-damp.

The work of clearing the shaft went on vigorously and in the afternoon communication was opened with the middle seam, and numbers of the miners entombed there—all of whom were supposed to have been killed by the explosion—were rescued alive, although much prostrated from the fire-damp. But five of their unfortunate comrades had been overcome and died before the rescuers reached them.

The lower seam, in which the explosion took place, was reached too late to rescue any of the miners who were at work there. Out of the eighty-seven entombed not one was found alive to tell the story of the explosion and of the vain struggle to overcome

the secret, silent, invisible enemy of the miner, which completes the work left undone by the destructive force of its more violent coworker in the conflict, "gas."

From the time of the explosion until the bodies were all recovered the pit-head was surrounded with weeping women and children very few of whom but had to mourn the loss of some loved one among the ninety-three who lost their lives on that occasion.

LINES ON THE GREAT EXPLOSION AT HIGH BLANTYRE, IN 1875.

The mines around Blantyre are the most fiery in Scotland. In 1875 an explosion took place at the High Blantyre Mine, by which 213 lives were lost. One of the miners composed the following lines, and while the elegance and diction are not those of the higher class of poets its humble and homely phrase conveys a sentiment that will reach the hearts of all:

The shades of night have gathered round;  
The twinkling stars appear;  
And for the toilers underground,  
The time for rest is near.

Nature sufficed, refreshing sleep  
Presents its soothing charms;  
Weary and worn they gladly sink  
Into its gentle arms.

Sleep sweetly on, ye sons of toil,  
Your hours of sleep are few,  
Your dangerous calling, 'neath the soil,  
You shortly must pursue.

Roused by the callers long loud knock  
They leave their humble bed  
And strike the hardened blackened rock,  
To earn their children's bread.

Along the subterranean paths  
With painful, weary pace ;  
Encompassed by destructive gas,  
How pitiful their case !

The trapper sits behind his door ;  
The driver speeds along ;  
Putters and hewers as before  
Are full of merry song.

Each at his post, the day glides on ;  
They are longing for its close,  
Little they think before it's gone,  
Stern death will interpose.

Alas ! What means that thunderous sound ?  
The deadly fiery blast !  
Which seems to shake the solid ground,  
And hold its victims fast.

From the pit-mouth great flame issued ;  
A leg to hank is blown,  
Which sight the gathering throng reviewed  
Exclaiming : " All are gone ! "

Children and wives, and mothers run  
Toward the black pit heap,  
For fathers, husbands, brothers, sons,  
Most bitterly they weep.

" All, all, are gone ! My bonnie lads ! "  
Heartbroken mothers say :  
" Him whom 'twas joy to call my own  
Supporter on life's way."

Children, no more will run to greet  
Father, on his return  
From work ; to share his kiss so sweet,  
Nor on his arms be borne.

A soldier, six weeks' furlough  
Had from his regiment got,  
With his father, that morn, did go  
To ease his toilsome lot.

On bloody field, midst shot and shell,  
Not suffered to expire,  
More glorious the hero fell,  
Helping his aged sire.

A youth, a stranger, it is thought,  
No one comes to own,  
While others are most keenly sought,  
Poor lad, he lies unknown.

Is there not one kind heart near,  
To kiss his blackened face—  
In absence of relations dear—  
To freely take their place ?

For lack of sterling sympathy,  
The crowd we censure not.  
Their grief, too great, unconsciously,  
The stranger seemed forgot.

One of the drivers, who was slain,  
Beneath his horse was cast ;  
His comrade tried to save, in vain.  
The boy cried out at last—

“ Run, save yourself, and let me lie ! ”  
Reluctantly his mate  
Was forced to leave him there to die,  
Or share the same sad fate.

Reader, think not true greatness reigns  
On battle-field alone!  
In that poor driver's farewell strains,  
How strikingly it's shown.

"I ha'e wearied twa days for ye!"  
To the explorers cried  
One whom, alive, they sent to bank,  
But who shortly after died.

All honor to those heroes great!  
Who, on that daring event,  
Their fellow-men to extricate  
Freely and boldly went.

The cause of this sad catastrophe  
We fear none can explain;  
But every effort should be made  
The truth to ascertain.

Ye, who despise the sons of toil,  
And cast on them your spleen;  
Who greedily lick up the spoil,  
Come view this painful scene!

Come hear the widow's sighs and groans  
The orphan's plaintive cry,  
And gaze upon the lifeless ones,  
Who, around the pit mouth lie!

Henceforth learn to be more wise;  
And choose a nobler plan;  
Instead of hating, ever prize  
An honest working man.

Regard in mercy the bereft,  
Thou Great and Loving One!  
Three hundred orphan children left,  
And seventy widows mourn.

Long will they recollect the day;  
And oft the story tell:  
Pointing to Blantyre pit will say:  
" 'Twas there! 'Twas there! they fell! "

The passing stranger will be told,  
Oft with a painful sigh,  
The distant churchyard to behold!  
Where Blantyre miners lie.

Until the arch-angel's trump shall sound,  
Each in his dusty cell,  
Obedient, shall, to life redound—  
Till then we say farewell.

## CHAPTER VIII.

### POTTSCHAPPEL, JABIN, PATURAGES AND MEANS.

**A**T the Pottschappel mines, in Saxony, on the second of August, 1869, an explosion of fire-damp occurred in consequence of the fire-damp collecting in the abandoned workings of the mines and being fired by spontaneous combustion of the gob waste which killed two hundred and seventy-six of the miners at once.

#### JABIN.

An explosion of fire-damp occurred at two o'clock in the afternoon of February 4th, 1876, at the Jabin Colliery, France.

The mine worked over two hundred and sixty men, all of whom were in the mine at the time of the explosion, and out of the whole number only forty-eight were recovered alive, and the rest, two hundred and sixteen, were doomed and met death in all its horrors in the dark galleries of the mine.

At eleven o'clock on the morning of the seventh, seventy carbonized bodies, placed upon roughly constructed litters, were conveyed by the companions and relatives of the deceased into the church, in some cases fathers and mothers, obliged through lack of assistance, to carry their own children. This ghastly funeral cortege was conducted by the doctor and engineers of the mine, and members of the administrative council, General de Alzac, representing the mar-

shal; M. de Muex, the Minister of Commerce, the Procureur General of Lyons, Bishop Thelbodier and commercial notabilities.

The little church known as the Eglise du Soliel was completely filled by the bodies, and the persons present had to stand between the improvised coffins. The scene at the cemetery was heartrending. Five hundred relatives, composed chiefly of women and children, wept aloud and threw themselves on the bodies of their husbands, fathers, brothers and sons. The snow, driven by a bitterly cold wind, was falling heavily, and it soon covered the scene of anguish and despair with a white shroud. Everybody present was deeply impressed, and the thought that twice the number of bodies lying before them were yet to be brought to the fatal pit mouth, made the scene more distressing.

Every effort was made to put out the fire caused by the explosion, moist earth being let down for that purpose. Day and night crowds of women and children were to be seen at the pit, waiting anxiously to receive the corpses of those who were their bread winners. Priests were moving about advising resignation and promising substantial assistance from subscribers and sympathizers at Lyons.

Up to the eighth one hundred and thirty-five bodies were got out, including the injured; but the dead bodies were so far disfigured in many cases that they could not be recognized. On the morning of the eighth fire broke out in the galleries, which hermetically closed them, thus sealing the bodies of the unfortunate victims in their tomb beyond recovery. And, after numerous unsuccessful efforts to recover



them seventy bodies had to be left in the ruined galleries of the mine as their last resting places.

All classes were greatly moved by the terrible catastrophe, and large sums of money were contributed and collected to relieve the widows and orphans, and the director of the opera gave a special performance for the benefit of the distressed families.

#### PATURAGES.

A terrible explosion of fire-damp occurred Friday night, March 6th, 1887, in a large mine, near Paturages, in the Borinage district, Belgium. Two hundred and fifty miners were down in the mine at the time. The shock was felt throughout an immense area. Rescuing parties were soon organized, and the first of them brought to the surface three corpses, five men, who were terribly wounded, and two who had escaped scathless, but who had become insane. Obstacles of all kinds prevented the rescuers from reaching the bottom of the pit for some time.

When the rescuers did reach the bottom they recovered a number of corpses, and came upon some survivors, who ran away biting their clothes so as not to inhale the poisonous gas. There were still one hundred and twenty men buried in the pit and who were not reached until the deadly gas had done its work and run the number of killed up to one hundred and forty.

The scenes around the pit were terrible, and the greatest sorrow prevailed among the population. A thick fog added horror to the scene. While the work of recovering the bodies was going on, women put on violet capes, which constitute widows' weeds

in Belgian mining districts, and gave every sign of the most poignant grief. Is it any wonder that such a catastrophe increased the irritation of the miners at that time, and illustrated more terribly the dangers they ran for a paltry pittance, and aroused them to demand more determinedly better remuneration for their arduous as well as dangerous toil?

#### MEANS.

In 1835, in consequence of an explosion at Means, France, the miners were seized with superstitious terror, and would never go down the shaft afterwards without imploring the protection of their patron—St. Barbe. They actually erected a statue of this Saint in one of the galleries of the mine, as a protection against any future explosions of fire-damp.

A terrible explosion of fire-damp occurred on the night of the 17th-18th of Jan., 1891, in the Tchervotoneff coal mine, near Jusoveja Railway Station, Russia. Of 120 miners in the workings at the time, about forty were killed outright, the majority of the remainder being brought to the surface in an unconscious condition.

## CHAPTER IX.

### DRUMMOND SLOPE AND MANAIMO.

**A**T the slope of the Drummond colliery, near Westville, Nova Scotia, on the eleventh of May, 1873, an explosion took place by which the whole force of the mine, except one solitary workman, was destroyed, and the bodies of the dead miners were not all recovered for nearly two years after the accident.

This explosion was caused by the coal taking fire from a shot in the pillar side in one of the rooms of the mine. The fire-damp ignited from the burning powder, and could not be put out by the united exertions of several of the miners, who fought the fire for nearly two hours. The alarm soon spread through the mine, and it is thought that some of the workmen in retreating to the bottom of the slope had left a trap door open, which was used for guiding the air current into the low lifts of the workings. The gas in this isolated district soon accumulated to the point of an explosive mixture, and, it is supposed, was fired by some of the miners' lamps as they were passing toward the burning pillar to assist in putting it out. A most terrific explosion occurred. Vast volumes of smoke and dust arose from the mouths of the slope and the upcast shaft driven forward by the roaring whirlwind of burning gas.

Many of the miners would be scorched to death in this blast, while those beyond its reach would at-

tempt to reach the bottom of the slope in utter darkness, for the blast would blow out every light in the mine. Every door and brattice used in guiding and directing the air currents around the working faces was dashed to pieces by the force of the explosion and the fire-damp made in the mine collected in a most destructive volume. A second explosion, more terrific in its nature, followed the first, and completed the ruin of the mine. A solitary miner, groping his way in darkness, reached the bottom of the upcast shaft a few minutes before this second blast, and though terribly mutilated from the effect of the first explosion, was able to signal those on top, and was drawn to day—the only survivor of the wreck.

Meantime a crowd of miners and others assembled on top, resolved to attempt the rescue of those who might be still alive in the mine. The rescuers were in the act of being lowered down the upcast shaft when the second explosion took place, and such was the fury and power of the blast, that one of the explorers was blown up out of the pit's mouth one hundred feet high in the air, and his body, mangled beyond recognition, was not found until the next day, and all the exploring party fell dead. The flames of the second explosion rose to the surface and set the shaft buildings on fire.

All hope of rescue was now abandoned. The fires raged all night with increasing fury. The sky was illuminated for miles around, and the mine gas, gathering increased force in the mine, exploded again and again. At every explosion the flames of the burning mine belched forth and rose high in the air.

About two o'clock in the morning the most formidable blast of all occurred, the noise of the exploding gas resembling a fierce clap of thunder. The earth trembled with its power, and the flames rose in the air two hundred feet.

Next morning the miners commenced the work of closing up the mouths of the mine in order to exclude the fresh air. This having been accomplished, a stream of water was turned into the slope, and the workings filled with water.

A terrible explosion occurred in No. 1 shaft of the Victoria Coal Company's mine, at Nanaimo, Vancouver's Island, at 6 o'clock Tuesday, May 3, 1886. At midnight several bodies had been recovered and a few persons seriously burned were rescued at the same time. These numbered twelve in all. A rescuing party went down, but owing to the black-damp they were unable to do anything. One of the rescuing party died shortly after coming out of the mine. A special train carrying surgeons from Victoria arrived at Nanaimo in a few hours after the explosion occurred and the work of recovering the bodies was proceeded with.

The total number of those known to have perished in the mine at Nanaimo is 189, of whom eighty-two were Chinese. The Chinamen held a meeting and made arrangements for burying their countrymen. Some of them refused to place the dead in coffins and had to be compelled by force to do so. Most of the white men were from Cornwall, Yorkshire and Wales, and a few were from Nova Scotia. The fearful character of the explosion cannot be exaggerated. Over 130 orphans and 47 widows have been counted.

## CHAPTER X.

### ADVENTURES IN AMERICAN MINES—BLUE ROCK MINE AND COALBURG SLOPE.

**I**N the preceding chapters an account has been given of the most disastrous explosion of fire-damp outside of the United States; and while the mines of this country have not been as prolific of such disasters the succeeding chapters will show our miners are not free from the dangerous gas, and some horrible scenes have been enacted in our own mines. Though fire-damp is not alone the cause of disaster and death, as will be seen as we proceed, there are many other causes that contribute great danger to the miner in his perilous occupation. This chapter we shall devote to a thrilling incident which shows some of the causes.

An accident occurred at the Blue Rock mine, on the Muskingum River, in the State of Ohio, by which four miners were inclosed in the mine for fourteen days and thirteen hours, and were all got out alive. It happened about noon on Friday April 25th, 1856, while twenty miners were at work in the mine, and was caused by a crush of the roof without previous warning. The mine was a drift opening, and the miners hauled out their coal themselves. They had just re-entered the mine after dinner, when the crush occurred. They heard the grinding of the rocks, and the bursting of the pillars, and rushed outside for their lives. Sixteen of the twenty escaped, though

three of them received slight injuries from the bursting pillars and falling rocks. The other four were at work in the farthest end of the mine, and did not hear the crush, and knew nothing of its occurrence until two hours afterwards.

Three of them were working in adjoining rooms, and after having loaded their cars, had wondered why the mine was so still, no sound of the picks, or of cars running had been heard since noon. One of them proposed to another that they go out and see what was wrong, and two of them started, each with a loaded car. The one who led the way, in going along the main entry with his car, struck against another loaded car standing on the track. He raised his head and cried out, "Whose car is that?" Receiving no reply, he passed forward along the entry for a few yards, and found it completely closed up by masses of fallen rocks. The roof had not quite settled, and he ran back and met the other coming with his car and, calling him by name, cried: "The mine has fallen in!" They both advanced to the fall, and found there was no possibility of getting out. They went back into the mine, and met the other two coming out, to whom they communicated the news of the disaster.

There was a second outlet to the mine, an old air-drift, and one proposed that they should try and find their way out through it, by the old workings. They found it had also become involved in the crush, and that there was no way of escape.

"My God!" cried he, "we are all lost; let us go back to the far end of the mine and make us a death-bed. They, however, all went round the mine two or three

times, in hopes of finding a way out, but there was no escape—the crush had extended over the whole breadth of the mine. They then went back to the most advanced room, and collected a quantity of dirt and gob rubbish in one corner for a bed, and lay down to die.

Two of them thought that the miners outside would attempt their rescue, and that they might be reached before death would overtake them. The other two were less hopeful, believing that were the attempt made, which was doubtful, they could not be recovered alive. They collected all the water they could find, and discovered a small lot of provisions—a check which one of the men had brought in at noon for himself and his boy. The youngest, who was a boy of sixteen, first complained of being hungry, and proposed that they should eat the check at once. They, however, divided it into two repasts. This was all the food they ever tasted during the two weeks of their imprisonment.

With the closing of the mine, the circulating current of air was cut off, but as the workings made mineral gas very slowly, the lamps continued to burn for several days. At length the black-damp began to tell on their lights—they put them together and held them downwards to maintain combustion as long as possible. The supply of water soon gave out, but one found a low place in a room within fifty feet of their bed, filled with copperas water, and marked the way by a row of stones. They drank seven jugfuls of this water. It had a very disagreeable taste, but it appeared to allay the pangs of hunger. One of the men was troubled with palpitation of the heart, and sel-



dom left the bed. But two of them frequently went round the mine, as if by instinct, in hopes of finding some way of getting out, and to listen if anybody was at work beyond the fall, trying to rescue them. They all suffered greatly from cold, and took turns lying in the middle and of piling one on the other, and they frequently contended for the central place in the bed. Each hoped to die first, and they agreed that those who should die first were to be carried to the other corner of the room and to be stretched out in death, and the last survivor was to lay himself beside the others and die.

In time the lights all died out and they were left in utter darkness ; they earnestly prayed for salvation, and felt assured that when death overtook them, it would be well for their souls. They suffered terribly from the pangs of hunger, and in their restless sleep, would frequently dream of being seated at tables loaded with the choicest food. Sometimes on awakening they found they had crammed their mouths full of the slack coal on which they lay. On being rescued, one's hand bore the marks of his teeth ; he had bitten it while fancying he was devouring tempting cakes, covered with yellow, dripping butter, which his father had spread before him.

After the lights went out the two who had gone round the mine before still made the rounds occasionally. None of them had any idea of time, and when they were rescued they did not think they had been more than six or seven days in the mine.

The pangs of hunger were often too severe for them to stand patiently, and they could not bear to hear each other talk of the choice food they had enjoyed.

Meantime, everything was being done outside which human power could do to rescue the entombed miners.

The news that four human beings were imprisoned in a coal mine, in danger of a horrible and lingering destruction, spread like wildfire. People flew to the scene of disaster, and preparations were at once inaugurated for the rescue. The main entry was unbroken for a distance of nearly one hundred yards from the mouth, but the falling of the rocks had discharged a current of water on the entry, which lodged in a dip or low place at the outer end of the fall. Two lines of men, eighty-six in number, were formed to bail it out. The water pails were handed from one man to the other along the line, and this obstacle was soon removed.

A corps of miners was now organized, which divided itself into shifts or reliefs, each working an hour at the time. Timber and prop-wood were cut on the ground to maintain the passageway as it was excavated out of the mass of fallen rocks. The work went on with unabated energy all Friday night. On Saturday morning the miners came out for the first time, driven back by the settling and falling of the roof. One of the imprisoned men's wife passed in unobserved, and groping her way in utter darkness along the entry, reached the fall, and, unmindful of the falling rocks, tried to find a passage through the entry. When the miners returned they found her calling in grief and despair through the rocks for her imprisoned husband.

A doctor, of McConnellsville, assumed charge of the operations, and displayed extraordinary energy

and perseverance in the prosecution of the work of rescue. On Sunday morning the miners were again driven out in dismay by the settling of the falling rocks, believing the whole hill was about to settle down. One of the owners of the mine rushed forward and cried: "Those men must be got out of the mine, or I will die in the attempt. Who will follow me?" This display of daring revived the drooping spirits of the rescuers. The attack was renewed. An old English miner arrived from Roseville, and took charge of the inside department. He was a man of great personal bravery and well skilled as a miner, and worked to the last hour of the rescue without leaving his post.

On Tuesday the workmen mined through a solid pillar, and were in good hopes of soon reaching the entombed men, but in advancing forward they found a new break or crush. The air became too foul for the men to work, and they were compelled to cease operations at the fall and erect a temporary brattice-way to renew the circulation and discharge the black-damp. On Friday the entombed men had not been reached and the rescuers were beginning to lose heart, believing the poor fellows in the hill would be now dead, and it was proposed to abandon work. But nobler counsels prevailed, and it was resolved to recover the bodies of the imprisoned men, whether dead or alive. Provisions came pouring forward on the steamboats on the river. A vast concourse of people had now assembled to assist in the work of rescue.

By Tuesday of the second week the rescuers had cut their way through the fallen rocks to the car pushed out by one of the imprisoned men. It was

smashed to pieces and they expected to find his dead body beneath the rocks near it. This part had fallen after the four men had started to go out on the day of the accident, and the mine was still closed in advance.

On Thursday morning, while the work was going on with all possible energy, one of the rescuers thought he heard the sound of a human voice on the other side of the fall. He became dreadfully agitated and called the attention of his comrades to the sound. The foreman put his ear to the ground and listened. He heard the sound of voices as of men engaged in conversation. He shouted through the rocks: "Are you all alive and well?" "We are all well," responded one; "but we have no light in here."

"We are doing all we can for you," cried the now overjoyed foreman.

One of the imprisoned men asked if his father was there, and another asked if his wife and father were there. They were advised to return to their bed, and to quiet themselves and they would soon be reached. One of the miners ran outside to communicate the joyful tidings to the assembled multitude. "The men are all alive; we have heard them talking," cried he.

The people could scarcely give credit to the statement, but another and another of the rescuers came out, pale with excitement, and repeated the statement. Messengers were at once dispatched for physicians.

The vast concourse of people now crowded around the entrance to the mine, eager to catch the news as the workmen came outside, and it was found necessary to fasten stakes and ropes around the mouth of

the drift, to keep the excited multitude from blocking up the passage-way.

During the day the air became so foul that the miners' lamps would not burn within twenty feet of fall, and mirrors were taken in to reflect light, but the workmen were forced to stop work for want of air. One of them asked what was the matter. The foreman replied that their lights had gone out. Another inquired what time of the week it was, and on being told that it was Thursday, replied that they thought they had been in about a week, unaware that it was the Thursday of the second week of their confinement. They were advised to go back to their bed in the mine, beside their comrades and that everything which human skill and power could do would be done for their speedy recovery.

"Tell our friends not to grieve for us," they said; "we are all prepared to die, and if we cannot be got out we will die happy."

By means of a bellows the air was so far renewed that work was resumed by four o'clock. The miners now put forth herculean efforts to clear a passage-way to the entombed men, and the people outside were full of eager hope. Everyone that came out was surrounded by a crowd of excited people to inquire if the men had been reached. At this time part of the mine fell in afresh, which cast a cloud of gloom over every soul. But the work of removing the fall was promptly resumed; and by Friday morning it was known that the men would be rescued that day. One of them from beyond the fall encouraged the men. All forenoon a death-like stillness prevailed outside. Thousands of hearts beat high with emotion.

At one o'clock, May 9th, just fourteen days and thirteen hours from the time they re-entered the mine after dinner, on April 26th, the four imprisoned men were brought out. The multitude outside were requested to refrain from giving vent to their feelings, and the friends were not allowed to see or hold conversation with them. The youngest was the first brought out. The first words he spoke, were asking for a quid of tobacco. Their faces were covered to protect their eyes from the glare of light. They were all borne to their respective homes on chairs, and placed in dark rooms; they were fed on rice water and soup, and little conversation was allowed for several days. They soon began to rally; one of his companions called on one a few days after the rescue, to inquire how he felt, he replied: "I feel as though I could floor you, if they would only allow me to come out there."

When allowed to look outside, the earth bore a strange contrast to the last time they had looked on it. The trees, which were then almost bare, were now clothed with green leaves, and the grass was green and wavy.

#### COALBURG SLOPE INUNDATION.

On the 21st of July, 1865, four men were inclosed in a mine at Coalburg, Trumbull county, Ohio, from two o'clock Friday, until six o'clock the following Thursday afternoon, two of them not getting out until Saturday, the ninth day.

The mine was a slope and the coal vein was in a long narrow and serpentine trough or swamp. The mouth of the slope stood facing a small rivulet, the

waters of which even during the fiercest storms of former years had rolled harmlessly past. About noon of July 21st, however, a storm unparalleled in fury occurred. The rain came down in torrents, the water overflowed the banks of the creek, and rushed tumultuously down the slope. The main gallery of the mine was soon filled to the roof and the water nearly filled the slope. Only the very highest workings in the interior workings of the mine were dry. Two of the miners were on one side of the swamp and two on the other. They worked on unaware of their danger, when, attracted by the rise of the rushing water, they started to go out to see what was the matter. But, by this time the main gallery was full to the roof, and they were driven back by the advancing waters. The parties on the opposite hills hallooed to each other and made their voices heard, but they could not understand what each other said. The increasing volume of water drove each party up the opposite hills until they reached the highest galleries which were yet dry.

The news of the catastrophe soon spread all over the surrounding country and all the mines in the Mahoning and Shenango valleys stopped work and the men rushed to the rescue of their imperilled fellow workmen. The pumps of the mine were drowned, but the miners stretched themselves in lines along the slope, and began bailing out the water.

They worked with herculean energy and the water fell rapidly in the slope.

Meanwhile, a bore hole was commenced on the line of the high workings with the purpose of sending down food to the men in the mine. The hole went

down in a pillar, but within two feet of the workings, and the miners were able to cut into it.

It was now Monday, and the foul air of the mine had put out the lights of the miners. They cut into the pillar in the dark and reached the drill hole. The people on top sent down crackers, but the water in the drill hole washed them away and they became food for the rats, hundreds of which sought the dry places with the miners for safety. Beef tea, soups and brandy were next let down in long narrow bottles. The food was eaten by the miners, but the brandy was too strong and they could not drink it.

By six o'clock on Thursday two of them were reached and rescued. The two on the opposite hill were still beyond help, but were reached and brought out safely on the morning of Saturday the 29th.

#### BROOKFIELD CATASTROPHE AND TYNEWYDD FLOOD.

One of the most disastrous of mining accidents in the Mahoning valley happened at the Brookfield Mine, July 11th, 1877.

On the 5th of July a locomotive engine was put in the mine to haul coal in place of horses, and on the 11th after bituminous and black coal had proven failures on account of the gases accumulating in the tunnel, anthracite coal was used, which filled the tunnel up with carbonic oxide gas. After several trips had been made the pit boss went to attend the door in place of a trapper boy who had gone home on account of sickness caused by the gas.

The engineer on coming out with his trip noticed that the pit boss was not at the door, nor anywhere along the tunnel and thought he was outside. But



on coming out, found he was not there. He also found that the brakeman who looked after the cars, was missing, which made him give an alarm. Two miners immediately got their lamps and went into the tunnel. Before they had got a thousand yards one fell, overcome with the gas. His comrade, unwilling to leave him behind, tried to raise him and take him to safety, but was too weak to carry him and had to abandon him. He continued on, hoping to reach the hauling way, but had not passed the pit boss very far when he was overcome and fell. Some boys who were at the parting, or changing switch saw him fall and went and aroused the men inside by telling them that men were being overcome in the tunnel. Three of them immediately ran to the double parting and went into the tunnel and coming up to the one who was seen to fall soon carried him to where he could get fresh air which revived him.

They then took an empty car and went into the tunnel again. They found the pit boss, but he was dead. They found the brakeman still alive but he died in half an hour. The tunnel was clear, but they did not know it and took the car into it, and as it had a grade of one foot in fifty towards the outside, they soon reached daylight in safety.

In the meantime one of the drivers, when the alarm was given, jumped on his mule and rode to the Cleveland shaft, a mile and a half away, and alarmed the miners there. The pit boss of that mine hitched up a team and drove a load of miners over. Three of them, not knowing that the tunnel had been cleared, rushed in, and were followed by four others with an empty car. When they had gone some distance one of them

concluded to wait until the others came up with the car, but the other two rushed on and were soon overcome by the gas and died. Those who had the car felt the effects of the gas before going far into the tunnel, and becoming too weak to push it, jumped into it and let it run to the outside again.

Applegate mine was about a mile and a half away in another direction, and the news spread to there, and immediately the miners rushed to the tunnel to render what assistance they could. By this time it was known that the two men from Cleveland shaft were in the tunnel, and a volunteer force went in to get them out, two of whom were overcome and died; others fell but were rescued and brought out. Who will question the bravery of miners in such actions as these; to see their fellow miners fall around them by the powers of the insidious gases and then to rush into the danger themselves to rescue or relieve them.

#### THE TYNEWYDD FLOOD.

On Wednesday evening April 11th, 1877, as the men were on the point of leaving work in the Tynewydd mine near Pont-y-Pridd, Wales, the roar of rushing water was heard and the galleries and tunnels suddenly began to fill. The water had broken through from an abandoned and flooded mine, and of course, rose in the main shaft and lateral workings until it found its level. Most of the men made their escape, but when the roll was called, fourteen were missing. An exploring party went down to look for them. They found all the galleries within a few hundred yards of the bottom filled to the roof, but a knocking being heard behind a wall of coal indicated that some

of the missing men were imprisoned alive in a gallery which sloped upward, its mouth being under water.

The walls were only a few yards thick. And the volunteers went at it with their picks; the prisoners worked from within; in a few hours they could hear one another's voices. But the moment a hole was broken through, the confined air, kept under great pressure by the rising water, burst out with a terrific explosion, and one of the imprisoned miners was shot into the opening as if he had been blown from a gun. He was taken out dead.

Four others in the chamber with him were rescued uninjured. Knockings, however, were heard farther on, and it appeared that other missing men were in a similar, but still worse predicament—shut into a chamber of compressed air. It is with the efforts to release the second party that the chief interest of the story begins.

The wall behind which they were confined was in a heading that was flooded, and nothing could be done with the pick until the water had been pumped out. Divers first attempted the perilous feat of reaching the opening from the main shaft through half a mile of water, and it was afterwards ascertained that one of the men within had tried to escape the same way. This, however, was impossible.

It was not until Monday, the fifth day, that the volunteers were able to begin digging. The distance to be cut was one hundred and twenty feet.

The work went on day and night with an eagerness that seemed like desperation, and yet it was so slow, cutting through the solid coal, in a gallery not more than three feet high, where the water, only kept down

by constant pumping, threatened every moment to rise and engulf them, with trouble from gas and danger of another explosion of air always before them, the rescue parties took their lives in their hands whenever they went into the mine, and their wives followed them with sad eyes as they entered the shaft, doubting if they would ever come up alive. And the hope of saving their comrades, shut up so long without food, was at best a forlorn one. To reduce the danger from the sudden liberation of the air—danger not only of a violent explosion but of a sudden rise of the waters in the chamber as soon as the pressure of the water should be relieved—air-tight doors were constructed in the cutting, and an air pump was set in operation to establish an equilibrium on both sides of the wall.

On the 18th, a week after the accident, voices were heard, and the working party were cheered by a faint cry, "Keep to the right side; you are nearly through." On the nineteenth, the work had made such progress that an iron tube was forced eight feet through the barrier of coal, and an attempt was made, but without success, to introduce milk through it to the famished prisoners. The miners learned then that there were five of their comrades in the chamber, all alive but two of them nearly exhausted.

On the night of the 19th, there remained only eighteen inches to be cut away, and the excitement rose to a fever heat. An enormous assembly of people surrounded the mouth of the mine; physicians were in readiness; a temporary hospital was prepared, and a house near by was put in order for the suffer-

ers if happily they should be got out alive. The state of the work was discussed in Parliament, and bulletins were flashed at short intervals to the farthest ends of the kingdom. But just when it seemed that a few strokes of the pick might complete the labor an eruption of gas took place, and the working party had to run for their lives. In time, however, the air was renewed, and the work went on. At last on the afternoon of Friday, the 20th, a hole was knocked in, and one of the cutting party entered the cavern. All was still; in their weak condition the agitation of the moment made the imprisoned men speechless. The rescuer felt about, and, not finding any one, shouted, "Don't be afraid." The answer came, "All right; we are not afraid," and then a pair of rough arms were thrown about his neck. The first to be taken out was a boy; and it is related that when he came to the surface and the long suspense was over, the vast crowd of spectators did not cheer, nor use any of the ordinary means of showing enthusiasm; all seemed too serious for that.

Cases of life preserved without food for ten days, and even longer, are not rare, though the period of abstinence which these Welsh miners endured is considered the longest which man is capable of sustaining under ordinary conditions. They were able to drink the dirty water of the mine, and water, it is well known, has a great influence in retarding the effects of starvation. They obtained a little sustenance also by sucking the grease that stuck to the bottoms of their candle boxes, but they ate nothing during the whole ten days. Still they retained so much strength that when the iron pipe was pushed

through the wall and the water began to rise in consequence of the escape of air, they were able to promptly plug up the aperture; and one of the men even wished to walk home when he was taken out, but the doctors refused to let him.

The other four men out of the fourteen who failed to make their escape when the water broke through were drowned, and their bodies were not recovered until the water was pumped out of the mine and it was cleaned up ready to start to work again.

## CHAPTER XI.

### AVONDALE AND WEST PITSTON, PA., AND ATWATER, O.

"Oh, the brawny Plymouth men,  
As they sit by their wintry fires,  
Shall tell the tale of Avondale  
And its awful pyre of pyres—  
Shall hush their breath, and tell how death,  
His flag did wildly wave,  
And how in shrouds and smoky clouds  
The miners fought in their graves,  
And how in a still procession  
They passed from that fearful glen,  
And there shall be a wail in Avondale,  
For the brave two hundred men."—ALICE CAREY.

**A**VONDALE is about four miles from Plymouth and the same from Wilkes Barre, on the right bank of the Susquehanna River, in Luzerne county, Pennsylvania.

As the miners of the Anthracite Region had been on strike for a long time, September 6th, 1869, was marked not only by ending the long strike of that year, but will be handed down in American mining history as the date of the greatest mining disaster in the country up to the present time.

About eight o'clock in the morning, some boys working in a field near the breaker observed a bluish vapor arising, but paid no attention to it, knowing that the miners had started to work. An hour or so later the stable boss of the mine took a load of hay down the shaft for the hauling mules. Nothing had

attracted his attention on his way down; but as soon as he reached the bottom he discovered the fire. He immediately gave the alarm; and at the time his cry was heard a cloud of smoke, followed by a column of flames shot with terrific fury up the ventilator. The flames set fire to the breaker and spread to the engine room. So great was the heat, that, before the engineer could reverse or stop the engine he was driven from his post, and the fiery demon, dancing and roaring in his mad glee, as the tongues of flame lapped the woodwork of the breaker and hoisting apparatus, the only means by which they could be got out, shut off from escape the whole population of the mine, two hundred souls, there being only one opening in the mine.

The people on top of the shaft became paralyzed with terror, knowing the fate of those below in the distant chambers of the mine. Dispatches were sent to all the neighboring cities, and the fire departments of Wilkes Barre, Scranton, Kingston and adjoining towns, were soon on their way to the scene of the conflagration, where, it is needless to say, they were gladly welcomed and did good service. The news of the fire spread like lightning, and people rushed to the burning mine in thousands, to assist in rescuing the imperilled miners; but they were powerless before the burning elements. The whole immense wooden structure covering and surrounding the shaft was one vast volume of lurid flame, which rose for over one hundred feet upward, in the air, and swayed to and fro by the wind, formed a scene at once grand and terrific, while great volumes of smoke filled the air. The ponderous pulley wheels, ropes and all the



incombustible material above the pit's mouth, fell crashing through the shaft, followed by pieces of burning timbers and other débris.

The shaft was ten by sixteen feet square and three hundred and fifty feet deep, with a wooden partition extending from top to bottom, forming a flue for ventilation. The fire being in the flue at the bottom of the shaft prevented the stable boss from seeing it on his way down.

The neighboring mines all suspended work, and miners and operators hurried to Avondale to render all aid possible in rescuing the miners below.

On the arrival of the fire engines, streams of water were turned into the burning mine, but the monster furnace, as it seemed, appeared to bid defiance to the water, and for several hours the fire raged with unabated fury. When at length it was subdued, a band of volunteers, fifty in number, composed of miners, mine superintendents and colliery proprietors, offered to go down the shaft to rescue the imprisoned men, or perish in the attempt. The shaft was choked up for nearly forty feet with fallen débris, and it was half past five in the evening before any attempt at descent could be made.

A dog and lamp were first let down as far as possible, and on being withdrawn, the dog was still alive, and the lamp still burning. An hour later a miner was lowered, who returned in a few minutes nearly exhausted. Soon after, a shift of men went down with tools to clean out the rubbish. Having effected a landing on the bottom, they advanced for sixty yards along the main gallery of the mine, and came upon three dead mules in the stables. The main

door, for directing forward the ventilating current of air was found closed ; they rapped on it with a club, and shouted with all their might, but on receiving no response, they returned to the bottom of the shaft, and were drawn up to day.

An exploring party was lowered, but were unable to withstand the influence of the deadly gases, and they soon returned. On being raised to the surface, they were nearly overcome. A ventilating fan with canvas hose leading into the shaft was then erected, and fresh air blown into the mine. The next explorers found the ventilating furnace still burning, and also a heap of loose coal lying near the fire. The gases from these fires had been driven into the interior of the mine by the ventilator, and it was found necessary to extinguish them before any further attempt was made to penetrate the interior of the mine. All night efforts were made to extinguish the furnace fires, but without success, as it was found impossible to get the water hose to play upon them. The miners, however, reported that the fires were dying out of their own accord.

During the second day several attempts were made to reach the entombed men, but the accumulated gases prevented any extended search. At midnight the air had become greatly improved, and at two o'clock in the morning an exploring party came upon the dead bodies, but they could not recognize their features, owing to their blackened and distorted appearance. The explorers returned to communicate the fact to the people above ground.

Preparations were at once made for the descent of several bands of men, to be divided into groups of

four each. At half past six, as one of the parties was traversing the east side of the flame, they discovered the whole force of the mine lying dead behind an embankment which they had erected to shut off the deadly gases: Fathers and sons were clasped in each other's arms. Some of the dead were kneeling, as if in the attitude of prayer; some lay on the ground with their faces downward, as if trying to extract a mouthful of fresh air from the floor of the mine; some were sitting with clasped hands, as if they had vowed to die with each other; and some appeared to have fallen while walking. In two hours, sixty bodies were sent to the surface, and by noon the last of the unfortunate men who had gone down to work three days before, full of health and vigor, were sent to find *their last resting place in the tomb.*

## WEST PITTSTON.

In less than two years the lesson taught by "Avondale" of the danger of working men in a mine with only one opening seems to have either been disregarded or forgotten by some near to that neighborhood, for on May 27th, 1871, an accident almost similar, although not as disastrous in the loss of life happened at the West Pittston mine, in the same region, by which twenty lives were lost.

The mine had been running with a small number of men and improvements were being made to increase the force. The Mine Inspector had previously visited the mine and warned the superintendent against allowing more men at work than was permitted by the State law, ten men, until another opening had been made. The caution was not regarded, and the force

increased to over twenty men, and two shifts of men were working. The ventilating fan at its regular speed would not furnish enough air for the number of men in the mine and the superintendent gave orders that the speed of the fan should be increased. The ventilating part, or what is known as the upcast, being in the same shaft as the hoisting part, it was divided by a wooden partition as at the Avondale shaft, and the fan was closely incased at the top.

About one o'clock the heat of one of the journals of the fan caused by the increased speed, set fire to the woodwork, and there being no water available, the buildings surrounding the top of the shaft were soon in flames.

Alarm was soon given to the cager at the bottom of the shaft and he called on two trapper boys who were near the shaft to come on and go up with him and save themselves. One of the boys told the other to go on and he would go inside and alarm the men.

The cager and the trapper boy and a driver and one or two other men that were convenient to the bottom reached the top in safety. But the trapper boy who went to warn the other men and nineteen others were overcome by the poisonous and deadly gases emanating from the burning woodwork which turned down the shaft and into the mine, putting them into an everlasting sleep; leaving wives and helpless families to mourn their loss.

The following lines were composed on the little trapper boy, and, as the author gives his own explanation further comment would be out of place:

## LITTLE MARTIN CRAGHAN.

(The brave boy, only ten years old, whose fate is the subject of the following verses, was murdered by the mining system. He was employed in one of the Pittston mines. When the shaft caught fire he, with a comrade, sought to escape. Suddenly he remembered that some men, who were busy in a farther chamber of the mine, must be unaware of their danger. There was but one outlet, but one chance. He left both to his little mate and darted back into the mine. He hoped for time to warn the men, and yet make good his own escape; but he knew well his frightful risk and accepted it. He reached the men, warned them, and fled back to the shaft to find that hope, only too slender before, was now absolutely gone. He turned and hurried through the galleries once more, that he might die with those for whom he gave his life. They had builded with desperate haste a wall between them and the deadly gases and vapors that rolled thickening toward them. Even then their chance of surviving was a slight one. To let him in was to admit certain death; so they refused his prayer. They heard him sob and walk falteringly away. He was afterward found quite dead, a little board beside him, on which with a piece of chalk he had, in dying, feebly written the names of loved ones.—Zadel Barnes Gustafson.)

A child looks up to the ragged shaft—

A boy whose meager frame  
Shrinks as he hears the roaring draught  
That feeds the eager flame.  
He has a single chance; the stakes  
Of life show death at bay  
One moment; then his comrade takes  
The hope he casts away.

For while his trembling hand is raised,  
And while his sweet eyes shine,  
There dwells above the love of life  
The rush of love divine—  
The thought of those unwarned, to whom  
Death steals along the mine.

The while he speeds the darksome way  
Hope paints upon his fears  
Soft visions of the light of day:  
Faint songs of birds he hears;  
In summer breeze his tangled curls  
Are blown about his ears.

He sees the men; he warns and now,  
His duty bravely done,  
Sweet hope may paint the fairest scene  
That spreads beneath the sun.

Back to the burning shaft he flies;  
There bounding pulses fail;  
The light forsakes his lifted eyes;  
The glowing cheek is pale.

With wheeling, whirling, hungry flame,  
The seething shaft is rife;  
Where solid chains drip liquid fire,  
What chance for human life?

To die with those he hoped to save,  
Back, back through heat and gloom,  
To find a wall, and death and he  
Shut in the larger tomb.

He pleaded to be taken in  
As closer rolled the smoke;  
In deathful vapors they could hear  
His piteous accents choke,  
And they, with shaking voice, refused,  
And then the young heart broke.

Oh love of life! God made it strong,  
And knows how close it pressed,  
And death to those who love life least  
Is scarce a welcome guest.

One thought of the poor wife, whose head  
Last night lay on his breast—  
A quiver runs through lips that mourn  
By children's lips caressed.

These things the sweet, strong thoughts of home,  
Though but a wretched place,  
To which the sad-eyed miners come,  
With Labor's laggard pace—  
Remembered in the cavern gloom,  
Illume the haggard face.

Illumed their faces; steeled each heart;  
O God, what mysteries  
Of brave and base make sum and part  
Of human histories!  
What will not thy poor creatures do  
To buy an hour of breath?  
Well for us all some souls are true  
Above the fear of death!

He wept a little—for they heard  
The sound of sobs, the sighs  
That breathed of martyrdom complete  
Unseen of mortal eyes—  
And then, no longer swift, his feet  
Passed down the galleries.

He crept and crouched beside his mule,  
Led by its dying moan;  
He touched it feebly with a hand  
That shook like palsy's own.  
God grant the touch had power to make  
The child feel less alone.

Who knoweth every heart, He knows  
What moved the boyish mind;  
What longings grew to passion throes  
For dear ones left behind;  
How hardly youth and youth's desires  
Their hold of life resigned.

. . . . .

Death leaned upon him heavily;  
But love, more mighty still,  
She leant him slender lease of life  
To work her tender will.

He felt with sightless, sentient hand  
Along the wall and ground,  
And there the rude and simple page  
For his sweet purpose found,

O'erwritten with the names he loved,  
Clasped to his little side.  
Dim eyes the wooden record read  
Hours after he had died.

Thus from all knowledge of his kind,  
In darkness lone and vast,  
From life to death, from death to life,  
The little hero passed.

And, while they listened for the feet  
That would return no more,  
Far off they fell in music sweet  
Upon another shore.

## ATWATER SLOPE.

The Atwater slope, in Portage county, Ohio, was the scene of another of those mining calamities which result from working a mine with only one outlet. Fortunately, this colliery was a new opening, and at the time of the accident there were but twenty-one persons in the mine. It occurred July 3d, 1872. The slope was not more than two hundred feet in length, and dipped at the rate of one foot in three. At the bottom of the timbers a small perpendicular air shaft had been sunk, into which a rude furnace was placed. From the bottom of the air shaft to the bottom of the mine a wooden partition, dividing the slope into upcast and downcast compartments, was formed. The furnace set the wooden structures in the air shaft on fire, and the fire soon communicated with the timbers of the slope.

A young lad on top, observing the fire, ran down the slope through the burning timbers to alarm the miners. They were all at work within a few hundred



feet of the bottom of the mine, and they rushed up the slope for their lives. Eleven of the miners, creeping low, and covering their faces with wet cloths, were able to get out of the mine alive, although all more or less scorched and suffocated from the fire and smoke; but the other ten, among whom was the brave little boy who gave the alarm, perished. The burning timbers prevented all possible ingress to the mine. After they had been burnt through, the roof and loose drift material above them fell down and closed up the mine, and the bodies of the dead miners were not recovered for three days afterwards.

The above recorded accidents showing the necessity for more than one opening to assure the safety of miners from either fire or water or any other accident to the inlet of the mine, caused the various State legislatures, in States where coal mining has been developed to any extent, to pass stringent laws against allowing more than ten men in a mine at any time until a second opening has been made.

## CHAPTER XII.

EXPLOSIONS IN AMERICAN MINES—OTTO COLLIERY,  
WEST PITTSBURGH; WADESVILLE, PENNSYLVANIA;  
ROCK HILL, OHIO, AND COULTERVILLE, ILLINOIS;  
COLORADO MINES AND COAL DUST.

ON the morning of October 2nd, 1871, an explosion occurred at the Otto Colliery, Schuylkill County, Pennsylvania, by which five men lost their lives.

Two men who were working in a breast had fired a shot in the coal and then went to the gangway to eat their dinner. After they had been there about fifteen minutes they heard a fall of coal in the breast. Some men who were working in the next breast heard a second fall and came down to the gangway to notify the two who had fired the blast, and to warn them against going up the breast into danger. Before they got to where the two men had been sitting, one of them had gone up the next breast on the other side while his comrade remained on the gangway to get the safety lamp ready to go up their own breast. Just as he had got into the chute with the safety lamp an explosion occurred, killing the two men who had just got into the breast and three others who were sitting on the gangway eating their dinner at the time.

When the shot had been fired the coal generated gas rapidly, much more so than the men expected, and silently and invisibly worked its way into the next breast where it came into contact with the

naked light of the miner who had gone up the breast to investigate the fall, and in the twinkling of an eye it made its deadly presence felt and added five more lives to its already long account among the miners.

#### WEST PITTSTON.

The fatal accident at the West Pittston Mine, Pennsylvania, Feb. 18th, 1876, caused by an explosion of fire-damp, by which four men were instantly killed and eight were so seriously injured that three of them afterwards died from its effect, made a sad addition to the large number of similar calamities that have occurred in the Anthracite Regions. The mine was known to be a dangerous one having been the scene of the fatal fire in 1871 by which twenty persons lost their lives; but it is reported that the immediate cause of the present explosion was foul air coming into contact with the naked lamp carried by a man who had wandered into the old workings which was not less dangerous than going into a powder magazine with an open light.

#### WADESVILLE.

One day in March, 1876, the village of Wadesville, Pennsylvania, was thrown into a state of intense excitement by an explosion at the mine. People flocked to the pit to look after loved ones who worked there, and watch the taking out of the bodies of those killed and injured. Six were recovered during the day and early part of the night. At midnight all of the men were out of the mine except one, who was still reported missing, and the excitement began to decrease. To the miners inured to danger and acci-

dent it seemed to have been but a little event, soon to be forgotten.

About one o'clock next morning the gangs of miners, headed by the inside boss, who had fought against the deadly fire-damp for twelve hours, came upon the dead body of the missing man. It was not disfigured but showed signs of suffocation. This ended the long battle of the searchers, and they returned to the open air completely exhausted by their labors.

The crowd which had watched at the mouth of the mine, hoping against hope that another one might escape, groaned aloud as the corpse came in view, then quietly dispersed, leaving the dead to be taken to the homes of their kindred, where modest crape bands hung and the door mats were reversed in homely token of grief, while simple flowers covered the dead, hiding as best they might the disfigurement of face and limb.

Four of them were buried in the Catholic cemetery on Wadesville Hill, and the funeral services were attended to by a Bethlehem priest. The others were buried in the Protestant cemetery a little beyond. The whole village and many of the farmers and neighbors from the surrounding country followed them to their last resting place.

The explosion, though not widely felt, was most powerful in its immediate results. Doors, batteries, heavy supports and masses of coal and rock were thrown violently out of place. One of the men was literally blown through an inch plank door, his legs and skull being shattered. Another was thrown several yards, and his boots were stripped from

his feet; while another, who escaped only by throwing himself on his face and clutching the rails, declared that the force of the wind nearly tore him from the ground. The cause of the explosion is no mystery and is easily told. The men were working near a breast chamber which they had been warned was dangerous, not using the safety lamp, but carrying naked lights. In the top of this chamber was the dangerous sulphur gas, waiting only to be touched by a light to cause an explosion. A fall of rocks precipitated this gas among the lamps, and seven deaths are the result of men's reckless and culpable carelessness,

#### ROBBINS' MINE, OHIO.

The most destructive and deadly explosion of fire-damp recorded in the mining history of Ohio occurred at the Rockhill or Robbins' mine, at Robbins' Station, near New Lisbon, Columbiana county, Ohio, February 10th, 1881.

The mine was known to be very gaseous and many old miners had warned both owners and miners working there, that, "unless greater care was used in its workings and ventilation, there would be a 'blow-up.' " There was a fire-boss employed, but the signals used to warn men against danger were so primitive that a strange man would not know whether they meant danger or were put up to stop the mules from going into a room or entry. The usual signal of danger being one or two old wooden rails put across the mouth of a room or entry where gas existed.

Still all went well until the morning of the date given, when the long looked for explosion took

place and killed six men and seriously injured five others.

On the morning of Feb. 10th, one of the entries that had been driven through a swamp was full of water, so that the men could not get through it to their rooms beyond the swamp. A number of the men had gone in the mine, and one of them, noted as one of the most careful men in the mine, and well informed as to the nature of gases, was about to change his room that morning, and had some of his tools at his new place, to which he went the first thing in the morning. After having talked to some of his fellow-workmen, who were talking and having a smoke, preparatory to starting to work for the day, he started to his old place to get the rest of his tools. Knowing that he could not get to them through the entry, the regular way, he went through a break—through into the air-course, intending to go through the rooms to his own in the other entry. Shortly after he had left the other men the explosion occurred, instantly killing him, and burning another man severely, who worked in a room near where the explosion was, but he managed to crawl out through the water before being overcome by the after-damp.

The man who fired the gas was found near the mouth of a room, in which the fire-boss had found gas, and put up two rails across as a warning. Whether the poor unfortunate man, careful as he was known to be, had seen, and seeing failed to understand what the rails meant, before going into the room, is a question that will ever remain unanswered. None of the men in the mine knew of gas being in there in any quantity until it had fired

and wrought such havoc. Three other men were found dead in the water, near the swamp in the entry, who had been overcome by the after-damp. Two of them were father and son, who were going into work along with the other man when the explosion occurred and were overcome before they could retreat.

At the time of the explosion a team of mules was hitched to a train of cars five or six in number, and five or six men in them were waiting at the change, about one hundred feet inside the mouth of the mine; and although the explosion was over two hundred yards farther in the mine, such was its terrific force, that it blew the team of mules and the train of cars completely out of the mouth of the mine and over fifty feet, clear of a railroad that passed the tippie, knocking down the bridge that crossed the track, killing one of the men who were in the cars, and crushed the others severely, none of them getting off without several broken bones.

Another man had just started in the mouth of the mine, to walk into the change, when the cars in their flight out, struck and instantly killed him. It is needless to say that the mules were killed and every car smashed, and every trap-door in the mine was blown down and timbers knocked out in every direction.

The driver of the mule team was standing with his arm around the neck of one of the mules and patting him. When the mules were carried out by the force of the explosion he was taken with them and, strange to say, was not much injured, though knocked unconscious. On coming to he asked: "What's the matter?"

Looking up and around, he saw the bridge of the mine track down, and wagons and other débris on the railway track. Before getting an answer to his question he yelled out: "The bridge is down and the track is blocked, and the passenger coming!"—meaning the passenger train on the Niles and New Lisbon Railway, which was about due at the time—and he started to run up the track to meet the train and flagged it, thus avoiding another accident. A man who was walking past the mouth of the mine on the bank of a creek over a hundred feet away, was blown across the creek nearly sixty feet and had one of his legs broken,

The men who were inside and unhurt made their way out through old workings to an opening that had been made in the hillside. The news soon spread to the other mines that were working within a few miles of the place, and miners and bosses soon were on hand to render any and every assistance possible. And before the day was past all the dead bodies had been brought out of the mine.

#### COULTERVILLE, ILLINOIS.

Some time during the year of 1883 an explosion occurred at Coulterville, Illinois, by which ten lives were lost. The facts of the explosion are hard to get at, at this time, and its cause will forever remain a mystery, as far as any direct knowledge is concerned, for the mine was not known to generate gas. But as the explosion occurred about firing time in the evening, and a large quantity of powder was afterwards found to have been exploded, the mine known to have been dry and dusty, it was thought to have



been caused by a combination of gas, coal dust, and powder. It was thought that after a number of shots had been fired, gas had generated rapidly, and reached a place where an extra heavy shot had been fired, which exploded the gas, and it had such force as to form the small particles of coal dust into a combustible quantity, and fired them, this carried the fire to the stored powder; which ended the destruction which it had started by being fired in small quantities.

This idea was pooh-poohed by many old and practical miners at the time, but it has since been practically demonstrated that such a combination will, and has proven very destructive agents in explosions, the State Inspector of Mines, of Colorado, recording two such accidents in that State, for the year of 1888. The first of these happened at Starkville Mine No. 2, Las Animas county, Nov. 5th, 1888, and killed two men. The mine consisted of two parallel entries and other narrow work, no rooms had been turned yet. The two men had been at work all night and were the only persons in the mine. About five o'clock in the morning they fired shots and went back to see if the shots had cracked through the pillar. As they had worked all night with naked lights, and had detected no gas, it is but natural to suppose they took the naked lamps with them and thus fired the gas, which ignited the coal dust, the explosion killing them. The report continues: "To what extent such accumulations of fine coal dust aggravated the consequences of this explosion could be easily traced on examining the course of the blast, which had certainly increased with *terrific* force. At a point there was contained in a box thirty pounds

of giant powder which was swept before the blast, and it was perceptible that it had to a degree added to the force in its work of destruction.

At another point the ruthless blast was again increased in force by the exploding of six kegs of blasting powder, containing twenty-five pounds each, which had been kept there in store. It could be traced there that the blast had spent its force in an inward as well as an outward direction, dislodging the massive entry timbering in both directions like saplings before a tornado." The Inspector says: "I have witnessed the destruction of some *very* disastrous colliery explosions, but never did I witness such an enormous degree of destruction as was the result of the explosion in question."

The next occurred in a mine at New Castle, Garfield County, December 3, 1888. One man was killed, two others received injuries from which they died two days later, and three more were seriously injured. The Inspector says:

"I am rather doubtful whether coal dust is capable of forming an explosive mixture with pure air, in the absence of carbureted hydrogen gas. Yet in this accident it is said that there was no gas present, nor could there be to any extent, it would seem. The entire workings consisted only in a tunnel of about five hundred feet long; from which was driven a few 'stopes' having an air shaft connecting them. It was a new mine, and the few places working had men in them only a few minutes previous to the explosion. All were working with naked lights and had never seen any explosive gas. At half past five in the evening these men, as was their custom on quitting from

their day's work, fired several shots. After lighting the fuse, the men retired to the mouth of the tunnel, where ten of their number were standing when the explosion occurred, which took place immediately after the report of a shot. The force of the explosion threw the men from the mouth of the tunnel, some fifty feet over on the dump, and the flames rolled out of the tunnel's mouth for some seconds. The man who was killed was a carpenter, and was engaged hewing a piece of timber outside and in front of the tunnel."

As the Inspector recommends as a remedy for such mines that they be sprinkled, the following on such accidents will fittingly close this chapter:

The imprisonment of a hundred miners in a burning coal pit on Vancouver Island is one of a long list of similar disasters. When the safety lamp was invented in England many years ago it was universally considered a sure preventive of explosions from fire-damp or coal gas, by which thousands of miners have been killed. The frequency of explosions in England, Pennsylvania and other places where the safety lamp is in general use indicates that there are other dangers which have not been guarded against. There has not been a year since the introduction of that lamp when there have not been as many as fifty or sixty mining explosions in Great Britain alone, and the average loss of life from this cause in all parts of the world has ranged between 700 and 1,200 annually. Fire damp or coal gas is no longer the main source of peril; and scientific experts have been investigating the subject for fifty years without agreeing upon the common cause of fatal calamities like the

one in British Columbia. The closest approach to a solution of the mystery in England is made in the reports of the Atkinsons inspectors of mines in northern counties. Their theory is that the chief explosive substance in collieries is coal dust.

The reports of these experts, as we find them summarized in *Science*, bear evidence of thorough investigation of recent explosions in the North of England. Their main conclusion is that dust explosions are far more common in coal mines than gas explosions. The most serious feature of these dust explosions is that they occur without warning and always near the shafts, thus preventing escape from any part of the mine. Coal-dust is not largely present in the atmosphere of mines, but is accumulated along the roads or intake airways, through which coal is hauled. It abounds wherever coal is drawn at a high rate of speed or by engine power. It is ordinarily quiescent, but may be set in motion by the concussion of a remote blast, as well as by the rapid passage of cars, and it is at all times highly inflammable when fine, sootlike and dry. When the explosion takes place there is ordinarily little force at the point of origin, but when once initiated it is self-propagating and rapidly increases in violence, a wave of air filling the air in the roads with dust and flame, following instantly into compressed air charged with inflammable material.

The most effectual remedy which the authors of these reports suggest is the conversion of mines from a condition of dryness to one of dampness, by saturating with moisture the air which enters by the shafts. It would then have no drying power, and the coal

dust would cease to be dangerous. Other precautions are a reduction of the speed of coal cars so as to diminish the velocity of air charged with fine particles of dust; wetting or covering the loaded cars; constant watering of roads, and dampening remote passages of the mine when charges of gunpowder are used in dusty places. By these methods the discomfort of miners would be greatly increased, since it is pleasanter for them to work in a dry than in a wet coal-pit; but the danger of explosion would be sensibly diminished by these expedients, since it is a dry atmosphere which renders coal dust lighter and more inflammable. In brief, dust is the main source of danger in a coal-pit as it is in a flouring mill.

## CHAPTER XIII.

### DIAMOND MINE DISASTER, BRAIDWOOD, ILL.

ONE of the most disastrous events in the history of the coal trade of the West was that of the Diamond Mine, Braidwood, Illinois, on February 16th, 1883, whereby sixty-nine men lost their lives, leaving thirty-nine widows and ninety-three fatherless children to mourn their loss.

The topography of the county (Will) in which the Diamond mine was located is known to be in general very level and low. The seam of coal is thin, and near the surface, and one of the chief sources of expense in mining it is the handling of the great quantities of water which continually accumulate in the workings.

There is said to be ten square miles of this level and marshy tract upon which the Diamond and other mines are located, and it is so flat that no natural drainage is locally possible, and ordinarily all accumulations of water lie upon the surface until absorbed or evaporated. Even when thrown from the mine with pumps it has no alternative but to find its way through the soil back again. Another feature of the situation is that all the coal in this field is worked on the long-wall system, and as fast as the mineral is removed the surface comes down with the roof, and consequently makes a loose, irregular break along the surface of the workings, particularly suscep-

tible to the action of water, and leaves in general an uneven and treacherous surface for water to stand upon.

For several days prior to the 16th of Feb., 1883, there had been a general thaw in the vicinity of Braidwood, accompanied by warm rains, which reduced the winter snow to water and swelled, it to a flood, which overspread the entire surrounding country. That this was not an unusual condition of things is not claimed. Water in similar quantities had accumulated and stood upon the surface there before. On several occasions in former years, surface water had found its way into the mine, and two years previously it had broken through in such quantities as to create general alarm. In this case it is stated only that the volume of water was not greater than usual. Its depth was given as from one to three feet, but whether it was or not does not effect the gravity of the situation. It was spread like a sea on the entire surface of the country and constituted an open menace to every mine in the vicinity. That it was regarded as an element of danger was shown by the action of the superintendent of an adjacent mine, who prohibited the men from going into his works and ordered those out who had gone down before his arrival. Yet the men of the Diamond mine went below that morning, as usual, and with only fifty-four feet of sand and surface drift between them and an untold weight of water, began the day's work which they never finished.

At about eleven o'clock in the morning the "Cager" at the bottom of the main shaft discovered an unusual amount flowing to the bottom, and sent word to that effect to the men at the different working places,

by the drivers who came to the shaft with their loaded cars. Being still uneasy about it he came to the top to ascertain if possible the cause of it. Making no discoveries he descended the shaft again, and on reaching the bottom found the volume of water already so great that he had difficulty in rescuing a boy, who had charge of a door near the shaft, with whom he once ascended again to the top. By this time those who had taken the alarm were now clambering out of the escapement shaft, and the mine was now filling so rapidly that those who failed to receive the alarm, or were at too great a distance from the shaft, were speedily and hopelessly shut off from all escape whatever.

In this, as in other mines generally, the main shaft was located in the dip, or lowest point of the coal, so that all water which accumulated in the mine could flow to the shaft, and then be raised with pumps to the surface. The depth of the old shaft near the break was sixty-eight feet, that of the main shaft eighty-four feet, and that of the escapement shaft seventy-five feet. The first rush of water was consequently to the bottom of the main shaft, that being the lowest point, and all escape at that point would be shut off some time before the outer galleries were filled. It is probable, therefore, that no water would reach the working places until it was really too late to make any escape except by the escapement shaft. The bottom of this shaft being about nine feet higher than that of the main shaft, it would afford an opportunity for egress after it was no longer possible to reach the bottom of the main shaft.



To this point those who did escape made their way, and at this point the last desperate struggle of those who barely escaped was made, and, groping for this in despair having almost reached it, twenty-two men waited and accepted their doom.

Unhappily there was a fatal defect in the construction of the roadway leading to this escapement shaft, which proved full of fatal consequences. At a short distance from the bottom of this shaft there was a dip or declivity in the roadway, followed by a corresponding rise and creating a hollow about fifteen yards in length. Of course this hollow would be filled with water to the roof, while the road on either side of it was still out of water, and thus the advantage of the higher ground at either end would be neutralized and lost. It will be seen by the statements made hereafter by those who escaped last by this route, that they had to dive or plunge through this fifteen yards of water in order to be able to reach the bottom of the escapement shaft.

Another complication arises in all such cases as this, from the doors set across the roadway for the purpose of directing and controlling the currents of air. One of these doors being closed, with a weight of a body of water against it equal to its own dimensions would constitute a barrier as impassable as a wall of rock, and so, doubtless, many desperate men found it. Those who did escape had their most dreadful struggle with the door leading to the escapement gallery, and the location at which twenty-two others were found indicated that they may have had a similar struggle in vain. It will be thus seen that when this sea of surface water began its headlong

rush into the cavities of the Diamond mine, it first closed the exit by the main shaft, then by the escapement shaft, then hermetically sealed the doors and took possession of the more remote recesses at its own deadly leisure.

As soon as the nature and extent of the catastrophe could be realized on the surface, active measures were proposed and taken for the rescue of those yet within the mine. These were, however, as brief as they were futile. It was as difficult to get into the mine as it was to get out. The pit boss descended the main shaft, but found only water, and the black damp so heavy as to put out his light. Two men, however, succeeded in making an entry by the escapement shaft, but they never returned. Their bodies were afterwards found among the twenty-two victims near the bottom of the shaft, and their widows, children and friends can only lament their fruitless heroism.

This closed the chapter and completed the death roll. Having thus briefly sketched the circumstances attending this tragic event we now introduce the statements of some of those who participated in the scenes inside the mine during those few fateful moments in which the destinies of so many men were sealed.

The first is the statement of a young Swede who worked in the mine: "I was at work in the extreme southwest entry. The driver came running in and gave the alarm that the water had broken in. There were ten men at work there in five places. All of us quit work and hurried out towards the shaft, and met the water first at the west switch, and before

reaching the door leading to the escapement shaft we had to wade through three feet of water. Four of us came out together to that point, and found twelve or fifteen men there ahead of us. It took the united strength of as many as could get at the door to force it open against the pressure of the water.

"I was the last to go through, and the weight of the water pressed the door together, and caught my foot and jammed it very badly before I could get it away. After a struggle, I got loose, and followed the others. I found them at a point where the bottom dipped and made a hollow, between us and the escapement shaft. In this hollow the water was up to the roof and the distance through it was, I should think, about twelve or fifteen yards.

"Most of the men thought it was impossible to get through, but a man named Smith urged on us all to try. He said he would die if he stayed there, and he would rather die trying to get through. He went into the water and called me to come on. He seized me by the arm, and holding to each other we struggled on until we finally came through on the other end completely exhausted. After resting long enough to recover our breaths, we climbed the stairs and were safe."

The next statement is by a young Scotchman. He says:

"I was working at the face when the alarm was given by the drivers, and as I had been afraid of the water, I ran out with the others, without stopping for our clothes. I was not much acquainted with the roads, so I had to follow the others, trusting to their knowledge of the way. We had not gone far be-

fore we met the water. It seemed to swell before us. I heard some one shouting to others that they had gone the wrong way, and hurrying after them as if to bring them back, but I never saw them afterwards. When we got to the door leading to the escapement it took seven of us to get it open.

"The water was surging against it in great waves, and rising with every wave. When we had forced our way through the door we found about fifteen men in there ahead of us, and up to their chins in the water, and the dip ahead of them filled to the roof. Some were crying, some were praying, and all hopeless of getting any farther.

"Then Smith called out that it was death to stay there and he would die trying to get through. Six of us plunged after him into the watery tunnel. I got down on my hands and knees, and began to grope my way through in the dark, hurrying, and trying to hold my breath. Just as I thought I must be nearly through, I found my way obstructed by a fall of rock, against which I struck my head with such force as to be almost stunned, but I rallied again and made my way over it and then encountered two men struggling wildly in the passage. Fortunately I escaped their dying clutches, for another moment's delay would have been fatal to me.

"A few more struggles brought me suddenly to the end, and I emerged from the water close to the bottom of the shaft. The water ran from my nose and mouth for some time, but I soon recovered strength to go up the ladder, where I found my father and brother, both of whom had been at work in the mine, but had escaped before I did. They had about given me up. I

was the last to come through the water, and Smith was the last to climb the shaft."

The alarm was sounded by the engineer's whistle, and soon, crowds flocked from Braidwood, and the neighboring villages; men coming with all possible speed to render any necessary assistance in rescuing their friends and comrades. But it was of no avail, as they were past all earthly help in a short time; and the usual scenes of such disasters—weeping wives, and children pleading, praying, and crying for their husbands, fathers, sons and brothers, filled the eyes and swelled the hearts of those there to witness them.

The break was found near the end of the dump, and the water was boiling three feet above the surface as it went rushing into the break like a whirlpool, roaring so that it could be heard for a quarter of a mile away. It was found to be about fifty by ninety feet in dimension. Nothing could be done to get the water out of the shaft until a dam was built to stop its running in. To accomplish this required the building of a dam five thousand feet in length, in water three feet deep. Assistance in the way of labor was at hand, all the mines in the vicinity lying idle until every effort was made to secure the dead bodies of their fellow-workmen.

When the dam was built all the pumps available in the neighborhood were put in the shaft, and with two tanks on the cages, the combined output of water was two thousand five hundred and ninety gallons per minute. This powerful force was pushed to its utmost limit night and day until the 26th of March, thirty, eight days after the mine was flooded before any of the bodies were recovered.

Volunteer exploring parties were soon organized, and, led by men of nerve and experience, descended into the pit while it was still necessary to wade through water to make their search, and here is the experience of some of them. One says:

"Shortly after the water was down so that a search could be made, I became one of a party of explorers who undertook to go into the mine. We found the bottom of the shaft and the roadways in a terrible condition. The water had washed gravel, sand and rubbish into and across the shaft bottom to a depth of about four feet. Found the water running also about four feet deep in the roadway on east side. I made my way to the door which had stopped the men from reaching the main shaft, owing to the weight of water against it. Immediately behind the door lay the bodies of four men; two more lay near the stable, which was situated in the southwest corner of the bottom pillar, and before reaching the return airway, several others were discovered lying more or less under the fallen rock. We found the bodies of three brothers on the top of some framing timbers. They were arm-in-arm, the youngest, a lad of fifteen years, in the middle. He had a large stone lying on his head. There were twenty-two bodies in all recovered at this time, all in the space between the door and the roadway leading to the escapement shaft. They were all in such a state of decomposition that it was impossible to identify them except by their clothing. We advanced and tried to reach the escapement shaft, but found it impossible, as the water was still nearly up to the roof.

"In the other direction we advanced about two

hundred and fifty yards, until our progress was stopped by fallen rocks. We found no more bodies, however, and came out."

The following is the statement of another discreet and courageous explorer:

"In company with a number of others I went up to the Diamond shaft, when it was ready to be searched for bodies. We all went down and there found the bodies which had been discovered by the first exploring party, and while they were being taken to the surface, we went on in search of other victims of the flood. We found the roadways very badly caved in, and in a very dangerous condition. We had great difficulty in making our way over the falls, and this was materially increased by the bad condition of the air, which was so heavy we could hardly keep a light. To guard against danger from the gas, I kept some distance ahead of the party with a safety lamp, they following with naked lights. It required the efforts of the whole party in some places to make a passage-way at all, but after a great struggle we succeeded in reaching the main switch or parting, a distance of perhaps two hundred yards from the shaft and found we could proceed no farther, on account of a heavy fall. All that day was spent in trying to force our way by digging and crawling under and over the piles of rock, past this obstruction.

"The night shift came on and relieved us, and in the morning we again relieved them at this work, and continued the effort to get over the fall until four o'clock in the afternoon of the second day, when we finally reached the roadway on the other side.

Some distance farther on we came upon the bodies of two mules, but made no further discoveries. On the next day I made a further search in this entry, and reached the working face, though in some places wading in water waist deep, but no other bodies were found but those of the mules. The day following we went into the entry running south, until we were stopped by falls, which completely blocked up the entry; and as black-damp was too strong for a light to burn, we were compelled to abandon the effort in that direction.

"On Friday morning we got through into the main west entry, and after a very arduous effort we stopped to smoke and rest a bit; but while the others were resting, I went on a short distance, and there discovered six bodies, all on the top of the timbers. I went on a little farther to make sure there was no danger, and then called up my mates, and we then counted the bodies. Afterwards I pushed on, and by dint of hard creeping and tight squeezing, I reached the working face, but discovered nothing more.

"We then went out and reported to the superintendent, and decided to make some small sleds, on which to remove the bodies. While these were being made, men were vigorously at work on the roadways, cutting a passage-way sufficient to admit of the sleds and coffins. This was not accomplished until Sunday morning, about ten o'clock, and on Sunday afternoon the bodies finally reached the surface."

After a thorough search of all accessible parts of the mine it became evident that the other forty-one victims of the flooded mine were buried beneath the ruins and beyond recovery, except at an enormous



expense and great risk of life, and further effort to recover them was abandoned. The company offered to keep up the work of pumping and afford all the necessary facilities, if men could be found to go on with the exploration below, but the improbability of any further satisfactory results deterred the men from taking any more risks. Consequently by general consent, though not without protest of those most deeply affected, some of whom wanted a shaft sunk about the face of the workings where the drowned men were supposed to be at work when overcome by the water, the long-sustained effort was at last suspended. The dead were identified and buried. The fires drawn from the furnaces, the pumps ceased, the shaft gradually filled again with water, and the late populous mine became simply the silent sepulcher of the unrecovered dead. And such it will ever remain. The property was abandoned, and will only be known in the future as the scene of the great tragedy.

## CHAPTER XIV.

### CRESTED BUTTES, COLORADO, AND POCAHONTAS, VIRGINIA, EXPLOSIONS—CRESTED BUTTES.

A TERRIBLE explosion occurred at Crested Buttes Coal Mine, Gunnison county, Colorado, January 24th, 1884, in which fifty-nine lives were lost. About eighty or ninety men were employed at the mine, and the force of the explosion wrecked and blockaded the entrances to the mine.

The mine had over three miles of drifting, and had long been considered dangerous by those acquainted with it. While one of the best producing mines in the country, its operations had always been attended with more or less apprehension and real danger. In speaking of the mine at the time, the superintendent said: "It is a fire-damp mine, and seems constantly to generate the most deadly gases. They seem to generate in the coal or under it, and pours out of the seams in the walls of the tunnels and shafts, yet the mine is the most perfectly ventilated in the world. We send a mine-veiwer through every chamber each morning before any of the miners are allowed to go in. He must have returned this morning before the men started in, and everything must have been all right."

The explosion was the most appalling that ever occurred in a coal mine in this country up to that time. The cause of the explosion is unknown, but it

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is supposed to have been caused by the carelessness of a miner going into a room where he was forbidden to go with a naked lamp. The explosion occurred in either chamber one or two just half an hour after the day force of sixty-seven men had gone to work. Fifty-seven of these were at work in chambers one and two, all of whom perished. The horrors of the accident were added to by the report that there were ten kegs of black powder in those chambers and where the explosion was supposed to have taken place.

The force of the explosion not only barricaded the main entrance, but blew the roof off the tramway; and the appliances for ventilation, which were near the main entrance, were badly wrecked. The night force of the neighboring mines and citizens generally worked hard all day to rescue the men, and succeeded in getting eight out alive.

The town of Crested Buttes was in deep mourning. Crowds of women clustered about the entrance to the mine, praying, wringing their hands and crying piteously, presenting a scene that was heartrending. Most of the men killed had families in the Eastern States. Only eight of them had moved their families to the now desolate town.

#### POCAHONTAS.

The thirteenth day of March, 1884, is marked in the history of the coal trade of the United States with the black and terrible significance of being the date of the most appalling explosion that the mining record shows, that of the Pocahontas, Virginia, mines, which hurled into eternity one hundred and fifty-nine human souls, without a moment's warning, and sent

a chill of horror throughout the broad extent of the country. Happening so shortly after Crested Buttes, in the West, and Leisenring, in the coke regions of Pennsylvania, they seem to fade into insignificant accidents; and people were beginning to think that there was danger lurking in the mines in our own land, and that we could not hold up our hands in horror at the thoughts of the terrible explosions and mining accidents in other lands, thousands of miles from us, and thank God that our mines and miners were free from such terrible calamities.

At the usual hour on the night of March 13th, 1884, the night relief of Pocahontas mines went to work over one hundred and fifty strong. A little after midnight the town was startled by a report that sounded like the rumbling of an earthquake, followed by a clap of thunder. Soon a message came from the mines, three-fourths of a mile away, with the information to the superintendent that there had been an explosion there. The superintendent and others went to the mines at once. The scene presented was indescribable. Words could not convey the faintest idea of the destruction wrought in a few seconds. Signs of it were plainly visible on every hand. The entrance of the main drift was torn out and scattered pell-mell for hundreds of feet. The little train track was torn and twisted, and the shapeless timbers and ties mixed in confusion all around. The cars were taken up bodily, torn in twain and their iron wheels broken and shivered. They were thrown three or four hundred feet away.

The Ridge and the timbers of the Ridge opposite this drift were a blackened picture to the summit six

hundred feet away. A searching party found a pair of shoes that had been blown to the summit of the ridge, and a mule was found at the same place twisted into an indescribable shape. The second entrance to the mine presented a similar appearance as the first. At this point lived a Hungarian family, whose house was shivered almost to atoms, but wonderful to relate, the inmates escaped without serious injury. At the entrance of the fan tunnel stood the company's large ventilator, which, with the house around it, was swept entirely away, leaving the engine standing on the foundation and all shattered and broken with pipes twisted and forced.

It soon became evident that the whole mine was ablaze, and could not be extinguished for weeks, if at all. This settled the fate of the unfortunates below ground, as they had absolutely no chance for their lives. Not the least distressing phase of the calamity was the fact that all the families of the dead were left utterly homeless in the wild mountain region, as all the workmen's shanties were badly wrecked and those on line with the drifts were demolished. The greater part of the victims were Italians and Germans.

The force of the explosion must have been terrific. Rocks were thrown through the workshops and every object that stood in the direct course of the forced air was demolished. Several workmen in the shops were seriously injured, and the shops themselves as well as the locomotive house were leveled to the ground. Of all the men who were in the mine at the time of the explosion not a single one ever came to the surface to tell the story of the sad calamity.

To give an idea of the violence of the explosion the

following description by a correspondent who was on the ground is given :

“The very trees on the mountain sides, that have withstood the storms of ages were shriveled, torn and blasted, and their branches scattered in every direction. Portions of the wreck were blown clear over the mountain ridge fronting the approaches to the mines, and picked up more than half a mile distant. Even coal dust was blown over the mountain and covered the earth on the opposite side to the depth of half an inch ; and the blackened and rent overcoat of one dead miner was picked up in a gulch nearly half a mile away. All the laborers' shanties in the vicinity were more or less wrecked, and those in line of the mine approaches completely demolished. So terrific was the force of the explosion that the windows in the house of a farmer two miles off were shivered. A few minutes before the explosion a train of coal cars had been backed into one of the entrances of the mine and the locomotive had moved some distance down the track. Many of the cars were hurled down the track, and the *débris* thrown a great distance up the mountain side. Heavy axles were wrung and twisted into all sorts of shapes, and wheels cracked and broken. Gulches in front of the mine were filled with wreckage.

“The Pocahontas mines embrace an area of twenty-five miles, that is to say, a person traversing all the chambers and galleries of the mines would have to cover that distance. There are five entrances, and each one of them seemed to be an exit for the pent fury within. The entrances are filled with foul air, rendering the recovery of the dead bodies impossible.”

Finding that the inside of the mine was a living flame and entrance to the bodies out of the question, steps were taken at once to seal tightly every entrance and break that would allow air in the mine, and thus smother the fire. The mine was closed until the latter part of April; meantime work went on outside, rebuilding all the torn and wrecked shops, houses and other buildings. The ventilating apparatus was put in readiness for use when the mine was opened. About the 26th of April the mine was opened and an exploring party entered. They found that the fire was smothered out so that they could proceed with the necessary repairs before getting the bodies out. The evidences of the tremendous power of the explosion manifested themselves inside the mine as much or more so than they did outside, and many weeks of time and a large amount of money was spent before the mine was put in running order such as it had been on the 12th of March previous.

The finding of the dead bodies, minus heads and limbs, and charred and blackened beyond the semblance of human beings, was more than many of the men who composed the exploring parties could stand; and they had to give up in horror and repugnance at the thoughts of the fate of those men who had met such a sudden and horrible death. Identification was out of the question, and sacks had to be used to convey such parts as were found and put in promiscuously to send outside, and buried just as they came out. It was known that one hundred and fifty-nine lives were lost, but to place each part with its original members was beyond the power of those there. Many were found at their working places not

altogether dismembered, though charred, and the knowledge of who worked in those places gave a clue to who they were. Funeral services were held over all, and they were put into the ground as found to await the resurrection at the call of the last trump of the Angel Gabriel. And Pocahontas will ever remain in the memory of the miners of this country connected with the most horrible mining catastrophe its history has ever recorded, and it is likely that the number of lives lost will ever stand at the head of the list as the largest ever known caused by an explosion, and second only to the ill-fated Avondale in calling public attention to the dangerous calling of miners, even where easy access is had to the coal in the mountains and hillsides of our land.

WEST LEISENRING, YOUNGSTOWN MINE, MOCANAQUA,  
OTTO, AND PHENIX PARK COLLIERY, PA.

On the morning of February 20th, 1884, a fatal explosion occurred in shaft No. 2, of the Connellsville Coke and Iron Company, at West Leisenring, Pennsylvania, by which nineteen men lost their lives.

It appears that gas had accumulated in one of the entries during the night, and the men had just started to work on the morning of the twentieth, without the mine having been examined by the pit boss, or some other competent person. It is supposed that one of the unfortunate men went into an old worked-out room, to look for rails to put down in his own room, and lit the gas with his naked light, which exploded, burning and killing some of them, and the others were suffocated by the after-damp. Several men, who were old and practical miners, and



who knew the effects of the deadly fire-damp after the explosion, escaped by going around to another entry. One man through careful foresight escaped the explosion by a very narrow margin. He worked in a room near where the explosion took place, and on going to the mouth of it, he heard the roof cracking and working from what he considered to be gas in the roof; and he would not venture past it, but returned to the bottom of the shaft to wait for the pit boss to either examine his place or give him another. He had just got out of the reach of the powerful blast when the explosion occurred. Several of the men who were killed were found convenient to his room.

## YOUNGSTOWN MINE.

Shortly after noon on the 27th of October, 1884, another gas explosion caused the loss of fourteen lives at the Youngstown Mine, near Uniontown, Pa. This mine had two main entries and an air course running from the bottom of the slope. From these entries were driven what were called flats. Out of the flats were driven butt entries from which the rooms were turned. Number three butt was turned from number seven flat, and ran across number six towards the old works. In one of the rooms in the butt entry it was known that there was gas, which was examined by a man who knew nothing of the nature of gas, and only knew from what he had been told by the pit boss, who first took him to show him how to test it, when he gave him the position. That when the lamp was in gas the flame would be drawn up in the gauze of the safety lamp. When he saw that, then he knew there was gas. The mine had

been examined about half past two in the morning, when the night shift had quit, and the explosion took place in the afternoon, just as the day turn were about to quit and the night turn start to work.

The Mine Inspector, being in Uniontown at the time of the explosion, hurried out to the mine, and promptly took steps to explore it. He got five or six men to volunteer to follow him, and they commenced the work of searching the mine. This promptness saved a number of lives, as they found men still living but overcome with the after-damp; these were assisted to the outside and were brought to consciousness and recovered. No one knew who fired the gas, or how it was fired; but on investigation it was found that the door on number three butt entry had no one to attend it, and was left open nearly all day for the convenience of the driver. On making the trip before the explosion occurred he had shut it, and, as there had been an accumulation of gas in number six flat, while the door was open, the air, on being driven around, drove the gas into number seven, where the driver, on coming for his trip with the naked light, exploded it, and snuffed out his own life and the lives of thirteen others, three of whom were young boys, and left seven or eight more men at the mercy of the deadly after-damp who were fortunately saved.

#### MOCANAQUA.

On August 10th, 1885, the fan of the West End Colliery, Mocanaqua, Pa., was stopped for repairs. The night shift went to work, but had to quit, because of the gas from the fires under the boilers that furnished

steam power for the fan, and which were between the fan and the face of the workings, went into their working places. At seven o'clock on the morning of the 11th, the day shift went to work, although the fan had not been started, and in a short time the alarm came that the men were being overpowered by the gas, and, out of fifty or sixty that went into work, ten were brought out dead, and twenty or thirty nearly so. But they recovered. All were asphyxiated by the gas from the burning coal under the boiler. The mine foreman was prosecuted and found guilty of criminal negligence, and fined fifty dollars and costs.

#### OTTO COLLIERY PA.

A sudden outburst of gas in the Otto Colliery, about midnight of September 8th, 1885. caused a terrific explosion, but fortunately, all things considered, only caused the loss of one life, though severely burning twelve others. In an air course that was being driven there was a miner and a laborer working. About midnight the miner noticed the solid coal heaving and cracking with gas. He hurriedly sent the laborer out of the heading to get the fire-boss, and if it became necessary that he could rush out. The fire-boss and the laborer had only got back to the gang-way, when they saw the miner come rushing and tumbling towards them, followed by coal. They retreated back, the fire-boss with safety lamp in hand watching the gas, until it had driven them two hundred and twenty-five feet, when it stopped for about fifteen minutes and then began to recede

They waited there discussing the subject for about

twenty minutes when they heard an explosion in another part of the mine, but they never thought it was the same gas that had exploded, there being such a quantity that it would have wrecked the mine and killed every man in it. It seems that the current of air which had been reversed by the force of the gas, drove it down to other parts of the mine where it became divided and diluted by other air currents, part of it going to a door on the main gangway; inside of which twelve men and a boy, the driver, were at work timbering. About one o'clock they had got through with their work and got into an empty car for the mule to haul them out. On coming to the door the driver, on opening it, met the gas with his naked light, and exploded it killing himself and severely burning the twelve men in the car.

#### PHENIX PARK.

At the Phenix Park, No. 3 Colliery, April 27th, 1886, two men were killed by an explosion of gas from one of those sudden outbursts so frequent in that district. The coal was known to be gaseous, and for that reason the day shift was stopped in the place where the explosion occurred, and only the night shift allowed to work; and those with safety-lamps. The night of the explosion nothing indicated that there was any outburst of gas. About twelve o'clock the miner went back to his supply box for something, and just as he got there he heard an explosion. Thinking it was in the other gangway he shouted to his laborers to run for their lives, and ran to the other gangway to see how serious it was, and get the men working there, if burnt. But to his sur-

prise he found the men coming out of that gangway nearly overcome by gas, and it closely followed them up. As soon as the other men recovered they began to search his gangway, but found it filled with coal. They then began to throw the coal away and make a road as soon as they could, thinking to find his two companions still alive. But they soon found them buried with coal, dead. Over twenty tons of coal had burst out of the solid face, although the gangway was only five feet wide by four high.

## CHAPTER XV.

### DANGERS OF AMERICAN MINERS.

**A**MERICAN miners are subject to perils in their occupation that are outside of explosions, inundations, falls and the many other incidents against which it is possible to contend and overcome or avoid. These dangers are such as cannot be guarded against by the most intelligent and practical, being out of their hands and beyond their control, as will be seen by the following incidents, which show that such causes are a standing menace to miners, particularly in explosive and gaseous mines.

On the morning of June 4th, 1885, the fire-boss was examining No. 4 slope, of Nanticoke, Pa. He found a check door open and gas accumulated in a room worked by two Polanders. He saw them at the fire station and warned them very positively not to go in the room until he came and told them to do so. They went to the gangway and waited, but getting impatient, they were going up a cross cut to get into their own room, when they were seen by the brattice man, who drove them back, while his assistant took their tools to another place. After they had put up a stopping to turn the current of air to where the gas was, the brattice man took the safety lamp to see whether the gas was moving or not. At the same time the Polanders stole up the other breast and met the gas, which they exploded, fatally burning themselves and the brattice man.

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A peculiar explosion of oil gas, which might have had more serious results, was caused by the disregard of instructions by a man without the knowledge of danger necessary on such occasions; which was made worse by a lack of understanding the language spoken by American miners, at the Akron mine No. 2, at Trail Run, near Byesville, Guernsey county, Ohio, Dec. 19, 1887.

The facts are as follows: In several places in the mine oil of a very lubricating character had been discovered coming from the roof, and in many instances it had been used for oiling pit cars. During Sunday night the 18th, a room caved in, and on the following morning it was discovered that a large quantity of oil had been discharged and was dammed back towards the neck of the room. The mining boss, at once sent two road-men to make a careful examination of the room, and if thought necessary take the track out. When arriving at the room the first thing they discovered on entering it was a larger quantity of oil than usually met with, and from appearances suspected it to contain a considerable percentage of carbon or lighter oils of an inflammable character. One of them returned to the shaft bottom to get his gum boots so they might proceed without getting wet, and the other remained at the edge of the oil and water until his return. In the interval a Hungarian and his partner who worked in the room came upon the scene and found their tools were shut in. The road-man remonstrated with them not to enter the room with a naked light, as he had strong suspicions as to the inflammable character of the oil emanating from the roof, where

the fall of slate had taken place, but they were determined to have their tools, and rushed past him along the top of the slate piled on each side of the room. The Hungarian rushed headlong to where the oil was falling from the roof, and in an instant ignited the carbon evaporating from the oil, which conveyed the flame to the oil on the floor. His partner escaped out of the room with a slight singe from the rising flame. The road-man, who was a thorough practical miner and accustomed to slight explosions of carbureted hydrogen, naturally enough dropped down on the floor to escape the flame, but found to his sorrow that the flame was on the oil and had reached him. Finding that, he sprang to his feet and made his way out of the room; his right hand and face being somewhat scorched, but not seriously burned. The other road-man had just returned, and he made repeated efforts to rescue the Hungarian, whom the road-man saw fall down on a slate pile, and whose body was inside the burning oil.

The raging fire in the room and dense volumes of smoke emanating from it into the entry soon banished all hopes of rescuing the unfortunate man alive, and very slight hopes indeed were entertained of ever recovering any part of the body. The men and boys were at once ordered out of the mine, not through any danger of fire, or any fear whatever of any further loss of life or property, but that the air currents might be changed to prevent the smoke from the burning room filling the working places of the mine and allow methods to be speedily adopted to extinguish the fire, and, if possible, recover the body of the deceased. With a staff of good practical men as ex-



plorers, cool, brave and foreseeing, in two and a half hours after the course of the air fan had been changed, the flames were extinguished, the burned out posts in the room replaced and the body recovered. The continued outbursts of oil kindled into flame by the smouldering embers of the previous fires so endangered the mine that it necessitated the complete sealing up of the room, which was done by substantial brick stoppings.

One of the most horrible accidents that has occurred in that region for a long time, happened at the Big Vein, or Kaska-William colliery near Middleport, operated by the Alliance Coal Company, Thursday evening, May 9th, 1889.

The colliery had quit work for the evening and the day shift men were being drawn up from the slope in groups of ten, according to the requirements of the mine law.

When the cage was ascending the shaft, which is five hundred feet deep, and when the cage got about 16 feet from the bottom, an empty car which had been pushed over the top of the shaft by two Hungarian laborers, crashed into it and instantly hurled the ten men into eternity. The rope was broken by the crash and the cage descended to the bottom and was hurled into the sump. If any were not crushed to death instantly by the crash of the car, they were drowned in the sump, which contained thirty-five feet of water.

The news of the accident soon spread and caused great excitement for miles around, and it was not long before the scene of the accident was thronged with people. The victims of the accident were all

well known and highly esteemed citizens. It was by a mere chance that one of them happened to be on the fatal cage. He wanted to get up early in order to attend a wake, and exchanged turns with a boy.

From the best accounts it appears that the poor men were the victims of the ignorance and stupidity of two Hungarian laborers. As at many collieries in the region this ignorant class of laborers are at work at places where their inexperience and inadaptability make it positively a source of danger to employes. Two Hungarians, in this instance, pushed an empty mine car weighing considerably over a ton into the shaft in which ten men, the lawful number, had just started in the cage for the surface. In its descent the car knocked out timbers right and left, and when it struck the cage broke the rope from the end of which it was suspended, crashed through and crushed the occupants and fell with them and the débris liberated in the frightful descent from the giddy tip into the sump and into thirty-five feet of filthy mine water. The two Hungarians were to have been put under arrest, but when the officers went to look for them they were not to be found.

Had section 6, article 4, of the mine law been complied with, which requires safety gates at the head of the shaft, the accident would not have occurred.

A Polander went into a room which had the signals of danger and gas put up, to warn the men, with a naked light and exploded the gas and killed himself and fatally burned six others at Plymouth, Pa., Jan. 27th, 1889. All were married, and there were heart-rending scenes when the miners were brought out in blankets and carried home. The

*Philadelphia Record* had the following short but pointed comment on this accident:

"The late gas explosion in the coal mine at Plymouth puts a new and strong argument at the service of those persons that cheap labor is dear labor. The ignorant man who walked with his blazing lamp into the working filled with explosive gas had not the wit to understand his danger. He could not read the warning placard at the entrance. Those employers who do know the danger and who can read might as well have tied a burning fagot to the tail of a mule and set him adrift in their mine as to have endangered the safety of others by the employment of the Polander. There is a certain degree of intelligence necessary in the dangerous occupation of mining which employers and employes both have the right to insist upon. It is a matter of life and death."

THE MINER'S DANGER—FATAL MINING EXPLOSIONS IN  
ENGLAND DURING THE LAST HALF CENTURY.

Since the commencement of her majesty's reign upward of 11,000 lives have been lost in Great Britain owing to explosions of fire-damp. The immediate causes of most of the sad catastrophes which have led to such a serious loss of life were the use of gunpowder in blasting, naked lights, defective safety lamps and laxity of discipline, with no knowledge even on the part of many officials of the dangerous nature of coal dust. Fortunately, as the production of coal has gone on increasing, so has the system of working in mines been carried on by improved methods and on scientific principles. Had this not been so, the

deaths from explosions during the last twenty years would have been treble what they were for they were as numerous or even more so then, when the quantity of coal raised was not much more than one-third what it is at the present time.

In 1837, when her majesty ascended the throne the production of coal was estimated at 38,000,000 tons, whilst in 1884 it was 160,757,779 tons, although during the past two years it was rather less. Again, it appears that the quantity of coal imported into London in 1837 was 2,626,997 tons; in 1845, when coal was first sent to the metropolis by rail, the imports by sea, canal and rail were 3,403,320 tons, whilst last year they were 11,800,507 tons. Such has been the production and consumption of coal during the last half century. As to the explosions during the same period, about 20 per cent. of the deaths from these took place in the West Riding, about the same in Durham and Northumberland. But whilst during the last twenty years explosions in those districts decreased in a marked degree, there was a great increase of them in South Wales, Lancashire, Scotland, Staffordshire, and in a few other districts. In the early explosions the victims included women, girls and boys. At an explosion which took place at Porter's colliery, Barnsley, in 1842, three of the killed were young women; and at the inquiry which took place in 1844 with respect to the Haswell colliery in Durham, where 95 persons were killed by an explosion, it was given in evidence that lamps were given out to lads of ten years of age. The fatality at Haswell, it may also be said, was about the first in which the government sent down experts to

report upon the event and to assist the coroner in his investigation of the case. There were two gentlemen sent down, admittedly the most eminent of the time, being Professor Faraday and C. Lyell, Esq. (afterward Sir Charles Lyell). Three years later an explosion at the now historical Oaks colliery killed 73 persons, and in the same locality, at Darley Main, 75 were killed in 1849 from a similar cause. In 1857, however, the country was startled on hearing that an explosion had taken place at the Lund Hill colliery, near Barnsley, by which 189 lives were lost, the largest number of deaths ever recorded as having been caused by one explosion. During the next few years explosions became more frequent in other districts, including those in South Wales, but the climax was reached in December, 1866, when 361 lives were lost by the explosion at the Oaks colliery; and it was followed a couple of days afterwards by a similar event at Talk-o'-th'-Hill colliery, Staffordshire, where the loss of life reached 100. In 1863, in South Wales, 63 lives were lost at Morfa by an explosion, 14 at Maesteg, and 26 at Tredegar; and in 1867, 167 persons were killed at Ferndale. In 1868 the deaths from explosions throughout the kingdom were only 154, of which 22 took place at St. Helens, Lancashire, and 10 at Ruabon.

In 1869 South Wales again took the lead, when out of the 251 killed Ferndale again was credited with 60; Haydock, Wigan, 58; Ince, Wigan, 26, and Highbrook, Wigan, 36. In 1871 there was an explosion at Moss Side colliery, Wigan, which killed 70 men and boys, whilst from a similar catastrophe at two mines at South Wales 57 had to be added to the

number, and another at Seaham, in Durham, 80. These explosions led to Parliamentary inquiries, which in 1872 resulted in the passing of the Mines Regulation Act, and which has been in force since the commencement of 1873. In the course of the first year of its operation the deaths from explosions only numbered 100, the lowest recorded since 1859, but in the following year there was an increase of 66 in the number killed, of which 51 took place at Dukinfield, in Cheshire, 23 at Warren Vale, near Rotherham, and 17 at Bignal Hill, Staffordshire. With only two exceptions the deaths from explosions in mines in 1876 were the lowest recorded during the previous 25 years, the most serious having been at Arberrillery, in South Wales, where 20 were killed out of a total of 96. It was very different in 1875, when the lives lost by explosions were 345, and of these 213 took place at High Blantyre, near Glasgow. In 1878 the killed by explosions reached 586, only exceeded in 1866, on the occasion of the Oaks explosion. The most serious one was at Abercarn, in South Wales, by which 265 lives were lost; Haydock in Lancashire, adding 200 to the number. Another unfortunate year was 1880, when the killed from explosions numbered 499, of which 119 took place at Risca, South Wales, and 162 at Seaham, in Durham. In 1881 the explosions caused 116 deaths, 40 of them occurring at the Abram colliery, in Lancashire, and of the 250 killed in 1882, it appears that 30 took place at Clay Cross, and 21 at Baxterly, in Warwickshire. Of the 134 killed in 1883, we find that 68 occurred at Accrington and 20 at Wharncliffe Carlton, near Barnsley. The lowest number of

deaths recorded in one year from mining explosions was 65 in 1884, and of these 36 took place in South Wales. In the following year, however, the number increased to 341, of which 178 were killed at the Clifton Hall colliery, in Lancashire. The number of deaths from explosions in 1886 was 116, and of these 38 took place at Leigh, Lancashire, 22 at Altofts, near Leeds, and 28 at the Elemore colliery, Durham. So far in 1887 the deaths from explosions have reached 129, of which 93 took place at Udson, near Glasgow.

**COST TO HUMAN LIFE AND LIMB AT WHICH THE COAL  
PRODUCT IS WON IN BRITISH MINES.**

Following is from London *Iron* of Aug. 10, 1889, giving statistics and comments thereon of the mine inspection report for last year:

Not less interesting than the account of the production of our collieries and mines is the report on the cost of human life and limb at which that production is won. The one may be considered of material and the other of moral importance to the community at large. It may be said that every industry is attended with some degree of danger to those who follow it, but certain industries lay claim to our sympathies more strongly than others do, on account of the dramatic circumstances by which the fatalities peculiar to them are accompanied. Mining stands in the front rank of such. There may be other industries which present a heavier death-roll every year, but there are none, if we except the seafaring profession, which appeals more forcibly to public sympathy toward those exposed to its special

dangers. This we are inclined to attribute wholly to the manner in which great colliery explosions lay hold of the imagination. The suddenness with which disaster overtakes the busy toilers, the dangers which await those who may escape instant death, the privations to which survivors are sometimes exposed when egress is blocked, the instances of heroism which such catastrophes invariably call forth, and the heartrending scenes witnessed at the mouth of the pit, all tend to arrest attention and to evoke commiseration. And yet it is noteworthy that, especially in recent years, the number of victims of explosions is much less than that of those carried off by accidents of other kinds. Last year 149 lives were sacrificed by fire-damp explosions, but 470 succumbed to falls of the roofs and sides of colliery workings, and 213 to miscellaneous accidents underground.

It is a curious fact, that with the exception of one or two years in which great disasters have tended to raise the number of fatalities, the yearly total of deaths in the collieries of this country exhibits a remarkable uniformity. In 1851 it was 984, and last year it was 995. It is never very far off from 1,000, the average for the ten years ending 1860 having been 1,001; that for the ten years ending 1870, 1,062; and that for the next ten years 1,134. For the seven years of the present decade the average amounts to 1,025. But it must be remembered that, while the number of deaths may be considered stationary, the number of workmen has increased largely, or, say, from 216,217 in the year 1851 to 526,277 in 1877; so that, while in the earlier period one person was killed out of every 219 employed, in the latter period death claimed one vic-



tim only out of every 529. This points to a very decided amelioration in the lot of the coal miner, and it is to be noted also that the improvement has been very steady and regular. For the ten years ending 1860 the ratio was one death to every 245 hands employed; in the next ten years the ratio fell to one in every 300; and for the ten years ending 1880 it amounted to one in 425.

This improvement may be attributed very largely to the beneficial effects of legislation, coupled with the accomplishments of science. That such is the case is very clearly demonstrated if we take the number of fatal accidents rather than the number of deaths of which they were the cause. Thus in 1851 there were 98 explosions of fire-damp, occasioning one or more deaths; last year there were 22 explosions. The number of such has decreased with gratifying steadiness, as is shown by the averages of the several decades. In the ten years ending 1860 the annual average was 82; in the ten years ending 1870 it was 56; in the succeeding ten years it fell to 42, and that for the last seven years amounts to only 27.

Where, however, science and legislation are comparatively powerless to interpose any protection, and men are very much the victims of their own recklessness and carelessness, or of those of their fellow-workmen, we look in vain for a corresponding improvement. The number of accidents occasioned by falls of the roofs and sides of workings has risen during the thirty-six years almost as steadily as fire-damp explosions have decreased, so that from 307 in 1851 they increased to 455 last year, the averages for the three complete decades having been respect-

ively 361, 403, and 426. In the class of miscellaneous underground accidents a similar tendency is observable, the number of separate accidents having increased from 68 in 1851, to 203 last year. But, on the other hand, accidents in the shafts of pits have become much less frequent, having fallen from 187 in the earlier year to 73 in the later, a result undoubtedly due to the efforts of science or invention to improve the appliances used in winding or in the fittings of the cages. Allowing for the increased number of workmen employed in and about the collieries, there is only one class in which an improvement has not been established, and that is that of miscellaneous underground accidents. In 1851 there was one fatal accident among every 3,183 individuals employed, and one death to every 2,961. Last year, however, the ratio had risen to one accident amongst every 2,592 workmen, and one death in every 2,470. From what has already been said, it will be expected that, taking into account the larger number of persons employed, the fatalities from explosions exhibit a marked improvement, and such is the case. In 1851 one fatal accident occurred to every 2,606 hands employed, and one death in each 673. Last year there were 23,921 men at work for each fatal accident, and 3,532 for each death which happened. Of course one year varies very much from another, according to whether there has been a serious explosion or not in the course of it; but, taking the average of a series of decades, there is no room left for the slightest doubt that a great improvement has been established. The ratio of deaths annually to the number of persons employed was for the ten years ending

1860 one in 1,008; for the ten years ending 1870, one in 1,408; and for the ten years ending 1880, one in 1,795. More marked still has been the decrease in the ratio of deaths from accidents in shafts. For the three periods just named the ratios have been one in 1,161, 2,121 and 3,557 respectively.

#### IN BRITISH MINES.

So far, we have been dealing only with accidents in collieries. The figures given in connection with metalliferous mines do not admit of such an extended survey being taken. But so far as the statistics furnished go, an improvement is shown. Thus for the ten years 1874-83, the average death-rate from accidents was 1,645 per 1,000 persons employed, while last year it was 1,341. Comparing 1887 with the year immediately preceding, there was a decrease in the number of separate fatal accidents of eleven, and in the number of deaths of nine. But, unfortunately, the same cannot be said of coal mines. In these there were 830 separate fatal accidents in 1887, as against 807 in 1886, the number of resulting deaths being 995, against 953, an increase of 42. This falling back was mainly due to the increase of miscellaneous underground accidents, and of these the most prolific were fatalities arising from explosives, and accidents on inclined and engine planes.

The aggregate number of persons employed in and about the whole of the mines in the United Kingdom was greater last year than in any year since 1876, having been 568,026. Of these, 5,725 were females. Statistics of the production are only available yet so far as mines worked under the Coal Mines Regula-

tion act are concerned, and we will anticipate the publishment of the Mineral Statistics of the United Kingdom no further than to say that the output of coal increased from 157,518,482 tons in 1886 to 162,119,812 tons 1887; while the production of ironstone fell from 8,862,648 tons in the earlier to 7,569,918 tons in the later year.

## CHAPTER XVI.

### INCIDENTS IN MINING LIFE—THE LITTLE COAL MINERS.

**N**EARLY a quarter of a century ago a man who lived in an Eastern State, overtaken by the American passion for the hardships of pioneer life, moved with his family to the then unsettled West. The family consisted, besides the husband, of a wife and two little daughters, and the journey westward of many hundred miles was made in a covered wagon. After numerous hardships the little household at length reached what is now the great State of Illinois, but what was then an almost unbroken expanse of wild forest and prairie land. The country pleased the adventurer, and he built a rude log-house upon the edge of a prairie bounded on one side by a wooded bluff, and watered by a small stream. It was a promising site for one of the great farms of the future, and even the first year of the settler's occupation saw an abundant crop of corn and the family safe from privation, so far as food was concerned.

Winter came, one of the severest ever known in the Northwest, and the only want felt in the household was for fuel. The settler discovered, too late, that he should have built his hut close to the wood, or have provided plenty of fuel before winter arrived. He had reasoned that it would be the easiest way to haul wood to the house upon the snow, and his plan would have been all right had he been able to do the work. Unfortunately, just as the bitter cold

weather set in, the father broke his leg. He could do nothing, and upon the mother, who was herself ill, and upon the two little girls, devolved the hard task of supplying wood for the fire.

Many trips were made to the bluff and many an apron full of dead twigs and bark was brought to the cabin, but the little girls, who had to do the work, nearly perished in their journeys. Finally came a great snow four or five feet in depth, and further trips were impossible. It seemed certain that the family, far removed from all help, must die of cold.

There was a rude cellar to the cabin and into this, for greater warmth, the family moved. A few twigs and pieces of bark remained at this time, as the result of the children's last trip to the bluff, and with these a fire was built upon the cellar floor. It burned well enough, but as the wood was consumed there was noticed a great deal of crackling and sputtering, and the ground beneath and around the fire turned red. It attracted the curious attention of the family, and it finally dawned upon them that the fire had been built upon a bed of coal. In digging for the cellar the pioneer had stumbled upon an outcropping coal seam, but he knew very little about coal and had not deemed the circumstance of any consequence. Now he changed his mind. There was no longer any danger of freezing to death.

The family moved upstairs again and the two little girls became coal miners. They had only an old ax and a shovel, and they were small personages and not very strong, but they did not have a great deal of difficulty in getting out a sufficient number of pail-fuls of coal a day to keep the fire going. Before

spring came they had a big hole dug in the bottom and into the sides of the cellar. They made it quite a roomy place, probably the largest cellar in Illinois at that time.

The family prospered, and those two little girls are now middle-aged women and mothers of families, who often laugh over the hard winter's experience of many years ago. And you cannot tell either one of those two middle-aged, comfortable looking women anything about coal mining. They will tell you that they know all about it; that they, in fact, started the industry in this part of the country.

#### HE FOUND HIS LOST BOY.

After spending five days and nights at the bottom of a mine hole 150 feet deep on Third Mountain, beyond Narrow Valley in the anthracite region, a boy aged 17, missing from Wednesday evening, Sept. 3d, 1885, was found and rescued. The boy and his father went to the hills on Wednesday morning in search of mountain tea. They became separated in the afternoon, and when evening came the father called for his boy, but could not find him. Every effort by the father and the neighbors to find the boy was in vain. The mountain was well sprinkled with deep and dangerous air shafts of old and abandoned coal mines, and it was almost a certainty that the boy had fallen into one of them.

Next day the father and friends searched but found no traces of the boy. Friday, Saturday and Sunday they explored hundreds of holes, but in vain. All gave up except the devoted father, who again went out on Monday. He had given up all hope of

finding the boy alive, but thought he might discover his dead body. All of Monday he vigorously hunted high and low. He halloed, "Clayton," "Clayton," as loud as he could in the deep holes.

Monday evening came, and as the father was about giving up in despair, he saw one more hole near the edge of a hill, and he resolved to make a last effort. He knelt and halloed down the hole and listened as he had listened hundreds of times during the past five days. Then he became startled as he heard a groan. Then he called again and listened to hear the faint words of his son answering, "Father, I am down here." The old man aroused the neighbors, who lowered a rope 150 feet long to the bottom of the hole. The boy was just strong enough to tie the rope to his body, and the men drew him up. He was nearly dead. His feet and lower limbs were swollen and he was nearly starved.

He said that in the dark he had tumbled down the air vent, which, being zigzagged, broke his fall and saved his life. Although he was horribly bruised, he thought he would have to starve to death. His joy at hearing his father's voice was great. The doctors hoped the boy's feet would not have to be amputated. Hundreds of excited neighbors followed the strong men as they carried the sufferer three miles on a litter home.

#### NARROW ESCAPE OF MARYLAND MINERS.

The little mining towns of Eckhart and Hoffman, Md., have been greatly excited over what came very near being a frightful disaster. About 5:30 o'clock Saturday afternoon, Aug. 14th, '86, when nearly all of



miners had finished their work, a miner came staggering out of the mouth of the slope. He told the bystanders that a large number of miners were dying for want of air in the third lift, a mile and a half from the mouth of the slope. As soon as possible every available man joined the rescuing party and entered the mine. They found and brought out about 30 miners whom they found in various attitudes along the galleries perishing from suffocation. In a short time they all revived. The accident occurred as follows: The men were on their way out of the mine and were walking not far behind the train of cars drawn by the locomotive used in the mines. Some derangement of the ventilating apparatus occurred and the smoke from the engine settled in the gallery behind, completely enveloping the unfortunate men. The men owe their preservation to one of the miners, who broke open a brattice, thus producing a small current of air.

#### A NARROW ESCAPE.

Terrible excitement was caused on Thursday morning, Aug. 25th, 1887, in the fatal number one shaft at Nanticoke, Pa., by the breaking away of earth barriers that separated a worked-out portion of the colliery from the chambers where mining is in progress, and the sudden precipitation of a large body of water into a gangway where over three hundred miners were at work. For a long time past a huge subterranean reservoir had been forming, containing millions of gallons of water. This underground lake was 570 feet below the surface. The chamber where the men were at work was one hundred and fifty feet

farther down and about the same distance from the mining galleries. The first intimation the men had that the mine was being flooded was the sudden appearance of water in the chambers. As it increased in depth many hurriedly quit work and rushed to the bottom of the shaft. By this time a regular exodus from all parts of the colliery set in, the miners wading through water breast high before the last of them got out. The work of rescuing the men was proceeded with promptly, the steam carriage taking up twenty at a time. All sorts of rumors were set adrift, and the mouth of the mine was crowded with anxious women and children, exhibiting the usual alarm and frantic demonstrations. Luckily all were taken out safely. Ninety mules perished. Had the earth fissure been wide enough to admit the whole volume of water at once not a man would have been saved.

In July, 1887, a miner was imprisoned in a mine at Grand Junction, Iowa, for one hundred and ten hours alone, and came out all right.

#### WRECKED IN THE SHAFT—A PERILOUS RIDE.

On Saturday, the 11th day of December, 1887, an accident of an alarming nature took place at Prince of Wales colliery, Abercarn, Monmouth. At 2:20 P. M., on the day in question I and fifteen others had finished work for the day and were waiting at the pit bottom to be drawn up the shaft. The carriages in use are "double deckers," and hold sixteen men—eight on the upper deck and eight on the lower. It might be as well to make a little explanation at this stage, so that my readers may thoroughly un-

derstand the position that we were afterwards placed in. The shaft is one of the deepest in South Wales, being fully 400 yards deep, and is a round pit with wire rope guides for the carriages to work on. The engine which works the haulage underground stands on the surface, the rope coming down the shaft in wooden chutes, which are attached to the side of the shaft. Well, down came the carriage, and eight of us stepped on to the upper deck, after which the carriage was drawn up a few feet to allow the remaining eight to get on the lower deck, and we were ready to go; and just as the carriage left the bottom of the shaft the haulage rope commenced to work. All went well until we had ascended about sixty or seventy yards from the bottom, when suddenly we heard a tremendous crash, and almost immediately the carriage was swung into the middle of the shaft, almost on its side. "Keep a firm hold, lads," I almost shrieked, while I myself grasped the bar with a tenacity the effects of which I feel now as I pen these few lines.

Happening to look down when the carriage was in this position, I was horrified to see great strings of light gleam now in one place and then in another in the shaft far below us; and then, in a moment, all was dark. Then I felt a movement among my comrades on the carriage, and immediately afterwards an awful crash was heard accompanied by a fearful cry, which seemed to be the last heart-rending shrieks of some poor fellow mortal who had been plunged into eternity without a moment's warning, then some heavy beam or shoot would come crashing from above, and go past us with a whiz, that caused our

hearts to leap almost to our mouths. Then a moment's quiet, and we would hear the dull thud and awful noise as it went crashing to the pit bottom hundreds of feet below us. Thus we hung, as far as I can remember, for about three minutes, when the carriage slowly began to right itself again. As soon as we were again standing properly on our feet, the first thing I did was to count the number of men on the "lower deck," on which I was. I soon found out that it still contained eight, several of whom were slightly bruised with the shaking, and terribly frightened, but otherwise all right. I then called up to the men on the "top deck" as to how they had fared there, and soon discovered that they were in much the same condition as ourselves.

So far, then, we had been very lucky, and it now became necessary for some one to discover, if possible, the cause and the amount of damage done. This I set about at once. I soon found out that it had been caused by one of the chutes containing the haulage-rope becoming detached from the side of the shaft and falling over on the top of the carriage; when the carriage struck it, it of course flew into splinters, thus freeing the haulage-rope, which immediately became entangled between the guide-ropes and the carriage so firmly that to move any farther up was impossible. At this moment we heard a faint call from the bottom of the shaft, asking what was the matter. We called down as loud as we possibly could that the carriage was fast, but that we were all safe so far. Then we were again asked if it would be possible to lower the carriage to the bottom again. We called back to say that we were afraid to allow

the carriage to be moved in any direction, as tons of old timber and wire ropes seemed to be hanging about us in every direction, which the least movement might displace, and in all probability bring them crashing down on the top of us. However, we allowed the carriage to be lowered a little bit, gently, until it commenced to tumble over on its side again, when we saw that there we must remain until help came from above.

There was no help for it; we were fast, so all we could do was to crowd together as much as possible to keep ourselves as warm as we could until help arrived. Slowly the time passed away as we anxiously listened for every sound which seemed to indicate that efforts were being made to attempt a rescue; but moment after moment passed away until we had been a full hour and twenty minutes in our dangerous and uncomfortable position, when joy! a light was seen slowly descending the shaft. We almost warm up with hope, as still nearer it comes. "Are you all right?" its bearer calls. "Yes," we reply; "all right, but almost stiff with the cold." "Oh! we will soon set you free," is the reassuring answer. We soon see that it is two of our pitmen who have been let down on a small wooden seat, by a rope attached to a donkey-engine kept in case of accidents. They soon find out where the damage is, but a lot of hard and dangerous work is to be done before we are free, the haulage-rope has to be cut in three places, and we are slowly and carefully lowered to the bottom again, after being in the shaft for three hours and a half. We at once made for the upcast shaft, and are safely drawn to the surface at 6 P. M., where we are heartily

congratulated by hundreds of our friends, who have been anxiously awaiting our release.

#### A SUBTERRANEAN PRISON.

A miner, of Lloyd street, Providence, Pa., was yesterday covered beneath a fall of rock and coal while at work in his chamber in the Brisbin mine. The rock had been treacherous for some time, and yesterday a part of it began to fall. He had been working at the "breast" of the chamber, when several tons of coal fell behind him across the track, cutting off any possible chance of escape. The fall continued and approached him nearer and nearer and several huge chunks of coal fell immediately before him. Death seemed inevitable, but he acted with that wonderful presence of mind which many experience when death seems to stare them in the face. He seized two drills which stood beside him and stretched them across the corner, over his head. Several small pieces of coal fell all about him, but the larger ones were caught by the drills and formed a protection. The coal closed around him, but the drills kept off the weight of the immense mass. He was forced into a position half standing and half sitting, and for fifteen hours he could move neither hand nor foot. His body rested upon the irregular edges of pieces of coal, and during his imprisonment he suffered from the pressure of his body upon these projections. His laborer, who was at the open end of the chamber, gave the alarm and soon a dozen men were engaged in cutting through a chamber near by and rolling away the coal. The fall occurred about nine o'clock in the morning, but it was not till midnight that he was rescued.

While in his narrow quarters he suffered the utmost mental torture. He says that he could not move an inch, not even the breadth of a hair, and the creaking of the coal as it worked about him, seemed to warn him of momentary death. The twelve men worked diligently through ten yards of loose coal and rolled away the large pieces. He suffered much for a time from the want of air, as the culm was rushing in, filling the crevices and air passages through the larger pieces, and besides each minute expecting death through the breaking of the drills above his head, or the movement of the coal even an inch—for if it had moved a single inch the life would have been crushed out of him—he was almost suffocated. His feet were caught by pieces of coal resting upon them and the circulation stopped in one of his legs. He was as if resting on spikes and unable to sit or stand. The workmen propped the coal as they went, but in lifting the coal off the drills they were in great danger of allowing a mass of it to fall upon his head and crush him to death. He was at length taken out remarkably free from injuries. He received not a scratch upon his face, for he had protected it with his hands. His body was swollen in several spots by projections in the coal, his foot considerably bruised and his leg temporarily paralyzed. He suffered much from weakness, brought about by hunger and nervous excitement during the long and trying ordeal. Beyond this he was uninjured.

#### REMARKABLE ESCAPE OF SIX MEN IN A MINE.

Several men were imprisoned in a gangway of the Black Diamond mine near Mt. Carmel, Pa. About

10 o'clock on the morning of March 14th, 1889, while they were at work mining coal, the crack of timber in the gangway gave warning that a fall of coal was about to take place. The miners dashed down into the narrow tunnel endeavoring to escape. Two of them were ten feet in advance of the others, when suddenly a mass of rock and coal fell in front of them, choking up the entrance into the main gallery; as the men turned about to escape, another mass of rock and timber dropped, stopping their retreat and completely isolating them from their comrades. The alarm was given throughout the mines and the work of rescue was soon begun. At 4 o'clock in the afternoon the laborers heard faint sounds of voices. They pushed on with their work, and two hours later were enabled to hold a conversation with one of them. He informed them of his own and his companions' safety. A mass of ragged top rock was hanging directly over the men's heads and might fall at any moment.

The next night joy reigned supreme in the homes of five of them on account of their almost miraculous deliverance from what seemed certain death. Hundreds of citizens escorted them from the Black Diamond colliery, the scene of the accident in the afternoon, to Mount Carmel, and a constant stream of callers kept them company all that night, being anxious to see and hear them.

Two of them, though suffering extremely from nervous exhaustion, gave the first account of their experience. These two men were engaged in driving new chutes in breast No. 8 in the south slope of the mine about noon, when they heard a terrific roar, and the



next minute they experienced a shock which caused one to exclaim to his butt, "My God, Nick, the slope has caved in!" Nick descended to the gangway, and 12 feet from him found their egress to the slope cut off by huge rocks. He called to the miners who were working in No. 7 and soon saw a miner crawling from the débris.

They had joined in the shouts and then heard another calling from No. 7 chamber for help. He was pinioned by a large rock and urged his comrades to come to his rescue. They climbed up a distance, but the danger grew so great that they had just time to run back when a second fall occurred and no more sound was heard. The poor fellow was, it was thought, in all probability killed, though a force of men were still working for his deliverance. The five miners who were saved secured themselves by setting props in the gangway, and they then awaited the result. They heard their rescuers stop work outside about 6 o'clock, and, growing desperate, they endeavored to climb up an abandoned chamber and gain an exit, but mountain-like boulders stood in their way. They returned to the gangway and endeavored to console one another.

Later they heard sounds of outside work again and their hope grew. They betook themselves to prayer and the sounds grew nearer. They then signaled five times on the solid pillar; the rescuers returned the signal, and the wives, children and hundreds of friends at the mouth of the colliery knew that five were safe. At 12 o'clock the next day they heard a voice shouting, "Are all safe?" The imprisoned miners answered back, "Five are here; one is covered." The next mo-

ment they embraced their rescuers and shed tears of happiness. Their deliverance had been effected by driving a tunnel 29 yards. Hundreds of tons of débris had to be removed before the mine could be put in working order.

The last miner, after 50 hours of imprisonment in the Black Diamond Colliery, was hoisted to the surface at 4 o'clock the second afternoon. His appearance was the signal for cheers from hundreds of throats, which were heard for miles. He had been half buried, and had given up all hope when his rescuers reached the "breast" in which he was imprisoned.

Strange to say his injuries, aside from his nervous prostration, were not serious. After the five men were taken out alive, it was supposed that he was dead, but the search was continued with the result stated above.

The story of his escape from death is a most remarkable one. When the roof of the mine began to cave, he, while attempting to escape, was struck by a piece of coal and fell into a hole in which he was buried to his neck. A great mass of rock fell immediately after and one large piece, hollow in the middle, imprisoned the miner in a nearly air-tight inclosure. The man would soon have been suffocated had not the hollow lump been broken by a falling piece of coal. During his long imprisonment he swooned many times. All that he had to sustain life during his long imprisonment was the oil in his lamp, not a drop of which remained when he was taken out.

On the 21st of April, '88, the contractors commenced the work of drilling a tunnel from the valley

of Big Mine Run to tap the water from the basin of the Centralia valley. The force at work consisted of 12 men. A breast had been fired Monday night and the supposition is that only a part of the dynamite exploded, leaving a quantity of that deadly explosive remaining in the hole. Another hole was drilled above the old one and at a depth of two feet the old hole was struck and the explosion followed. A miner was in charge of the drill and a laborer was working a few feet in the rear of him, at what is technically known as feeding the drill. The other men occupied the same position, on the left side of the tunnel and were somewhat shielded from the flying pieces of rock by a tub of water which stood in front of them. The laborer would no doubt have received the same fate as the miner who was killed had it not been for an iron prop which he was seated back of. The piece of rock which was blown out by the explosion was about two feet square. Twenty 10-foot holes had been drilled, and the men were at work on the second lot. The place in the tunnel at which the explosion occurred is 150 feet from mouth at Big Mine Run colliery. Another miner's escape from death was miraculous, as he was directly in front of the explosion. The machinery was slightly damaged.

On Monday night a serious accident occurred at the Twin Shaft of the Pennsylvania Coal Company, at Pittston Junction, Luzerne county, Pa., by which four men narrowly escaped instant death. The manner in which the accident occurred is as follows: The miners were driving a rock tunnel through a fault in the vein. They had just finished the rock and had struck coal. The drilling is done by means of air

compressors on the surface, the air being run into the mine by means of hose. The exhaust from the machines at the face is sufficient to keep away the gas at the foot where the men were working. One of the machines was working badly, and the air was shut off in order that it could be piped. During the interval which was only about five minutes, the gas accumulated and one of the men fired it by means of a naked lamp which he carried. Immediately there was an explosion and the men being in the midst of it received the full force. Assistance came at once and the men were carried out and taken to their homes.

Very little damage was done the mine. It is miraculous how the miners escaped instant death.

Fifteen miners and laborers who were at work in the rock vein of the Bellevue slope in the city of Scranton, Pa., were startled by the bottom of the vein, at a point north of them, giving way with a tremendous crash. They were hurled about and their lights put out by the great pressure of air caused by the commotion. To add to the horror of the situation the rock about them began to fall and threatened to kill them outright or hem them in. Thirteen of them succeeded in groping their way out to the foot of the slope. One of the remaining miners saved himself by sticking closely to a prop, while huge pieces of rock fell about him. One of them pinned his legs to the prop. Finally he saw a light carried by a miner who was searching for the missing men. He, by a severe struggle, freed himself from his perilous position and ran out. When he met the rescuer he fell unconscious. His legs were swelled

to a great size from his contact with the rock. He was very low when he was conveyed to his home.

Search for the other man, a laborer, was then made. The continuous crash in the mine as the rock in three worked-out veins fell and was piled up in great heaps, made the scene a thrilling one. The laborer who was lying some distance back of the place where the miner was caught, was imprisoned for four hours before he saw one of the rescuers' lamps and made his way out. He was so much frightened he could not speak. He was cut from head to foot by the sharp pieces of rock over which he crawled. Hundreds of people gathered about the mine and remained until all the men were brought out. The cave-in made large openings in the surface, and a number of houses, streets and fields were considerably damaged.

#### SINGULAR DEATH IN A MINE.

Crape on the door of a West Spruce street residence, Mahanoy City, Pa., told the story of one more sad tragedy of the mines. A well known citizen of that borough met his death in a rather singular manner at Schuylkill colliery (P. & R. Co.), just as he was preparing to begin his day's work. He had taken into the breast a piece of sheet iron and was about to lay it down to form a part of the chute, when just at that moment a quantity of coal fell from the roof, striking him on the back of the head, and pressing his neck down on the sharp edge of the sheet iron, which penetrated his neck like a knife, almost severing the head from the body. In all the records of curious mine accidents, it is probable that

another such one cannot be found. The unfortunate man left a wife and three children.

About 10 o'clock Wednesday, August 16th, 1885, in the Grand Tunnel mine of the Susquehanna Coal Company, at Nanticoke, Pa., a lad 15 years old, a door tender, was struck by a loaded car in a dark gangway and literally cut to pieces, the fragments of his body being gathered up subsequently, placed in a shoe box and taken to his home. There was scarcely a vestige of his head left, it being mangled to a jelly, while other portions of his body were distributed along the track. At the very moment the boy was run over his father, at work in a chamber about four hundred yards away, was crushed by a fall of top coal and so horribly mangled that he lived but a little while.

#### THE WATERS OF A CREEK SUBMERGE A MINE—ESCAPE OF THE WORKMEN.

One of those accidents which strikingly illustrate the terrors to which the coal miner is hourly exposed occurred in the workings of Elmwood colliery, Thursday morning, Dec. 20th, 1888.

A short time before an air shaft was driven from the East Seven-foot gangway to within about fifteen feet of the surface. At this point the outcrop of the vein was covered with large stones which lay in close in such a manner as to indicate to the parties engaged upon the work that the air hole had penetrated into an old abandoned drift near the point where it was expected it would reach the surface. The mine boss reported the supposed discovery to the District Supt., and on Thursday morning the

fire boss, an experienced and scientific miner, was sent to the point in charge of two men, to examine the place, and ascertain whether the air-hole had really penetrated the abandoned drift, and prepare the outlet for the uses to which it was intended to be put. The object of driving the air-hole had been three-fold—to make an additional outlet for the men in that part of the mine, to use it as a timber way, and to improve the ventilation.

When the fire-boss and his assistants began work there were no indications of the stream which was flowing a few feet above their heads, but as they removed the large, smooth stones above, evidently the original bed of the creek, the water began to percolate through, and one after another the stones gave away with the pressure of water from above, and went resounding down the air way, a sheer fall of 225 yards. Soon a torrent was rushing and roaring down into the mine, and the astonished and affrighted three men fled to the adjoining breast No. 60. Here, in their perplexity, they paused a moment and then began a perilous descent to the gangway. Stumbling and slipping down in the darkness, clinging all the while to the rotten planks and props of the sides which crumbled in their fingers. When they reached the gangway they discovered that the torrent rushing down breast No. 61 (through which the air hole passed) had already almost completely blocked the gangway with the débris of rocks and timbers it had brought down with it. Back of that torrent barricade thirty-three men were working.

Here was presented one of those terrible questions, calling for instant decision. To the three men, it ap-

peared that certain death would be the portion of the men in the mine if not warned in time. It might be death also to those who attempted to apprise them of their danger. Safety lay in the direction of the mouth of the mine. "Come along and fetch those men out," said the fire-boss, as he scrambled over the barricade, and tumbled into the gangway, over his head in water, on the other side. He was followed by one of his companions.

The other went out to notify those on top, so as to be prepared for any emergency, and to turn the waters of the creek as soon as possible. The fire-boss and his companion ran along the gangway in water up to their hips, and found a number of miners and loaders seated at the "turnout," talking while waiting for cars. The startling news of the fire-boss, conveyed in these words: "Now, men, for your lives; the water's broken in," caused them to rush out the gangway as far as possible in the swelling stream and then to ascend breast 69, where they waited in terrible suspense in the heading until joined by the men from the more distant part of the mine. The fire-boss continued his race to the face, alarming all along the way, and instructing them to make to the heading and find their way out. The water gained in height until it reached almost to his chin.

Still they persevered until they reached the men at the farthest end inside. Leading the men at the face back through the heading as far as where the torrent was rushing into the mine, blocking their further progress toward the colliery.

Here they waited until the rescuers above had turned the course of the stream, or rather an arm of



the stream which was running into the mine. As soon as the news of the accident had been conveyed to the mine boss, his first business was to get all the men out of the seven foot west of the break, and then a gang was dispatched post haste to the point where the creek had broken in to change the course of the creek. Word was sent to the district superintendent who took charge of the work of the rescue. In half an hour's time, the course of the branch of the stream had been changed, and the torrent ceased to flow into the mine. It was big work, but miners are accustomed to doing surprising things in such instances. A large rope was then tied to a stump and let down the hole to the men below and one after another they pulled themselves up. The fire boss being the last to ascend.

A large crowd had been attracted to the scene and watched with interest and enthusiasm the work of rescue. The point where the break occurred was in the swamp back of North Main street, within a few yards of the mouth of the old drift into which it was supposed the air hole had penetrated. The former bed of the stream, now a small arm, the central stream having formed a new bed in the north, had broken through. In dry weather the amount of water flowing in the old bed was very small, but at that time it was swelled to a strong stream. Some of the incidents connected with the accident related by the men are touching. A father clasped his son in his arms, and said that if they must die, they would die together. Others clasped hands and promised to live or perish together. Some in running along the gangway fell in the stream and had their lights extinguished. A 13-

year old door boy was carried out on the shoulders of the men. He was brave above his years. No one was injured. The colliery resumed work the next morning.

A peculiar accident happened at one of the collieries of the Anthracite Region in 1885. A miner and his son and a laborer were driving what is called a "counter-gangway" across the face of some old chambers that had been driven up from an old slope. As the pitch was about forty-five degrees, rows of props were put underneath and stringers laid on them, to enable them to carry the track from breast to breast, and lagged closely to prevent the coal from falling into the water below. One evening the son had fired a shot in the top slate, which loosened the props they had put in. Next morning when the miner went to work he saw what had been done and went outside to get some props the proper length to replace them, telling the laborer in the meantime to load the loose coal and be very careful. When he returned the car of coal had not yet been taken out. In a few minutes after the driver came with his mule for the car. The three men got out of the way of the car and in doing so stepped onto the loose prop, which precipitated them into the water below.

The driver at once gave the alarm and the driver-boss immediately came to the rescue and the two caught the son and the laborer, but the miner has never been seen since, although every conceivable means was adopted to rescue him or recover the body, even to putting in a pump into the old slope to get all the water out that way. Floating platforms and grapple hooks were used while the water was being lowered by the pumps, but all to no purpose. When the

water got low a squeeze came on that part of the mine and put an end to further attempts to recover the body.

A very affecting accident is also reported from one of the mines in the upper end of the Anthracite Regions. A miner was caught by the caving in of the breast in which he worked, and was held fast by a fall of rock and coal which had covered his legs and the lower part of his body. Hearing his groans and cries for help, his fellow-workmen, thinking he was under the fall, listened, and located him near the rib of coal on the side of the breast. Finding out that getting to him over the fall in his own breast was out of the question, they attacked the rib from the other breast at once. After working for some time they could talk to him and bade him be of good cheer as they would soon reach him. He begged of them to have the priest near as soon as the hole was made, as he never expected to get out alive, as the weight of rock was crushing the life out of him. They worked all night and by the next morning had a hole through to him big enough for a man to crawl through. The workmen retired and the priest heard his confession and administered the sacrament to him. The men again set to work to make the hole large enough so that they could work in removing the rock and coal that was on him and put it out of their way.

His wife had come down into the mine where he was and urged the men on in their work, and cheered and encouraged her husband, who was suffering terribly. The men worked with all the energy they possessed and soon had the rib pillar cut wide enough that they could work with plenty of room and re-

treat if it became necessary. They procured crow-bars and began to remove the rocks, and had their bars under one large piece that was over the poor unfortunate man's body. They began to pry on it and lift it, and had succeeded in raising it a few inches, which gave him some relief. But in doing so they had disturbed the mass of rocks above it, and, before they could prevent it, or save him from its fall a large piece with a sharp edge slid from the rest and falling edge ways across the man's neck, nearly severed the head from the body. As the head, with its staring eyes and gaping mouth, turned to one side and seemed to look his wife in the face she fell over into a swoon that nearly cost her her life also. As it was her reason tottered and she was unbalanced in her mind ever after.

When the G. A. R. of Pennsylvania held their State encampment at Shamokin the early part of the year 1890, some of them visited the mines in that locality, which is part of the Anthracite Region, and Hon. John Parker of Mahanoy City, a noted advocate and leader of the miners in that part of the country, gives in his paper, *The Tri-Weekly Record*, some of the following expressions of the party:

"When I get out of this," said Mr. J. F. Lovett, of Trenton, New Jersey, one of the party who accompanied Gen. Alger into the Indian Ridge mine, at Shenandoah, "I'll pay my \$5.50 a ton for coal willingly, and thank the Lord for allowing me to reach the surface." "'Tis terrible," said Gen. Alger. "To work in a place like this is worth \$12 a day."

This reminds us of an incident that fell under our notice twenty years ago.

We were at Philadelphia on business and sitting in an office while in the prosecution of it, a party of gentlemen came in and we had an introduction to them. After the introduction one of them, looking at us, said, "Are you the John Parker that is connected with the Miners' Union?" We owned up to the "soft impeachment." "Why, Mr. Parker," said he, "don't you think your men are very unreasonable in asking three dollars for digging a ton of coal?" It was at the time the \$3 basis was being agitated. He thought, doubtlessly, and honestly, too, that the \$3 basis meant three dollars to the miner for digging the coal. We explained, and then he said, "Oh, that is quite a different thing." "Well," said one of his companions, "Suppose they did ask that, is it too much for going down into the holes they go into? Would you do it?" "No, I'll be — if I would do it for \$50 a tou." "You are a fine man, then, to find fault with the poor fellows, even if they did ask for \$3 a ton for doing it."

Doubtless, neither Mr. Lovett nor Gen. Alger ever dreamt that coal mining was half so bad as they found it by visiting the inside of the mine. How true is it that one-half of mankind doesn't know how the other half lives.

## CHAPTER XVII.

### NANTICOKE HORROR, AND OTHER ACCIDENTS—NANTICOKE HORROR.

**V**ERY few more sad accidents have occurred in the annals of the coal regions of Pennsylvania than that which is now known as the "Nanticoke Horror," which happened on the 18th of December, 1885, and by which twenty-six human beings lost their lives by a rush of quicksand and water into the mine.

This is the most remarkable accident of the mining history of this country. This mine was considered one of the best planned and most reliable, and no one ever dreamed of such unexpected danger lurking near them. It appears that one of the gangways of the Ross Seam, of Slope No. 1, was driven around what is commonly called a saddle of rock; some of the breasts were on to the top of the saddle. On the morning of the 18th the twenty-six entombed men went to work little dreaming that they had looked on the earth for the last time. They had not been at work long before the rush of sand and water came, and, in less than an hour completely filled the gangways in the basin from floor to roof. Four men who worked in the basin at the foot of the saddle, finding the rush coming upon them, made desperate efforts to escape, but only one succeeded. He says: "On getting loose he looked behind him and saw the other three still struggling in the mud and sand, but they never got out and are still there."

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As soon as it was known what had happened in that part of the mine the men in other parts of it escaped by an air-shaft, and at once means were adopted to rescue the men inside if possible, and if not possible to reach them alive to recover their dead bodies. A gang of men were set to work to clear a passage through the sand down a breast thought to be inside of the fall. By Monday, four days after the accident, they had reached the bottom of the basin opposite a hole which had been driven from the other side to the gangway on top of the saddle. As far as they could see with the light of a Clanny safety lamp, this hole was clear of sand, and they were greatly elated and encouraged by the prospect, believing that they could rescue the entombed men in a few hours. The hole was rising to a pitch of 45 degrees, and was too steep to climb without ladders or steps, and orders were promptly sent out for them. While waiting for them an old battery was cut out of the way at the bottom of the hole, and while doing that, small quantities of dirt were noticed to fall from above, which caused them to be watchful and ready to retreat in case a rush should come. Shortly after the battery was cut a large quantity rushed down and drove them all back.

The passage-way made through the sand was only three-and-a-half feet high, and about the same width, and was made a distance of about two hundred and fifty feet. The débris was carried away in buckets, and sixty men employed, one behind the other, handing the buckets back and forth. It was thought difficult for so many to escape in case sand and water rushed in again, therefore only seven or eight returned to see

what fell, and while they were at the bottom it rushed down again, and filled the passage all the way up to about twenty feet higher than when they started to make it, and the men escaped only by the greatest exertion. If the whole number had returned, there is no doubt that most of them would have been caught and added to the number already entombed; but, fortunately, the few that had returned were not so much in one another's way, and were thus better able to exert themselves and escape.

The company then commenced to survey and locate the fall and a hole seen on the surface on the map of the mine workings. The hole seen on the surface was a deep cone-shaped depression on the culm bank, and was about three hundred feet in diameter. When the survey was done, it proved that the cave broke in near the solid at the face of the counter-gangway on the top of the saddle or on the apex of the anticlinal, and that all the entombed men were very probably caught and killed soon after the sand broke into the mine, and that the two drivers, a runner, and a trapper boy, who had gone in with the cars half an hour before, were either with the men inside or were caught in the gangway by the sand and water. This dispelled every hope of rescuing the men alive, and cast deep gloom over the countenances of those who had worked so hard to reach them, and brought a cloud of sorrow over the homes they had left so cheerful a few mornings before, and eight widows and nineteen children were left without bread winners.

The survey also showed that the only way the bodies could be got out would be by clearing the



gangway from the slope in until they were found, and the work was commenced and pushed vigorously until the summer of 1886. The sand was found to be packed tight from floor to roof in the two gangways, and although they cleared the sand in the main gangway to within two hundred feet of the curve, in which the basin commenced, not one body was found. The officers of the company feared another rush of quicksand when the gangway was cleared to the curve, and every indication showed that such would take place; if it did, the bodies could never be recovered, and it was doubtful, also, whether the men who were engaged in clearing the gangway could have escaped if it rushed in under the pressure that was supposed to be behind it. This danger was fully explained to the men at work, and it was left to the men themselves whether they would work on and see if the bodies could be recovered or not. This they did for some time, but no satisfactory results were obtained, and the officers, apprehending danger to the men working in the other lifts, as well as those working there, abandoned the work, leaving the buried miners in their deep and silent tomb.

Some of the friends of the dead miners entered suit against the company, to compel them to recover the bodies. But the courts decided that sufficient efforts had been put forth by the company to do so and nothing more could be expected from them.

#### NORTH ASHLAND COLLIERY.

Early on the morning of May 13th, 1885, four men were killed by a rush of mud or mountain clay at the North Ashland colliery, Pa. The mine was an old

one and the men were engaged in robbing the pillars of a gangway when the rush of mud suddenly came upon them from a pillar between two breasts in which they were working and completely buried them and caught two other men who were working with them, but who were rescued by the men working in the other breasts, and who rushed to the place of the accident on hearing the roaring noise of the fall. The four men who were killed were out of sight, while the two men who were saved were seen struggling in the mud, and were seized by the other men and dragged out. It seemed strange that there was no water came down with the clay, or was there any seen in that vicinity; but, stranger still, ice came down with it. It was the sixth of June before the last body was got out of the mud.

#### FRANKLIN COLLIERY.

Owing, either to an incorrect survey, or work done in an old mine after a survey had been made, and which was not entered on the map of the mine, four men were drowned at the Franklin colliery, Houtzdale, Pa., on the morning of Sept. 22nd, 1885, by a sudden flow of water from an old colliery. The men were driving an entry, and as no one had any idea of being near a body of water, no thoughts of keeping bore holes ahead were entertained. The night shift had quit work and the four men had started to work on the day turn, and the entry being driven to the dip, water, more or less of it, bothered them all the time. They had not been at work long when they drove their picks, unexpectedly, through the coal into the old workings, and before they realized their dan-

ger, or could retreat the vast body of water burst through the coal and submerged the entry, rolling them along with its force. It took forty-eight hours to get the water out and recover the bodies. Some of the miners who were searching for them waded in the water all of that time trying to find them.

#### AN AWFUL MYSTERY.

One more terrible mine accident has been added to the fatal list of horrors which has recently been growing so rapidly. At J. C. Hayden & Co.'s No. 1 mine, Jeansville, Luzerne county, Wednesday morning, Feb. 4th, 1891, a large body of imprisoned water broke into the lower level from some of the adjoining workings, which had been abandoned and allowed to fill with water. Seventeen miners were suddenly ushered into eternity and nine others narrowly escaped. Six widows and 31 orphans mourn the loss of husbands and fathers. The other 11 victims were unmarried, but several the support of aged parents.

The accident happened about eleven o'clock. A driver told how he was standing in a gangway waiting for a trip to come out, when a gust of wind blew out his lamp. He began running to the bottom of the slope, but was overtaken by the water which became two feet deep before he got to the bottom of the slope. The water raised until it was within eight feet of the gangway in the first level. It was certain that all the seventeen missing men were dead, as the water had reached a point higher than any of the breasts.

When the excitement caused by the awful disaster had partially subsided, the conversation about it

generally turned to inquiries as to the parties directly responsible for the deplorable affair. Old miners in that section were strongly of the belief that the mine engineer in particular was the most to blame. Not more than two weeks before the last survey was made, and it seems very strange that the location of the abandoned No. 8 workings was not more definitely fixed with regard to its proximity to the breasts in No. 1. The opinion of the best miners is, that the face of the breast in which Boyle and Cull were working could not have been more than ten yards from the No. 8 workings, and that this being the case the engineer and company were much to blame for neglecting to warn the men of danger ahead. From what can be learned from all sources, an investigation was a decidedly proper thing to have, and if these unfortunate men met their horrible fate through the fault of employers who could have averted the sad catastrophe, measures should be taken to obtain such amends as the circumstances warrant.

The homes of the unfortunate men were gloomy pictures of grief and sorrow. Relatives, neighbors and friends called on the grief stricken families on Wednesday to offer sympathy and consolation. Their mission was a sad one, and it was a pitiable sight to see strong men weeping in sympathy with widowed mothers and orphan children. Some of the families were not in very good circumstances, and the sudden cutting off of their main and only support left them in a condition that enlisted the sympathy of every one acquainted with the fact.

It was first reported that the water had broken

through from the abandoned workings of the old No. 8 shaft.

This gangway had been stopped in a fault of solid rock, and according to the maps of the engineer, was about seven feet higher than the gangway of the lower level, and was separated from it by seven yards of solid rock.

It is believed that while Boyle and Cull were drilling a hole in the face of their breast, they unexpectedly broke into the abandoned workings of the No. 8 shaft, and that the water instantly tore away the intervening rock and rushed in upon them. Some of the miners and officials are inclined to doubt the correctness of this theory, however, as, upon examining the old workings from the shaft, it was found that the water was disturbed but very little, if at all. Another theory advanced was that the water was from Carter's old mines—better known as the Colerain. These mines have been abandoned for many years, and were filled with water, and the lines between the works ran very close together. Until it was learned where the water was from, it was impossible to tell how soon it could be removed, as they could not ascertain the amount of water that would run into these works as it was being pumped out of the slope.

• The awful quiet which disaster and death bring with it hung like a pall over the ill-fated town, where the bodies of the luckless miners were deep down in the cavern of coal, swollen and distorted by the water that caused their death. Wednesday's intense excitement gave way to peaceful calm, and everything was directed toward securing the bodies of the

unfortunate victims and then ascertaining just how the disaster occurred. The slope in which it occurred is known as No. 1, and is sunk in what is known as the "two lift." The bottom of the first lift is about 200 yards from the surface, and the second lift is driven down about 75 yards farther. The gangways run east and west, and in the west gangway is where the accident originated.

The west gangway runs toward and beneath what is known as No. 8, a slope which had been abandoned for about three years, and the accumulation of water since that time must have been an enormous quantity. An estimate of the quantity of water stored away in this abandoned mine cannot very accurately be made, but when it is taken into consideration that the lower lift of No. 1 was filled to within eight feet of the top, which is identical with the bottom of the first lift of No. 1, it can be judged what a great quantity of water was let down upon the unfortunate victims.

A visit to the old abandoned No. 8 slope was made on Thursday and it was found that the water had only dropped 30 feet, which is the exact mark it was after the accident. Just what volume of this immense storage found its way into the lift of No. 1 slope cannot be told. But judging from the progress made for 24 hours in pumping out No. 1 slope it was very great. By constant pumping with all the available machinery the water was lowered about 35 inches on Thursday, which, with the fact that the water in the old No. 8 slope did not fall at all, indicates that a great deal of water from the old workings was finding its way into No. 1, and this water

would prolong the finding of the bodies for months. Of course it would be idle to attempt to fasten the responsibility directly where it belonged, but enough was known to demonstrate that some one had blundered. Miners conversant with the works said that the company's chart of the workings, as kept in their office, showed that there was 80 feet between the men at work in No. 1 slope and the volume of water in No. 8. This, if true, shows at once an error of calculation, and a grievous one, which resulted in the destruction of thousands of dollars worth of property, to say nothing of the irreparable loss of life.

On Monday night, Feb. 23rd, the men who had been patiently and heroically working to recover the bodies of the miners who were entombed in the mine on the morning of Wednesday, February 4, were rewarded by the discovery that four of them were still alive.

The belief that all the victims of the rush of water had not been drowned was strengthened by the finding on Sunday of three bodies that bore evidence of the fact that the unfortunate men had starved to death.

Monday four more bodies were discovered, and it was plainly to be seen that these men had suffered horrible tortures and that death had ensued from starvation.

This caused the weary searchers to redouble their efforts in the hope that some might by some remote chance be still alive. On Monday night the situation assumed a new and startling phase.

Sounds were heard issuing from an abandoned portion of the mine, as if of rapping, and the experi-

enced miners knew at once that it could only come from some human agency.

At once their suspicions were put in circulation and the wildest excitement prevailed. Further investigation proved that the sounds were made by some of the imprisoned men, and four of them still lived.

It was some time before the rescuers could overcome their astonishment and bring themselves to a sense of action.

Steps to reach the imprisoned were then taken, but it was found that the black-damp, which was present in large quantities, prevented them from pressing forward. Means for brushing out this impure air had then to be constructed.

Preparations were made to relieve the imprisoned men at once, and nourishment was taken down in the meantime by physicians. At 10 o'clock the exploring party had got so near the imprisoned men as to be enabled to converse with them.

The voice heard was distinguished as that of "Big Joe." The men were located in an overhead passage-way and could not possibly be reached until the foul gas and impure air were removed.

Every effort was exerted and preparations for receiving them were made. The rapping continued and grew more distinct as the rescuers were enabled to proceed farther.

At 10 o'clock they had got near enough to speak with "Big Joe," from whom it was learned that three others were with him and still alive. The astonishing information was received by the rescuers with joy, and they could scarcely control themselves from rushing into the deadly black-damp.



Repeatedly the superintendent cautioned them to move cautiously, and after four hours' exciting and continuous toil they were enabled to reach the point from which they could satisfy themselves that the men lived, and the most wonderful experience in coal mining was performed.

At 12 o'clock the men were still imprisoned, but nourishment was furnished them through a small opening.

The experience of the four men who were closed in at Sugar Notch, in 1880, can, in a manner, be compared with this case. Those men had water, pure air and a mule's carcass to live upon. They had plenty of room to move about in and other conveniences which these men were deprived of.

It is supposed when the rush came, they were on the gangway, near the "breast" worked by Reed, and in making their escape from the onrushing waters fled up the main way. This led them to a cross-hole, and after proceeding along it for some distance, they found their road blocked by the water, which had now come down another opening and filled up the space through which they traversed.

Upon retracing their footsteps to find an exit from the end through which they entered, they found themselves similarly situated. The water had cut across the old level and taken a course downward, exactly parallel with that which they came into the cross-heading. They were thus firmly imprisoned.

The space through which they had to move about in is not more than 4 feet high and  $2\frac{1}{4}$  feet wide. How they managed to live in this place is a mystery. The Polander, whose vitality is to be marveled at,

cannot be perfectly understood on account of his broken English, but the fact that his three companions and himself were still living was satisfactorily established and their rescue accomplished in a few hours.

The rescuing party worked as rapidly as possible under the circumstances; physicians were soon close at hand with food and drink, and as soon as the opening could be made sufficiently large for a man to crawl through the famished men were brought out to the tender care that awaited them.

The greatest excitement prevailed at Jeansville over the rescue of five miners from the flooded mine. Their escape is regarded as a miracle. Such a thing was never heard of before. The men had been imprisoned 18 days and had suffered most terrible torture. They were on the verge of starvation when found and brought out of the mine at 4 o'clock Tuesday morning. They were carefully carried out on stretchers, wrapped in blankets.

The rescued men, who are all Hungarians, were found huddled together in the breast of the mine, keeping up their warmth and vitality and courage by contact with each other. For seven days after their imprisonment the unfortunate men carefully divided the contents of their dinner cans, only a few ounces of bread being allowed each one. When this was exhausted they fell back on the oil in their lamps, and, when that was gone, caught and ate rats that swarmed in the mine. They were terribly weak when rescued and presented a pitiful spectacle. They could not have lived much longer in their prison, unless they had resorted to cannibalism.

## FROM AN AWFUL TOMB.

The three men imprisoned in the old Harvey mine, at Grand Tunnel, near Mt. Carmel, Pa., on Wednesday, Feb. 4th, 1891, were rescued on Monday, the 9th, from their living tomb. The event caused great rejoicing in the little village. All work was suspended, and everybody hastened to the mouth of the slope. When the three men appeared there was a great shout. Then another rent the air, and at the suggestion of a local preacher a great many of the crowd knelt down to give thanks to the Most High for the happy deliverance of the men from death.

Rineer was the first to be brought to the surface. He was very weak and could not stand on his feet. His wife was the first to clasp him to her bosom. She kissed and kissed her husband's black face, and finally had to be taken away by force. Rineer's little children cried when they caught sight of their father and crowded around him. As soon as possible the man was removed to his home and a physician summoned.

The second member of the party was unconscious when he was brought up, but he soon rallied. He cried out, "Oh, God, oh, God, am I safe once more?" When assured that he was safe, he said: "Thanks to God." The Polander, and third member of the party, was taken to a house near by, by some countrymen, where he soon was himself once more.

After the disaster on Wednesday afternoon, the superintendent and his assistants at once set to work to pump the water out of the flooded slope, and by Saturday afternoon the water had been reduced in the slope five feet. At midnight Sunday, prepara-

tions had been completed for floating a raft through the gangway. It contained blankets, brandy and milk for the men in case they should be found. At an early hour in the morning faint cries were heard in the distance.

Five minutes later one of the rescuers shouted: "Stop rowing, I hear a noise." "So do I," said another. Soon a sound of "Oh!" in dreary and distressing tones, was heard. When the raft was within ten feet of a high-pitching breast the men on the craft caught sight of the imprisoned miners. They were perched up high on a piece of timber. Their heads touched the roof. Rineer was the only one of the party who could speak. He said: "My God, help at last." Some one said: "Are you all alive?" "Well, I am," replied Rineer; "but I don't know about the others. I have been holding them on to this perch for some time now; I think they must be dying." The other men could say nothing above a whisper. As quick as possible they were taken down from their resting place, wrapped in blankets, and placed on the raft. The raftsmen pulled the oars for all they were worth, and when the mouth of the slope was reached they were well-nigh exhausted.

Rineer, in an interview, says: "Wednesday morning, when the rush of water came, it was with a roar and a crash, seemingly in all directions. The others were with me, and for a second we were dumbfounded. The only way of escape lay toward the direction of the incoming waters, and in that way we ran. The water was soon up to our waists. A few feet farther was the first cross-heading, and hardly knowing what we did, we turned into this. It pitched upward at an al-

most perpendicular incline and offered but a slight foothold.

"A piece of 'lagging' was at the foot of the cross-cut and the two men helped me wrench this loose, and then shoving me up on their shoulders, I put it across the tunnel. After helping them up on this perch, I climbed up myself. After resting on the beam, I began to feel above and back into the cross-cut. Then the startling discovery was made that a great mass of loose coal was held above us by a log becoming jammed in some way, and I surmised that possibly hundreds of tons of loose rubbish from the abandoned workings above were in this cross-cut. If this stuff started to run nothing could save us. Nothing could be done but sit on our perch, which was just three inches wide.

"From Wednesday morning until our rescue, with but one exception of possibly half an hour, we were sitting on the narrow strip of lagging. We were careful with our lamps, and by burning one after the other, the oil lasted a few hours. Then came darkness, and we huddled close together for warmth. We soon grew stiff and numb. Then we rubbed each other as well as could be done in our dangerous position. It seems now as if we had been in there a year. Time did not move to our thinking at all, and the intense darkness added to the horror of our surroundings.

"Wednesday dragged through and the night; then came Thursday, but after that we lost track, and had no idea how long we had been in the place. After a while a terrible thirst came upon us, and one of the men began to act queer. 'There's a car,' he

said, 'let's get on it and ride away. Come, come,' he cried, and with that he jumped off, and I heard him struggling below in the water. I went down after him. Here I found him drinking in great gulps of water. I put my head down to taste it, and found it so strongly filled with sulphur that it blistered and burned my tongue. It seemed to cool the fever, however, and I drank several mouthfuls.

"The other had been left on the beam above, and I could hear him up there gibbering and talking to himself. Then came the fear that he would loosen the rock behind us by some means and it would come pouring down. I spoke sharply to the first and induced him to climb up with me to the lagging again. Once back to our seats the other got better and kept quiet. At intervals afterward both became wild, and it was hard work to keep them from jumping off.

"The first glad sound that reached our ears was the 'plunk' of the pump. It came very faint, but gradually increased in volume until we were sure that the rescuers were at work. Now, while this glad sound gave us hope another dread took it away. The loose coal behind us began working and the small pieces commenced to crowd us off the lagging. We worked it out with our fingers as fast as it came down and for a while kept our seat free. Finally, as the sound grew louder, we slid down and found the water had gone back a good distance. After a time we heard voices and I began to shout. This was kept up until morning, when lights appeared over the black surface of the water, and the raft came to us."

Cragle said: "If one piece of loose coal above our heads had started hundreds of tons would have rolled

down the sharp pitch, and hurled us into eternity. I did not sleep 15 minutes the whole time. The other men would go off into a slumber. I would punch them and tell them to keep awake, as they were liable to drop down into the water. No one can tell the misery we suffered but God. I knew Rineer would stand by me. When I fell off the perch into the rubbish I was very weak. I said: 'Boys, I am sick; I cannot get up again.' I then prayed to God for help. Then Rineer and the Polander came down and helped me up.

"I never lost heart but once. That was when the pump stopped and the water rose again. I prayed again. We were very thirsty. I put my lips to the dirty coal and sucked it. My, but it tasted good. I took the cotton out of my lamp, soaked it with water and passed it up to the Polander. He sucked the cotton dry."

This is the second rescue of miners alive made in the Anthracite Region. The first was at Sugar Notch in 1880. Five men were imprisoned for seven days. They lived off the carcass of a mule.

## CHAPTER XVIII.

### A CHAPTER OF ACCIDENTS.

**T**HE short and pointed notices of the daily and weekly papers of the country of the mining accidents, as culled at the time, and given in this chapter show that little is thought of an accident in which only four or five lives are lost, and it is just given as a small item of news. It is only when the number of lives lost runs up into the scores and hundreds, and a terrible accident startles the world to horror and casts a gloom of sadness over the community in which it happens that extended details are given.

An explosion of fire-damp in the Nesquehoning mines, near Allentown, Pa., on Wednesday morning, April 19th, 1876, killed three men and seriously injured five others.

Six miners were killed by an explosion in the Black Diamond coal mine, at Mount Diablo, California, and five others seriously injured, in July, 1876. This is the only coal mine ever known in the Golden State and very little information could be secured from it.

On Saturday, July 29th, 1876, an explosion occurred at Gray's mine, Saw Mill Run, Pa., by which four lives were lost. The explosion was so terrific that it was heard for miles around, and brought crowds of people to the scene. As soon as possible the bodies were recovered, one being still alive when found but died in half an hour after.

October 21st, 1885, an explosion of fire-damp



killed six men and severely injured ten others at No. 2 Shaft, Plymouth, Pa. No cause can be assigned for it and it remains one of the unfathomable mysteries of fire-damp explosions that has caused the loss of so many lives.

On the morning of Sept. 2nd, 1885, ten men were going down the Oakwood shaft of the Lehigh Valley Coal Co., Pa., and when near the bottom a large piece of rock loosened from the side of the shaft, fell several hundred feet crashing through the cage and instantly killing three men and injuring another so seriously that he died in a few hours after.

#### THIRTEEN MINERS KILLED.

The fire damp explosion in mine No. 4, at Almy, Wyoming, January 15th, 1886, is the most serious in the history of Rocky Mountain coal mines. All the men in the mine, thirteen in number, met with instant death. A train of cars going into the mine was broken into fragments.

Occurring at night, when only a light force of miners was at work, the death roll was thirteen, but had it occurred during the day the loss of life must have run into hundreds, for every person in the mines at the time met with instant death. The whole face of the country and that portion of the settlement fronting the slope gave evidence of the terrible force of the explosion.

The thirteen cars which were going into the mine at the time of the explosion were broken into fragments and shot out as from a cannon. Two passengers in them were literally blown to pieces. Many people living near the mine narrowly escaped death.

Huge timbers crushed through the roof of the superintendent's residence, 250 yards from the slope, and fell between two beds occupied at the time by himself and family. A miner lived in a house in front of the air shaft in the mouth of the mine. Here the force of the explosion tore a great hole in the earth twenty feet in diameter, and a rock weighing over a ton fell through the roof into the kitchen. A store, 200 feet away, lost its front and some goods were damaged. The wheel from the pit car passed through an out-house near by as if thrown from a catapult.

An explosion of fire-damp occurred in the shaft of the Newburg, W. Va., Ore and Coal Co., Thursday, January 21, 1886, which shook the buildings in the immediate vicinity and caused consternation and alarm among the relatives and friends of the miners employed there. Immediately following the sound of the explosion a flame of fire arose far above the mouth of the shaft, and timber and débris of all description were thrown around. Great excitement ensued, and crowds of people hurried to the spot. The shaft in which the explosion occurred was sunk two years ago, and reached a depth of 350 feet. From the base of the shaft the main heading runs out about half a mile, from which the various rooms diverge from either side. The theory advanced as to the cause of the explosion was that the fire-damp had accumulated in one of these rooms and was accidentally ignited by a miner's lamp, but nothing positive could be learned. The force of the explosion so blocked the air course that no one dared venture in the main heading to ascertain the fate of the imprisoned men until an air passage could be established.

What little hope that was held out that at least some of those in the mine might have escaped the deadly blast, and its silent though just as deadly follower, choke-damp, was soon dispelled when the work of exploration began, for it was found that the whole force of the mine, thirty-nine men and boys, were found stark and cold in death.

The scene at the shaft was heart-rending. Fathers, mothers, wives and children lingered in groups with pallid faces, anxiously waiting some tidings from their loved ones, which would either bring hope or end in suspense.

A terrific mine explosion occurred about 4:30 o'clock in the afternoon of July 11th, 1886, at Buchtel, O., a small village about three miles east of Nelsonville, which resulted in the instant death of one man and the fatal injury of several others. Johnson Brothers & Patterson, of New Pittsburgh mine, were preparing to start up. The coal in this mine has to be gotten out by machinery. A leak was discovered in the compressed air receiver, which furnishes the motive power, and Charles H. Johnson and Tom Williams went into the mine about 250 yards to repair it. They neglected to turn off the pressure, and upon attempting to stop up the leak the end of the receiver burst into fragments, knocking the machinery about and tearing up things generally.

The excitement in the village was intense. As the unfortunate men were brought out of the mine the groans and shrieks were heart-rending. Thomas was repairing the leak, and Johnson, one of the owners of the mine, was holding a light, and the others looking on when the explosion occurred.

Every bone in Williams' body was broken. Johnson was thrown against the wall with a large scantling across his breast. Every shred of clothing on Williams' body was torn off, and his shoes were blown over twenty yards. Williams left a wife and three small children in almost destitute circumstances. The rest were also married men. It was a case resulting from carelessness.

Fire-damp has again done its deadly work in the Connellsville coke region. An explosion occurred at the Uniondale mine of Reid Bros., near Dunbar, Pa., Monday, resulting in the death of two men and the injury of twelve. A rescuing party was soon formed to enter the mine and recover the bodies of those inside, and their timely presence saved a number of lives.

There were two explosions, occurring a few minutes apart, and both of them terrific in their character. Miners in the adjoining pits ran for their lives. The scenes at the pit-mouth were heartrending. The inspector soon arrived at the scene and began an investigation.

Monday morning, September 28, 1887, at 9:20, a cave-in occurred in Marvine shaft of the Delaware and Hudson Canal Company, near Scranton, Pa. The cave-in was from the Diamond vein to the No. 14, 200 feet below. Between 60 and 70 men were in the level at the time, and all but eight of these escaped alive. A workman, who was twenty feet from the head of the slope, was blown by the force of the wind under the boilers and escaped without injury.

The Cunningham colliery, situated in North Wilkes Barre and owned and operated by the Delaware and Hudson Canal Co., was the scene of a frightful explo-

sion shortly after 7 o'clock Friday morning, Nov. 26th, 1887. The terrible catastrophe was due to one man's carelessness, and caused the loss of twelve lives and severely injured a number of others. The day before being Thanksgiving, the mine was not worked, and the enforced idleness caused the waste water to accumulate in large quantities at the bottom of the shaft. It was here that the men were gathered when the explosion took place. Owing to the high water, the men were in some doubt about going to work, and were waiting for instructions from the inside superintendent. All the hands were chatting gaily and relating their Thanksgiving experiences.

A laborer, who was among the party, said he wished the boss would hurry up and say work or no work, as he wanted to do one thing or the other. He was getting tired of standing around. A miner told him to have patience. He made no reply, but walked off in the direction of the mule barn, about 200 feet from where the men were standing. No attention was paid to his movements. Ten minutes later—a violent flash first—and then a terrible explosion was heard. All knew what that meant; but before they had time to put one foot before the other they were hurled about in all directions. Many fell on the bottom of the gangway, horribly burned.

There is no injury a miner dreads so much as to be burned with gas, and the agonizing cries of those who lay prostrated, with the flesh hanging by threads to their bones, was frightful in the extreme. The report of the explosion was heard in other parts of the mine, and, in fact, so great was the concussion as to be heard for miles around. Assistance was rendered as

quickly as possible, and the dying miners hoisted to the surface. Upon their arrival on top they were dropped in cotton sheeting and blankets, and conveyed to their homes or to the hospital. Some of them presented a horrible sight, the flesh hanging in threads. The man who caused the explosion was unrecognizable. To add to the scene of terror, around the mouth of the shaft the families of the victims had gathered, and as each man was brought to the surface the cry went up to the heavens, "Oh, that is my poor papa!" "Oh, my darling husband!" etc. The confusion became so great that it was found necessary to put a guard around the shaft to prevent the people impeding the work of rescue.

A terrible explosion occurred at the Fair Lawn colliery, near Scranton, Pa., Monday, by which five miners were instantly deprived of their lives and two others were severely burned. The fire-boss had charge of the ventilation of the mine. The remainder of the party was composed of miners and laborers who had gone in to make improvements in their chambers, the colliery not being in operation at the time. They had traversed the slope, which is 1,400 feet long. Then they entered the lower vein, where the chambers in which they worked are located, and proceeded about 1,000 feet. The fire-boss was on an incline some distance ahead of them. He was testing the air with his safety lamp, when he encountered a large volume of fire-damp. It was so dense that it penetrated the gauze of the lamp, and set off an explosion that shook the ground, traveled up the slope and tore timbers from the breaker 3,000 feet from the scene.

Then took place a disaster which can hardly be imagined, much less described. The men were tossed about like leaves and burned and mangled. All the doors and brattices by which the air currents in the mine were regulated were smashed.

A great crowd immediately gathered at the mouth of the slope. Wives, mothers and other relatives of the imprisoned men were in the throng. They anticipated the worst, and their outcries were harrowing.

A rescuing party soon went down the slope. They were compelled to spend an hour in restoring the air current so as to allow them to approach the vein in which the explosion occurred. When this had been done there was still danger from the intense heat and the after damp, and it was after 10 o'clock before the rescuing party could enter the vein.

Press dispatches gave additional details of the disaster, as follows: Two men were standing at the head of the slope at the time of the accident, and felt the force of the explosion as the rush of air came out of the mouth of the mine. They at once started to go in and ascertain the extent of the damage. The August quota of coal had been mined the week before and no men were employed in the mines. Word came, however, that a party of five or six men had gone into the mines to clear up their chambers.

The Mine Inspector happened to come along about this time, and he and one of the men who worked there with a party entered the mines, going down to the third or lower vein, and then followed the air courses, stopping to repair damages to the brattice, etc., as they went along. Their progress was neces-

sarily slow, and the course they followed took them to the right hand side of the mines.

They came at last to a point where they found repairs necessary, and returned to the foot of the mines for more material. When they learned that groans had been heard in the east gangway, they worked over that way, and found the party who had gone in the mines before the accident near or about the entrance of one of the chambers, a short distance from the foot of an inside plane, about 150 feet from where the heading branches off. Three of them were alive and three were dead.

#### HORRIBLE MINE DISASTER.

The most horrible mine disaster that ever occurred in the West, up to that time, happened at noon on Thursday, March 29, 1888, at Keith & Perry's No. 6 mine, at Rich Hill, Missouri. The explosion occurred when a large force of men were at work in the mine. Not one of the survivors has been able to give any coherent story about the shock. The explosion wrecked the mine and buried in the débris nearly 100 miners. The superintendent of the mine was badly injured, but was alive when taken from the shaft. His face was horribly disfigured by the explosion, and the flesh of his arms was torn in shreds. The bodies removed from the pit showed the terrific force of the explosion. Coal dust was blown in the flesh of the dead until they looked like the bodies of negroes. Some of the corpses were frightfully mutilated. Arms, legs, and eyes in some instances were blown out of their sockets, while others of the unfortunates have been so cruelly dis-



figured as to be unrecognizable. The dead were strewn throughout the corridors of the mine. The explosion is attributed to the presence of natural gas in the mine and carelessness on the part of the mine inspector. The list of dead on March 31 had reached twenty-one, and nine were seriously injured.

#### TERRIBLE EXPLOSION OF FIRE-DAMP.

An explosion in the mines at Savanna, Indian Territory, killed six miners, and thirteen of their comrades lost their lives in attempting to rescue the bodies of their unfortunate brothers through choke-damp. The body of gas fired must have been immense, for the torrent of flames forced from the mouth of the slope was over a hundred feet in height and illuminated the whole country like an immense flash of lightning. It was followed with such a concussion as to startle every one for miles around, and people in the immediate vicinity were severely shocked. The engine house and lifting works, a structure over a hundred feet long and two stories high, were blown into splinters by the current driven out of the slope, and in a few minutes it was enveloped in flames. The explosion was due to improper ventilation, and should be made a subject of judicial investigation. Many of the readers will remember the publication in the columns of the *National Labor Tribune* of a letter notifying a subscriber to that paper to leave that Territory for being "a mischievous man." His crime consisted in calling attention to the bad condition of the mines, and objecting to abuses in the manner of operating them. The notice gave him ten days to

get out of the Territory, and that, failing to go, the military authorities would assist him to do so.

#### FIVE MEN SUFFOCATED IN A MINE.

A terrible accident occurred in the afternoon of April 27, 1888, at the Tunnel colliery, in Ashland, Pa., by which five men were killed, leaving four widows and seventeen orphans. Owing to an anticipated "run" of "pillars," the west gangway had not been working for a couple of weeks. Notwithstanding all possible circumspection, the apprehended "run" occurred about 1 o'clock, bringing down with the coal a volume of deadly gas by which five human victims and six mules were suffocated.

#### A TERRIBLE ACCIDENT.

On the 1st of October, 1888, twenty men in the Bast colliery, Ashland, Pa., were caught by the giving way of a large supporting pillar. Five of them were killed and all the others were severely wounded, but were got out alive. Had it not been for the timely arrival of the rescuing party the wounded would have been suffocated.

The officers of the Kettle Creek Coal Mining Company received information that a terrible explosion occurred at their mines, located in Clinton county, on the line of the Philadelphia and Erie railroad, Nov. 3, 1888. The superintendent, upon hearing a heavy report at the new No. 2 drift proceeded to the spot, when he at once saw that a violent explosion had taken place. The necessary arrangements were quickly made to carry the air to the face of the wreck, and men entered the mine to learn the particulars of

what had occurred. An appalling state of affairs was found inside. Of the 21 men who had been working in the drift only three or four had escaped death or injury. At the end of an hour's hard work fourteen dead bodies were recovered from the drift. Two of those who were injured subsequently died. One man was missing and his remains were found out in the woods where they had been blown by the force of the explosion through the air shaft. The total number of killed or fatally injured was found to be seventeen. All but four of them were Hungarians or Italians whose names are not furnished. The driver was entering the drift when the explosion occurred. He was thrown toward the mouth and escaped. His mule was killed. The force of the explosion was shown in the fact that bodies were blown clear out of the mouth of the drift.

One of the most serious and saddest mining accidents ever known in this portion of the State occurred late on the afternoon of September 9th, 1888, in the White Ash coal mine, near Golden, Colo. An old abandoned mine runs alongside the White Ash, and had for months been full of water, which, without a moment's warning, burst through into the White Ash mine, filling it full of mud and water. Ten miners were known to have been at work in the White Ash mine at the time of the accident, and they could not have lived five minutes after the surging mass broke in upon them.

## CHAPTER XIX.

### THE BRAVERY OF MINERS.

**A**LTHOUGH it would seem from the preceding chapters that the heroic courage and undaunted bravery of miners at the time of accidents and disaster have been amply demonstrated, I cannot resist the temptation of giving some of the opinions that have been expressed upon the subject by those whose interests are not connected with the mines and miners, and who can speak with more freedom upon the matter than those who are. There are also some special cases given to carry out the impressions made and the knowledge gained by those who have given it any thought.

One writer says: "The heroic conduct of miners in their efforts to rescue their imperiled comrades on the occasion of a mining catastrophe, or in facing danger in the line of duty, is never surpassed, if equaled, on any battle field."

M. Simonin in his "Underground Life" says: "The public has passed by the collier with too much indifference; the philosopher, the savant, the artist, the romance writer have not sufficiently examined him. The soldier of the lower regions deserves more than a passing notice, a momentary curiosity, when a hurried visit is paid to a mine, or a shocking accident happens to alarm a whole district and throw hundreds of families into mourning. The patient and en-

during labors of the coal miner are deserving of serious examination on the part of all."

*Saward's Coal Trade Journal*, which is looked upon as the standard authority on mining matters and the official guide of coal operators, in 1877 says: "Some of the noblest deeds ever performed by man—deeds which, had they occurred on the battle-field, would have been rewarded with high public honors and emoluments, have been performed by miners on the occasion of mining catastrophes. On the occurrence of every accident, however dangerous, there are a dozen, or one hundred men ready to plunge into danger, or death itself, in the hope of rescuing a fellow-workman. This race of men are also remarkable for their generosity as for their spirit of daring. When any one of their members gets hurt in the mine in the pursuit of his calling, his associates are always ready to assist his family until their fellow-craftsman's wounds are healed and he is again fit to work."

In 1890, we again cull the following from it:

#### THE PRICE OF COAL.

"A very much esteemed friend and correspondent thinks that the public are apt to view this feature of the coal industry too much in the light of dollars and cents; that in mere chaffering over a few cents per ton, both buyer and seller are apt to lose sight of that other and wider view of this topic, the sacrifice of human life that annually takes place in all the mining districts. Men are killed and wounded daily in the battle-field of the subterranean areas 'where coal is won.' A fearful calamity, it is called, where fifty are killed and wounded on the rail, but what of

those who go down to the pit, and then are brought up feet foremost. The short and simple annals of the miner's life and death generally appear only in the local papers; it must be something of great importance, in the eyes of the news-gatherer, to burden the wire with anything happening in the mining district. Here is an item from a local paper: 'The pit was idle Wednesday and Thursday, owing to the death of Bro. —.' Now who was this brother, who had given up the fight, and why did he succumb? Let us read a little further: 'He was just in the act of giving the finishing touches to the 'holing,' when about a ton of coal from the 'fall' came upon him, resulting in death. He was a young man with much to make life dear. The funeral was largely attended; the members of the local lodge walking 14 miles." Peace to his ashes.

Here is something else to remember, when some one "kicks" about the price of a ton of coal, and jugs one down a quarter, and chuckles over getting the best of the bargain. A young man (always the case in every battle) was working in the breast of his chamber. He suddenly noticed that the roof was weakening, "several tons of coal fell behind him across the track, cutting off any possible chance of escape. The fall continued and approached him nearer and nearer and several huge chunks of coal fell immediately before him. Death seemed inevitable, but he was seized with that wonderful presence of mind which many experience when death seems to stare them in the face. He seized two drills which stood beside him and stretched them across the corner, over his head. Several small pieces of coal fell all about him, but the

larger ones were caught by the drills and formed a protection. The coal closed around him, but the drills kept off the weight of the immense mass. He was forced into a position half standing and half sitting, and for fifteen hours he could neither move hand nor foot. His body rested upon the irregular edges of pieces of coal, and during his imprisonment he suffered from the pressure of his body upon these projections. He says that he could not move an inch, not even the breadth of a hair, and the creaking of the coal as it worked about him, seemed to warn him of momentary death. Twelve men worked diligently through ten yards of loose coal and rolled away the large pieces, in order to rescue him; he suffered much for a time from the want of air, as the culm rushing in filled the crevices and air passages through the larger pieces, and besides each minute expecting death through the breaking of the drills above his head, or the movement of the coal even an inch—for if it had moved a single inch the life would have been crushed out of him—he was almost suffocated. His feet were caught by pieces of coal resting upon them and the circulation stopped in one of his legs. He was as if resting upon spikes and unable to sit or stand." This man was saved to his wife and little ones through the pluck and bravery of his fellow-workmen, who went through great peril in attacking such treacherous stuff as a fall of roof.

The *Philadelphia Enquirer* says: "We give praise, and we cannot give too much of it, to firemen who boldly enter a burning building and fight the fire at the risk of their lives. This takes courage of a high order, but these men are never out of hearing, and

scarcely out of sight of friends; they can always escape if they have a minute's warning. It takes still higher courage when the twenty-five or fifty feet of space that intervenes between them and safety is increased to a mile or more and they have to work alone uncheered and with the consciousness that if they fail to survive the desperate chances they are taking, their families will be left helpless. The miners are the men who have lost so much of their scanty wages by stoppage of mines that they are constantly on the verge of want. They would be among the world's heroes if the world appreciated the heroes of labor as it does those of war."

Hon. John Parker has the following in his *Tri-Weekly Record*. Although not a miner himself the whole of his life in this country has been spent among them and he knows whereof he writes:

The *New York World*, in offering \$500 reward to act as an inducement to more strenuous efforts for the rescue of the men in the burning mine at Wilkes Barre shows that with all its knowledge the great city paper does not fully know of what kind of stuff the old anthracite miner is made. When his fellow-workman's life is in danger he does not wait to see how much money he is to receive for risking his own life in the attempt to save his comrade. He even does not reason as to the probability that going into danger, on a forlorn hope, he may not return alive again. Like the noble six hundred at Balaklava, he does not wait to reason why, but offers himself to do and dare for the good of others. No! The brave miner of the Anthracite Region needs no incentive but humanity; no urging but sympathy, to face danger



in its worst form, and death in its grimmest shape, in the attempt to save his fellow-workman and restore him back to his weeping family. He may be oppressed, ill-paid and impoverished, but no kind of treatment, however bad, can rob him of that unselfishness that makes of him, in times of extremity, a hero.

At an explosion at Coalbrookdale in 1857, the foreman of the mine sacrificed himself to try and rescue the entombed men below. The force of the blast damaged the shaft frame and the carriages used for raising the miners, and some time elapsed before it was possible to get down the pit. Four men volunteered to go down the mine with him, and although he told them it was too late to do any good, as the men below would all have been overcome and dead from the effects of the after-damp, and that if he went down he would never come up alive, he was prevailed upon to go down to the rescue. He shook hands with all on top, and stepped on the cage, and descended with the four to the bottom. Two of them soon returned, unable to withstand the noxious vapors of the mine; the other two were with great difficulty rescued, but the mine foreman, acting as guide to the party, fell dead amidst the poisonous elements of the mine.

One of the shafts in the Pas-de-Calais, in France, gave away in 1866. The mine boss descended in company with the consulting engineer, during the closing of the shaft. Believing he was going to certain death, the brave over-man said to his comrades: "I am fifty years old, and have a wife and children; but I go where duty calls:" and after embracing his

comrades, he stepped upon the cage. His hair turned white during the perilous descent, but after a short absence, they were drawn up to safety alive and unharmed.

In the early part of February, 1889, a miner was killed at the Hammond colliery, Girardville, Pa. He had drilled a hole which was at the top of an eighteen feet plank elevated at an angle of 75 degrees. He placed the stick of dualin in and tamped it. As soon as he lighted the fuse to fire the shot he came down in a hurry to get down out of the breast. In doing so he started a great mass of coal and was caught and crushed against the wall of the breast. His loader, who was working on the gangway, heard his scream for help, and looking up the dark chamber saw the sputtering fuse. Not knowing what had befallen his comrade, but knowing that if the shot went off he would be surely killed, at the great peril of his own life he climbed the steep plank and pulled out the fuse which was burnt within an inch of the powder. He found the miner later with the life crushed out of him. The mine inspector said that in all his experience he never saw a braver act or more presence of mind, and at the inquest over the dead man he commended the young loader. Turning to those present he offered to head a subscription to buy him a gold watch and chain. The citizens of Girardville took charge of it and soon presented him with the memorial of his brave act.

At the Bast colliery, Ashland, Pa., a similar occurrence is reported. On Saturday, March 8th, 1890, a father and son were running down a breast after lighting a squib to fire a shot. The father was struck

by a piece of coal and held fast. The son, at the imminent risk of his life, ran back to the face and removed the lighted squib.

"NAY, I'LL STAY WITH THE LAD."

A poem by Lillie E. Barr, on an incident in the terrible explosion in the Hutton Seam of the great North of England coalfields.

Six hundred souls one summer's day,  
Worked in the deep dark Hutton seams;  
Men were hewing the coal away,  
Boys were guiding the loaded teams.  
Horror of darkness was everywhere;  
It was coal above and coal below,  
Only the miner's guarded lamp,  
Made in the gloom a passing glow.

Down in the deep black Hutton Seams  
There came a flowery, balmy breath; \*  
Men dropped their tools and left their teams,  
They knew the balmy air meant death,  
And fled before the earthquake shock,  
The cruel fire-damp's fatal course,  
That tore apart the roof and walls,  
And buried by fifties man and horse.

"The shaft! The shaft!" they wildly cried,  
And as they run they pass a cave,  
Where stood a father by his son—  
The child had found a living grave,  
And lay among the shattered coal,  
His little life was nearly sped.  
"Fly! fly! for there may yet be time!"  
The father calmly, firmly said:  
"Nay, I'll stay with the lad."

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\*The author notes the words as follows: "The fire-damp is frequently heralded by a balmy scented air, warm, and having an odor of flowers."

He had no hurt; he yet might reach  
The blessed sun and light again,  
But at his feet his child lay bound,  
And every hope of help was vain.  
He let deliverance pass him by;  
He stooped and kissed the little face:  
"I will not leave thee to thyself,  
Ah, lad; this is thy father's place."

So Self before sweet Love lay slain—  
In the deep mine again was told  
The story of a father's love,  
Older than mortal man is old.  
For though they urged him o'er and o'er,  
To every prayer he only had  
The answer he had found at first:  
"Nay, I'll stay with the lad!"

And when some weary days had passed,  
And men durst venture near the place,  
They lay where death had found them both,  
But hand in hand, and face to face.  
And men were better for that sight,  
And told the tale with tearful breath;  
There was not one but inly felt,  
The man had touched a noble death,  
And left this thought for all to keep—  
If earthly fathers can so love,  
Ah, surely, we may safely lean  
Upon the Fatherhood above!

## CHAPTER XX.

### HARTLEY COLLIERY; LIEGE 1812; LALLE, KILDRUM- MIE, AND MINE LOCKS PIT.

ON the tenth of January, 1862, at the Hartley colliery in England, the whole population of the mine, one hundred and ninety-nine men and boys, exclusive of five who were killed on the cage, perished for want of means of escape. The mine had but one opening, and was divided into upcast and downcast compartments for ventilation, by means of a wooden brattice partition. Two engines stood on top of the mine, one for hoisting coal and for lowering and raising the miners, and the other for pumping the water out of the mine. The pumping beam of the water engine, an immense cast-iron rod weighing over eighty tons, stood with one end reaching directly over the mouth of the shaft. As eight men were ascending the shaft the pumping beam broke in two, and one-half of it fell into the pit, killing five of the eight men on the ascending cage, the other three escaping by a miracle. The broken beam in falling smashed the timbers of the shaft and tore them away with it until it, with the débris carried with it, wedged in the shaft several hundred feet from the bottom and closed the men below in a closely sealed tomb.

All communication with the interior of the mine was cut off. The imprisoned miners rushed to the bottom, and finding the only means of egress hopelessly closed against them, attempted to break into the wa-

ter pipes, which were eighteen inches in diameter; but they were unable to make any impression on these strong cast-iron structures. The rescuers on top, of which there were several thousand as soon as the news got abroad, soon adopted means to rescue the three live men on the cage, and were ready to risk their health or lives in the endeavor to rescue their fellow-workmen from what proved a sepulchre.

There were three seams of coal being worked in the shaft, one of which was above the fallen débris and the middle seam was just below. There was communication between the lower seam and the middle, and as soon as those below found they could get no word or sound from the top of the shaft they went to the middle only to find themselves as tightly inclosed as though they had been below; but they had the consolation of hearing the men above working on the mass of iron, wood and dirt wedged in the shaft to get them out. Had there been communication between the middle and top seam, as there should have been but for the criminal neglect of the company, every life could have been saved.

For ten days men worked hard in trying to make their way through the mass of rubbish that choked up the shaft, and several times they nearly succeeded and got within hailing of the men below and encouraged them to hope on, only again to be disappointed and drive the prisoners again to despair, until at last after ten long and weary nights and days, to the men below and their anxious friends on top, the middle seam was reached and a party of rescuers went to explore and found every one in the sleep of death,

overcome by the foul air of the mine. A little pass book on one of the men partially told the story of how they flocked together and held religious services in which all took part—who led in prayer and who inspired them with the courage of hope in rescue in life, or eternal peace in death. The hopes and fears of all were recorded in that little pass book scribbled with a short lead pencil, some of it in entire darkness, thus giving a history of their last hours.

One of the men who were saved from the cage in describing his experience says: "When we got past the middle seam we heard a tremendous crack that sounded louder than the biggest cannon that I ever heard; followed by a rushing, roaring noise that can never be described or imagined; we had no time to speak, but just looked at each other and gripped the cage as tight as we could, when the crash came upon us. Some were hurled down to the bottom of the shaft and their shouts of horror, as they saw themselves going, came to us above the din of the crash, and I got to see one of their faces and I never care to see such a look again as long as I live, for I fancy I can always see him when I think of it. Some were caught among the timbers and the life crushed out of them at once, others lived in agony for several hours and their groans would chill the hardest hearts. Another man and myself threw our arms around each other, as though by mutual consent we concluded to die together. We saw the heavy bulk crash past us and the timbers and dirt falling around us as though the whole shaft was caving in; and when it had got past we found ourselves jammed back of the big water pipes, and though cut and bruised

neither of us badly hurt. We braced ourselves and slid down to a joint of the pipes where we had a better foothold and could stand better; and began to call for help to those on top."

The other man who was saved was on the top of the fallen timbers and dirt and held against the side of the shaft by a cross-piece that had fallen against him.

#### LIEGE, FRANCE.

On the 28th of February, 1812, in one of the mines of Liege, in the Department of the Gard, France, a sudden eruption of water from an abandoned mine, surprised the miners. Some of those nearest the bottom of the shaft were drawn up in safety, but nineteen others were drowned. The manager of the mine could have escaped, but he refused to ascend the shaft as long as a living miner remained below, and he even kept back his son, a boy of twelve years. Nine men and fifteen boys were forced to fly to the rise workings before the rushing flood, and were shut up in the interior of the mine. The manager displayed a heroism and self-sacrificing devotion for his men never surpassed on any field of battle. "I will save you or die with you!" he exclaimed.

He commenced opening up part of the gob waste in hopes of finding a way to the old mine from which the pent up waters had been discharged, but finding it filled with fire-damp he ordered the opening to be closed up again. One of the miners, believing that death was only a question of time, wanted to carry forward a naked light into the inflammable gas in order to blow themselves all up at once. On another



occasion two men engaged in a quarrel, and while the manager was trying to part them, some one cried out, "Let them fight; we will eat the man who is whipped." They devoured their candles to assuage their hunger, and some of them became delirious, but they were all brought out alive at the end of five days. The brave superintendent of the mine, as a reward for his noble devotion to the interests of his men, was rewarded by Napoleon with the Legion of Honor, and a life pension.

#### LALLE, FRANCE.

On the eleventh of October, 1862, a violent storm passed over part of France. The rivers overflowed their banks and did great damage. The waters of the river Ceze came down in a vast flood and rushed tumultuously into one of the slope openings of the mine at Lalle, near Bessiges. The whole force of the mine, one hundred and thirty-nine souls, were at work below. They were startled by the rumbling noise of the water in its passage down the slope, and rushed to the ladders of the hoisting shaft. A few nearest the bottom got out in safety. One of them immediately lashed himself to a tub and redescended. Five men were at the bottom, four of whom got into the tub and were drawn up alive. He went down again and rescued a young man whom he found drowning between the timbers and the roof. There were yet one hundred and ten men in the mine.

In half an hour from the time the water burst in the slope the whole interior of the mine, except a few acres of the rise workings was a vast lake. The air of the mine, compressed by the volume of water,

was forced up through the surface, producing an explosion of the violence and rapidity of gunpowder. The earth was thrown high in the air, and a number of houses were overturned.

The workmen of adjoining mines all stopped work and flew to the scene of the accident; no means of immediate relief could be had, but preparation was at once made to pump out the mine. Next day a rolley boy went down the slope to the water's edge, and began knocking on the coal with a pick. He listened, and thought he heard the signal returned. He called his comrades down and repeated the experiment. The engineer of the mine placed his ear to the coal, and heard the distant and timed sounds of the miner's signal in response.

A solid pillar of coal, sixty feet in thickness, stood between the entombed men and those who were knocking. The rescuers at once commenced cutting a passageway through the solid wall of coal. One man worked at a time, and was relieved as soon as his energies became exhausted. In thirty-two hours, nearly the half of the pillar had been pierced, and conversation had with the miners inside.

"How many are there?" was asked by the rescuers "There are three of us," came the reply, and gave their names. In seventy hours from the time the entry was commenced, communication was opened, and the imprisoned men set free; sixty feet of entry having been driven in that short space of time. One of the three was dead. He had lost his resting place, and falling backward into the water, was drowned. Another had become delirious. The third one, a boy of seventeen years of age, slept most of the time.

They had been working in an entry, when hearing the noise of the rushing waters, they hurried to the rise workings. The water rose to their feet. They dug a little in the floor with the hooks of their lamps, so that they might rest with greater ease on the inclined floor of the mine. The compressed air caused a constant buzzing in their ears. They had been knocking on the pillar with the heels of their shoes for twenty hours before they were heard by the rolley boy in the slope.

Meantime, a number of pits were being sunk along the line of the rise workings, from the bottom of which bore holes were cut into the mine, in the hopes of finding others still alive. On the 24th of October, the thirteenth day after the catastrophe, the men who were boring in the bottom of one of the shafts heard shouts in the mine. The workmen in the shaft were fearfully agitated. "How many are living?" they asked. "There are but three of us," was the response; "and we have been here a long time." The shaft was soon sunk through into the mine, and the overseer went down to extricate the prisoners. Two of them came forward and begged to be withdrawn. The overseer covered them with his clothes, and they were drawn up to-day. The third one, a mere child, was found buried in the gob, where his comrades had laid him to keep him warm.

These three, like their comrades who had been rescued through the pillar of the slope, on hearing the noise of the approaching flood, made for the rise of the workings. One of them had a repeating watch, but it stopped the day following their confinement. After awhile they heard the noise of the tubs raising

the water from the shafts and endeavored to reckon the time by the number of tubs raised and lowered. These five were all that were recovered alive; all the rest, one hundred and five in number, were drowned or perished by starvation. The mine was not re-opened before January of the following year, when, one by one, the bodies of the dead miners were recovered. Managers and workmen vied with each other in the endeavor to rescue the entombed miners, and the government of France bestowed crosses and medals of honor on the brave men who met every privation and danger in their efforts to save their fellows from a horrible death by drowning, or still more horrible, because lingering, destruction by starvation.

#### KILDRUMMIE, SCOTLAND.

There are found in every mining community, in every country, men who have been rescued and restored to their family and friends, after every one had ceased to hope against hope of ever seeing them alive again, and the following is one of the most, if not the most remarkable case in all the history of mining. In the year of 1835, a man was inclosed in the Kildrummie mine, Scotland, alone for twenty-three days, without any food whatever, and was brought out alive. Being over sixty-six years of age the strain was more than he could bear, and he died two days after he was brought out.

The pillars of the mine, originally of ample size and strength for the support of the roof and the rock above it, had been cut away and thus weakened brought on a crush in the workings. For some weeks previous to the accident about to be related, grind-

ing and crushing noises were heard in the mine, but the miners worked on believing there was no reason to fear sudden or immediate danger. On Wednesday, October 8th, the crush came suddenly and with great violence—the roof falling down with tremendous noise and force. The terror-stricken miners made a rush towards the bottom of the shift, but were too late for escape, and they retreated to the interior of the workings where the pillars were firm. By means of a day level, originally cut to carry off the waters of the mine, the workmen found means of egress. This level, half a mile in length, was several feet deep with mud and water, and the miners were up to their armpits, and sometimes up to their necks, in the slimy mass, for nearly the whole length of the way. They all reached daylight in safety except Brown.

He had been working in a remote part of the mine, beyond the reach of the crush. Just as the miners were about to start for the day level, it was observed that Brown was not present. Two young men ran up to his working place and urged him to run for his life, that the mine had fallen in and all the miners were retreating by the day level. He started out with them, but in the excitement on hearing the perilous tidings he left his coat behind. On the way out he proposed to his comrades to return for it. They urged him to leave it, and even attempted to force him along. "The coat is a new one," he said, "and, as for the crush he had been in one before," and tearing himself away from them, went back to search for the valued garment. Before he could return the roof between him and the day level fell in with a tremen-

dous crash, and he was shut up alone in the bowels of the earth, beyond the possibility of escape.

For several days no attempt could be made for his rescue, as the roof of the mine continued to fall. The minister of the parish on the following Sunday, made the tragedy of the poor miner, dying a horrible and lingering death beneath the very feet of the congregation, the subject of a powerful appeal. As soon as the roof was sufficiently settled to permit of descent into the shaft, a corps of miners was formed to rescue him or recover his body.

A reconnaissance of the ruined mine suggested the cutting of a new roadway leading from the main shaft to the workings. The work was slow and difficult. In those days the minds of the miners were clouded with superstitious fancies—the dead, hollow sounds given off in the mine by the grinding and settling of the rocks, were interpreted as the presence of evil spirits, and the rescuers would frequently leave their work in terror and rush to the bottom of the shaft. The rocks through which the roadway had to be hewn were very hard, and by the end of the second week everybody had given up hopes of poor Brown being alive.

Early on the morning of the twentieth day after the crush, a hole large enough for a man to crawl through, was made to the unbroken part of the workings. A rush of foul air extinguished every light, and forced the miners back. One of them brought forward a flat board, and crawling through he began agitating the air about in order to mix the pure air and foul together to make it breathable. While in this act he heard the groan of a human

being. He threw down the board and rushed through to his comrades. He was speechless with terror and his hair stood on end. One of his comrades offered to return with him. Again there arose out of the darkness a faint but audible groan. Was this the devil attempting to lure the miners to destruction, or was it poor Brown still alive?

Knowing that the Evil One cannot reply when invoked in the name of the Almighty, one of the miners mustered up courage and solemnly asked: "In the name of God, Brown, if that were you who groaned, give another." Brown groaned again, and the miners moved forward and found him still alive. They laid their hands on his body; it was cold and clammy. The joyful news was communicated to the other miners, and in a few seconds they were around the unfortunate man. The lights would not yet burn. Stripping off their coats and shirts in the utter darkness, two miners laid with their naked backs next to his body to restore warmth to his emaciated frame. He soon rallied and asked for a drink of water. They moistened his lips and he asked for more. The water still further revived him and he murmured: "Oh, boys, but you were long in coming."

The glad tidings were soon communicated to the outer world that Brown's body had been recovered, and that he was still alive. Physicians were sent for, and preparations made to bring him up to day. He was moved to the bottom of the shaft with all the care possible, and was placed on the knee of the lessee of the mine, and raised to the surface. The white fungus of the mine had spread over his body and had

taken root in his hair. His face wore a strange, sallow hue like that of a mummy, and the flesh of his body was entirely gone. His bones looked as if they were coming through the skin, and his eyes were sunk back into his skull. When the surgeon put his hand over the pit of his stomach he felt the inner surface of the backbone. Every particle of fatty matter had been consumed from off the body, and the skin looked like leather.

He had tasted nothing in the shape of food during the whole of his confinement. Once, he took a little of the oil from his lamp, but it made him sick. He had walked around the mine for several days after the crush, occasionally drinking water. At length he grew so weak that he stumbled and fell; he heard the miners working at the fall, and never lost hope of being rescued and saved. He told his comrades that as soon as he recovered he would tell them a strange story of his imprisonment. He was, however, too far gone to rally, and died three days after his rescue. He was buried in the quiet churchyard of Daily, on the banks of the Givan burn, near the scene of his imprisonment, and a tombstone was erected to his memory bearing an inscription, telling of his imprisonment and rescue and death.

#### NINE LOCKS PIT.

One Saturday evening in the latter part of January, 1870, eight men and two boys went down the Nine Locks Pit, near Brierly Hill, England, to do some important work to enable the mine to draw coal on the following Monday. Some time during the night a subterranean stream of water broke into



the shaft and filled it nearly half full. It made its way along the water level to the pumping shaft of the colliery until its volume choked in the level and dammed it back into the Nine Locks Mine. The pumping engine, having so much more work to do than usual, broke some of its working parts under the strain. It was during the examination of the causes that led to the strain, by the engineer on Sunday morning, that the discovery was made of the water having broken into the shaft. Knowing that the men were in the Nine Locks Pit, the pumping engine was soon repaired and put to work again. A tank was also put on the cage in the shaft and the hoisting engine run at its highest rate during Sunday afternoon and all night.

On Monday morning the shaft was examined and it was found that both the pump and tank had not lowered the water any. It was therefore concluded that, as there was no knowledge of the extent of the water underground, arrangements had better be made to cut through the solid coal from another pit in the same colliery. The Earl of Dudley, who owned the colliery, urged that every effort imaginable be made, and every suggestion that seemed practicable be adopted to rescue the men alive if possible, and not to wait until one experiment proved a failure before adopting another, but to go ahead at once and try everything until the men were found.

The best coal cutters in and around the "Black Country" were sent for and brought to the mine, and by Monday night they had commenced to cut through the coal from the nearest point, nearly two hundred yards away. The men were told off in relays to fol-

low the cutters and keep the coal from them. The coal cutters were put to work on one-hour shifts and in charge of doctors when at work and on top, and were told to work for the lives of the men and boys in the other pit. Cots were provided in the hovels at the top of the shaft and the engine house, and doctors in charge of them, the best of substantial food and home-brewed ale was furnished very plentiful, so that the men were well nourished. The coal being a thick vein, it was decided to cut a passage-way about five feet high and four feet wide, as that would allow room for a train—a wooden box used in that part of the country for hauling coal in the mines—and air enough for the men while at work.

As soon as the doctor, in charge of the men below, saw any sign of exhaustion in the man cutting the coal, if his hour was not up, he was immediately ordered to stop and flannels put around him and he was taken to the top and put in charge of the doctors there until it came his turn to take another hour's work. So that from the time it was started the work of cutting never ceased, except while one man was leaving and another taking his place at the face of the coal, which was less than half a minute each change. The amount of coal cut by those men surpassed anything ever dreamed of in that or any other coal field, during that eight days' fight for the lives of those men in the Nine Locks Pit. Some of them cut away as much as five or six feet of solid coal in their single hour's work, and two of them cut not less than five feet for every hour they worked, which was always considered a day and a half's work for an ordinary man in that coal. By Monday fol-

lowing, eight days after they attacked it they had cut through the two hundred yards of a solid wall of coal and reached the men inside.

The story of the men inside was that : " Just before it was time to quit work on Sunday morning they found the water coming to their working places, and it being so unusual a thing, they all removed to the highest place in one of the entries, while two of them went to investigate the cause of it. But they found the water gaining so rapidly that they could not reach the shaft but had to retreat back to their companions. The water filled the entry before it reached them and choked, thus preventing it driving them from the hill and drowning them. The water tank had not been at work long before they noticed something disturbing the water near them, and after noting it for some time they concluded it was the cage going up and down the shaft, and would be drawing water with the tank.

" They then realized that they were doomed to stay in the mine for several days, if they did not perish in it, and die for want of food. They, however, concluded to make the best of it and prepare for the worst if need be. They had some food left yet that they had brought with them the night before, and as water was plenty they would do without food as long as possible and then each take a little share of ration to stave off the hunger. They gathered up all the candles they had, and only burnt two at a time, one near the water's edge so that they could see if the water was going down, and the other for themselves. Their food and candles lasted until Thursday night, and from that time until rescued they were

without food or light. That they might be able to notice the falling of the water even in the dark they put stones from the edge of it in three or four feet, and kept each other in good cheer all the time.

Sometime during the second Sunday afternoon one of the eight men became delirious and ran and dived into the water beyond their reach and drowned himself. During that Sunday night they could plainly hear the sound of the picks of the men who were cutting the coal, and hope rose buoyant in each breast, as it was only a question of hours now, and not very many at that, before help would reach them from a source that they little expected, knowing how far it was to any other shaft, and they gladly hailed the welcome sound, which was the sweetest music they had ever heard, though they could not respond. Visions of gladsome friends and joyous homes kept some of them from sleeping on Sunday night after the sounds had been heard coming nearer and nearer as the hours passed."

On Monday afternoon about four o'clock they were brought out after spending nine days in their prison, four of them without food or light. The doctors took charge of them and ordered every one away and forbade them talking or asking any questions. One of them, who was somewhat of a dog fighter and had his dog matched for a battle that day, would not obey the doctor, for the very first words that came from his mouth after being carried into the hovel on the top of the pit were: "Did our Prince win to day." The poor unfortunate that drowned himself was not found until the water was taken out.

## CHAPTER XXI.

### DEATH AND MADNESS COMBINE TO MAKE A PICTURE OF SURPASSING HORROR.

**T**HE following descriptions given to the press at the time of the accidents are so vivid that they cannot be improved upon now, hence I give them in full without any particular change:

The little village of Pittsburgh, Kan., was overwhelmed with grief. There was scarcely a cottage in town or in Frontenac that was not in mourning. Nearly every family in the two mining villages had lost a relative in the terrible colliery disaster on the evening of November 9th, 1888. The stores were closed and the blinds of the cottages were tightly drawn. The only place of business remaining open was the little undertaker's shop which had long since been cleared of its ghastly stock. Streamers of crape fluttered from the doors of cottages at every step, and the village bell was tolled almost without intermission from sunrise. Carpenters were hurriedly making coffins from such timber as was at hand. The noise of their hammers, the shrieks of hysterical women, and the creaking of wagons as they moved slowly over the rough roads with their loads of mangled human bodies were about the only evidences of life in the stricken village.

Such a night as had just passed has no parallel in the history of Kansas. The wailing and shrieking of 1,200 women and children above the tomb of 60

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sturdy miners, the screaming of the storm through the wreckage of the fatal shaft, and the glare of a score of bonfires upon the low-hanging clouds made a picture of hideous characters and of the most gruesome colors. For hours after the explosion snuffed out the lives of 59 men the scene at the pit was distressing. Poorly clad women with babies clasped to their breasts came through the darkness with the light cast by the bonfires like haggard, uncanny beings from another world. Some shrieked above the roar of the storm. Others seemed bereft of reason, and moaned and muttered as they fell helpless on the shoulders of their stranger neighbors.

Still others were mad in their despair and tore their hair and garments and would have dashed headlong into the tomb but for the strength exerted by miners from other shafts. One poor woman, whose husband and two sons were in the pit, lay her three youngest children beside a blazing fire and then fell in hysterics among them. She lay unnoticed in this position until morning when she was removed to her home a raving maniac. At one time the crush of women and children at the shaft was so great that it was feared violence would be necessary in order to clear the way for the rescuers. The poor creatures fought each other in their despair, and in some instances inflicted severe punishment. •

About midnight the hoisting apparatus was patched up, and then a crew of miners without lamps slowly descended into the pit. With breathless interest the women and men watched the car disappear. The moments passed like hours to the watchers. Finally the signal for hoisting was given, and then amid a

most profound silence the car slowly arose from the tomb. The rescuers were pale and nearly overcome from the gas with which the mine was filled. They staggered out of the car, bearing between them the dead body of a minor, whose face was torn and bespattered with blood and dust. For an instant not a word was spoken. Then a wail that drowned the screaming of the autumn storm arose from the watchers, who fought with blind desperation for the body, the identity of which had not been established.

As the night wore on the work of recovering the bodies continued, until the floor of the engine house was strewn with mangled men. The bodies were placed in rows upon the ground, where the rain and snow beat upon them. The victims were shockingly mutilated. Some were so disfigured as to be unrecognizable. All were covered with blood and dust, and many were almost stripped of their clothes. There was nothing left of the man who was brought up from the dreadful hole but a bleeding, pulpy trunk, the head, and the arms and the legs having been blown off.

Many of the searchers fainted at their work. Others, stimulated by brandy and the entreaties of the demoniacal women, continued at their bloody task all through the long night. Some of the victims were not disfigured. They worked in chambers least affected by the shock and perished from asphyxiation.

As fast as the bodies were brought to the surface there was a rush made to identify them, a half dozen women in many cases being engaged at one time in scanning the bleeding face of some unfortunate. When morning came it found the same crowd of

weeping women about the shaft. The air was raw, and the sky was still overcast with clouds.

The work of emptying the pit of its dead was continued all day until 36 corpses had been borne to the surface. There were still about 24 bodies in the lower levels. Some of the victims were found buried beneath immense weights of slate, while others were discovered in groups and in all kinds of positions. Two men who had not been identified were so tightly locked in each other's arms that it was with great difficulty they were torn apart. Their eyes had been blown out by the explosion, and their faces so horribly crushed that the bones were ground into the flesh. With the coming of daylight the bodies which had been identified were borne to the cottages in Frontenac and Pittsburgh, while those remaining unidentified were laid in rows in the village church.

Preparations were made to bury the dead in the little graveyard. Men had been digging graves all day. The bodies not identified were buried side by side. Wagons draped in crape were used as hearses, while the mourners followed on foot. Meantime the work of recovering the rest of the bodies in the mine was prosecuted with the utmost haste, as it was feared the pit would soon become so filled with gas that it would be impossible for men to enter it and return alive. Work was suspended at the rest of the mines, all the men being employed in relieving each other in recovering the bodies in the fatal shaft. Large numbers of countrymen who had learned of the disaster also lent a helping hand in the distressing work, while the farmers' wives and daughters assisted the widows in preparing their dead for burial.



There was a large gang at work at the pit the following night, and many women and children who were still hoping against hope that their loved ones might yet be rescued alive were grouped about the shaft unmindful of the biting wind which was blowing.

#### A SURVIVOR'S DESCRIPTION.

At five o'clock next morning the relief squad working at the foot of the main shaft were astonished to see an apparition approaching them. It was not one of their party and they did not believe that there was a living man in the mine besides the rescuers. Their surprise can therefore be imagined when the mysterious visitor staggered up to them dimly outlined by the uncertain light of their lamps, and greeted them with: "Here, fellows, let me have a light." It was Henry Burns, who had, for thirty-six hours, been counted among the lost. He was quickly taken to the surface, and there told the story of one of the most remarkable escapes from death on record. He was slightly delirious, but there was considerable coherency in his account. He related his story as follows:

"I was working in the first room, first north entry, east side, when there was a roar and a shock. I at first thought I had been asleep, and, in fact, was so bewildered that I did not know whether I was in this world or the next. Managing to make a light with my only remaining match I found that my watch had stopped at five o'clock, but did not know the day or whether it was morning or evening. I was suffering internal agonies from inhaling the after-damp, but was otherwise unhurt and proceeded to

make my way to the foot of the shaft. I do not know how long the journey lasted. After being removed to the open air I became more nervous and delirious and could not be made to understand the full significance of what I had undergone."

Burns could not realize that two nights and a day had passed since he had lost consciousness, and insisted that people were joking when they told him it was Sunday morning. He was well cared for, and was all right in a few days.

#### A MICHIGAN MINE HORROR.

The Calumet branch of the Calumet and Hecla mine, at Calumet, Mich., was smoking like a volcano Nov. 30, 1888. A great fire was raging in the mine, and eight men were in or far beneath the fiery furnace and would never see the light of day again, if indeed they were not long since dead, as was believed. The excitement was intense, and the agony of friends and relatives of the missing were dreadful to witness. To add fuel to the wrought-up condition of men's minds the report had been circulated and was generally believed that the terrible calamity had been deliberately planned and carried out by an incendiary, the motive for whose villainous work no one could imagine. The first discovery of the true state of affairs was made at midnight by an English miner, who was at work with a party of timbermen in the fourteenth level of No. 2 shaft. He detected smoke and called the attention of his companions to it. Their noses were not tuned so acutely and they smelled nothing, but he was positive a fire was burning somewhere in the mine and proposed to in-

investigate. He had not gone 50 feet when he saw a large volume of smoke rolling toward him.

He ran back to where he had left the party, and they at the same moment saw the ominous cloud, and all started for the surface. Two of the party were more acquainted with the Calumet branch of the mine than the others, and these two started up the latter as far as the tenth level.

Then they made their way south to the main engine shaft and rode up to the grand sixth level. Here they crossed to No. 3 shaft, where they saw a sight which appalled them. A roaring conflagration was in progress. The bed plank, the mill timbers, the top, sides and bottom were all on fire. Flames thus confined in the bowels of the earth, roared like a thousand hurricanes. The heat exceeded the powers of human endurance even for the briefest period of time, and the men, blinded, half suffocated and their flesh almost roasting, ran for their lives. But, hardy fellows that they were, they determined as they ran to use every endeavor to quench the flames. One suggested to the other the water pipe, and as quick as a flash of light from the subterranean furnace, they had the valve opened and the hose straightened out. But there was no water there. The hose began to curl up by the intense heat, and if there had been anything less than an ocean of water, it would have helped matters very little.

The man who had minded the valve while the other got the hose in shape, now grabbed him and motioned for him to run back the way they had come. To have spoken would have been like voices amid the roar of a thousand cannons, such was the roar of the

fire. Reaching the men they had left behind them, one piloted the way to shaft No. 5, and then to the surface of the earth. At this hour nothing was known above of the fire. Hundreds of miners were in the mine, all unconscious of the danger which threatened to cost many lives. In that particular portion of the mine where the fire was, over 100 men were at that moment at work.

They were just becoming aware of their danger, and coming to the surface as rapidly as possible, with blanched faces and trembling limbs, as they realized their narrow escape. They rushed for the top in a mad half-frenzied way, each man for himself, in the panic which followed the discovery of the fire.

Out of the burning shaft there poured a pillar of smoke, which seemed to reach to the heavens, and which soon began to settle down over the mine location, concealing from view the terrified miners and others who were now arriving at the scene.

When the men were counted at daylight, it was learned that eight were missing.

These eight were working 1,700 feet deeper in the main engine shaft. The wives of the missing men—or rather their widows—hurried to the mine. Their grief and lamentations were pitiful to witness. As soon as something like order and quiet was restored, inquiry was made as to the origin and extent of the fire. There was no fire in shaft No. 3 at 10 o'clock, for at that hour the shift men passed through that shaft. The theory of incendiarism was gaining ground, and the miners were being worked up to a high pitch. If it should be found to be the work of a fire-bug and he could be reached, there was no doubt of his fate.

He would probably be cast back into the furnace which his work had made. There seems to be no basis for suspecting it to be of incendiary origin, as similar great fires have only recently occurred.

#### PREVIOUS FIRES.

In October, 1884, the first fire in the Calumet and Helca was caused by the carelessness of some miners. Great damage resulted, though the fire was extinguished in a very short time.

In August, 1887, fire caught from an oily waste burning under an air compressor on the sixteenth level. After several days' hard fighting the flames were believed to be under control by the use of carbonic acid gas. Work was resumed, but on the morning of November 23, more than two months later, the flames broke out again on the seventeenth level, and for more than three months that portion of the mine was idle. Then the mine was filled with water, which was entirely pumped out only a few weeks ago. This fire may be due to similar causes, remote from intentional burning. The previous fires did at least \$1,000,000 damage. This fire it was said, would not prevent work at the South Hecla.

#### NOTTINGHAM, SOUTH WILKES BARRE AND ASHLEY EXPLOSIONS.

The frequency of explosions in the Anthracite coal fields, although but little thought of when only one or two or perhaps three lives may be lost, cannot help but cast an appalling gloom over the community surrounding a mine in which a terrible explosion robs a number of families of their bread winners.

And this was the case at Plymouth, Pa., February 1, 1890, when the ill-fated Nottingham shaft lured six men to their fate and crippled seven others on that fatal morning, every one of the killed, and all but one of those injured, being married and the father and entire support of a family.

The men were engaged in timbering two of the lifts of the mine and were in charge of the fire boss. He had been in one of the lifts and gave the men their instructions what to do and left to go to the other lift. He had been gone about ten or fifteen minutes when the explosion occurred. The gas was fired in the first outlet opening, going into the other lift, and, as the men in there had not seen him, it was believed that it was the fire-boss who fired it. On his way from one lift to the other he must have passed through the outlet, and as he was passing through there he encountered a standing body of gas which took fire from his naked light.

The violence of the explosion was terrific, the men were dashed about as though by a cyclone. They knew nothing from the moment the explosion took place. In the upper lift, where the fire was, they were also wrapped in flames and were horribly burned. In the lower lift there was no fire, but the concussion was felt in its full force, blowing down props and timbers, shattering cars that stood on the track like match boxes, and dashing the men about as if they were straws. The rush of air was so violent that on its way up the lower air-shaft down on the flats it stopped the fan at the head of the shaft and blew the engineer through the door of the fan house.

The last body taken out was found about one

o'clock Sunday morning buried under several tons of rock. When one of the dead men was found he was in a kneeling position, as though in the act of praying when the dreadful summons came. That part of the mine where the explosion took place was a total wreck. The Nottingham shaft is the greatest anthracite mine in the world. It had at one time an output of three thousand tons a day, and netted the Lehigh and Wilkes Barre Coal Co. half a million dollars' profit last year.

One of the injured men, who had a marvelous escape, told the following story concerning the explosion: "There was eight of us in the fifth lift standing timbers. I did not know them all, as most of them were strangers. Just before the explosion came I'd called all hands to come up and help me raise a timber, and we were all standing close together when the explosion came. The driver, who was killed, was standing by my side. His mule was twenty or thirty feet away. I'd called him from them to bear a hand. As near as I can tell, the gas was fired down at the outlet. I saw fire down that way, but in a second the shock came. I saw the fire plain enough, but did not know anything more."

"I must have lain there unconscious for maybe an hour and a half; when I came to I did not know where I was at all. I found myself lying in the gutter in the mud and water. I dragged myself out of there on my hands and knees, I could not stand up, I dragged myself off to a dry spot, where I thought I'd be out of the way, and waited there for some time. I did not know what would come next, and hardly expected to get out alive. The air was getting very bad

and I started to drag myself down the gangway when I saw some men coming along, and with their help I got to the foot of the shaft. I don't know who fired the gas. Two of the men who were killed were away from the rest of us a piece. I think they were up in the air-way. I think the gas was fired down near the outlet. The fire-boss was not with us when the explosion came, nor had he been there for some time."

#### SOUTH WILKES BARRE.

The following graphic description is taken from the *New York World* which had a reporter and sketch artist on the ground:

A short while ago there was joy in the homes of certain colliers in Wyoming Valley. Work had been slack for months; purses were low, cupboards were bare, wives' cheeks were pale and thin, children cried with hunger, sickness stole in and sometimes death came, homes were cold and cheerless—the situation was desperate even for men and women accustomed to the dangers and deprivations that are common in colliery districts. All at once the clouds lifted; rays of hope pierced the gloom, and sunshine entered the hearts of several brave little women when their husbands came home one day and told them work was to be had again, and there was once more a prospect of making the hearth comfortable and restoring the roses to the cheeks that had sunk and whitened in the bitter winter struggle against starvation.

Nobody but a collier can know the beautiful heroism that exists in the colliers' homes. Woman's love is always bright and pure and strong, but nowhere



does it shine with the steady brilliancy that characterizes its existence in many a coal miner's cottage. Only a true heroine could stand beside the man of her choice and steady his nerve and uphold his courage as the brave woman of the colliery district does when adversity appears and hunger and all the terrors of destitution crowd in upon the family circle. Small reward is hers for the fortitude with which she faces distress. Little gleams of hope come to her now and then through the clouds, and once in a while there is a brief interval of happiness and a brightening of the vistas down which her eyes are ever strained. Her career is an endless battle, with the odds always against her and those dear to her; but does she give up the fight? Never. Sometimes she may press her hand over her heart to crush out the anguish, and bite her lip to suppress the other pain she feels, but in a moment she casts aside her womanly weakness, dashes a rising tear from her eye, tosses her head in nonchalant defiance of everything and everybody, and is again in the thick of the fight. She does not know what it is to flinch, and never does. She dies fighting, for death is about the only victory this heroic woman achieves.

Of this kind were the women who felt a thrill of joy when work was resumed in the South Wilkes Barre mine, owned by the Lehigh and Wilkes Barre Coal Company, at Wilkes Barre, Pa. They thanked God for his goodness and sent their strong-limbed husbands and sons to their first task with a blessing. The shadows would now recede from their thresholds. All went as well as could be expected with colliers. A week passed and then another week, and life was

brightening for them. That fatal Monday morning while the sky was threatening, the husbands and sons went to their work as usual. With wives' and babies' kisses upon their lips or mothers' prayers following them, the men and boys left their homes.

These people know nothing about danger. Men perish by the dozens in the coal mines, and nothing much is said or thought about them, except by their families and immediate friends. "Poor fellows!" the public says; and there may be a question or two about the circumstances of their death, but that is all. As long as coal must be mined and colliers must work there will be accidents in the black caverns under the earth and colliers will meet all kinds of horrible deaths there. They know this and their wives know it, and their friends, but somehow none of them ever think of the impending doom until the deadly fire-damp or the treacherous side-wall brings disaster, and sorrow sits in the homes of the sacrificed and lost.

That is the way it was with the men who went down 700 feet in No. 3 shaft, Hillman vein, of the South Wilkes Barre mine, at 7 o'clock Monday morning, March 3rd, 1890. Happiness gave way to tears and moans in their homes, Monday night. Eight of the men employed on the Hillman vein that day lost their lives in the mine. And what a frightful fate was theirs! Death did not overtake them suddenly and without warning. It was not the quick quenching of their lives by a cave-in or the swift hurling of their souls into eternity by an explosion. Death came in one of its most terrible shapes.

Nobody knows exactly how it came, and it is prob-

able that nobody ever will know. The story of the catastrophe, so far as it has been possible to obtain particulars, is here given to the readers. It is the same story that was heard by grief-bewildered women, crying children and trembling men at the mouth of No. 3 shaft Monday night. Then hundreds of people familiar with colliery accidents gathered to listen with bated breath to the recital. Nearly one thousand feet below the spot upon which they stood fire was raging in the Hillman mine, filling the gangways and air-courses with suffocating smoke and gas. Eight men were in the mine, either dead or fighting desperately for their lives against the suffocating vapors. They might have perished by both smoke and fire, but they might still be living, waiting in agonizing suspense for succor. Women wrung their hands and grimy-featured men tried vainly to comfort them. Mothers clung to their children and wept as only women can. "Save my husband!" "Save my father!" "Save my son!" were the heart-rending appeals that melted the crowd to tenderest pity.

The shafts and shaft-houses of the South Wilkes Barre Mine are located on Rolling Mill Hill. Pennsylvania trains pass within 100 feet of them. Hundreds of passengers during the week regarded with dread curiosity the two high riggings of timber above the shaft-openings of the Baltimore and Hillman veins. Smoke and steam in gray clouds rise from the shafts and obscure the cages hanging from the wire cables that pass over sheaves at a height of 75 feet, and thence back 200 feet or more to the engine-houses. No. 5 shaft, above the Baltimore vein, lies to the south No. 3 shaft, which gives entrance to

the Hillman vein, is about 1,000 feet north; between the two, runs a trestled railway for small coal cars; higher up on the hill and still in the line between the shafts are blacksmith and carpenter shops and a small plain pine structure, part shed, part office, in which the mine superintendent has a desk. The colliers call it the Company office. It was in and around this little building the crowd gathered after the accident. The fire started in the mine about 4:30 P. M., and all night long friends and relatives of the imprisoned miners stood there in the snow and cold, impatient for a definite declaration concerning the fate of the eight men underground.

Not until 10 o'clock was a plan of rescue formulated and put into execution. Volunteers were plenty, even when the peril was greatest. A hundred men and more stood ready to face the fire and try to make their way into the death-teeming caverns, but the officers of the mine, who had consulted with the Mine Inspector, and thoroughly discussed with cool-headed men the chances of success and failure, were not willing to hazard a further sacrifice of life. The chances were that the men perished within a few minutes after the fire got fairly started, and when the so-called rescuing party went down into the mine it was with very little if any hope of finding more than the bodies of the victims and saving these from the flames. At any rate, they went down and explored the workings as far and as fully as the heat and the stifling atmosphere permitted. Twenty-five or thirty men effected an entrance to the Hillman vein through the Stanton shaft, about a mile from No. 3 on the other side of Rolling Mill Hill, and they pushed their

way through the heat and smoke to a point within a few hundred feet of the raging fire. They were in the mine six hours and found only the tools of the unfortunate miners packed away at the place where they had been working. No news that night for the sorrowing ones. At 9:30 next morning the rescuers went in again, taking their lives in their hands, not knowing at what moment an explosion might occur and add them to the list of the lost. They searched for over three hours and brought back no fresh tidings. It was evident, of course, every time they returned to the surface empty-handed that the first fears concerning the missing men were strengthened. Nobody doubted Tuesday that the eight men were dead.

It was impossible for them to have survived the smoke and gas even if they had escaped the fire. Their families gave up hope as morning broke and simply begged for the bodies of their loved ones, that they might give them descent burial. Now they have abandoned this slight hope. Wives never expect to see their husbands, or to be placed in possession of even a fragment of their remains. "They'll never be found," the colliers say. "They won't get that much of them," said a brother of one of the missing miners, measuring off the first joint of his thumb. "It will be like the Nanticoke affair," remarked another.

The "Nanticoke affair" was a memorable horror. Nanticoke lies across the valley front, Wilkes Barre. You can see its houses shining in the sunlight. There one day three years ago an explosion occurred in the "No 2 Slope" and twenty-five to thirty miners were buried under tons of caving coal. The mine-owners

said it would be dangerous to attempt to take out the bodies, so they walled up that part of the mine and made it the permanent graves of the victims. Doesn't it make you shiver to read such things?

The air of Wilkes Barre seemed to the strangers who were there during the week, to teem with horror. Only three weeks before that eight men were killed by a gas explosion in the Nottingham mine. Its chimneys and the smoke from them, as well as the shaft, are visible from Rolling Mill Hill. Two days before two men were killed in the Plymouth district. Every hour seems to have its calamity. Sorrow must find Wyoming Valley a perfect Paradise. With nearly one hundred collieries and about fifty thousand men employed in them, how hearts at home must tremble for the safety of absent ones with every tick of the clock! The accident of Monday will be forgotten in another week; maybe some other accident will take its place in the public mind.

It is not probable that the bodies of these last victims will ever be recovered. Look at the diagram of the workings of the Hillman vein and then listen again to the story of the disaster. The entrance to the Hillman vein is through No. 3 shaft, which is over seven hundred feet deep. Through the shaft the eight missing men and three others went to work at 7 o'clock on Monday morning. The doomed eight were extending a gangway through the vein in a westerly direction, and were working at a point about three thousand feet from the foot of No. 3 shaft. Near them was a rock plane, connected with the workings of the Stanton colliery on the other side of the hill. Doors built in the rock separated the workings of the

two mines. As the miners pushed forward the gangway they also dug out air-courses, about seven feet high and several feet wide, parallel to the gangway. Natural pillars separate the gangways from the air-courses. The width of these pillars is 17 to 18 feet or it may be less. When a new pillar was formed the space of a foot or more between it and the last pillar was filled with rubbish, so that there are in reality two gangways or continuous openings always behind the workers. An exhaust fan placed above the shaft sucks out the impure air through the air-courses and fresh air rushes down the opening and into the gangway at the rate of many thousand cubic feet per minute. A constant current is kept up in this way so long as the exhaust fan is at work.

Less than one thousand feet behind the eight miners, three tracklayers were at work repairing the rails along which the coal trams drawn by mules travel. The miners and track-layers carried the wire-gauze Davy safety-lamp, the only kind, it is said, used in gaseous mines like the Hillman. At 4 o'clock a driver, who began work in the mine that day, passed out with a car of coal. He had a naked lamp in his cap. In the "rock tunnel," a few hundred feet from the foot of the No. 3 shaft, he stumbled and fell. Numerous leaks of natural gas find their way up through the rocks of the tunnel. One of these "feeders" as they are called, became ignited and the flame communicated to others. The tunnel was pretty heavily timbered and the wood was dry. Soon it took fire. The driver ran forward and told the inside foreman of the mine. The foreman, the driver, and another man went into the tunnel and

tried to whip the fire out with their coats. The flames spread. Eighty thousand cubic feet of air coursed through the tunnel every minute. Seeing the danger grow, the foreman sent the driver back through the fire to notify the miners and track-layers of their peril. The boy, who was tall and strong for his age, ran as fast as he could through the smoke and succeeded in reaching the three track-layers. Then he sat down exhausted. And there they left him sitting. A story was told that he offered his hand to one of the track-layers and asked to be helped back through the mine, but was refused on the same principle that a drowning man's clutch is avoided. The story, however, is most likely not true. He must have eventually returned to the miners at work above the rock plane and informed them of the fire, for neither the boy nor the miners could be found by the rescuers in the gangway or air-courses beyond the fire. The track-layers followed the gangway until the heat and smoke drove them back, when they returned to a point where the cross-cut connects the gangway with an air-course extending in a circuitous way to the Baltimore shaft. They reached the landing of the Baltimore shaft through this air-course, waited fifteen minutes for their comrades, and when they didn't come were hoisted up.

The others could have saved themselves in the same way, but it must have been several minutes after the track-layers' departure that the driver reached the miners, or it may be that he called to them. At any rate it is likely that when they sought to reach the bottom of No. 3 shaft, unsuspecting of the gravity of the situation, for there had been small fires in the



Hillman vein several times before, they pushed ahead too far, were overcome by the smoke and fell helpless in the path of the fire. If they had reached the air-course in time through the cross-cut they would have been as fortunate as the track-layers in escaping.

An attempt was made to put out the fire by using the water appliances in the mine. Several men went down No. 3 shaft and fought the flames until the streams gave out and a cave-in broke the pipes. At 10 o'clock, as was said before, the first rescue was essayed. The General Supt. had charge above ground and stood at the telephone in No. 3 shaft engine house for six hours. Another man was at the telephone in the engine house of the Stanton Mine and a man at a telephone in No. 5 shaft house, where the big exhaust fans upon which everything depended were making 200 revolutions a minute. The Mining Supt. had charge of the brave band that entered the mine. With him were the Mining Engineer, District Superintendent, Mining Inspector and about twenty others. The rescuers went down in the Stanton Shaft, and traveled 3,300 feet through that mine's workings, to the point where the doors in the rock plane already mentioned connected with the Hillman vein. Then they moved on toward the fire. All depended on the exhaust fan. If it stopped smoke would fill the mine, or there might be an explosion, and then the number of the dead would be increased. Men were stationed one hundred feet or more apart in the gangways, so that the first sign of danger would be signaled to the watchers above ground. The rescuers searched the air courses and penetrated

to within a short distance of the fire. Six hours of perilous searching in the heat and smoke revealed nothing. The second search Tuesday morning was equally fruitless. Every part of the mine except that in which the fire was burning was explored, but there was no sign of the men. There was no place else to look. The Baltimore vein is 300 feet below the Hillman, and they couldn't get into that except through No. 5 shaft, and if they ever got to the shaft all they had to do was to touch an electric button and the cage would come down for them. They could have opened the doors leading into the Stanton Mine, which were never locked, and walked five-eighths of a mile to safety. They went to their doom though.

Thirteen streams of water were turned into No. 3 and No. 5 shafts, and in a few weeks or longer the Baltimore and Hillman veins were under water and the fire extinguished. Then the mines were pumped out and if anything is left of the bodies it was yet to be recovered. The Baltimore Mine, 300 feet under the other, was full of water the second week. In the mean time the fire extended, occasional explosions were heard and there is a probability that there will be a vast destruction of property before the flames are subdued. Not a dozen people now visit the scene in a day. A woman with her babe in arms peeps into a shop, has her request for news answered by a shake of the head and goes away. A lost miner's child comes to the shaft for news and gets none to take back to his sorrowing mother. There will be no news for perhaps a month.

It was a sad and ghastly sight that greeted the few who obtained admittance to the little frame tool

house near the head of South Wilkes Barre shaft, Wednesday afternoon, December 31st, 1890. There, placed in coffins and made as nearly like human remains as their shattered and mangled condition would allow, was all that was left of the eight victims of the disaster of last March. For nearly 10 months those bodies had remained 600 feet underground. First half consumed by fire, then crushed under tons of falling timbers, rock and coal and then covered for months by water it is only wonderful that there remained sufficient of these unfortunate men to let their workers know when they reached the spot where they met their death.

Up to midnight Wednesday night only four bodies had been reached. Very slowly the heaped up masses of rock and débris were removed and, as was expected, the remains of all were found close together. As fast as they were uncovered they were muffled in blankets and placed upon stretchers and brought to the surface. Thence they were carried to the tool house where an undertaker and assistants did all that was possible to restore them to some semblance of humanity.

It was utterly impossible to identify any of the remains except by the fragments of clothing still clinging to their mangled forms. There was little but the bones remaining, and even these were partially disintegrated and torn. By means of fragments of clothing, however, recognized by those who had known the dead well, seven of the eight were identified. One was recognized by the wooden leg he wore, though only a small portion of this was left. Another, it was remembered, had worn a coat on which had been

sown, the day before the accident, a white button. The third was identified by fragments of his vest and shoes. The fourth's leather boots proved the means of distinguishing his remains. The fifth had worn leather leggings with iron buckles the day of the disaster. The sixth had on, it was remembered, a pair of shifting shoes instead of the usual heavy boots. The driver boy's gum boots were recognized. This accounted for seven out of eight men, and though the other heap of remains had nothing by which they could be distinguished they were set down as those of the remaining unfortunate.

From the situation in which the remains were found, the fate that overtook the men is made plain. On being acquainted with their danger they started at once to the foot of No. 3 shaft. They advanced as far as the rock tunnel and probably penetrated some distance into the tunnel, but found themselves unable to make farther progress against the smoke and heat. They then turned back and attempted to make their way through the airway back to the foot of No. 5 shaft. They had not gone far in the airway before they were overcome by heat, smoke and gas and dropped there to be half consumed by the advancing fire and buried under piles of roof and caving rib.

#### ENTOMBED ALIVE.

From the *Wilkes Barre Newsdealer's* excellent account we condense the following facts concerning the accident at Ashley, Thursday, May 15, 1890:

A cave-in of unusually large proportions occurred without the slightest warning, at the Jersey

colliery of the Wilkes Barre Coal Company, about 9 o'clock in the morning, imprisoning within the mine 24 to 25 men and boys.

The cave-in occurred in the second and third lifts of the Baltimore vein. As a rule these cave-ins are preceded by signs unmistakable to the miner. The roof cracks, strange noises are heard and pieces of coal chip from the roof and ribs. These premonitions of disaster were not heard, it is believed, except for a moment or two before the fall, when it was too late. The men were all at work in their chambers. When the warning did come, however, a sudden rush was made for safety. Everywhere the men ran toward the foot of the slope. Before the point was reached a terrific rush of air told that a fall had taken place in the workings behind. Every light was extinguished and the men were tossed about like straws. The rush of air ascended the slope like a whirlwind, blowing a vast cloud of dust and débris in the air.

The first fall was succeeded by others of less violence, but all the men succeeded in making their escape except those in the first lift. There had been no cave-in there, so far as known, but all the gangways were blocked by fallen rock.

Immediately the mouth of the slope became the scene of a terrible excitement, as hundreds, men, women and children, flocked to the scene. Immediate efforts were made at rescue, the officials deciding that the best plan would be to dig from the surface into some old breasts which were driven near the surface. A large force of men were set at work. At 3:30 o'clock a hole was driven from the surface into an

old breast and a rescuing party were let down by means of a rope. Slowly and carefully they were let down and groped their way around the mine. It was about 6 o'clock when one of their number came back and reported that three had been found and were alive. The words were electric with hope and passed like lightning through the despairing crowd. Shortly afterward the three were brought out. They were bruised, unconscious and suffering from breathing the foul air.

By this time the members of the exploring party were utterly exhausted. So dense had become the fire-damp that they had been compelled to dispense even with the light of safety lamps, and had been groping around in absolute darkness and among the wreck and débris of the caving mine. The air, too, was almost unbreathable, and the violent exertions in the foul and suffocating atmosphere had utterly exhausted them. It became evident that the efforts of rescue would have to be suspended until the mine could be at least partially ventilated, and efforts to this end were vigorously prosecuted.

While it is quite possible that more of the entombed men might be reached in time to save their lives, it was feared that the majority perished from suffocation.

It was said that the fire-boss caused the explosion. A slight cave had stopped the air current. The fire-boss appeared with a naked light. The miners who were clearing the débris expostulated in vain. Soon after a violent explosion came, but the fire-boss and two others had started out and called for the others to follow. They feared the danger of remaining.

The three got 500 feet away before the explosion came. They lay down flat on their faces to escape the after-damp. The cave occurred in front, blocking the way, and their companions were separated by another fall. This accounts for the finding of these three first.

At 7 o'clock the morning of the 16th the work of rescue was resumed as fast as was deemed safe. In an hour the second cave was bored through and the rescuers rushed into the chamber beyond. The sight there no one can describe. Scattered about in various positions, lying on their faces, on sides, or on their backs, were nineteen bodies. Some were recognizable, but most were not. Several had their clothing partly burned off and the faces and bodies were a charred mass. Many had their blackened hands held up to their faces as if to ward off the deadly gas. No less than half a dozen were lying on their faces, showing how they tried to avoid breathing the deadly after-damp, by which they would have been suffocated, if not already fatally burned. The work of bringing out the bodies was difficult, as the slope was steep and the bodies were found over a mile inside.

At 9 o'clock men appeared bearing a form covered with a blanket on a stretcher. The scene around the mouth of the slope can never be conveyed in words. Women rushed up screaming, tore the coverings off, but the features revealed were blackened and the hair burnt off. The body was removed to an undertaking room. Half an hour later another body came out. At noon twelve bodies lay side by side and were being prepared for burial.

At 8 o'clock in the evening all operations at the

mine were abandoned. There were yet six men in the fatal chamber.

At 8 o'clock the following morning operations were resumed.

The cause of the cave-in is believed to be the excessive amount of coal removed, not sufficient being left to carry the superincumbent rock. The roof was especially dangerous because of its being thirty to sixty feet in thickness, permitting of local settlements. Frequent comment was made on the fact that this accident, like many others of recent occurrence, was due to carelessness on the part of a subordinate mine official, in this case of a fire-boss. Though they are employed because of their cautiousness and experience they have been the very ones to imperil their own lives and the lives of others by acts of marked foolhardiness. Only a short time before two fire-bosses were convicted of criminal carelessness and fined by court \$50 each, and another was awaiting trial, while several others lost their lives with their fellow-workmen.

Saturday, the third day after the Ashley disaster, witnessed the recovery of five more dead bodies from the fatal gangway. The air was found to be very good and the current strong. Down the slope some slight bodies of gas were encountered, but not strong enough to delay the workers. Somewhat past the spot where the last of the bodies taken out Friday were found, the party came upon the remains of a man lying face downward near a breast. He was burned and cut about the head, but not badly. His body was taken to Graham's and then to his home.

One of the men, who it was supposed was crushed



beneath the rock on the way to the main slope where he was running to escape, was found lying near his comrade, his body had been dashed against the side of the gangway and was crushed to a jelly. In life he was a very large man, weighing two hundred pounds, but what was found of him only aggregated about one hundred and fifty. The remains were placed in a rough box and in that way taken to Graham's. It was impossible to wash or dress him, and his limbs and head and pieces of his body were placed in a coffin and a shroud placed over him.

The fifth man taken out was an unknown Polander, who, being so terribly battered as to be unrecognizable, was immediately coffined and buried.

After working some time longer without coming upon any indications of more dead, the party came out and no work has been done since.

One of the most affecting incidents of the catastrophe was the identification of John Scully. He was supposed to be in the mine with the other five men, but when all of them had been recognized and he was not there, his mother's grief was almost heartrending. Finally, some one suggested that perhaps he might have been buried with the five on Friday who were thought to be Polanders.

His mother was taken to the undertaker's establishment and the large box of clothes taken off the dead men was looked over; each shoe and each piece of cloth was carefully examined; near the bottom of the box was found a part of a pair of white duck pants, torn almost to pieces and with one leg gone altogether. "That's John's," cried old Mrs. Scully; "that's my poor boy's." "Then he must have been

buried with the Polanders yesterday," said the outside boss, "and we must dig them all up," and he mounted his horse and galloped away in search of volunteers to re-open the graves.

Sunday was a day of funerals at Ashley. Twelve of the victims of Thursday's disaster were laid to rest in Hanover cemetery. The remains were not all buried at the one time. Some were interred in the morning, some at noon and some in the afternoon.

All day long Sunday there was a steady stream of people wending their way to the scene of the disaster, many people walking the entire distance from Wilkes Barre. The Jersey Central trains carried at least 1,000 people to Ashley during the day.

How it feels to be in a burning coal mine is graphically told in the story of Anthony Train, who was brought out alive from the Jersey mine of the Lehigh and Wilkes Barre Coal Co., at Ashley, Luzerne county, Pa.

"I was at work in my chamber," he said. "John James was with me and Ellis Williams was in the next breast; we were all of us close together all the time. The first notice I got of any trouble was the rush of air. It wasn't very strong and didn't put our lights out, but I knew it was time to get.

"I scrambled through the heading into Ellis Williams' breast. James ran out for the gangway. Ellis and I started out to the gangway together. Just as we were turning out of the chamber there was a great crash and a rush of air that threw us back into the breast, put out every light, and filled the place with dust. 'What is it, Ellis?' I called out as I got on my feet. 'A fall, I guess,' he said. 'I pray God

it's not in the lower split or we'll never get out of here.' '

"We went in the gangway and called, but no one answered. They were all in the gangway by this time. Pretty soon some one lighted a safety lamp and we all gathered about it. There were over twenty of us. Six or eight chambers were working in that split, and there was a gang who had been repairing the track in the gangway.

"John Allen, the assistant mine foreman, had been in charge, and he was there. He said he thought it was a fall of roof, and would go back and see. Three of the men went with him. I stayed back. It was a long time before they came back and we were beginning to feel uneasy. We smelled the gas, too, and noticed that the air current had almost stopped.

"When he came back and told us that there was a big fall down on the road and that we could not get out that way, I felt my heart sink, for I knew we were in a tight place. I didn't have any doubt, nor did the others, that they would dig down to us, for we knew we were mighty near the surface, but what we feared was the air.

"Well, we sat down in the gangway and talked it all over, and Allen said it was no good in trying to get out of the lower road. He wanted us to dig and work a way out through an old cave hole known as the sand pit. Most of the others would not have it, but thought it better to try and find a way out through the lower workings. Finally, Allen said he was going to the sand pit, and Bob Roberts and I said we would go with him. We left the others all

gathered there just as they came together when the shock came.

"We three started off. Roberts had a safety lamp, and it was the only light we carried. We crept along the gangway testing the air all the way, for the ventilation was dead. It took us pretty near an hour, I should judge, to work along the gangway and get into the chamber where the cave-in was. When we got to it, however, we found so much gas there that we dared not go in, even with a safety lamp.

"We talked over what we should do, and suggested getting back along the gangway and climbing up one of the old chambers that pitched right up within a few yards of the surface. Well, we started, and when we got fairly on the gangway we went into several of the chambers and tested the air with the safety lamp and found it pretty good. Finally, we came to the chamber where we were found, and which was the very one into which the opening was driven.

"As we turned into it and began to climb up Roberts lead the way with the lamp. He tried for gas and only found a little near the roof, and we had gone up but a few yards when Allen got ahead. He called out: 'We're past the heading; I guess the air is all right. I will light my lamp,' meaning his naked light. Roberts said: 'Don't do it. You can't tell anything about the air here.' Allen replied: 'I guess it's all right,' and I heard him striking a match. He was then about ten yards ahead of me. I saw the match flare up and Allen take his lamp out of his hat and light it.

"He was straightening himself up when I saw the

gas flash along the roof. I was knocked down, and don't remember anything more."

This story agrees in every particular with the state of things discovered in the mine. The three men—Allen, Train and Roberts—were close together near the bottom of the steep pitching chamber, into which the opening was driven, but after they had been recovered it was found impossible to penetrate to the gangway on account of gas.

The fire-boss died the morning after he was brought out, making twenty lives in all that were lost by his want of thought or ordinary common sense at a critical time.

## CHAPTER XXII.

### ABERSYCHAN AND MORFA, WALES—DISTRESSING SCENES.

THE following extended account of the disastrous explosion at Llanarch pit, Abersychan, Wales, February 6, 1890, is taken from *The Labour Tribune*, of West Bromwich, England:

We inserted in last week's issue a brief paragraph informing our readers that an explosion of a serious character had taken place at Messrs. Partridge, Jones, and Co.'s pit, Abersychan, Monmouthshire. The information reached us after we had already commenced printing the *Tribune*, and we were only able therefore to give the briefest summary of the occurrence.

The latest information, however, appeared to warrant the hope that all or nearly all of the entombed men would be rescued in safety, or with only comparatively slight injuries. While desirous of taking the most hopeful view of the matter, we regarded this information with considerable doubt and misgiving. The memory of the fearful Hartley calamity might well arouse anxiety as to the position of miners imprisoned in a pit, especially after an explosion of so violent a character as the Abersychan catastrophe was known to be. We consequently awaited with considerable anxiety later and fuller intelligence, little anticipating, however, how dreadful would be its import. The hope that the great majority would be safely rescued turned out to be

wholly unwarranted. The Abersychan calamity will rank with the most terrible disasters of the past for its pitiless violence and wholesale destruction of human life. Nearly two hundred lives have been sacrificed. Scores of families have, by one fell and tragic stroke, been plunged into unutterable grief, and hundreds of children are fatherless. In many instances they are brotherless also, for several cases are cited in which fathers, sons, and brothers have all perished. We give below, as fully as our space will permit, details of the sad calamity.

The colliery is one of half a dozen belonging to Messrs. Partridge, Jones and Co., and is situated at the top of a hill not far from Abersychan. Several seams of coal are worked, but the output is chiefly that of the well-known Welsh steam coal. The explosion took place soon after eight o'clock on Thursday morning, when a tremendous report was heard, filling the inhabitants for miles round with consternation and attracting thousands to the pit-shaft. It was seen that the explosion had completely wrecked the woodwork at the top of the pit, and had so blocked the mine as to cut off communication with those below.

Among those imprisoned in the mine was the resident certificated manager, who with about fifty others not far from the shaft had fortunately escaped death, though several of them were injured more or less seriously. About an hour elapsed before the mine was sufficiently freed from debris for the men to be withdrawn, and this was a time of terrible suspense for the hundreds of anxious watchers on the bank. Seven or eight were badly injured, the engineman being severely

burnt, while the hitcher had part of his right leg blown away. The engineman stated that his engine was almost bodily lifted from its masonry and overturned by the force of the explosion. The position of the workings is described as follows: Running from the bottom of the two shafts are three main roads, as nearly as possible taking the form of acute and right angles. The road to the north is an old heading, in which the coal has all been worked out; and the one in the opposite direction, which is named the "Long Slope," was where those men were working who escaped unhurt. The middle road is known as "Cook's Slope," and here the explosion occurred.

The explosion is supposed to have been caused by a huge blower of gas in a stall leading out of one of the cross-headings midway along the slope, which is about 900 yards long. In this shift the majority of the day-shift were engaged. The coal won from it is rich, and is known as the "meadow" vein. It is stated that five men were engaged in one of the stalls driving a hard heading, and that they suddenly came to a fissure out of which gas rushed in a tremendous volume, and that it ignited at the lamps which the men carried, naked lights being used throughout the pit. The bodies of three of these were recovered during the course of the day. The work of the explorers was an arduous and painful one, as not only had they to encounter numerous falls which took place and which checked their progress, but the after-damp was so dense and deadly as to retard the most determined efforts.

Owing to the numerous falls it was three o'clock before the end of Cook's Slope was reached by the



explorers, and here some twenty bodies were found, the men having evidently run to this place for safety, and been overcome by after-damp. Those who worked in the Long Slope appear to have had a narrow escape, and they must have succumbed to the after-damp had they not rushed without a moment's loss of time to the bottom of the pit. The awful force and effects of the explosion were shown as the remains of the poor miners were sent up, and for a temporary mortuary, were placed in the new engine house, where the work of identification proceeded amid tears and sobbing. Many of the bodies were charred beyond recognition, and in a few instances the remains had to be placed in sacks, so terribly had the ill-fated miners been mutilated. Some had lost limbs. Of others only portions of the bodies remained. In the majority of cases the eyes were absent, and in almost every instance there was evidence that the right arm had been raised to protect the face. The brunt of the suffering has fallen upon the village of Abersychan, but Victoria Village and Talywain have also their full list of mourners. The colliers were almost wholly married. A poor little fellow, a boy named Sullivan, employed at one of the doors, was only 14 years of age; and during the afternoon the distorted bodies of several other lads varying in age from 15 to 17 were borne to their homes in the neighborhood.

No time was lost in conveying the dead to their homes on trucks along the colliery rails, and procuring ambulances and medical assistance for those who might be recovered alive.

The government inspector of the mines was at

Ebbw Vale for the purpose of attending an inquest when he received tidings of the disaster, and upon reaching the scene about mid-day, immediately wired to the Home Secretary apprising him of the explosion. In reply, the Home Secretary wired expressing his deep regret, and asking for further information.

Another Inspector of Newport, who was in Bristol on business, in his capacity of inspector of mines, also arrived at Llanerch during the afternoon.

It was in the engine-house, which was strictly guarded by police, that the most heart-rending scenes were to be witnessed. Clusters of sorrowing women gathered round the corpses as they lay side by side, and it was curious to note the means by which they sought to identify the dead. In every case but one the features were practically unrecognizable. But for this unfortunate man, who looked as though he had fallen off into a peaceful slumber, there was no claimant, probably due to the fact that he was a stranger to the works, although he was one of those who escaped from the Glyn Pit at Pontypool, exactly three weeks since. In case of a boy, whose lower part of body was entirely missing every-body but his father and brother seemed to agree as to his identity. After the mournful process had been gone through, newly-made widows would leave the building to be supported by their friends in an hysterical state. At midnight only eight bodies had been unclaimed.

By 4 o'clock ninety bodies had been sent up, including those of a father and two sons, who had only resumed work that day, after the recent accident at the neighboring Glyn Pit. At the mouth during the

day most heart-rending scenes were observed. One poor woman, between most piteous tears, said she had her husband ill in bed and three of her boys were in the pit.

The work of exploration proceeded without intermission throughout Friday, and by Friday night the death-roll totalled up to over 170, as follows: 153 bodies identified, 15 lying at the company's office down the hill, 4 seen partly under heavy falls, but inaccessible, 9 missing; total 181.

The mutilation of some of the recovered bodies was truly terrible. Charles Gwilym, son of John Gwilym, was simply a mutilated mass, and Dr. Verity declared that there was not a bone in the body that had not been broken; the skull was brainless, and the spine was completely shattered; but there was just sufficient of the poor boy's face remaining to enable his father to identify him. Among the bodies not identified is one which came to the bank minus a leg, with one of the thighs frightfully smashed, and the features beyond recognition; another was simply so much broken humanity; another was sent up the shaft with the right arm and left leg missing, but both limbs were found and placed in the succeeding truck; and a fourth was found to have all the ribs broken.

Many of the relatives have found slight consolation in the fact that the deaths must have been instantaneous, as the mass of flame appears to have been irresistible. Among the bodies recovered on Friday were five of one family—a father, three sons, and a son-in-law. In the Ashman family three sons, a son-in-law, and grandson perished. Richard Ashman, the father of the three young men had so far

survived, although he was in a somewhat precarious state from his injuries. How much domestic suffering has been caused by the disaster cannot well be gauged, but imagination has abundant scope in the fact that one bread-winner left a widow and ten children, while the cases of families of six and seven being bereft of their main support are sadly numerous.

Considerable surprise at the terrible nature of the disaster was expressed, as the mine had often been described as a model mine, for the modern character of its appliances, and the general excellence of its arrangements. Although the colliery yields first-class steam coal, the ventilation had been such that naked lights had hitherto been used. The ventilation was provided for by one of the patent Guibal Shiele fans (Walkers' patent) only recently erected, and which at the time of the explosion was in perfect working order, and sending 60,000 cubic feet of air per minute through the pit. The mine had always been regarded as safe and free from dangerous gas.

#### A GRAPHIC AND TOUCHING PERSONAL NARRATIVE.

The most striking personal narrative, perhaps, relating to the explosion is that given by Richard Ashman, head fireman of the district in which the explosion happened. Ashman, who was at first reported to have lost his life in the disaster was severely injured about the face and eyes. One who had visited him and spoken to him says that he found him overwhelmed with the sorrow of his bereavements. On the opposite side of the large room in which he and his wife and daughter were sitting were white sheets covering the remains of his two grown-up sons, his

son-in-law, and a little grandson. Ashman has been fireman of Llanerch since 1873. He stated that on the morning of the disaster he went through every heading and stall in Cooke's slope without discovering the slightest trace of gas. He returned to the surface and reported everything safe. At half-past eight o'clock he descended again, and proceeded to the lamproom. He entered the lampcabin, and, after enjoying a whiff of tobacco, he remembered taking out his knife to cut his bread and cheese. He had no recollection of anything after that until he saw many men before him. He seemed to have been puzzled at the sight of these men, and while in that bewildered condition he heard some one saying, "Here is Ashman." They took hold of him by the arms. He felt very cold, and the men having hold of his arms noticed it, and walked him backwards and forwards. He was certain, he said, that he was alone in the lamp cabin, but the explorers found one of the haulers, engaged at the top of the slope dead in the cabin. He must have darted into the place after the explosion took place, and perished there. "The injuries I have sustained," continued Ashman, "are burns about the neck and hands; but they are not deep, only as if a flash had scorched me. My three sons are lying dead there (pointing to the bodies in the same room), and my grandson, a little boy named Watkin William Williams, and his father, are dead next door. The little lad only began working with my eldest and youngest son last Monday week. I have no theory," he concluded, "as to the cause of the explosion, except the probability of a sudden blower."

At all the churches and chapels in the neighborhood

the pulpits, on Sunday, were draped in black. The ministers' references to the calamity were most affecting. Very few, certainly not more than a dozen, of the Llanerch victims were buried on Sunday, Sunday funerals not being much in favor; but the circumstances of these interments were inexpressibly touching. Crowds accompanied the bodies to the graveyards, and the dirge-like Welsh hymns and the grief of the bereaved and their afflicted friends—intensified at the burial ground by the gaping spaces which had been prepared for the reception of the bodies of other victims, are memories not to be easily effaced. Quite a hundred bodies were interred on Monday. The first part of the funeral procession left Abersychan at 12:30. It was headed by the members of the Abersychan and Pontypool Local Board, the clergy of the district, and ministers of various denominations. Those present included Mr. T. P. Price, M. P., and a representative attendance of colliery officials. The relatives of the deceased followed in large numbers. The largest number of interments took place at Trevethin, Pontnewynydd, and Talywain. From the Abersychan Police Station to the junction with the Leigh Road, a distance of about a mile, the roadway was lined with coffins, placed outside the dwelling-houses. The relatives with their sad burdens, successively fell into the procession. Hymns were sung by the Pontypool and Abersychan Choral Union, and the whole spectacle was most mournful. The dead were interred in Trevethin, Pontnewynydd, and Talywain churchyards. The procession was at one time upwards of a mile in length, but eventually broke off in different directions. In Ebenezer Burying

Ground a man who was witnessing the funerals was so overcome that he fell down dead.

#### LLANERCH COLLIERY.

A correspondent writes: The whole of Monmouthshire as well as South Wales has been thrown into great excitement during the past week, by the terrible explosion at the Llanerch colliery, Abersychan, which occurred on Thursday morning, February 6th, about twenty minutes past eight. All grievances, disputes, and other matters have been entirely thrown into the background by this calamity, and the miners' minds of this vast coalfield have turned as that of one man to the Llanerch colliery, while a general anxiety has been manifested to render any assistance that might be required in rescuing their unfortunate fellow-workmen. The Llanerch colliery is situated on the side of the hill in the narrow vale of Cwmnantddu or about one-and-a-quarter mile from Abersychan. There are about 450 men working in and about the mine. The colliery is divided into three parts, the three-quarter, rock and meadow vein. In this latter range the sad accident occurred. It is stated that in this particular part of the work about 180 men are employed, but through the late explosion at the Glyn colliery, that number has been increased to about 200. On this eventful morning about 360 men and boys descended the Llanerch shaft, each workman going down to his respective working-place. Scarcely had this been done, and it is believed that in many instances the men had not reached their working places, before this ghastly explosion took place.

This quiet vale, known as Cwmnantddu, was soon aroused by the loud report as well as by the large volumes of smoke that ascended through the shaft to a very great height in the air, and the news quickly spread that a sad catastrophe had occurred. Crowds of men, women and children hastened with all possible speed towards the pit to learn the nature of the occurrence. On reaching the pit-top the anxious friends of the miners below learned the nature of the outburst. Messages were sent to the various collieries for assistance in the work of rescuing any who might have been so fortunate as to escape the explosion.

Strong bands of sturdy miners were soon to be seen wending their way thitherward to render any possible help in the explorations. All those who were working in the three-quarter and rock vein were soon brought to bank, while all those who worked in the fatal seam with one exception succumbed to the fatal consequences of the explosion. So far as can be ascertained 175 bodies have already been brought to bank, while we are informed there are five still missing. On Sunday a few of the unfortunate victims were interred at the various cemeteries.

On Monday and Tuesday about 150 funerals took place, the sight being a very touching and imposing one. The funeral procession began at Talywain with some six or eight corpses. But at nearly every turning or crossing a small detachment of mourners were waiting with their coffin ready to fall in with the mournful procession, which had extended to an enormous length by the time Abersychan was reached. Never, we should imagine, will this dreadful occur-



rence pass out of the minds of those whose lot it was to witness such a solemn sight. We feel satisfied that if our employers and the general public had seen the disastrous effect of the Llanerch colliery explosion witnessed on Monday last, the hard words, and in some cases tyrannical actions, to the miners of this country would be a thing of the past.

MORFA, WALES, AND A LIST OF OTHER EXPLOSIONS—  
THE TERRIBLE COLLIERY DISASTER IN GLAMORGAN-  
SHIRE, WALES.

A cable dispatch was published in the *National Labor Tribune*, of Pittsburgh, Pa., briefly announcing the terrific explosion in the Morfa colliery in Glamorganshire, Wales. Later advices were that 300 miners were entombed, but that 200 had been rescued from the workings nearest the main shaft. Most of those taken out were unhurt, but several had received fatal injuries. Heavy falls of rock prevented the explorers from reaching the more remote workings. The choke-damp was spreading, and it was feared that at least 90 lives had been lost. A further fall of débris blocked up the pit. A later estimate makes the number of dead 160. At last accounts the work of recovering bodies was going on slowly.

There has been an unusual number of fatal colliery disasters in Great Britain during the past few months. On September 5 last there was an explosion in the iron-stone pit of the Maurice Wood colliery, in Midlothian, Scotland, by which 50 miners lost their lives, only 14 of the 64 men at work in the pit at the time of the explosion being rescued. On October 16 an explosion

occurred in the Bentrae colliery, in Staffordshire, an English inland county. There were 70 miners in the pit at the time, and only 11 of them were rescued, making the list of killed 59. But the most serious accident of recent occurrences was the explosion in the colliery at Abersychan, Monmouthshire, near the border of Wales, on February 6. There were about 300 men in the mine at the time, and for several hours no communication could be had with them. Over 100 of the imprisoned miners were finally rescued, but 150 lost their lives.

There have also been several serious mine explosions on the Continent recently—in the Rhein Prussen colliery at Homburg-on-the-Rhine, on September 28 last, when 10 lives were lost; in a colliery at Bochun, Prussia, on November 28, when 14 lives were lost, and a colliery near Decize, in the Department of Nièvre, Central France, on February 18, when 43 miners were killed.

#### FIFTEEN EXPLOSIONS IN SIXTEEN YEARS.

During the past sixteen years there have been explosions on the following dates and at the following places in Europe, the approximate number of lives lost being specified in each case: December 6, 1875, Barnsley, 150; December 16, 1875, Mons, 115; February 4, 1876, St. Etienne, 211; October 22, 1877, Blantyre, 200; June 7, 1878; Wigan, 200; September 11, 1878, Abercarne, 270; January 13, 1879, Dinas, 60; January 21, 1880, Leycester, 68; July 15, 1880, Risca Newport, 119; September 8, 1880, Seaham Harbor, 162; December 10, 1880, Penycraig, 90;

February 16, 1882, Trimdon Grange, 70; February 4, 1887, Mons, 150; May 4, 1887, Nanaimo, Vancouver, 160; May 28, 1887, Blantyre, 80. These fifteen disasters cost, on the average, 140 lives apiece.

## CHAPTER XXIII.

**T**HE press reports gave to the world at large this account of the following accident:

### A HERO'S ERROR.

Shortly before noon the people living in the vicinity of the Hill Farm mines were startled by a loud and terrific explosion, June 16th, 1890. It shook the dwellings and made the earth tremble as if some mighty convulsion was in progress. Terror blanched the faces of the miners' families, for they knew that the sound boded disaster to their loved ones.

Their worst fears were speedily realized when it became known to the hundreds of affrighted persons who gathered to learn the news, that an explosion had taken place within the mines. And many hours later, though the full measure of the horror was recognized, the excitement was by no means abated. Thirty-three miners lost their lives, and thus far only two bodies have been recovered.

The Hill Farm mines are situated in Fayette county a short distance from Dunbar, Pa., and are surrounded by low-browed hills, upon which the slope enters. At the foot of these hills are scores of miners' houses.

These little dwellings shook but a moment before their frenzied inmates were rushing out by hundreds and gathering at the mouth of the mine, but ingress was impossible, as smoke in dense volumes was issuing forth.

Fifty-two miners had gone to work that morning, and were in the slope when the explosion occurred. Of these 52, 18 were in the left heading and 33 in the right heading. Those in the left heading got out all right. The retreat of the others was cut off and not one escaped.

At 7 in the morning the gang turned in at the mines, the smaller gang going off to the left, while the larger, some 35 in number, went to the right, and descended some 800 feet from the surface and at least a mile from the opening. These two drifts are connected, but the connection is from the main stem, some half mile from the entrance.

The mine, it seems, had been somewhat troubled with water, and an air shaft had been drilled from the surface to the juncture of the right and left entries, where the water seemed the most abundant. As the miners branched off from this point they knew that an air hole had been drilled there, that had not yet been broken into the mine, but they did not know that the shaft was to be broken into that day.

A miner had been left in the right drift near where that branch joined the main exit, and in the course of his labors broke into the perpendicular shaft.

The moment this was broken into a flood of water gushed out, and the miner and another man standing by yelled out for some one to save the men in the right drift, as the water poured down the hill in a stream and he feared they would drown.

Young David Hays, who had seen the affair, leaped forward at the call, and turned down the left drift in a deluge of water to warn his endangered comrades below. Just as he passed the air shaft that had been

broken into, the rush of waters had changed to the ugly roar of a fluid, which blanched the cheeks of the men who stood behind and toward the light.

The flow of water had changed to a deadly volume of fire-damp, and as young Hays swung by the shaft a flash of blazing light shot through the shaft from end to end, it seemed. The daring youth carried an open burning miner's lamp in his hat, and he had hardly taken a step beyond the roaring shaft when the spark ignited a reservoir of the deadly fluid, fire-damp, that had already accumulated, and he sank a corpse ten feet toward the men whom he had hoped to save, and the men he had doomed. In an instant an unquenchable fire sprang up in the nine-foot vein, just between the main entrance and on the right drift, forever shutting the 32 imprisoned men therein.

Poor old David Hays, the father of the mistaken hero, driven mad by the fate of his son, dashed into the sulphurous smoke and strangling fire-damp, only to fall blindly by the side of his son, and to be drawn out an hour later with another miner, both recognized only by their wives.

The fire, fanned by air, from the main drift and from the fatal shaft itself, soon sprang into an awful conflagration. A hauler, who was driving a mine car near the place at the time, says the explosion seemed nothing, but the blinding, strangling smoke and gas followed him like a fiend to the very door of the slope, and poured out after him to ascend to the heavens and wave a black flag of woe and distress over this hitherto prosperous mining region.

The miners from the left drift escaped, blackened and burned, but safe, and they tell a fearful story of

the sight just beyond the blazing coal on the right, where half imagination and half fact showed them a score of terrible faces walled in by a flame no man could pass and live.

Willing hands and hearts were not wanting on the outside, and the clerk of the mines, with the mine inspector himself, headed a party of 100 who entered the main entry, and, after groping on for a quarter mile at least, were driven back again and again by the deadly gas, only to recover breath for a moment and again plunge in, to find, at last, that the right drift was impenetrable, and no man living could pass in, in the hope of even seeing a score of men dead beyond.

They finally came upon two bodies, and they were brought to the opening of the mine. When the two blackened corpses, those of Hays, the elder, and the miner who was with him, were drawn into daylight, a moan went up from a few of the hundreds about the pit, but their anguish was as nothing to the silent watch kept by the wives, children and sweethearts of the 30 more still in the mine.

The volunteer corps worked steadily from noon until late at night, with no result, but the two dead above mentioned and each trip but brought a deeper despair to those above and showed there was no hope, and no one alive below. The corps of 100 was changed again and again as each exhausted squad staggered to the outer air, but all in vain. One man who had entered several times, finally from sheer exhaustion, fell into an open pit, and was drawn out fatally injured.

The sullen lowering night added rain to waste and

woe, to an anguish almost unbearable to the wives, children, sisters and sweethearts of the men, whose doom was all the more awful because unknown. One could well enough stand the whimpering of the children, who missed the father's friendly pat, or the desolate wail of the stripling, but the sullen stony glare of the dark browed men, standing about, and the drawn white face of a wife, or a sister, or a mother were too pitiful to comfort and too dignified to pity.

At midnight the smoke and gas from the right entry poured up the main exit in an unbroken volume, and after trials almost beyond human endurance, the party gave up all hopes of ever recovering their comrades' dead bodies from the entrance, and turned their attention to the Ferguson mine, one and one-half miles away. From that time they were striving to penetrate from that mine, but the flames and smoke balked their every effort.

The universal and unwilling verdict from the old miners about the shaft was that the entombed men had either been killed outright by the explosion or later by suffocation. The latter seems to be the more probable, at least in part, as sounds were heard from the entombed men as late as 1 o'clock in the afternoon. These grew weaker and weaker, however, and half an hour later even the most hopeful of the willing rescuers could hear nothing but his own heart throb.

The men say that had they known the shaft was to be broken into they would never have entered the mine, as either water or gas would surely follow, since in these regions gas always comes from the



upper shale. The owners, however, and, in fact, some of the men themselves, say it was an accident pure and simple, that could neither be avoided nor atoned for.

The mines are owned by the Dunbar Furnace Company, and the owners are all Eastern men. Charles Parish, of Wilkes Barre, is president, and F. A. Hill, of Dunbar, is superintendent. The latter has been here four months, and seemed perfectly conversant with the mines, though the men say fire-damp has been more than plentiful in the region lately.

The mine inspector had made a thorough tour of the mine but two weeks before. Some of the men in certain portions invariably burned safety lamps, but in other parts, as in the case of young Hays, the lamps were worn uncovered, as no danger was apprehended there. No definite reason or cause could be given for the disaster.

The disaster was the worse ever known in the Connellsville region up to that time, the nearest approach being the Leisenring explosion seven years before, when 23 men were killed. The rescuers were at work, and continued throughout the night. A large crowd surrounded the mouth of the pit, but all hopes of reaching the entombed men before morning were abandoned. The damage to the mine could not be estimated, but the owners feared that the slope was lost. The Hill Farm mines were about the most valuable in that section of the region.

A representative of the *Pittsburgh Dispatch*, who was with the rescuing party, writes as follows:

Those who live and work in God's pure air and light have no idea of what is being undergone at this

moment by the faithful rescuing party in the depths of the Mahoning mines. There is not a word of complaint heard, however, from the men, and the only impatience is that shown at the progress, all too slow, to the busy workers, and how slow then must it be to the men waiting on the other side, should they be living and conscious. A favored few were allowed to take a trip down the Mahoning mine this afternoon, and the strange experience will not soon be forgotten by those who had never seen such a thing before.

A Knight of Labor organizer in this district took the party in charge. He was sent here by the organization to look after the men, and do all he could to push the work on. Just inside the mouth of the pit the party was called to a stand, and each man asked to give his name and residence to the brawny sentinel at the door.

"What for?" was the hurried question.

"It's only a record," (quietly). "Ye may never come out again."

"Is it as bad as that?"

"It's worse," (gloomily). "Everything is worse here now. Nothing seems to get better. You are on a dangerous trip, but it's none of my affair," and the guard at the door stood aside to allow the party to enter. Just inside the mouth the guide gave a Clanny safety lamp to each, after he had carefully tested them. The lamp is made with a wire-gauze chimney instead of glass. Its merit is that the mine damp may ignite inside the screen, but the meshes are too fine to allow the flame to extend to the outer air. A faint blue flame, the men say, can be seen burning in-

side the lamp when gas is encountered, but unless defective, it remains there.

With these slender barriers between them and an awful death the party then began the march downward. To eyes unaccustomed to the darkness the sudden transition blotted out everything but the faint spark from the lamps.

"Step in here," said the guide, "and get your sight. I mean by that," he continued, in explanation, "if you stand in this perfectly dark chamber for a few minutes your eyes will get accustomed to the dark and you will be able to see, not much, but enough."

"Will it bring your sight quicker if you close your eyes?"

"Yes, that will help. Now look at that wall over there, and when you all can see it plainly we will start."

For full ten minutes the party stared in the direction he pointed. At first nothing but inky darkness lay in that direction, but little by little there was molded out of the darkness strange patches of something. These grew more and more defined, and finally the party with eyes round and wide could make out the lump patches to be coal. Feeling comparatively safer, with eyesight at least, the party again turned downward, while the guide told of queer experiences he had gone through in regard to sight. One story was particularly striking.

In driving mules down into the deep mines, one eye of the animal is handled for daylight purposes, while the other is kept for night. This is done by carefully blindfolding the left eye when there is occasion to

bring the animal on top of ground, and as a result the animal goes placidly along, seeing perfectly well underground with one eye and able to take care of itself in daylight with the other. He told also of when he was driving a mule down in the Scotdale mines, he had given to him a mule that the other men did not seem to manage. He drove him for awhile, but noticed the poor animal invariably staggered from side to side in an uncertain way, far different from the straight walk of one that had its underground sight. He carefully bandaged the one eye when daylight was reached, but there was no improvement. The mule positively could not see in the mine.

The driver happened to change the bandage to the other eye once, when it was found that the animal could not see at all. He was and always had been totally blind in one eye. Thereafter the mule was kept underground all the time, and no further trouble was experienced.

The party, after getting its mine sight, started down again. The slope is very steep, being 18 feet in a hundred, and as they went lower and lower the current of fresh air grew thinner, though it was not positively bad until the very end was reached. Three thousand five hundred feet from the mouth the party came upon a strange scene. The steadily descending slope suddenly branched to the right and made a slight rise. Several miners were at this juncture resting as best they could against the walls and munching at a lunch while waiting for their turn at the pick. Three hundred feet from there, and up to the left, a canvas curtain, practically air-tight, had been stretched, and beyond this could be heard the

steady drive of the pick. A little farther to the left some 50 feet of canvas had been put up. This was the "brattice," to turn all the air possible toward the men working. Each man was allowed to step inside the canvas door for a moment, just one moment, in order to see the actual work of rescue. Heaven's "free air" was far too precious here to have it wasted on any there for curiosity or sympathy. They wanted muscle and willing hands.

Once inside the canvas door the stranger paused, disappointed. There can be no romance, no poetry, no martyr here in this dirty hole. The nine-foot entrance has suddenly narrowed to but two or three, and at the end, half crouching, half lying, a single man swings his pick against the rocky barrier. The heat is intense, the air so thin as to strangle a stranger, but the short, stout miner with the pick is working like a tiger, driving his pick up to the middle at every stroke, and tearing aside coal, wreck and rock as easily as if he were playing with a snowbank.

"They can stand that work ten minutes or maybe a little longer," whispered the guard at the door, "then, even the best of them must lie down outside to get back breath and strength."

Then the door opened again, and the visitors stepped, respectively, to aside, while another man entered and silently took the pick from the worker's hands, then tore at the earth and stones like a mad man. So the relief goes on, and so the relief will go on, until the men are found. There is always a ready hand to take up the work when one weary man lets it fall. A giant mule is driven hastily up the slope dragging the queer-shaped cars, and is rapidly driven

away again with the load, as the one thing valuable here is air, and nothing but the single worker must stay at the extreme end for any length of time.

The 17 men necessary to remove the rubbish and to relieve at the digging are silent all. There is no time or inclination to talk, and it is work, and work only, that is wanted here.

"For men must work and women weep, though the harbor bar be moaning." As I write, I am painfully reminded of the above lines from Kingsley's beautiful poem of the "Three Fishers." The men who go down in shifts, and the miners entombed alive, meet a horrible fate, but the awful suspense of the fisherman's wife during a storm is the same agony that the women were enduring at Hill Farm mine. The miners had not yet been rescued, dead or alive.

Of the hundreds who have gone through all phases of hope to despair, there was one whose steadfast faith had been more than encouraging, even when the affair looked the blackest. David Davis, an old Welsh miner, was at one time entombed nine days in a mine in Cornwall, and his wife never gave up. She remembered that day, and should David Davis have ever emerged from the mines he would find a woman calmly waiting at the door to welcome him. She patiently repeated to all visitors that Davy would come, and no amount of reasoning or argument would make her believe that her husband was not alive, and hoping for his final return to her as placidly as she awaited his coming.

The same old scenes were enacted about the pit mouth of the Mahoning mine. The beautiful girl, waiting longingly for a glimpse of her imprisoned lov-

er still, kept up her faithful vigil. Another man sat beside her on the seat under the bushes and talked with her while she tried to eat her simple lunch. Three anxious mothers with their little flocks playing at their feet leaned against the dividing fence and eagerly listened for any word of hope. The same crowd occupied their places on the high bank of dirt overlooking the mine, where they watched the pit-mouth and waited to spread the joyful news as soon as rescue was made.

It soon became evident to those who set out to cut through from the Ferguson mine that it would be of no benefit to the men inside, or give the rescuers any chance to reach them from there, as they would have to work in the Hill Farm mine to reach them, which could not be done. It was then determined to cut through from the Mahoning mine on the other side. The maps of the two mines were examined and it was thought that a road could be cut between them in six or eight days. But the old rooms in the Mahoning mine having fallen in, the task took longer than was anticipated, and it was not until Friday night, the 27th, that the place they expected to cut through was reached. But also, "the best laid plans of men and mice gang aft aglee," after driving thirty or forty feet past where they should have reached the chamber which would have led them to the doomed men, it was found that there was an error in the map of the Hill Farm mine, and they were all astray. This discouraged the most sanguine, and hope of ever finding the men alive was given up. And, as if to show the folly of expecting to find them alive as late as that, the vast fire that had been ranging in the mine

burst out of the slope of the Hill Farm mine. A description of it by a witness is given.

About dusk great volumes of black smoke began to pour out of the Hill Farm mine. Higher and higher rose the boiling clouds, tumbling over each other in their rapid upward flight, and forming a massive pinnacle, that stood out in bold relief against the darkened sky. Away up at the top, wafted by the winds, the blackened vapor and gases rolled to the left into a graceful course, making a mighty bow, that, unlike the bow of promise, filled men with terror and fearful foreboding. The miners about the Mahoning pit mouth looked at each other and wondered what was coming next.

Suddenly, without warning, a flash of light reddened the black mass and in another instant a rushing hell of flame shot forth from the burning pit. At last the awful fire had reached the surface, and for miles around the distant hills were quickly brought to view. Great crowds soon flocked to the bright scene, and broke down the wire fence that encircled the mine and helped the police to keep back the people. Think of an enormous canyon 2,000 feet long filled with devouring flames and concentrated fire, and you will get some idea of what this conflagration was like. Crawling on my hands and knees I got directly in front of the pit mouth and looked down into the throat of the monster. The tanks near by were opened and a heavy stream of water ran down, but it was licked up at the entrance as easily as the sun dissipates a light fog in the early morning. Coal and timber in abundance were feeding the flames, and the thought of 32 helpless men imprisoned behind such a



fiery furnace made the flesh creep. The heat was simply terrific. Alas, for those who have been hoping in vain for the recovery of loved ones alive.

The sight of this crackling, warning fire made hearts sink. Old miners stood by dumb with fear and awed by the terrible force of the flames. "I have seen many mine fires," said one old miner, "but I never saw such a terrible conflagration. Before it burst out I could see it leaping and bounding along the slope, eating up everything in its track. If it was dangerous to pierce through from the Mahoning mine, this fire makes it 10,000 times more hazardous. The suction power of this fire cannot be estimated. I think this ought to convince everybody that it was simply impossible to cross over to the men from the Ferguson side, and how thankful the men ought to be that they didn't cut through as some of them wanted to; true this fire could have been put out early after the disaster by closing the mine, but the owners have given the imprisoned men the benefit of the doubt. There is no doubt in my mind that the mine is filled with smoke, but I think it can be easily blown out."

The same writer, on June 30th, said: The miners had been working hard all day. They believed, although the inspectors and bosses did not, that the men were alive, and as they went in on each shift they encouraged one another to do their utmost. Most of the miners working were Welshmen, and they are great believers in the longevity of the men below the surface. The situation at the Hill Farm mine was just about what it had been for several nights. The only difference was that the workers were ahead of the place where they had cut the night before.

At 11 o'clock, the workers said that the drill ought to go into a chamber of the Farm Hill mine within three hours.

The families of the men who were buried below gave up all hope. The writer was talking to a gentleman of 60 years, whose son is in the mine. He said, "I don't believe any of the boys are living. It can't be that they have lasted until this time. If they could live on this food this long, they can live as long as I can. I have not eaten a bite since ten days ago and I have tried to sleep, but can't. I can't eat at the table. I look at Tommy's place every time I sit down and have to get up. The food sticks in my mouth."

At eight o'clock in the evening there were little groups of people standing on the hillside looking down toward the mine.

There were four women. Two were clad in black, one was weeping. At times she cleared her eyes, put her hand upon her companion's shoulder and looked toward the mine. Then she began crying again and wept upon her companion's arm. Her husband was below. She did not hope to ever see him. Like nearly all the other women she had lost hope, but desired to see his body. There were people who believed that the men might still be alive, but such as believe that were those who suffered the most.

#### THE BRAVE INSPECTORS.

When the story of the Dunbar disaster is all written, if it ever will be, too much praise cannot be given to the six faithful inspectors who came from all the bituminous districts, and risked their lives by go-

ing down into the cut before the hourly expected break. Much credit must be given to Inspectors Keighley, Evans and King. They have worked early and late.

They are keeping up by sheer will power, and not one of them had over two hours' sleep a day from the time the work began.

After 15½ days had elapsed, the work of rescue at Dunbar was abandoned. The rescuing party entered the mine and found it impossible to reach the men, who undoubtedly perished the first day of the fire.

It was a heroic exploration which was made by three brave men. It was the first and last search for the missing miners. The party rescuers descended into the Mahoning mine about 3 o'clock. About half an hour before going, the Inspectors held a meeting and discussed the wisdom of going into the mine at all. There were some who thought the task not only a vain one, but dangerous to the explorers. It was decided, however, to make one more effort to discover the mystery of those underground chambers.

There were 16 men in the party which went down. Inspector Keighley led the way, and six of the men crawled through the long and cramped hole leading from one mine to another. This cut is 615 feet long and was itself a place of great danger. It was for a large part of the way, cut through loose earth, and was caving in slowly, although timbered up. Three of the party went only a few yards into the Hill Farm mine. The other three men then left them and pierced 100 feet further into the darkness. They carried with them three clothes lines, which they tied one to the other, making a length of 180 feet.

They had also a bottle of camphor and cloths which they saturated and placed over their nostrils.

The chamber into which they entered was an old one. It had not been used for three years. In many places the roof had fallen in, and over these piles of slate and coal the men had to crawl. In one place the fall had extended 20 feet into the roof and the climb up one side and down the other was at an angle of about  $40^{\circ}$ . The opening in some places was only 2 feet high. Through such places they worked their way crawling one behind the other. The smoke had all been driven out to the south and the air was pure. Each man carried a safety lamp. In some places the rooms were found to be flooded to a depth of three feet. Through this the brave fellows waded unmindful of the possibility of holes in the floor. At last the rope came to an end. They had gone 180 feet and had found nothing. "What shall we do now?" one of them asked. "Let us go ahead," responded Mr. Keighley, and ahead they went; the clothes lines was tied to a post and the explorers plunged into hidden places from out which they had no idea whether or not they would ever come. They cut in through across to the heading furthest to the right and there in a few minutes they came to the short side room where some of the men had been working when the fire occurred two weeks before.

The explorer's cannot themselves describe their feelings as they came upon two dinner pails. One tin bucket was closed. When the lid was lifted the food was found inside undisturbed. Beside the bucket was a blue jean blouse. The other bucket was about three feet away, sitting right on the floor of the

mine. The lid was off and laid at one side. The coffee cup had been lifted out and sat beside the bucket. The napkin had been removed. Just about two feet from the bucket, and between it and a blouse, was a piece of bread with one bite taken out of it. At the time of the discovery the searchers did not know who were the owners of these two buckets. The owners were evidently just beginning to eat dinner when some other miner ran into the room and told them the mine was on fire. They dropped everything and ran toward the main slope. Some of the men evidently seized their dinner buckets and carried them with them. The food found in these buckets was in good condition. The searchers entered nine chambers before they were compelled to yield. About 300 feet beyond the place where they found the buckets they came upon a dead mule hitched to a coal car. As the three men approached the mule they smelled nothing offensive. The air was drawing away from them. They stopped and looked a moment at the animal. It had been suffocated. It was swollen and bursted. Then they passed it, and as they did so they started to run. The smell was horrible. They clapped their camphor cloths over their noses and hurried on. This smell was almost the death of them. They were so anxious to escape from it that they rushed into danger.

It was not until their lamps grew so faint that they gave no light that one of the party awoke to the fact that he was in danger. He stopped and called out, "Boys, we have gone too far." Then all stopped. The lamps were almost out. There was not enough oxygen in the atmosphere to make a healthy blaze.

The moment they discovered they were in bad air, they began to feel it physically. Keighley jerked a piece of chalk from his pocket and marked on the timber wall. Then all turned and hurried back. The heat at this point was intense, although no fire could be seen. It was a difficult journey back. Half an hour was lost by one of them going astray. Finally at 5:30 the three tired men crawled into the Mahoning mine and made their report.

Then a meeting was held in the manway, which must have been a solemn affair. Five men who were above were telephoned for and went down.

Inspector Keighley reported what they had done. They had gone, he said, about 1,800 feet into the Hill Farm mine and had made their way within about 300 feet of the main entry. Further than this they could not go.

Mr. Keighley gave it as his opinion that nobody could go any further until the fire was out.

The men, he believed, were in the fire and probably burned. He sadly gave his opinion that it was useless to try any more to reach the bodies.

In this he was supported by the men who were with him in the exploration. It was therefore decided, with but one dissenting voice, that the search should be suspended while the mine was on fire. Thus the thing was ended. How long will the mine burn? There is one in Wales which has been afire 40 years. The Beeson Mine, near Uniontown, has been burning about 35 years. All the entrances to the Hill Farm Mine were bricked up, the inspectors thinking that the fire may be destroyed by lack of air. There was great sadness over the decision. The citizens believed,

however, that the inspectors had done the right thing. The general opinion among miners was that the best possible was done. They all held that the men perished shortly after the flash of gas. They all started to run for the slope, and were caught in the smoke and flame and perished instantly. The work showed the humanity of working through the Mahoning mine instead of the Ferguson.

It was stated that the men were alive but a few minutes after the explosion. This was not known at the time the work of rescue began. It meant instant death to any man who was alive. The effort to rescue was a monument to the science of the engineers and Mine Inspectors.

## AT DUNBAR.

GEORGE H. THURSTON.

These are thoughts that came to me,  
In my quiet room at eve—  
Thoughts of miners starved or dead,  
Thoughts of wives that sob and grieve,  
Thoughts of group of stalwart men  
'Neath a lantern's scanty light,  
'Neath a smithy's sooty roof,  
At the mirk and noon of night:

Is it wrong to man or State,  
That they there deliberate?  
Nay, 'tis deeds the best of earth  
To their words give blessed birth;  
For, said Christ the Son of God,  
When this sinful earth He trod,  
Greater love hath no man than  
He who gives his life for man.  
Where the cannon sweep the plain,  
Where the hot blood fires the brain,

'Mid the rush and cheers of men,  
Life is ever counted naught,  
So the valiant deed is wrought.  
Grander was their courage who,  
With no selfish end in view,  
In the silence of the mine,  
Braved the fire damp's deadly breath;  
Only Duty's voice to cheer  
Where each pick stroke might bring death!

Tears for weeping orphans, mothers;  
Tears for stricken child and wives,  
But for noble miners cheers  
Taking in their hands their lives;  
Comrades in the burning mine,  
In the face of sudden death,  
Seeking, in a love divine.

Ah, it was a brave endeavor,  
Worthy praise of tongue or pen;  
Ah, it was a great unfolding  
Of the inner heart of men!  
For, as through the clouds of night  
Sudden gleams a radiant star,  
Through the clouds of greed and Self  
Comes the story of Dunbar—  
Story of devotion shown  
Night by night, and day by day,  
Hewing through the slate and stone,  
Toiling through the coal and clay,  
Thinking, with each sturdy stroke,  
'Mid the choke damp, fire and smoke,  
But of child and widows' moan,  
But of comrades, starved or dead,  
But of children wanting bread,  
But of reaching prisoned brothers;  
Not of Self, but still of others!  
Telling in the soul of man—  
Spite the fight for gold and bread,  
Till the better nature swoons,



Love of man for man seems dead ;  
Spite the deluge wild of Self—  
That man's higher nature lives ;  
Of a broader life to be,  
Cheering hope and promise gives ;  
Telling, though they rescued not,  
In the noble lesson taught,  
That the labor was not wasted,  
Brave endeavor all for naught !

O, for weeping orphans made  
Where the deadly death damps are !  
O, for hearts that, breaking, mourn  
Dear ones dead in sad Dunbar !  
But to self-devotion hail !  
Given for their neighbor's needs.  
Hail ! the blossom fair of Hope  
Springing from those noble deeds.  
O, for wrongs that fill the earth  
In the carnivals of sin ;  
O, for mountains huge of Self  
That our nobler selves pen in.  
Hail the years that coming are  
When those nobler lives will be ;  
When the love of man for man  
Sets our better natures free !

We can see their breaking dawn  
Thro' gh the night of Self steal in,  
In the sweeter Charity  
For a brother's fault or sin ;  
In the fuller comprehension  
Of the duties wealth attend,  
In the noble work of woman  
In the noble deeds of men !  
Giving wealth with gen'rous hand  
Where the suffering need relief,  
When distress pervades the land ;  
In the broadening Christian creeds.

Ah! for men who, wrapped in greed,  
Care not for their neighbor's need—  
Have no broader horizon  
Than the muck-hill they rake on;  
Nor see in tale of Dunbar's mine  
Words of Christ personified!  
Self for man was crucified  
In the creed of love divine.

Be their names with chaplets hung  
Who that lesson bravely taught!  
Be their names with praises sung  
Who that brave endeavor wrought!

#### A HORROR WITHOUT PARALLEL.

"More volunteers to go down the shaft," yelled a grimy-faced man at the shaft entrance to the Mammoth No. 1 mine, as he flashed his torch in the countenances of the men who crowded around.

There was no lack of responses, for down in the bowels of the earth lay the bodies of over a hundred of their comrades.

At nine o'clock Tuesday morning, January 27th, 1891, occurred the worst disaster ever known in a bituminous coal mine in the State of Pennsylvania, if, indeed, it was ever equaled in this country. Mammoth was the scene of the catastrophe.

At this place on the Sewickley branch of the Southwestern division of the Pennsylvania Railroad are located the Mammoth mines and coke works of H. C. Frick & Co. There are two mines, No. 1 and No. 2. The former is entered by a shaft 107 feet deep, and the latter by a slope. The two mines are connected by interior workings.

Gas, or fire damp, the bane of a coal miner's life,

was remarkable here for its absence. No trace of it had ever been found, and for that reason the common coal digger's lamp was used.

Early in the morning the fire boss had made his tour of the mines, in accordance with the laws of the State, and had found everything apparently in the best of order.

The men were ordered to work—110 of them, and went down the pit shaft, where in so short a time they were to meet their death, with laugh and with jests.

A few minutes after 9 o'clock there was a dull rumbling sound like the dim mutterings of thunder behind distant hills, a cloud of smoke and dust shot up the shaft of Mammoth No. 1, 50 feet above the tall derrick and slowly settled down.

For a few moments there was silence, and then the workers from Mammoth No. 2 began pouring out of the slope and rushing toward the shaft of No. 1. Many of these men had been bruised and shaken up by the force of an explosion, but none were injured seriously.

The superintendent called for volunteers, and at once 20 men stepped forward and were lowered down the shaft in the cage, which had not been injured by the explosion. When the party reached the bottom of the shaft, one glance, and the odor of the deadly fire damp was enough. Death lurked in these underground corridors. He had seized all he found there and was clamoring for more victims.

The party returned to the top of the shaft and the ventilating fan, one of the most powerful in use at any coal mine, was at once started up at its utmost speed.

Again the superintendent and his party descended. The force of the explosion was visible on every hand. The coal wagons used in the mines were splintered to pieces in some cases. In other places several of them had been jammed together in a solid mass. Mules were seen which had been driven against the ribs of the workings with such force that their bodies had utterly lost all semblance to the living reality. Here and there lay human bodies.

Some were mutilated and all were blackened by the deadly flame which had swept through the works. The bodies of those who had been killed by the effects of the explosion lay in distorted attitudes, while others, who had apparently escaped the flame and concussion, but had rushed from the rooms in which they were working, into the flats, had succumbed to the stealthy, suffocating fire-damp.

There they were, some at full length with heads resting upon their hand as if asleep, others face downward with their heads in pools of water. One man had climbed into a wagon which had not been wrecked, and there, with his dinner bucket by his side, had laid down as if to dream of pleasant things.

Enough had been seen for experienced miners to know that all the men in flats Nos. 2, 3 and 4 of the No. 1 Mammoth mine had perished.

The General Manager at once notified the managers of the other coal mines belonging to H. C. Frick & Co., and sent messengers to Mt. Pleasant, Greensburg, Scottdale and surrounding towns for physicians. Several doctors at once responded and while they could render no aid to the dead, took charge of the arrangement of the bodies, attended the rescuers

who were overcome while working in the still foul mine, and helped in many instances to distinguish traces of humanity in the heaps of débris which the less-learned miners were passing unheeded. The physicians took their turns below nothing daunted by the unaccustomed danger and worked with a vim.

When General Manager Lynch came in from Scottdale he brought with him the Superintendent of H. C. Frick & Co.'s Standard Works, the General Manager of the Southwest Coal and Coke Company, the Superintendent of the Hecla Coke Company, the General Manager of the United Coal and Coke Company, and all the best men at their several works. Undertakers at Mt. Pleasant, Scottdale and Greensburg were notified, and 50 coffins were brought from Pittsburgh, with a similar consignment to follow.

When the news of the explosion came to the miners' families in the little houses dotted on the hillsides, mothers, wives, sisters, daughters and sweethearts rushed to the shaft. The story was soon told: "All the men in flats Nos. 2, 3 and 4 are dead. As fast as we get their bodies out and they are identified and fixed for burial we will send them home."

There was no loud emotion displayed. A dry sob could be heard here and there, and many a woman walked away with a bowed head, returning to her desolate home to await the arrival of her dead. At least there was no suspense. The women bore the news well.

As soon as the mine experts had arrived, a systematic plan for the recovery of the bodies was agreed upon. The first party went down the shaft to the Forrest flat No. 4. Three hundred feet from the shaft

they found a wall of earth, coal wagon and human bodies which blocked further progress. This was tunneled through, and the party turned off at right angles along a haulage road. At the extremity of this was found a man with his head completely blown from his body.

At this point several of the party were overcome by the after-damp, and had to be carried back to purer air. The entrance to each room opening into three flats was hastily closed with brattices to give a clearer sweep to the air being forced into the mine, and a few of them were explored.

In the haulage road of No. 4 flat, 35 bodies were found, and 15 were counted in one heap in flat No. 2. One man had both legs blown off. The body of a boy was found with a stick driven through his arm. The fire-boss was torn to pieces, and a rubber boot was found still encasing the foot and leg of a miner. The big pumps, which lift tons of water out at a time, were broken and scattered as if they had been made of straw.

It was but a few minutes after the explosion when the first body reached the surface. It was still warm, but life was utterly extinct. The next man brought up appeared to be still breathing, but the utmost exertions of the physicians failed to resuscitate the victim.

Then commenced the dismal procession of the dead, to which rank after rank was added as the cage came to the surface. All day long it moved across the open lot in front of the shaft, and as the daylight faded and the darkness of night settled down upon the frowning hills the line of stretchers, almost un-

broken, kept passing from the shaft to the building which had been hastily utilized as a morgue.

The morgue, a roomy two-story frame structure, was formerly used as a residence by a former superintendent. It is a roomy building, and the bodies were taken into what had formerly been the sitting room. Here the undertakers, with sleeves rolled up and swathed in aprons, endeavored to bring back to the maimed, scorched and blackened bodies some semblance of their former appearance.

Then they were garbed in black shrouds and laid out on the long back porch. The porch was soon filled with bodies, 20 lying in a row at one time. The caskets were brought up, and as soon as a corpse was identified, it was placed in a neat black walnut casket and the vacant place occupied by a new arrival.

The work of searching for the bodies was hard and dangerous. The after-damp still lingered in large quantities, and once or twice fires were discovered where the explosion had ignited small heaps of dry coal dust. For a while it was feared the horrors which attended the Dunbar disaster would be duplicated. Large quantities of water were turned on the flames and after several hours of hard labor they were extinguished.

Then a bucket brigade was organized and every little spark was promptly suppressed before it sprang into a flame. The rumor that the mine was on fire spread among the the miners at the mouth of the shaft and for a time there was a hesitancy in volunteering for the relief of the miners below. It was only for few moments, however, and then a big, burly fel-

low with scorched face and red shirt open at the throat sprang forward and exclaimed: "I'm one, where is another?" and a dozen men jumped out of the hesitating crowd, and from that time on a call for volunteers was no sooner made than it was answered. The terrible disaster cast a gloom over the entire coke region. There were nearly 100 wives and families that were left wholly dependent on the charity of the world for sustenance by the disaster. In fact they were almost penniless, as the plant had not been running full for some time and work had been exceedingly scarce since the dullness set in the demand for coke. Every means possible were resorted to to supply the widowed mothers and their children with the necessities of life. The Frick Company were liberal in this direction and a subscription paper was soon circulated to obtain money to support the unfortunate families. The District Master Workman of the K. of L. addressed the following letter to the miners and cokers of the region:

SCOTSDALE, Jan. 27, 1891.

To the Members of the Knights of Labor and Workmen of the Coke Region:

The sad news of a disastrous explosion at Mammoth mines has just reached me, and I fear many families have been left destitute. I therefore appeal to you to promptly render what aid you can to assist the families of your brethren who have been killed. The Master Workman and committees at each works will kindly take the matter in hand and act as a relief committee. Let the committees select a "check number" and each miner run as many wagons as he can under the circumstances contribute, and arrangements will be made with the companies to pay the amount, and thus prompt aid can be given. Drawers can adopt the same plan and day men can contribute from their day's work and have the same deducted in the office. This aid will be separate and apart from any



public contributions and will be forwarded to district officers who will apply it to the relief of those to whom it is contributed.

Signed,

District Master Workman.

Mammoth mine No. 1 had yielded up the bodies of 107 victims of the explosion and after-damp on Wednesday, and 79 were returned to the earth in the little cemetery at Scottdale. The work of the rescuers was continued with unflagging energy from within a few minutes after the explosion occurred on Tuesday morning until noon Wednesday. Then the superintendent came out of the mine and said:

"We can find no more bodies. I think we have got all of them out, with perhaps the exception of one or two which may be buried under the piles of débris piled together by the force of the explosion. It will take several days to clear this away. I am going home to sleep for a few hours."

During the day the mine was inspected by Mine Inspector William Jenkins, of the Second district, Davis, of the Pittsburgh district, and Blick, of the Fourth district, and ex-Inspector August Steiner, Captain Schoonmaker and General Manager Lynch. They arrived at the conclusion that the danger was over and that within a week or 10 days work would be resumed in the mine.

Mine Inspector Jenkins, within whose jurisdiction this mine comes, was asked for a statement in regard to the accident. He said, although with some reluctance: "We have carried out 107 dead men, and we can see no more bodies in the mine, still there may be some there yet, buried under piles of coal and earth caused by the explosion. I only know of one mine

explosion which equaled this in its fatal results, and that was at Avondale in 1869, when 109 men were killed. The mine is all right, and as soon as all the after-damp is forced out through the slope of No. 2, we can start work to repair whatever damage may have been done. I could not give an explanation of all the causes leading up to the explosion until after the official investigation into the accident is made. The investigation is required by the State mining laws and will be thorough. The immediate cause of the accident was discovered in No. 3 flat. In one place where the pillars have been removed we found a small quantity of the gas. The quantity of the gas was so small that it does not account satisfactorily for the fearful intensity of the explosion, except upon the theory that the air was full of fine, dry coal dust, which rapidly ignited and doubled, perhaps trebled, the force of the concussion.

"Still we found that very few of the miners were burned, showing that the majority were suffocated by the after-damp. This mine had been always considered a very safe one, and exceptionally free from gas. Still, wherever there are or have been coal mines, there is always more or less danger of an accident. I can't say that was an unavoidable accident. However, every usual precaution seems to have been taken. The fire boss had made his report a few hours before the accident that the workings were in good order and safe."

After Superintendent Keighley decided that no more bodies could be recovered, action was at once taken to put the mine into shape for work again. Men below were relieved by gangs who had rested,

and the latter bore picks, shovels and other tools for clearing away the galleries and making the necessary repairs. The mighty fan was kept running at highest speed and late Wednesday afternoon the result became apparent.

Out of the sloping entrance to the No. 2 mine, half way on the other side of the hill, but connected by underground working with No. 1, could be seen a thin streak of dark vapor emerging. Soon it began to come faster until at a late hour Wednesday it was pouring out in big volumes.

There is no question but that the ordinary naked lamps and not the safety ones were used by the miners in the Mammoth. The officials explained this by stating that the pit was believed to be entirely free from gas.

General Manager Lynch, who had been constantly on the move since the accident occurred, at noon Wednesday began the preparations for perhaps the largest funeral which ever occurred in the State of Pennsylvania. Seventy-nine of the victims had been recognized as belonging to the Catholic Church, and Father Lambing, of Scottdale, and Father Symigiel, the Hungarian clergyman, arranged the details of the funeral. Father Lambing telephoned to Scottdale and ordered graves prepared for 80 bodies. This necessitated the digging of a trench 6 feet deep, 7½ feet wide, and 250 feet long. As fast as the bodies were brought out of the pit they were carried in stretchers across a temporary bridge, thrown over the railroad track, to the temporary morgue.

Here were 30 men engaged in stripping and washing the bodies, embalming them and dressing them in

neat black shrouds, after which they were placed in caskets to await identification. When a corpse was identified the name was inscribed on the lid of the rough box, the casket was nailed down and it was tabbed with the name of the place of interment. Long before daylight Wednesday morning, the large lot in the rear of the morgue was filled with coffins, and the later arrivals had to be carried out to the side of the road near the house.

There were some sad scenes to be witnessed. A middle-aged, pleasant-faced woman leaned over the casket which contained the body of her husband. "Oh, my Peter, my Peter," she moaned as she clasped her hands and bowed her head. She jealously guarded the remains of her loved one. When anyone approached to raise the lid of the casket for the purpose of identification, she would push them aside and cry, "No, no; that is my husband, my Peter." She stood there for two hours in the drizzling rain until General Manager Lynch came up, when he immediately ordered the body removed to the little home, back on the hill, where the woman could be with her sorrow.

A Hungarian's body lay in the casket at the roadside for a long time before it was identified. The skin had peeled off the face, leaving a blood-red travesty on the human countenance. His wife finally came to the line of coffins, which were opened one by one for her inspection. She had a week-old baby in her arms and to her skirts clung two tiny toddlers, who were bewildered by the crowd and the strange scene. The sobbing woman closely scrutinized the set and sometimes disfigured face of each corpse, but passed along

the line until she reached the casket in which was the awfully mutilated corpse. The man was well-known and generally liked by his companions; he was a gay young fellow of 25 years. Not one of them had recognized the body, however, until the eye of love proved truer than that of friendship. No sooner was the face exposed than the woman gave a shriek and began sobbing bitterly. Other women pressed around her to give her consolation, but she heeded them not. She pushed them aside, and, pressing her babe to her breast, sped rapidly across the steep hill to Mammoth Station, nearly a mile away.

In an incredibly short time she returned, carrying with her a Bible, a little prayer book and a rosary. The casket was reopened, with the gentlest of touches the woman placed the sacred volumes between the cold, still hands, and placed the rosary on his breast. Then, bending low over the coffin, until her face almost touched the raw and blood-red face, she softly crooned a weird, Slavic melody, broken every few moments by fits of passionate sobbing. Her friends at last persuaded her to leave the corpse and return to her home.

When the funeral train passed Mammoth station later in the day, bearing among others his body, the grief-stricken widow, with her little ones, and surrounded by several score of sympathetic friends, was there to bid her husband a last farewell. She could not go to Scottdale, as her child was too young to leave behind, and she was denied the somber satisfaction of watching the remains committed to the grave. As the train stood at the station for a few moments the woman repeated the rude melody she had sung

earlier in the day, and it was taken up by the women standing near, all of whom were weeping. When the train passed away, she fell unconscious to the ground. She was borne to her home by strong and willing hands, where she received the ministrations of her sympathetic friends and neighbors.

She was not alone in placing in the coffin of loved one the emblems of religious belief. Not an identified Hungarian was buried to-day without these tokens of that affection which is stronger than death.

A train of three baggage cars and four passenger cars was brought up to the pit mouth, and the work began of loading up the bodies intended for interment at Scottdale. The caskets had to be brought from the morgue, 100 yards away, and although six teams and 50 men were pressed into service, it took an hour to perform this work. There were 79 bodies all told.

Just as the train was about to start a woman came in search of her husband's remains. His body had not been identified but she knew it was among the ghastly freight. General Manager Lynch put her on board the train and promised her that when she reached Scottdale she should be given an opportunity to see her husband's remains. When the train arrived at Scottdale the first casket opened proved to contain the body of her husband. The woman's grief was terrible, and she was so overcome that she was unable to be present at the funeral.

Six hundred persons accompanied the bodies to Scottdale, and when the train arrived there several thousand were waiting in silence to receive it. Many of the dead had worked in and around Scottdale and were well known by their fellow-countrymen there.

Enough hearses could not be secured to convey the caskets from the depot to the Catholic cemetery, over half a mile away, and wagons were used. Then the long sombre procession started on its way, preceded by Rev. Fathers Lambing and Symiegiel and followed by a vast concourse of people, the Slav race largely predominating. Many of the women were clad in bright hued dresses with brilliantly colored handkerchiefs tied around their heads, but those who were there to bury their dead were invariably dressed in black garments. As the procession slowly passed along the road to the cemetery, all the church bells in town tolled heavily and added to the deep feeling of sadness which oppressed the multitude. The day was gloomy, the clouds were shedding a fine, misty rain and night was fast settling down. The solemn words of the burial ritual alone broke the hushed silence, until the sound of the clods of earth falling upon the caskets of the victims of this great mined disaster loosened the spell.

Women rushed frantically forward, sobbing bitterly and calling upon their dead ones, and no one in that vast concourse thought it unmanly to shed a tear. Then in one part of the throng was heard again in a thin treble voice the strains of the slavic funeral dirge; it was taken up here and there until the accents of woe seemed to fill the air and appeal to the very heavens. The strains died away as gradually as they arose, night dropped her veil over the scene, and slowly and sadly the army of mourners filed out of the cemetery.

All Wednesday afternoon and night a woman stood at the pit mouth and implored the men to bring the

body of her husband. She says he was working in No. 1 at the time of the accident, and knows that he was killed. She can't rest or sleep until she has wept over his corpse. The mine officials promised that every effort would be made to bring up her husband's body at the earliest possible moment.

About two o'clock Wednesday morning there was a panic among the workers in the mine, caused by the terrible cry of "Gas, gas" from Flat 3. A miner and the Fire-Boss of No. 2 were working here and were overcome by the after-damp; they were taken to the surface. It was 30 minutes before the miner was restored. The Fire-Boss while terribly sick, determined, when he saw the panic among the men, to return to work, and it took the united efforts of half a dozen men to prevent him going into the pit again until he had recovered. The panic lasted but a few moments and the men went back to work.

As soon as the news reached Pittsburgh, the Inspector of Emigrants, for that District and the officers D. A. No. 3, K. of L., sent out the following appeals to the public and the local assemblies attached to that District. The officers of other labor organizations did the same and the delegates to the United Mine Workers convention of Pittsburgh district, held on Thursday, the 29th, donated something to the funds and passed resolutions. The general officers of the United Mine Workers of America and the officers of the coke region district united in sending an address to the Governor and the Legislature.

PITTSBURGH, Jan. 28.

To the Public:

The duty of every citizen toward the families thrown suddenly into destitution by the horrible catastrophe at the Mammoth



mines is plain. At the request of the District Master Workmen I will take charge of and promptly forward any contribution that may be made in behalf of the hundred or more families who have been deprived of their bread-winning heads. The circumstances are such that no appeal should be necessary to secure a bountiful contribution. The men living at Mammoth mines have not had steady work for some months. It is not natural to suppose their families had much, if any, money laid by for such an hour as this. Twenty-five thousand dollars will not more than provide temporarily for the actual needs of the people. It is to be hoped the citizens will turn aside from theorizing on the causes which led to the explosion, and render such assistance as may be in their power to give. This duty we owe to common humanity.

Contributions may be sent in my name to the United States Custom Office, Chamber of Commerce Building, Wood and Diamond streets, Pittsburgh, Pa.

HEADQUARTERS OF D. A. 3, K. of L., }  
101 FIFTH AVENUE, }  
PITTSBURGH, PA., Jan. 28. }

To All Local Assemblies Attached to this District:

BROTHERS—Another disaster has fallen upon our brothers in the coal regions. In an instant, for the want of an adequate law for the protection of those who are compelled to toil in the bowels of the earth to earn a livelihood for their helpless wives and children, more than 100 souls have been hurled into eternity. What is your duty now? You need not ask. These widows and orphaned children must be provided for and your duty is to give every cent possible for that purpose.

Not since the great Johnstown flood has the necessity been so great. Come forward and show your charity for your fellow workmen. Do not hesitate for an instant, but go to work at once; collect by subscriptions and draw on your treasuries. Send to

M. W. D. A. 3, K. of L.

SCOTSDALE, PA., Jan. 29.

To His Excellency, Robert E. Pattison, Governor of Pennsylv-

vania, and the Honorable Bodies, the Senate and House of Representatives, greeting:

Standing as we do by the open graves of our brothers, whose lives have been suddenly and violently taken in the frightful Mammoth disaster, our hearts bleeding and torn while we witness the interment of the fragments of what have but recently been bodies of our comrades, we hear the orphans' wail, the widows' despairing cry, and feeling our helplessness, as we do most keenly, we appeal to you to come to our aid. Many kind appeals for aid have been issued, and to all the generous souls who respond we feel the deepest gratitude. But while we fully appreciate the timely succor which comes with true American promptness and generosity, we are fully conscious that kindness and liberality on the part of a charitable public is not all that is necessary. We accept these offerings most gladly, but we appeal to Your Excellency and to the honorable members of the Senate and House of representatives to come to our aid and throw around our craftsmen the strong protecting arm of the great Keystone State, of which we are proud to be citizens, whose secret hidden treasures we cheerfully delve and dig in exchange for our daily bread.

"Prevention is better than cure" is an old axiom, and we firmly believe it was never more truthful than in our case. Over 150,000 of our brothers daily enter the respective mines of the State, and in addition to the hardships incident to working under ground they are in many instances in constant danger of meeting the same fate that has shocked the entire Commonwealth and the country. Many of the mines in this region are exceptionally dangerous, and as the workings are extended the dangers are multiplied, and the present methods to protect life and property are altogether inadequate and frequently unreliable. The defects in our mining laws make it difficult to locate responsibility, and it is to be feared that a certain amount of carelessness is the result.

In this hour of our sorrow, face to face with the dangers and misery to which our craftsmen are exposed, we invoke protection for the helpless and the suffering. We have just learned with pleasure of the prompt actions taken in the appointment of a commission to investigate this matter. We would respect-

fully suggest that in addition to the testimony of experts the testimony of those of long experience be taken. Theories sometimes need correction.

Hoping that such measures will be devised as will bring greater safety to the workmen of one of the greatest industries of this great Commonwealth, we are, in behalf of the miners of Pennsylvania, your obedient servants.

The following are the resolutions of the U. M. W., of Pittsburgh, condensed. The committee reported resolutions of sympathy with the widows and orphans of the Mammoth disaster; that it be made mandatory on all delegates on returning to their mines to call meetings to take action on the following propositions.

*Resolved*, That all unions in Western Pennsylvania be called upon to contribute such financial assistance as lies in their power, and that the funds so collected be forwarded to the proper authority. Also, indorsing the appointment of the legislative committee to investigate the State mining laws, the amendment and enforcement of the same, the cause of the mine disasters and to suggest means for their prevention; and that the commission be urged to visit the mining centers of the State to hear testimony and gather data from the miners and others qualified to give information pertaining to the same. .

A telegram embodying these points was sent to the chairman of the investigation committee, requesting him to give them favorable consideration.

Twenty-three bodies were buried at Scottdale on Thursday, and others as they were recovered making the number buried there nearly 100. Others were buried at the various mining towns in the locality. Several funerals being held under the direction of the K. of P. on Sunday. The last bodies were taken out

of the mine Monday, February 8th, making a full total of 110 lives accredited to the Record of the Mammoth Horror.

A curious yet sad scene was witnessed Thursday afternoon in a barn near Mammoth station. When the bodies were recovered from the mines they were taken to the morgue, where they were stripped, washed and re clothed in black shrouds with white collars and ties. In the hurry the old clothing was thrown together in large piles. After the funerals were over several wagon loads of this clothing was taken to the barn, and the relatives of the dead men notified to come forward and claim that which belonged to their kindred.

A hundred women gathered in the barn in the afternoon. Many of them were there out of curiosity or in company with the bereaved. At first the women looked stolidly at the mountain of clothing, and then one by one they stepped forward and lifted from the heap a garment which, when they last saw it, encased the stalwart form of the provider for a happy home, and then they broke down and sobbed.

One woman, not handsome or young, but with lines traced on her face by hard work and care, and with rough, red hands, sank to the floor clasping to her breast a coarse, mud-stained coat. She rocked backward and forward, and while the tears ran down her cheeks she crooned a Slavic lullaby. Another woman who had looked upon the pile of garments with a cold, indifferent eye, suddenly saw a coat she recognized. Then, and for the first time since the explosion, she realized her loss and broke into a fit of hysterical weeping, which finally became

so passionate that she had to be almost carried to her home. It was not many minutes until every woman in the building was crying. It was a sorrowful procession which passed out of that old barn, nearly every woman clasping closely some memento of a love which once made life bright.

The owners of the mine set aside \$25,000 in aid of the victims' relatives, and private subscriptions were reported coming in liberally.

It was said the Brick Company would make another donation in addition to their \$25,000, if necessary. The United Mine Workers had a big defense fund on hands, and would divert a portion of these funds for the relief of the distressed, if necessary.

No accurate account of the number of men who descended Mammoth No. 2 on Tuesday morning could be ascertained. This is charged to be due to a habit, which is said to be customary among the Slavs, of a man bringing in one or two compatriots to assist him. The first man has the check, and the others assist and share in the value of the output. In this way more men than are represented by the checks issued may enter a mine, and some of them may never come out of it again alive. This matter, it was said, would be brought to the attention of the Legislative Committee of Investigation. The chief engineer of the Standard Works, made a quiet visit to the shaft Thursday afternoon and spent some time in examining the workings.

The Legislature, in obedience to the demand of the Labor Organizations and public opinion generally, appointed a committee to visit the mine and make a thorough investigation as to the cause and responsi-

bility for the disaster, and the following is a description of the trip into the mine. The committee men were all experienced and thoroughly practical miners, and bore themselves like men who would push the inquiry to its furthest limits.

After some conversation with Superintendent Keighley, in which they acquainted him with the authoritative nature of their mission, the committee held a short session, after which the visitors encased themselves in overalls and prepared to descend to the mine.

At the tippie they were joined by Superintendent Keighley, Inspector Austin King, of Clearfield county, and Inspector William Jenkins, of the First district, who with half a dozen of the mine bosses and leading employes, formed an exploring party which, at 12 o'clock was lowered into the Shaft mine. Each man carried a safety lamp, and naked lights were conspicuous by their absence. Two and a half hours were spent in the subterranean passages, and fully five miles of ground was covered during the trip. Steps were at once directed towards the "dip," that portion of the shaft mine where the explosion occurred. As near as could be gauged by the miners, this part of the mine is back of the hill which overhangs the shaft, and is about 150 feet deep, being distance from the tippie about 1,400 yards. Incursion along the first entry from the "mine bottom"—an entry about 15 feet wide and 8 feet high where the wagons are loaded onto the cage—for a distance of probably 300 yards, brought the explorers to the first vestiges of the accident. The heavy beams supporting the roof of the entry were lying on the track, and heaps of debris,

pilled up against either wall, showed how the solid masses of coal and slate had been torn asunder under the pressure from the exploding gas.

Proceeding further, at a necessarily slow pace because of the obstruction in the way, empty wagons, some torn in pieces, others displaced from the rails, were found, and once in a while a broken dinner pail, sometimes containing an untouched meal, bore sad testimony to some poor fellow's fate. Now and again gangs of three and four men were met with replacing the broken sills and posts, and doing so to the accompaniment of their jests and jokes with each other, illustrating—if illustration were needed—how usage and daily contact with danger so familiarizes the miner to it as to cause him to accept it as a matter of course, and give it little thought.

Tramping steadily along the silent, low and narrow passage, seemingly interminable, the vicinity of the explosion was reached. The doors of flats were seen wrenched from their fastenings and the brattices were strewn along the tracks. The committee gave everything the closest scrutiny, searching for the fireboss's marks and examining the matter in which the posts and sills were laid; looking for coked coal as indicating where the fire had been; and gazing closely at corners for evidences of the explosion through the soot on the coal.

"Those posts should rest on the bottom," said a committeeman. "See, the sills are supported from a short post resting on a place cut out of the wall above five feet from the ground. That is bad practice, as the wall might be forced from under the post and let in the roof. That is unsafe work."

After a time a heading was reached. Everything pointed to men having been at work very recently. A close examination failed to discover the fire-boss's mark of the 27th, which should have appeared if he had visited that particular heading. There was nothing to show that the explosion had eradicated it. On the other hand, the figure "30," the relief party's mark, was discernible. A committee man inquired from Inspector Jenkins as to the number of workings in the mine.

"I cannot say for certain, but I suppose there are 100."

"Is it the practice for the fire-boss to examine all the workings, or only those which are being worked?"

"I understand that it is usual for the fire-boss to examine only those which the men are working at."

"Then if a dozen or so headings only are worked, as in a slack time, the others might not be visited for some time?"

I believe that is possible, but when I was fire-boss, as I was for six years, I did not adopt that practice."

After a time the explorers had penetrated to within the "dip," and Inspector Jenkins went ahead to test the air for gas. That such was present was plainly discernible to the sense of smell, and more or less caution was used in pursuing a sinuous course through the butts, rooms, and flats, which abounded in this fatal section of the mine. Occasionally a call for the strictest silence would be made as the inspector listened to the crackling of the ceiling and tried for any inpouring of gas. At the entry to one flat the fire-boss's dates of inspection for 11 days, marked in chalk on a sill, were visible. A committee



man examined the character of the figures, and could not bring himself to believe that the date of the 27th—the day of the accident had been made by the hand that marked the others. There was a decided dissimilarity in the figures, and the “27” looked much fresher than the others. Only here and there could a “27” be seen, and it was observable that where the mark should have been it most decidedly was not.

In the third flat a pool of blood was found, and from it a broken oil can, cap and penknife were picked up as relics of the poor fellow who had perished there. Finally the actual place of the explosion was reached and located. This was in the third flat. One of the party scraped a few ounces of dust from the charred coal from the corner of the third butt on the third flat, and carried it away for analyzation. In the second butt on the third flat the posts supporting the roofs were plainly seen to be charred, and all around this immediate section were similar evidences of the gas having been fired.

An incident, which is given for what it is worth, occurred just as the party were proceeding toward this place. Superintendent Keighley was leading, and on reaching a flat, turned down another.

“What is up there?” inquired a committee man.

“Only some headings that have not been worked for some time. The fire did not extend there, and it is only waste of time to go through it.”

The party halted and were about turning aside, when three or four of the committee, on second thought, decided to go on and see for themselves, the others remaining. They were gone for a considerable time, when the superintendent and others, becom-

ing tired of waiting, followed. As they overtook a committee man, the latter took one man aside and said:

"I wonder what reason Keighley had for trying to mislead us? You heard what he said about abandoned workings? Why, here is where the men were killed," and the legislator pointed out the charred coal at the angles of the passages. In the rooms of the "dip" much criticism was made of the distance between the posts supporting the roof, and the width of the rooms, and again of the thickness of the ribs.

"Where there is a distance between supports, there is danger of the roof cracking," said a committee man. "Cracking may be followed by a fall of slate, holding a vein of gas. When that gas enters, it may be dissipated to a degree by the currents of air, but again, it may flow to a corner, or accumulate in a bratticed passage. Well; the result is that the miner's naked light comes in contact with it, and then——"

As the investigation proceeded the falls of slate became more frequent, and at one passage it was deemed advisable to turn aside. The visitors paid attention to every point; testing the roofs and examining the floors; the latter more especially in wide places, "because," it was explained, "the great weight overhead has a tendency to compress the ribs, which, yielding, do so by encroaching on the floor, and causing upheavals. In one or two places I have seen evidence of ribs bearing heavily on the floor space."

From time to time the spots where the men had

perished were indicated. Here four hardy men met their doom; at this corner another was picked up; and so on, was the mournful tale related. In this manner for two hours and a half did the party investigate for themselves into the cause of the disaster, and satisfied themselves as to how it was brought about. Concerning this very vital point what follows is said to be the result of to-day's inquiries.

"There was gas in the mine, and it was known to be there previous to the accident.

"Safety lamps were not used because naked lights were in vogue in the district.

"The committee men seemed satisfied that the mine was handled carelessly; that the presence of gas was sufficiently clear to warrant the use of safety lamps, and the mine practice might be improved upon."

The committee men's car was hitched onto a local train at 3:11 o'clock and drawn to Greensburg, where the party remained over Sunday.

In reply to a number of questions, Inspector Jenkins made the following statement:

"Gas is always present in mines which are below water level, as are those in this particular section. Whether it can be guarded against depends on how the mine is handled. It finds its way in through veins in the slate, and, when falls occur, they are just as liable as not to leave bare some vein of gas. There is always more or less danger in mining, and in very few cases does a miner enter a mine without taking, to a great extent, his life in his hand. If he is experienced and careful, he may avoid firing gas which has not reached sufficient volumes as to become danger-

ous, but the average miner is not careful. That is, he has become so accustomed to his life that he minimizes all chances of danger, and is apt to get off his guard."

"You give it as your opinion, then, that there was gas in this mine before the day of the accident?"

"I do."

"You think that safety lamps should have been employed?"

"I think that had safety lamps been used that the accident now being investigated would not have happened. Miners prefer naked lights, but that's no reason why they should use them. I think those lamps should have been used."

The mine disaster at Mammoth will have some good results, if the numerous schemes for revisions of laws amount to anything. A Representative of Pittsburgh, presented a bill in the House making employers liable for the loss of their employes' lives, or injury to them in any way. It provides that "all persons having control or direction of the services of persons employed about shafts, slopes, drifts or ways, shall not hereafter be considered a co-employee of the person injured or killed."

The Representative said this is practically the law of Kentucky, Ohio and Illinois, and several other States. The great trouble now is that the terms "owner," "operator," "superintendent," and similar designations, are used without the court or counsel having any definite knowledge as to what the term implies, and the meaning applied to the respective terms differ according to the interpretation put upon them by different persons under different circumstances,

and the miners claim that these interpretations are, as a general rule, against them.

It is needless to add that the bill was defeated by a large majority and though a commission was appointed to revise the mining laws, consisting of the Inspectors of all the bituminous districts of the State and a miner and operator from each district, their recommendations were voted down and the mining laws of Pennsylvania were not changed.

#### SPRING HILL, NOVA SCOTIA.

A tremendous explosion took place in the east side of the east slope of the Spring Hill mine, Nova Scotia, at 1 o'clock, Saturday, Feb. 21st, 1891, which resulted in a large loss of life and the destruction of the mine.

The Spring Hill mine is the most important in the Cumberland coal field. It employs 1,000 men. Its output is 2,000 tons of coal daily, and it is owned by Montreal and English capitalists. Hitherto it had been singularly free from explosions, and the cause of the disaster is unexplained.

The news of the disaster created the most intense excitement, and the whole population appeared to have gone wild. It was only Friday that the mine was examined by the deputy inspector and a few days previous by a committee of the men and found to be in a satisfactory condition. The news spread like wildfire and within a few minutes after the report was heard the mouth of the pit was surrounded by heart-broken wives and mothers whose

#### SHRIEKS AND CRIES OF ANGUISH

rent the frosty air as the dead and dying forms of

their husbands and sons were slowly brought to the surface. The bodies were terribly mutilated, and many of them presented a sickening spectacle. Volunteer parties were immediately organized to bring up the bodies, although the rescue of any of the men who were supposed to be beyond the immediate scene of the calamity was known to be impossible.

Telegrams were sent to Amherst and Oxford, the nearest towns, for additional medical aid, and a corps of doctors quickly arrived by special trains. There was no lack of brave volunteers, but the work of rescue was attended with great difficulty, and the rescuers themselves had many narrow escapes.

Choke damp set in immediately after the explosion, and it was soon certain that every man down in the mine was dead. The manager was down in the mine at the time and he, too, was among the victims. The mine was completely wrecked and the passage ways were blocked so that no more bodies could be recovered that night. Several of the victims whose bodies had been recovered were killed by the choke damp.

All the horses were killed. Several members of families are among the killed, and in one case, a father and two sons are among the dead. The pits were soon clear of fire, and ventilation restored in the immediate neighborhood of the disaster. Requisitions had to be made upon the surrounding towns for coffins, hearses, etc.

This is one of the greatest disasters in the history of Nova Scotia coal mining. Fifteen years ago the Drummond mine, at Westville, blew up and 65 men were killed. Ten years ago the Ford pit, at Stillarton, exploded, and 44 men lost their lives. Three

years later 15 men were killed in the Vale colliery, all three disasters within a few miles of each other. Three or four years ago six men were killed in the Spring Hill mines, but this was the only previous disaster to that colliery.

The rescuers were not able to get near the imprisoned men until some of the piles of débris caused by the fall of the roof were cleared away.

The bodies of the two boys brought up were so badly disfigured as not to be recognizable. Some of the injured persons taken out did not survive very long. Miners who had to come up said that the levels were blocked, in the locality of the explosion, with large piles of débris, consisting mainly of timber knocked out by the terrible force of the explosion, which was felt above ground.

The work of recovering bodies was carried on throughout Sunday and Monday most successfully. A revision of the list showed the number of dead to be 120. Of these 54 were married men, 40 single men and 25 boys.

The manager of the relief fund had been besieged by applicants for assistance to bury their dead and relieve the distress and hunger. On Sunday night one of the orphans of a family of eight was in a restaurant begging for enough bread for her little brothers and sisters for the morning. Other cases of destitution were cropping up continually and had to be promptly met. The subscriptions to the relief fund received Monday amounted to \$2,755.

The manager was at the bottom of No. 1 slope about fifteen minutes and intimated to one of the roadsmen that he was going into the place where the

explosion occurred. He was not seen after that. It is probable that his body was recovered when some of the debris was cleared up. He had relieved the underground manager who went out of the pit.

A trapper boy was sitting at his door, but noticing a flash of flame coming in that direction, he dodged under his seat and placed both hands before his face. His hands and the tips of his ears were burned and the door was knocked down. If he had remained on his seat he would have been killed or very badly injured. Another boy heard the explosion and rushed off to the place where he knew his brother was at work and succeeded in carrying him out, badly injured.

His heroism was one of the chief topics of conversation. There were plenty of volunteers to search for all bodies. Men who came to the pit as spectators divested themselves of their coats, and unhesitatingly went to the rescue of their fellow-workmen.

#### FIRE DAMP AGAIN.

Another terrible disaster was added to the long list of mine horrors which have occurred during the past year, at 7 o'clock on the morning of May 1, 1891, when four men were instantly killed at the Ocean coal mines, owned by Wilson, Black & Sherdon, two miles northeast of Clarksburg, W.Va., by an explosion of gas.

The report of the terrible explosion was heard for many miles in all directions and brought thousands of people to the scene.

Seven men had descended into the mine and forty more were at the pit-mouth ready to enter when, like a clap of thunder, the deafening report was



heard. It shook the ground like an earthquake and belched water and a cloud of smoke from the two entrances, which are located a thousand feet apart. None of the men on the surface had the slightest hope of ever seeing any of the seven men alive again, but a rescuing party was immediately formed, and men brave enough to enter the mine, notwithstanding that it was filled with smoke and fire, volunteered their services. Down they went into the suffocating cavern, penetrating the mine to a remote chamber, where three of the seven who had entered were found alive. They were at a point far from the room in which the deadly gas was ignited. There was so much smoke in the mine that the rescuers, as well as the three survivors, were almost exhausted when they reached the surface.

The rescuers also succeeded in finding one of the bodies which was burnt to a crisp, but the other three could not be reached. All hope of reaching the three remaining bodies had to be abandoned, as the fire was spreading rapidly through the mine and burning furiously. The scenes about the pit-mouth were most heartrending. The wives and relatives of the victims of the disaster were running about wringing their hands and crying hysterically. Thousands of people from the surrounding country commenced pouring in to investigate the cause of the terrifying report which they had heard. The company operating the mine were severely criticised for alleged neglect to thoroughly inspect the mines and provide proper ventilation, and many threats were made. The operators claim that the accident was one which it was impossible to have foreseen or prevented.

It is doubtful if the mines will ever be operated again. Had the explosion occurred ten minutes later the men would all have been in the mine and the result would have been appalling.

#### COLLAPSE OF A MINE.

One of the strangest accidents in mining annals and the sensational escape and rescue of a number of miners occurred at Hickory Ridge, Sept. 26th, 1891. For eight hours the men were imprisoned in an old chamber, not knowing what second they would be crushed to death. There were four Americans and a dozen Hungarians and Italians.

When they entered the mine at 7 o'clock in the morning, the inside foreman directed the men to rob pillars, considered the most dangerous of inside work. A pillar divides one breast or chamber from another, and after all the coal is taken from the chamber, then the pillar is removed in order to secure more coal. A chain pillar divides the levels. At the ridge the men were working on the first level, while 100 feet of rock and coal lay between it and the second lift, which had been well worked out. De Long and his comrades were compelled to work cautiously, as the pitch was 90 degrees. There were few men in the gangway anywhere near the men.

An hour after the first pick had been sunk into the coal the miners experienced a tingling sensation, as though a bunch of needles had been thrust into the souls of their feet. They grew dizzy and were momentarily paralyzed with astonishment and fear. The bottom of the gangway was cracking in hundreds of places, while through the fissures issued a

blast of air and dirt. A violent swaying then ensued, mingled with a sudden roar and crunching of coal, while a succession of reports, like that of an artillery battery in action, were heard above the din.

"Boys," shrieked one of them, "the chain pillar must be running, and if we don't get out of here it means death." A rush was made for the closed chamber. The one in the rear was lifted to the edge in safety, just as the bottom of the place they had left dropped and revealed to their startled gaze a yawning chasm 100 feet in depth and 90 feet in width. When the pillar started to run, the men on the lower level escaped. The imprisoned men were surrounded on all sides by falling coal.

They went up the chamber as far as possible and had a council as to what they should do. They found that there was no possible way of exit other than the way they had entered, but now a seemingly impassable chasm. Suddenly they heard voices calling for them, and they hurriedly clambered to the edge of the chasm. "Are you alive," cried the foreman, who, with two others, had gained the entrance of the gangway quick as the rush occurred.

The rescuing party were overjoyed on hearing that the men were safe. How to get the miners across the abyss was the next thing. A rope was procured and for hours the foreman and his men tried to cast an end across. Sometimes it would land on a treacherous ledge almost within reach and then go whistling down in darkness and dust. Once it fell on a rock which seemed solid, but as one of them was about to seize it, the rock and rope went down with a rush.

The men then grew timid and glanced into each

other's faces with fear. It was growing serious. They were almost without oil and had nothing but what was in their cans for provisions. Was it to be a second Jeansville horror, and yet within shouting distance of rescuers?

These gloomy meditations were cut short by a whirling noise and the crack of a bolt, which attached to the rope, had fallen at their feet. "Fasten your end of the rope to a timber," they heard a voice cry, "and we will do the same." Once securely tied about a post, the men consulted as to who would make the attempt. It was a perilous undertaking, but, as the way led to liberty, it did not take long for DeLong to make up his mind. Rubbing his limbs vigorously and tying a pair of suspenders about his waist were his preparations.

Then bidding his comrades goodbye, the intrepid fellow flung himself into space and went hand over hand. The rope cracked and swayed. Several times he thought he would fall, but with strained muscles and stout heart DeLong went on, and at last was drawn up and into the happy rescuers' arms. His experience was duplicated by other men, and when the last had crossed they wept like children and cheered loud and long over the miraculous escape. On being hoisted to the surface 2,000 men, women, and children cheered and danced with joy.