

**The Harwick Mine  
Of  
The Allegheny Coal Company  
Explosion Disaster  
January 25, 1904**

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## Overview

At approximately 8:20 a.m. on Monday, January 25, 1904, an explosion occurred in the underground workings of the Harwick Mine, operated by the Allegheny Coal Company. The day shift had been in the mine for about 50 minutes. The explosion encompassed the entire underground workings, destroying the ventilation controls, and knocking out the mine timbers, resulting in several massive falls. There are conflicting accounts of the number of people underground at the time of the explosion; however, all reports are consistent that only one underground miner survived the blast. While initial reports indicated a death toll of between 180 and 190, the Pennsylvania Department of Mines officially reports the death toll at 179. This presumably includes the fatalities in the tipple. Two additional men died in rescue attempts.

The explosion was determined to have been caused by a blown-out shot in the face of No. 1 monkey entry off No 3 room, off No. 2 butt entry on the south side of the mine. This blown out shot ignited an accumulation of methane gas, which in turn ignited suspended coal dust. The resultant explosion was then propagated throughout the mine by the coal dust which had been allowed to accumulate in the mine. Several factors contributed to this disaster:

- It is inconclusive whether the fire boss made the required examinations on the morning of the explosion, though eye witnesses reported hearing him tell the 'top man' that "it was all right, if the engineer was ready." No notations were made in the examination book for January 25. However, the state investigative report states that there is "some" evidence the fire boss did examine part of the mine on the day of the explosion.
- The mine was very dusty as a result of the use of the puncher type cutting machines to undercut the coal, and coupled with the extremely cold temperatures being experienced at the time, the dust was very dry. While some effort was reportedly made to wet down the dust during normal production, there had apparently been no effort made that particular morning. Additionally, the coal was found to contain "as high as 37.4 percent of volatile matter, which renders the coal dust very inflammable and exceedingly dangerous."
- The mine was not adequately ventilated. Ventilation was accomplished by means of a blowing fan, forcing air into the mine via a three entry system, which was deemed by almost everyone interviewed to be a poor system. Also, according to the report of the state mine inspector, F.W. Cunningham, in the *Report of the Department*

*of Mines of Pennsylvania, Part II bituminous, 1904, "...the ventilation on this particular morning had been very nearly if not altogether cut off from the workings of the mine by ice forming at the bottom of the down-cast (intake) air shaft, which was very wet at the entrances to both sides of the mine".* The state report indicates that the area was reduced by as much as fifty percent. Several proposed ventilation controls had also not been constructed.

### Mine History

The Harwick mine was owned and operated by the Allegheny Coal Company, which was owned by a group of Cleveland, Ohio capitalists, and is located in Springdale township, Allegheny County, Pennsylvania, near Cheswick. The production shaft was 216 feet deep and 21 feet by 9 feet in cross sectional area. A parallel shaft for ventilation and man tripping, located approximately 200 feet away, was 10 feet by 12 feet. The mine was producing coal from the Upper Freeport coal seam, which is about 7 feet thick with a 7 to 8 inch rock middleman in this area. At the time of the explosion, mine workings had penetrated less than 1,700 feet from the bottom of the shaft.

The company began shipping coal from the mine the latter part of 1902. The workings of the mine consisted of three south main entries and three north main entries, driven from the bottom of the production shaft. From the mains, 'butt' entries were then driven to both sides. The first listing of employment in the mine, taken from the state inspector's report, lists 75 employees. Eight mules were used to haul the coal, and 8 to 10 machines were utilized to cut the coal. Employment had steadily risen, and the October, 1903 report lists 123 employees and 10 animals. By January, the employment had risen to around 180 and there were 16 mining machines. From the list of persons killed in the explosion, the mine workforce, and thus presumably the community, consisted of a variety of nationalities. Predominately American and Hungarian, there was also a large Italian population. Also listed were German, English, Polish, Welsh and Swedish.

### Mining System

The Harwick mine produced coal by the conventional mining method. The coal was undercut with compressed air powered, puncher type mining machines. The coal was blasted down with dynamite, and the shots were prepared and charged by the men who loaded the coal. Blasting was done by authorized shot firers. The coal was then hand loaded into cars and transported to the production shaft with mules, where it was lifted to the tibble in steel cages. The head frame and pulley wheels used to lift the coal extended about 65 feet above the shaft. At the time of

the explosion, there were approximately 131 active working places in the mine, and the majority of those had 2 men working in them.

### Equipment

The principal equipment in the mine was sixteen puncher type mining machines. Four different manufactures were represented: the Harrison puncher, the Ingersoll puncher, the Sullivan Puncher and the Champion, an English built machine. The following is a brief description of the puncher or pick mining machine.

#### Pick or Puncher Type Mining Machine

"This machine is mounted on a pair of wheels and when at work is placed on a wooden platform, about 3 ft. wide by 8 ft. long, which slopes towards the face of coal, at an angle of around 5 degrees. By this means, the recoil of the blows is nearly neutralized by gravity and the machine is kept up to its work. The operator chocks the wheels with wooden blocks, sometimes strapped to his boots, and directs the blows by swinging the machine from side to side, with the supporting wheels as a fulcrum. As shown by the several cuts, the front cylinder head and piston rod are very long, to give the machine a sufficient reach. A horizontal width of 4 or 5 ft. of undercut is thus readily commanded. The depth of cut is rarely greater than 5 feet. A helper clears away the debris with a light, long-handle shovel, and assists in moving and setting up the machine.

Most pick machines run at speeds of 200 to 250 strokes per minute. The lower speed machines probably have some advantage, because, as each individual blow is directed by the operator, he can increase the efficiency of the work if he has time between strokes to point the pick in such a manner that it will do most execution. In coal of average quality, an undercut of say 4 ft. by 4 ft. in horizontal area can be made in 16 to 18 minutes. The platform can be shifted sidewise to the next position and the bit changed, if necessary, in 8 to 10 minutes. The height of undercut is 12 to 14 inches at the face, tapering to 3 in. or 3 ½ in. at the bottom. On completing the cut, the coal is shot down... Under favorable conditions, good operators can undercut, per shift, from 75 to 85 linear feet of face, to a depth of 4 to 4 ½ feet;" (Compressed Air Plant; The Production, Transmission and Use of Compressed Air, With Special Reference to Mine Service; Robert Peele, Second Edition, John Wiley and Sons, 1910, pg 389)

There are two primary limitations with this type machine. The first is the dip of the coal. Anything over 12 to 15 degrees and the weight of the machine makes it very difficult to maneuver. "The other limitation is the ability of the helper to keep the cuttings out of the way... The cut made ... by all machines of this type,

is V-shaped, being from 12 to 14 inches in height in front and tapering down to 2 or 3 inches in the rear, and having, therefore, an average height of 7 inches. In some test work done in the mines of the Clearfield Bituminous Coal Corporation at Barnesboro, Pennsylvania, this machine undercut as much as 1400 square feet

of floor in nine hours' working time. This 1400



square feet of floor by 7 inches of coal taken out by the machine, gives 816 cubic feet of solid coal removed by the machines, which, at 80 pounds per cubic foot, will be 65,280 pounds, or at least 32 tons, of coal to be handled by the helper. This is entirely too much for a helper to do regularly. In the mines in that vicinity, where the coal is soft, about 600 square feet of floor per day is the average production of a machine.

Figure 1 - Sullivan Coal Pick, showing undercut

This is easy work for the runner, but about all that a helper wants to handle." (Transactions of the American Institute of Mining Engineers; Vol. XXIX; February, 1899 to September, 1899; 1900 pg 422)

*The Harrison Machine*, manufactured by the Geo. D. Whitcomb Company, of Chicago, was the pioneer machine of the pick type, and was one of the first to demonstrate successfully the possibility of substituting mechanical methods for hand-labor in the under-cutting of bituminous coal. The first machine turned out by this company was placed upon the market in the spring of 1880.

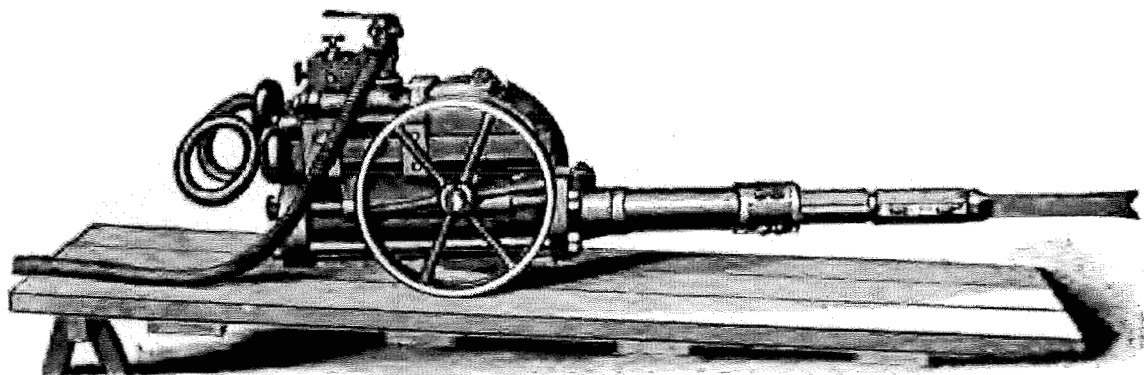


Figure 2 - Harrison Puncher

The method of attacking the coal is as follows: The runner sits behind the machine which is set upon an inclined platform, the angle of which holds the machine to the coal. The blow is struck in much the same way as the outward

stroke is given to the piston-rod of an engine, except that compressed air, instead of steam, is the motive force. A shallow hole is first cut in the face of the coal, even with the floor. A few blows just above the hole break down enough coal and clear a way for the runner to deepen the original cut. He works his machine backward and forward on the platform along the face of the coal, the work being comparatively easy as soon as the first cut has been made to a sufficient depth. The runner uses a block attached to the sole of his shoe, to "chock" the wheels of the machine against the effects of the recoil from the blow. This has been found much more satisfactory than using a stone or block of wood, ratchet-wheel or other independent brace, as the runner receives little if any punishment, and has better control and is more in touch with his machine all the time.

The platform upon which he operates has about the same width as the cut intended to be made, and can be made in duplicate, so that when he is near the end of one cut his helper may place the other section beside it, and the machine may be moved from one to the other with little loss of time. As a usual thing, however, only one platform is used in a room. The helper is also expected to keep the cut as free as possible from the slack and small coal made in the cutting, so that, once placed in position, the runner has little to do except to manipulate and shift his machine, until the face is under-cut entirely across the room. The machine is then removed to another room and the first one is shot down. One of the advantages claimed for the pick machine is that, as the cut is "V-shaped", with the wider part at the front, the coal will shoot down more perfectly, and does not have to be pulled down with a pick after the shot. Another admitted advantage of the pick-machine is that it may be used in mines where conditions of roof and floor will not permit the introduction of the chain breast-machine. It is in many instances necessary to bring the timbering up to within 3 or 4 feet of the face of the coal, in which case the use of a chain-machine, requiring 10 or 12 feet of clear space between the face of the coal and the supports of the roof, is manifestly impossible. In other cases, such as the frequent occurrence in the bottom of the coal of pyrite or other hard materials, which would break the bits of a chain-machine, if not the machine itself, the pick-machine has the advantage, as the runner is able to cut around the obstruction instead of being obliged to cut through it. Another advantage claimed for this type of machine (but which applies also with equal force to the chain-breast or long-wall machines driven by compressed air) is that, in mines where the quantity of gas is so great that safety lamps have to be employed, the danger of explosion, which might be caused by an electric spark from the motor, is obviated. (Transactions of the American Institute of Mining Engineers; Vol. XXIX; February, 1899 to September, 1899; 1900 pp 415-16)

All of the puncher type mining machines are of the same basic form, and operate in much the same fashion. The height of the cut in the coal seam may be adjusted

by the wheel size, and some models can be oriented so as to cut vertically instead of horizontally. The Harrison Puncher, pictured above, weighed between 500 and 700 pounds, depending on the model, and this is representative of the equipment.

### Ventilation

The mine was ventilated using a 3 entry system. The fan was 13 ½ feet in diameter and 7 feet wide, and capable of producing 200,000 cubic feet of air per minute. According to the state inspector's reports, however, there was always less than 70,000 cfm at the intake until October of 1903, at which time he reported 96,000 cfm. At that time there were 6 splits of air in the mine, with a total of 81,000 cfm measured within those splits. The measurements taken in the headings totaled 54,500 cfm.

At the time of the explosion, there were 5 splits of air, and according to testimony during the Coroners inquest the fan was making 74,000 cubic feet per minute. The first split was done at the bottom of the intake shaft, where the air was directed to the south mains and north mains. The north mains had no further division, and the entire north portion of the mine was ventilated with a single split of air. The air was coursed up the No. 3 north main entry to the No. 1 left butt entry. After sweeping the faces of the No. 1, 2 and 3 left butt entries, which were just beginning to be developed, the air was coursed down the No. 1 main entry and up the No. 3 right butt entry. After sweeping the No. 3, 2, and 1 right butt entries, the air was directed via the No 1 and 2 north main entries to the return air shaft.

On the South Mains, the original intent of the three entry system was being followed, to some extent. The center entry was used as the intake, with overcasts planned at each set of butt entries to direct fresh air into the butts. Four overcasts had been constructed, with the last one at the No. 4 left butt entry. The air coursed up the No. 4 left entry split at the face, and returned down the No. 3 and 5 entries, with a further split from the No. 3 entry being used to ventilate the No. 1 and 2 left butt entries. The air continuing past the No. 4 left entry to the face of the south main entries was split at that point and returned down the No.1 and 3 south main entries. The split returning down the No. 1 main entry was used to ventilate the No. 6, 7, and 8 left entries and then directed to the return air shaft. The split returning down the No. 3 south main entry was used to ventilate the No. 4, 5 and 6 right butt entries, and then the No. 1, 2 and 3 right butt entries before returning to the return shaft. See Appendix A for ventilation map.

The mine was ventilated by use of a Capell fan, a "small, quick- running fan made both with single and double inlets. They have two sets of vanes, an inner



and an outer set. The air on entering the fan at either side is received into a cylindrical chamber containing blades projecting inwards, and curved with the convex side in the direction of rotation. The air, in consequence of the vacuum created by the revolving wings, is discharged through a series of portholes in the cylinder, one porthole being placed between each pair of wings. Passing outward through the portholes at a high velocity, the air is discharged against the inner and concave side of the outer wings, the result being that while a large portion of its 'Vis viva', as the force inherent in the air is termed, is taken up by the revolving outer wings, the velocity of the issuing air is greatly reduced on account of its entrance into the much larger chamber contained between the cylinder and the outer wing. From the tips of the outer wings the air is discharged into the gradually increasing spiral casing called the fan-race, and then passes by means of the Evasee chimney into the open air at a still further reduced speed. The latest design of Capell fan has scoops on the inner wings. The scoops have their greatest projections near the centre; the ends near the outer edge of the inlet are placed inside the fan, and deliver the air between the wings. They add considerably to the fan's power of transmitting air. Extremely large water gauge equivalents have been obtained on the Continent and in America by these fans. At the General Blumenthal Colliery, Germany, a Capell fan, 13 ft. 6 in. by 6 ft. wide, double inlet, passes 227,000 cubic feet per minute at 12.5 in. water gauge equivalent, viz., 65 00 lbs.

Single inlet fans are sometimes used for quantities up to 250,000 cubic feet per minute, and for these, high speed engines are used running up to 180 revolutions per minute, The fans-whether single or double inlet - are invariably driven by ropes." (The Principles and Practices of Coal Mining; James Tonge; MacMillan and Company; London; 1906)

"It is made either as a single or double inlet; the latter is twice as wide as the former, and has practically twice the capacity. The double- inlet fan is, indeed, to all intents and purposes, two single-inlet fans combined.

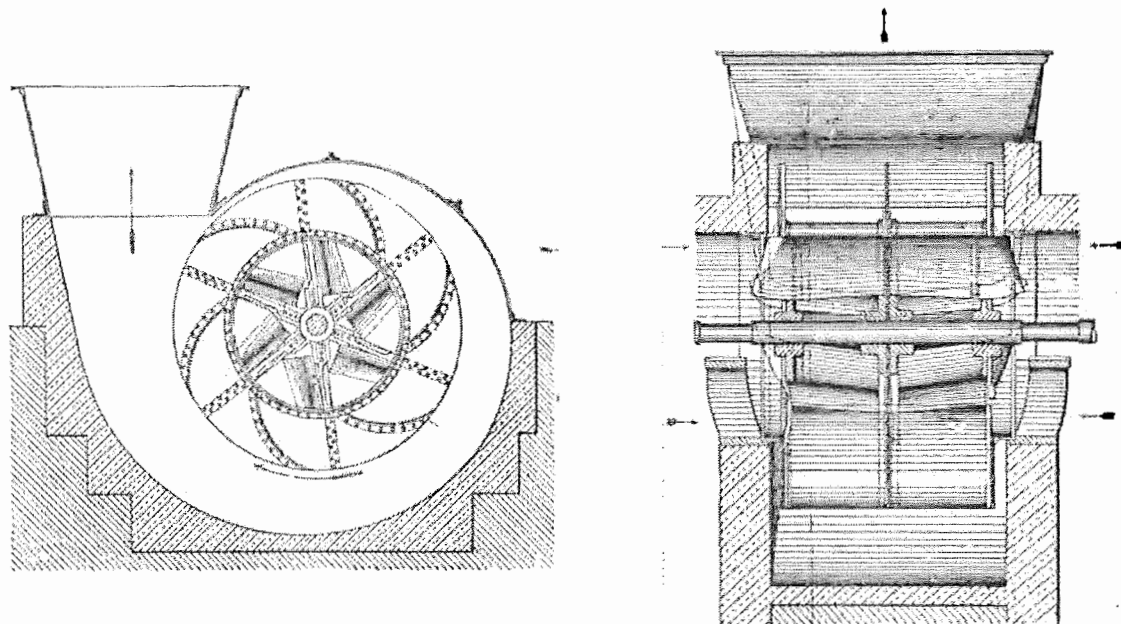


Figure 3 - The Capell Fan

The smaller sizes have six blades, and the larger sizes eight, or, to be strictly accurate, twice the number in each case, because the construction of the Capell fan is such that it has two sets of blades, an inner and an outer set. The revolving portion of the ventilator consists of a drum or cylinder, with one set of blades inside the drum, the other set outside. The outer blades are curved backward, and the inner blades, which are inclined backward, have their radial edges on the inlet side curved forward, somewhat like the blades of a screw-propeller type of fan, the idea being to gather the air in, so to speak. From the inner blades the air is discharged through openings in the drum or cylinder, where it is further dealt with by the outer blades, which take a very considerable backward curve. The fan revolves in a spiral casing, with an expanding chimney." (The Mechanical Equipment of Collieries; Percy, C. M.; James Collins and Kingston, Ltd.; Manchester, England; 1905.

The Harwick mine ventilation system was set up as a blowing system, which is at odds with what seems to have been the preferred method of ventilation during the early part of the 20<sup>th</sup> century. This was the time in which mechanical ventilation was just beginning to take hold in coal mining, and furnaces has been the primary ventilation force for many years, operating of necessity as exhausting systems. Furnaces had reached their peak of effectiveness some time earlier, and a well designed furnace could out-produce many of the available mechanical fans. One of the primary motives for development of the mechanical fan was the amount of coal necessary to fire the furnace, and the resultant danger in having the fire in the mine to begin with. Mechanical ventilation removed this danger from the mine, and the Capell fan became quite popular as it was

comparatively small in size, economical in cost, and economical to operate. Air flow could be easily adjusted at the fan, and the state inspector's reports for the preceding months indicate that the fan was producing steadily more air as production and employment increased. The Harwick fan was said to have been capable of producing around 200,000 cfm. The Capell fan was thought to produce a much higher water gauge than other fans, and this was the object of much discussion at engineering conferences. Eventually, it was determined that water gauge pressures taken within the drift showed the Capell fan to actually have a lower water gauge pressure than equivalent fans of other types.

### Roof Control

Mine roof control was with timbers. Little information is available on the condition of the roof in the Harwick mine; however, indications from available current data relative to the Upper Freeport coal seam indicate that in many areas the immediate roof is relatively weak, consisting of soapstone and laminated shale. This may have been true in the Harwick mine as well, as several massive falls were reported in the post accident investigation report. According to the investigative report conducted for the company, massive falls were present in all three main north entries, with the original timbers broken down. This was attributed to a 'more pliable' roof in this area than in other parts of the mine, proven by the fact that the entries were timbered at the time they were driven. Most of the rooms off the butt entries had large falls, and some were considered to be damaged beyond recovery. Some bodies were reportedly pulled from under as much as eight feet of rock and rubble. An additional indication that the roof may have been weak is related to the mining method in use. One of the positive selling points for the puncher type cutting machines was the closeness to the face that timbers could be set with those machines. Other available undercutting machines of the day required considerably more space to operate. Additionally, one set of butts had been abandoned before the explosion as a result of bad top.

The certainty is that the mine timbered, and many of the timbers were blown out by the force of the explosion. This led to massive roof falls in many areas of the mine, making the recovery operation that much more difficult. The north mains, the rooms off No.'s 1, 2 and 3 south right butts and the No.'s 3, 4, and 5 south left butts were very heavily collapsed.

### Haulage

The type of haulage in use at the Harwick mine is noted only in passing. There were 10 animals noted in the mine in the state mine examiners report, and during the investigation, there was mention of finding a "driver with a three car

trip... the mule yet remaining hitched to them." The hand-loaded cars were hauled from the working places to the production shaft by means of mules and rail. Once delivered to the production shaft, the cars were then hoisted to the surface by means of a steel cage, weighed, and dumped. The loaded cars were hoisted in the east cage, and the empties returned to the bottom on the west cage. The cages apparently counterbalanced each other, as when one was at the top, the other was at the bottom of the shaft. The coal appears to have been then loaded directly into rail cars, possibly after passing through some type of breaking and sizing apparatus. There may have been slate pickers employed as well, as the number of reported surface employees leaves several persons unaccounted for.

### Production

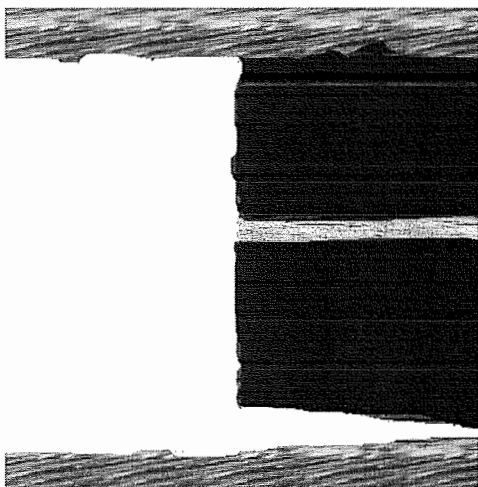
Coal production was accomplished by undercutting the coal by use of the different types of cutting machines in use at the mine. This type of machine would undercut about 4 to 4 ½ feet deep, creating an opening of 12 to 14 inches in height at the face, tapering to 3 in. or 3 ½ in. at the back of the cut. (See Figure 1). The face of the coal would then be drilled and blasted by use of dynamite to break the coal, as generally lump coal was more highly prized than slack. It was felt that the higher opening in the front of the seam made for a better, more efficient shot than the equal height cut of the rotary cutters, as the coal would have a tendency to fall out into the entry when blasted. The loaders could then load coal instead of having to 'pick' the coal down prior to loading.

Two methods had been used at the Harwick mine. The method apparently in favor at the time of the accident involved undercutting the coal at the bottom of the seam and then shooting the coal with holes drilled near the top of the seam. Three sticks of dynamite were generally used, but due to the difficulty in blasting the coal with this set-up, overcharges were also used. This was intended to break the coal from the top down to the undercut, and cast it into the entry for loading. In practice, according to testimony and according to evidence found after the explosion, there were frequent blown out shots. According to the experts, this was a result of the coal seam characteristics in the Harwick mine. The seam being mined, the Upper Freeport is around seven feet thick in this area and has a rock middleman or parting of about seven inches thickness, with the top portion of the seam being the harder of the two. By bottom cutting the seam, and then drilling and blasting near the top, it was said that blown out shots were common. The dynamite was unable to break the coal down to the cut though the harder coal and the middleman. The report published by the Department of Mines stated that "The shots were all located...near the roof of the upper bench of the coal seam, thus requiring an extremely heavy charge of the explosive to bring

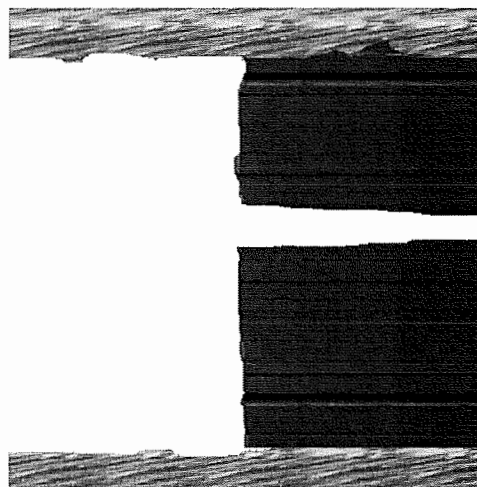
down the coal. This was rendered much more difficult owing to the center slate of the coal seam having a greater strength than the coal in the upper bench of it.”

This was felt to have been a contributing factor in the blown out shot which ignited the methane accumulation initiating the explosion. Testimony of one witness was that the undercut should have been at least as deep as the seam height.

The other method, and the one originally proposed by Mr. Edward Bell, the original mine superintendent, involved cutting the rock middleman instead of bottom cutting. It appears from his testimony that holes were drilled both above and below the cut, and that this process actually used less dynamite and also broke up the coal better, as both portions of the seam would be blasted. The bottom, softer seam did not need to be blasted as much, and could be shot up toward the cut, while the upper harder seam was blasted down. This involved drilling four holes however, and may have been the reason it had been abandoned by most of the men. Only one place was found where this process was being followed during the investigation.



Bottom Cut - Top Shot



Center Cut-Top and Bottom Shot

Figure 4

Both methods created a large amount of dust, as the compressed air puncher type mining machine most closely resembles a large jack hammer. One testimony was to the effect that the men would “kind of strangle” from the dust when the machines were working in an entry. In the working faces of the rooms, the accumulation of dust was reportedly quite extensive, as block coal was what was wanted. The responsibility of the helper was to keep this material shoveled away from the machine where it would not interfere with the continued operation of the machine. Additionally, one and a quarter inch airlines were installed in each

entry to provide power to the mining machines, and this was sometimes used to blow out any methane gas which was detected prior to a shot being put off. This also had the effect of suspending more dust in the air than was already there.

The coal was drilled by the men who were responsible for hand loading, and there reportedly were 131 places being worked throughout the mine, with two men in most places. Information is unavailable as to the specific method of drilling; however, each man was responsible for drilling and tamping his own shots. Three sticks of dynamite were used, which allowed for about three feet of stemming. The stemming was done by making dummies with newspaper and preferably, wet coal dust. If water was unavailable, dry dust and slack coal was used. This was also felt to have contributed to the explosion as the blown out shot would have put a large amount of very dry dust into suspension, which was ignited by the resultant methane explosion. Some testimony was given that this alone was sufficient to have caused the explosion without the introduction of methane, as there had been little methane reported in the mine. However, the amount of methane detected during the investigation, and testimony related to the experience of miners with methane in the mine, convinced almost everyone that methane was involved.

The shots were fired by company shot firers, with little exception. The established method of firing was with the Davy lamp, a safety lamp with an attached wire which could be inserted through the meshes of the gauze of the safety lamp and heated enough to light the fuse. The dynamite was exploded by fuse and fulminate of mercury caps. There was testimony that open lights had been used at times to light the fuse, but this was not the general practice, and only certain management persons were observed to have done this.

Once shot down, the coal was loaded by the same men who prepared the shots. They loaded the coal cars by hand, either taking the large blocks of coal by hand and placing them in the cars or loading the smaller coal with a shovel. When full, the car would be hauled to the bottom of the shaft by mule and placed in the 'up' cage. The cage would be hoisted to the surface, the car weighed and dumped, and the empty sent back to the bottom on the 'down' cage. Each miner had a numbered tag which was placed on the loaded car to identify who had loaded it.

### System Concerns

Dust - One of the principal concerns with this disaster concerns the control of dust in the mine. The type of mining machines used generated a tremendous amount of dust, so much so that one miner testifying at the Coroner's inquest stated that they would "kind of strangle" from the dust when the machines were working in their entry. He also stated that they would "scrape up a little, what

they could, but it was impossible to load all the machine dust". From previous discussion it may be seen that the cutting process would generate considerable tonnage of slack coal. (see discussion of mining equipment)

The method of controlling dust was to dampen it by sprinkling with water, and water wagons were provided for that purpose. Testimony was given to the effect that this was done as a practice at the mine, especially in the main entries, but that "it had been a good while before the explosion"; thus with the extremely cold weather, and by all accounts more than adequate ventilation, the mine was extremely dry. The weather at the time was reported in Pittsburgh as a low of 5 degrees above zero and a high of 23 with snow. It was reportedly below zero at Cheswick.

An additional factor was the use of compressed air to dilute methane in the faces prior to blasting. This practice had the side effect of also stirring up this extremely dry dust, and putting it into suspension. Given that on this particular morning there was limited ventilation in the mine to begin with, there was little air movement to sweep this dust out of the blasting area.

This issue can be related to the technical design of the machinery involved in creating the dust. The design and manufacture of the machine had focused on the operational usability of the machine and not on factors such as dust control. This idea would then lead to consideration of this issue also in relationship to organizational systems. The mine operators did not place any pressures on the manufacturers of the equipment to develop equipment which generated less dust, and indeed appeared to accept the generation of the dust as an acceptable risk. The methods of allaying the dust were entirely in the control of the mine superintendent and mine foreman.

Cutting the Coal - The practice at the time of the explosion was to bottom cut the coal and blast near the roof. In this mine, this seam was about seven feet in height and had a rock parting about mid-way in the seam. In addition, the top portion of the seam was harder than the bottom. This created problems with this particular system. It was very difficult to break the coal all the way to the cut, and more dynamite was used than might otherwise have been necessary. This, combined with the practice of tamping the shots with coal dust, was creating a recipe for blown out shots. The path of least resistance was out through the drill hole instead of down through the coal.

One of the strengths of the puncher machines was the wide cut at the face, which tapered sharply to the back of the cut. This was felt to create almost a hinge effect, similar to notching a tree before cutting it. When the shot was put off at the top, the objective was to break the coal down to the cut, and with the cut

about four and a half feet deep, the shot about three and a half to four feet deep, this would normally work well. The larger opening near the face of the cut caused the coal to roll out into the entry and less picking down of the coal was necessary. With the hard coal and the middle man, breaking down to the cut was much more difficult.

According to the testimony of Edward Bell, former mine superintendent at the Harwick mine, the original system of mining the coal had been to cut the coal in the 'bone', or the rock parting, in effect creating an extra face for both seams. His testimony was that "we put one shot under each rib and in the top, one in the bottom, and it took a very small quantity of explosive to blow the top down and the bottom up. It took four charges for the cut." If this is correct, there would have been a much reduced chance of having blown out shots, and the dust created by cutting the rock, while possibly worse for the miners from the perspective of pneumoconiosis, would have been less explosive.

Drilling four holes instead of three, and setting up the machine to cut in the middle of the seam may have possibly taken longer, thus the miners, who were paid by the ton loaded, may have preferred the other system, thus introducing the human factor into the equation.

Other factors involved in this area probably involve a number of considerations. Certainly the technology played a role. The method used in cutting the coal was probably chosen by the miners because it was easier to bottom cut than to cut higher in the seam. The cutter created a lot of dust; the way it was designed and built there weren't many other options. The blasting technology of the day was to use dynamite, as permissible explosives are not available. On the other hand, organizational systems came into play as well. It would have probably been a management decision to abandon the center cut method of cutting and going to the bottom cut method. It was certainly managements toleration and thus implicitly approval of the drilling and shooting at the top of the seam.

Blasting - As has previously been mentioned, there were at least two major areas of concern with the blasting practices in the Harwick mine. The first is directly related to the immediately preceding section: bottom cutting the coal as opposed to cutting in the middle, and the necessity of putting off heavier charges to break the coal. Testimony was that there were two primary reasons for blown out shots: loading too heavily, and poor tamping. Both of these were practiced at the Harwick mine, apparently with the knowledge and approval of the mine management. The other major concern deals directly with the tamping of the coal. No material was provided for the men to make up dummies, and according to testimony, the men made their own with paper, filled with coal dust. If water was available, they would dampen the dust, but if not, they used it dry; it was all



that was available. It appears to have been common knowledge that this was not a safe practice and could lead to fire and explosion, and there was testimony at the inquest that the coal had caught fire at times, generally as a result of a blown out shot igniting the coal dust.

An item of interest is that while both the mine superintendent and the state inspector denied any knowledge of blown out shots in the mine, there were several locations found during the post accident investigation. Both of these gentlemen also appeared to have difficulty in accepting the role played by gas in the explosion, even in the face of overwhelming evidence.

The mine was however known in the area as a safe mine, at least in part because of its blasting practices. While the men were responsible for drilling and preparing the shots, the shots were with few exceptions fired by company shot firers. These were trained personnel who were equipped with Davy safety lamps. The Davy light had a small wire attached which could be inserted through the mesh in the gauze and heated. This heated wire was then used to light the fuse. Open lights were not used in the mine, especially not to blast the coal.

The mine was known to produce methane, and apparently the shot firers were expected to test for the presence of gas before blasting. The practice was to dilute the gas with compressed air if any was found which had the side affect of suspending a lot of dust.

Likewise, the practice of tamping with coal dust, and the toleration of blown-out shots was under management control. There seems to also have been a certain amount of friction between the mine foreman and the superintendent. Perhaps the appointment of a superintendent from Ohio, the location of the company which owned the Harwick mine, created this issue. This is an issue that could have only been addressed by top company management, and this was urged on the company by the Coroner's jury. Whatever the reasons for the conflict, it was obvious that the superintendent was making little effort to support the mine foreman, and the foreman had his hands full.

Ventilation - Air flow at the Harwick mine was one of the things which led the state mine inspector to consider this as one of the best mines in his district. Air flow requirements were that one hundred cfm of air was to be supplied for each miner underground in non gassy mines, and one hundred fifty cfm in gassy mines. The mine employed less than two hundred miners, thus the requirement of law was that something less than thirty thousand cfm be supplied. Normal air readings in the mine were around sixty to seventy thousand cfm, so better than twice the required air was normally supplied. According to one of the last

reports filed by the state inspector, better than ninety thousand cfm was being generated and the fan was capable of producing two hundred thousand cfm. The mine records indicated that about seventy four thousand cfm was being supplied around the time of the disaster.

It is ironic that a practice which made the mine so much safer in one aspect created problems in other aspects. The volume and velocity of air passing through the mine workings, especially with the air so cold and dry, contributed to the dryness of the mine. Also, with both shafts being wet, the ventilation contributed to the formation of ice at the bottom of the shaft and in the overcast. This in turn lessened the air flow, and allowed methane to accumulate and coal dust to be suspended. Given that it was snowing on the morning of the explosion, it is also probable that the barometric pressure had fallen, which is now known to be a factor in liberating methane from the strata. These factors all contributed to the development of conditions which made the explosion possible.

The explosion destroyed every ventilation device in the mine.

Technical factors - the design of a system which allowed ice to accumulate internally to the system itself to the extent that ventilation was nearly cut off, and human factors - the responsibility of the mine foreman to see that the ice was kept cut to where it would not restrict air flow and organizational factors - the toleration of the situation as it was by mine management all combined to create a serious problem which had devastating consequences.

Additional factors which could be considered are:

The large number of immigrant workers - The largest group in the mine was Hungarian, with a relatively large group of Italians, and several other nationalities. The difficulty in communicating with them was probably one of the most daunting tasks faced by mine management. It was necessary for management to post rules in several languages, and if they were illiterate it was the responsibility of the mine foreman to make sure they were aware of what the rules were. This is an area where the organization bears full responsibility. While there were no apparent direct connections of the foreign workers with the disaster, there is an appearance that the remains of the deceased may have not been treated with the greatest respect. Several bodies were placed on the ground in the snow because they had been kept underground so long they were beginning to decay. This became a side-show with people coming from miles away to see them.

The state inspector – Mr. Cunningham had only been an inspector for about a year at the time of the explosion. While an experienced miner, the coroner's inquest found him culpable in the disaster, and recommended he be handed to the grand jury on a charge of murder. Based on the findings of the post accident investigation, and his sworn testimony, it appears that he may not have been as diligent in carrying out his duties as he could have been, even though inspectors had very limited powers to do more than suggest. This is a system factor related to the status of government and corporations, as well as a human factor related to his abilities on a personal level to do the job.

The fireboss – The human element in this disaster is probably brought to the forefront most clearly in this instance. What conditions did he observe in the mine, and why did he do nothing about those conditions? The actions of one man could have had a major impact on the lives of 178 others.

The mine foreman – Another example of the human element. For whatever reasons, he chose to allow the ice to accumulate at the foot of the air shaft and in the overcast to the point that ventilation was obstructed. The mine was said to have been extremely dusty, and he had not had the dust sprinkled in some time. It appears that production concerns had possibly begun to be a major concern of the mine. There had recently been an increase in employment. The fan was being operated on the blowing system, causing a build up of ice in the ventilation shaft, but leaving the production shaft open. We know this was a concern because when the fan was reversed, the production shaft began to ice, and several times during the recovery process, ice had to be removed from the shaft.

### Rescue and Recovery

The rescue effort began the same day as the accident, with men entering the mine around 5:00 pm. Shortly thereafter, the lone survivor would be brought from the mine. His life would however be traded for two others, as two would-be rescuers, advancing into unknown conditions in vain hope of finding survivors, were overcome by the afterdamp and perished. As the state inspectors arrived and entered the mine, "taking the air with them," they found the bodies of the rescuers, and soon began to find the bodies of the miners. Due to the extreme devastation they encountered, the total destruction of all ventilation controls, the massive falls and the presence of both fire damp and after damp, the operation soon became a recovery effort instead of a rescue effort. It would be the end of the week before the last body would be pulled from the mine, and many of the last would be placed in caskets at the pit mouth and buried in a mass grave, as the bodies were so mutilated that recognition was impossible.

On March 9<sup>th</sup>, a team of 60 men were sent into the mine to clean it up in preparation to run coal. The mine would operate for the next 66 years.

Two investigations were conducted into the explosion. The State of Pennsylvania Department of Mines conducted a very thorough investigation and made a determination as to the cause. On February 12 and 13, the Allegheny Coal Company sent in a team of their own, composed of mine foremen, mine superintendents, and engineers to make their own determinations. Both teams came to the same conclusion: The disaster had been caused by a blown out shot, igniting methane which in turn ignited coal dust, and thence a rapid explosion encompassed the entire underground workings, venting up the main shaft and seriously damaging the tippie and hoist, as well as doing major damage to the air shaft. Several of the rooms were fallen so badly, as was the north mains, that there was discussion as to the feasibility of recovering those parts of the mine. See Appendix A for map of damage.

### Aftermath

It seems amazing that 181 men lost their lives, and the only ones really remembered are those who lost their lives in what some would consider to be fool hardy attempts to rescue people whom they had already reportedly given up for dead. Selwyn Taylor, a prominent wealthy Pittsburgh engineer, having laid out the mine rushed to the scene, and went into the mine in an effort to find any survivors. Finding Adolph Gunia, a 16 year old who was badly injured, and probably thinking there might be others, he pressed into an area of the mine where those with him would not go because of the high levels of afterdamp. He soon collapsed, and his companions could not rescue him, they needing rescue themselves. By that time, Mr. Taylor was dead. Mr. Daniel Lysle also entered the mine, apparently unknown to any, and was found dead the next day. Their story is the instigation of the Carnegie Hero's Medal, as Andrew Carnegie was greatly touched by the tragedy. This medal is still being given today to those who willingly risk their own lives for others, and was most recently awarded in the coal industry to the men who gave their lives in an attempt to rescue their fallen comrades at the Jim Walter Resources disaster in Alabama.

The lessons of this tragedy seem to relate most vividly to the levels of ignorance, or the willful ignoring, of the hazards of coal mining and the total lack of preparation for such an event as occurred as a result. There were no resources available to aid in the recovery operation. Volunteers were requested from the surrounding mines and towns, and experience was not necessarily a factor. The fan shaft was almost destroyed, and one man made the decision to reverse the fan and descend into the mine. Planning and preparation are now known to be

essential to an effective rescue and recovery operation, and it was events such as this that began to make that clear.

It was also known throughout most of the mining world that coal dust was explosive, and the state investigation report conducted an analysis of the volatility of the coal dust and determined it to be highly explosive. Those persons interviewed all acknowledged that they understood dust would explode, and most of them had seen either fire damp or coal dust on fire in the mine from blown out shots. Several of the 'experts' interviewed stated their opinion that the explosion was caused by ignition of dust alone, without any gas being involved; mostly those with a vested interest in methane not being the cause as they had stated that the mine was producing very little methane. This is an interesting point as the mine fan was set to produce, at minimum more than twice the amount of air required by law, and the men were required to use locked safety lights.

Another major point of disagreement was between the state inspection report and the company report. The state report indicated that large amounts of methane were involved in the explosion based on the amount of heat generated in particular areas, and the fact that those areas had the highest concentrations of methane during the investigation. The company investigation determined that the high temperatures were caused by high levels of coal dust. This can be primarily attributed, of course to the lack of technology at the time to determine the source of combustion.

These disagreements within the ranks of the professionals point to the necessity of research, education, and training; the need for continued training, and the need for those persons having positions of responsibility to be the most knowledgeable people available. The superintendent knew little of what was going on underground, and proceeded to blame everything on the mine foreman, who was trying to manage 180 employees of various nationalities, maintain the mine ventilation, control the dust, etc. Clear lines of communication are essential, and somebody has to be in charge. Neither of these seems to have been occurring at the Harwick mine.

Another factor which these type disasters began to bring to the attention of the people, and the politicians, was the power of corporations to cause the deaths of hundreds of people and not be held responsible. It was not only the mining industry which was involved in killing thousands of people with limited liability. The railroad killed more than mining, and the laws were written such that corporations had very limited liability. This is a lesson which we seem to be forgetting, as corporations seem to once again be gaining an inordinate amount of power in America.

This was but the first of several massive explosions which would occur over the next few years in the coal industry. The ultimate outcome was such a public outcry that the government created the US Bureau of Mines. National attention was drawn to the conditions in the mines, as newspapers all over the nation picked up the story, and cries for new laws and regulations began to be heard, but it would be after the Monongah explosion that most of those changes would occur. The Bureau began to do experiments to determine how to control the dust and to develop blasting agents which would not ignite methane. They began to publish their findings and encourage the mining industry to adopt better, safer methods of mining coal. This disaster however was the one which first drew the nation's attention, and began the call for the governmental intervention which has had so dramatic an effect in reducing the loss of life in the nations' coal mines.

Maybe not such a bad epitaph after all for a group of unknowns.

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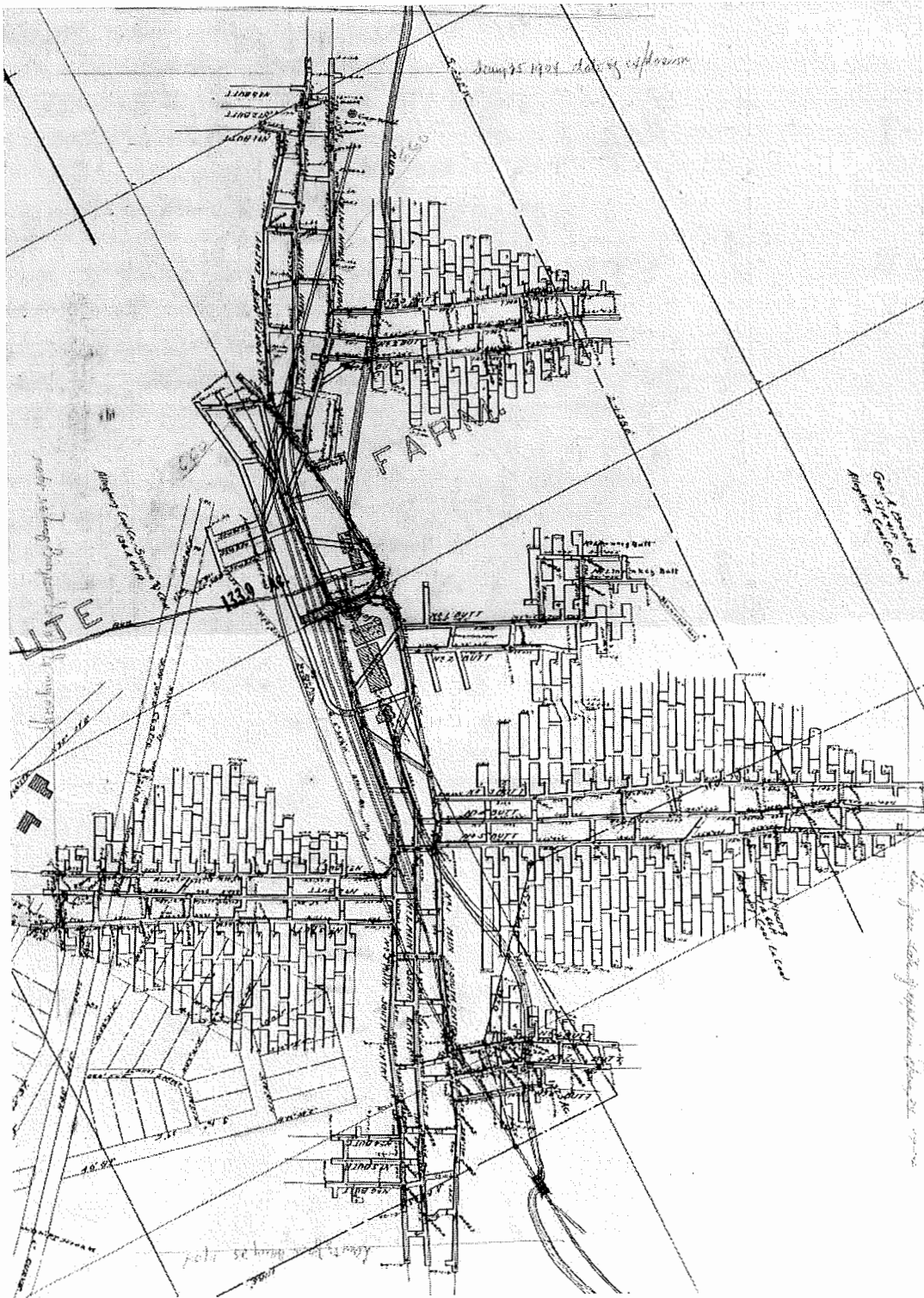
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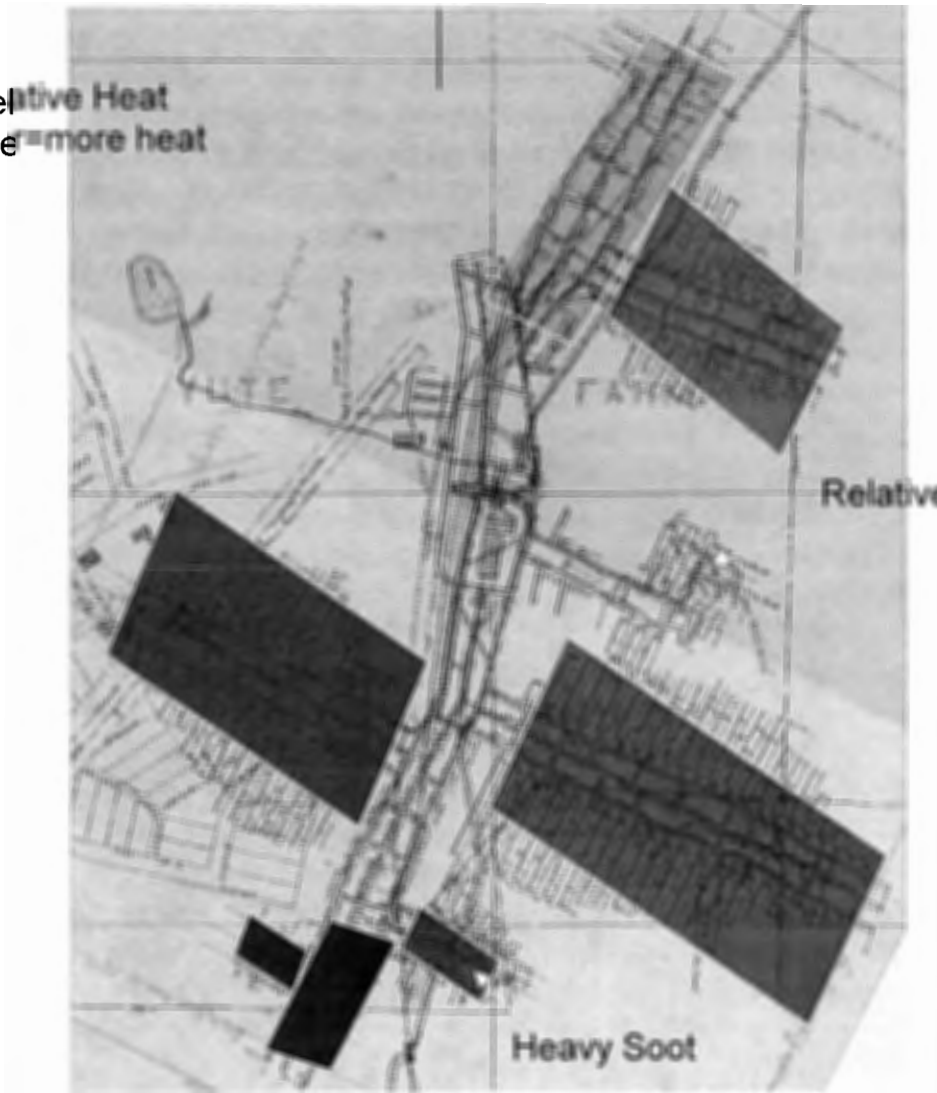
# Appendix A

## Maps



Map of Harwick Mine

Relative Heat  
Darke = more heat



Relatively Light Damage

Heavy Soot

Areas of Heat Damage from Explosion



Areas of Roof Damage from Force of Explosion



Location of Bodies

Appendix B  
List of Killed

Row	Name	Nationality	Occupation	Age	Marital	widows	orphans
1	Selwyn Taylor	American	rescuer	42	M	1	0
2	Daniel Lysle	American	rescuer	43	M	1	0
			Check				
3	John Waltman	American	weighman	??	M	1	3
4	D. Numet	Hungarian	dumper	?	M	1	1
5	J.A. McConneha	American	Loader	29	m	1	3
6	SA. Beecham	English	Boss Driver	46	m	1	5
7	Henry Mayhue	American	Shot Firer	32	m	1	2
8	John Zemosky	Polish	Scraper	18	s	0	0
9	P. Goodman	American	Driver	22	M	1	2
10	S. Hackney	American	Scraper	33	s	0	0
11	John Siminik	German	Loader	33	m	1	??
12	Jesse Cochran	American	Loader	35	s	0	0
13	Joseph Miles	American	Cager	24	s	0	0
14	George Ambrose	American	Cutter	41	m	1	3
15	John Cavach	Hungarian	Loader	36	m	1	??
16	Joe Bioll	Hungarian	Loader	45	m	??	??
17	William Shaw	American	Cutter	29	m	1	1
18	Charles Gunia Jr.	German	Scraper	16	s	0	0
19	Phillip Magnon	Italian	Loader	20	s	0	0
20	Steve Kovach	Hungarian	Loader	30	m	1	??
21	John Kallich	German	Loader	58	m	1	??
22	Henderson Glover	American	Loader	22	s	0	0
23	Gabriel Ihasz Sr.	Hungarian	Loader	42	m	1	1
24	David S. Morris	American	Loader	30	m	1	2
25	Balaza Mayor	Hungarian	Loader	27	s	0	0
26	Richard Dove	American	Driver	32	m	1	1
27	Thomas Noble	American	Loader	40	m	1	2
28	Andy Balogh	Hungarian	Loader	27	m	1	??
29	Mike Opepara	Italian	Loader	24	m	1	1
30	Andy Rogozinski	Polish	Loader	46	m	1	1
31	Frank Hijza	Hungarian	Loader	23	s	0	0
32	Frank Davis	Italian	Loader	22	s	0	0
33	Thomas Middlemast	American	Pick Boy	17	s	0	0
34	Frank Areuli	Italian	Loader	42	s	0	0
35	August Timpin	Italian	Loader	20	s	0	0
36	James Parry Jr.	American	Trapper	16	s	0	0
37	Ed Hutmire	American	Driver	24	m	1	1
38	William Fletcher	American	Loader	32	m	1	??
39	Lloyd Davis	American	Loader	24	s	0	0
40	Joseph A. Gordon	American	Fire Boss	34	m	1	3
41	Gabriel Ihasz Jr.	Hungarian	Loader	17	s	0	0
42	Tony Pasikawich	Polish	Loader	35	m	1	??
43	Ed Hill	American	Scraper	29	s	0	0
44	Joe Ballow	Hungarian	Loader	32	m	1	??
45	George Kukura	Hungarian	Loader	22	s	0	0

46	Sam Canton	Italian	Cutter	22	s	0		0
47	Rosario Elive	Italian	Loader	26	m	1	??	
48	Attiliv Lambriki	Italian	Loader	28	m	1		1
49	Irwin Kirkwood	American	Pipeman	16	s	0		0
50	Vendel Nesmith	Hungarian	Loader	25	s	0		0
51	Harry Flenner	American	Trapper	15	s	0		0
52	Lino Tarilla	Italian	Loader	22	s	0		0
53	John Hill	English	Loader	23	s	0		0
54	George Gregor	Hungarian	Roadman	36	m	1	??	
55	L. Kovach	Hungarian	Loader	32	m	1	??	
56	Varady Bernot	Hungarian	Loader	45	m	1	??	
57	Peter Rayher	Hungarian	Driver	27	m	1	??	
58	Joseph Pyszka	Hungarian	Loader	32	s	0		0
59	John Sek	Hungarian	Loader	22	s	0		0
60	John Katres	Hungarian	Loader	19	s	0		0
61	Joseph Rutzna	Hungarian	Loader	25	m	1	??	
62	John Shamber	German	Loader	40	m	1	??	
63	Joseph Hayder	Hungarian	Loader	29	m	1	??	
64	L. Fabin	Hungarian	Loader	18	s	0		0
65	Lorance Gardu	Hungarian	Loader	35	m	1	??	
66	T. Kosak	Hungarian	Loader	36	m	1	??	
67	Charlie Tuckacs	Hungarian	Loader	18	s	0		0
68	Albert Davis	American	Loader	32	s	0		0
69	Ed Chrispen	Swedish	Scraper	30	m	1	??	
70	John Scandolol	Italian	Loader	27	s	0		0
71	Sidney Huddelson	American	Loader	32	m	1	??	
72	Andrew Shaner	American	Loader	25	s	0		0
73	D. Gallelli	Italian	Loader	27	m	1	??	
74	J.C. Mace	??	Scraper	50	m	??	??	
75	John Salceni	Italian	Loader	30	s	0		0
76	James Crawford	American	Loader	35	s	0		0
77	John Anghenolfi	Italian	Loader	45	m	1		1
78	W.W. Trontner	American	Cutter	28	m	1		0
79	Phillip Nocean	Swedish	Cutter	25	m	1	??	
80	Thomas Phillips	American	Scraper	37	m	??	??	
81	Charles Anghenolfi	Italian	Water bailer	45	m	1		2
82	Dominic Arenli	Italian	Loader	28	m	1	??	
83	Frank Anton	Hungarian	Loader	38	m	1	??	
84	Frank Pullingi	Italian	Loader	28	m	1	??	
85	Alplin Timponi	Italian	Loader	25	m	1	??	
86	P. Gallelli	Italian	Loader	19	m	1	??	
87	Salvatore Genercio	Italian	Loader	21	m	1	??	
88	Andrew Sparda	??	Cutter	26	s	0		0
89	Gabriel Orban	Hungarian	Loader	25	s	0		0
90	Charles Gunia Sr.	German	Loader	44	m	1		5
91	Felice Gallelli	Italian	Loader	24	m	1	??	
92	Nosario Matariso	Italian	Loader	27	m	1	??	
93	Steve Orlosky	Hungarian	Loader	36	m	1		1
94	Henry Phillips	Welsh	Loader	35	s	0		0
95	Andrew Balog	Hungarian	Loader	28	m	1	??	

96	Domen Flenner	American	Loader	36	m	1		2
97	Joseph Yeager	Hungarian	Loader	31	s	0		0
98	John Boyers	English	Scraper	27	m	1	??	
99	John Float	American	Loader	53	m	1		4
100	Harry Cheatham	English	Cutter	24	m	1	??	
101	Harvey Rutter	American	Cutter	22	s	0		0
102	Chris Bowser	American	Cutter	28	m	1	??	
103	Lawrence Bulay	Hungarian	Loader	39	m	1	??	
104	Joseph Hay	Hungarian	Loader	18	s	0		0
105	Mike Stengart	Hungarian	Loader	18	s	0		0
106	Peter Brown	American	Loader	18	s	0		0
			Mine					
107	George Brown	English	Foreman	46	m	1		6
108	James Parry Sr.	Welsh	Loader	38	m	1		2
109	Rosario Manyon	Italian	Loader	35	m	1		1
110	George Bigley	American	Driver	32	m	1		1
111	Robert Brown	American	Cager	17	s	0		0
112	Samuel Hone	American	Loader	32	s	0		0
113	Rosario Maleto	Italian	Loader	35	m	1	??	
114	Kalman Zambo	Hungarian	Loader	22	s	0		0
115	James Baughman	American	Shot Firer	35	m	1		2
116	Alex Flenner	American	Timberman	37	m	1		2
117	C. Dapra	Hungarian	Loader	30	s	0		0
118	W. Tokash	Hungarian	Driver	21	s	0		0
119	S. Zemosky	Polish	Scraper	17	s	0		0
120	E. Sadoksy	Polish	Loader	??	??	??	??	
121	Steven Tote	Hungarian	Loader	??	m	1		3
122	J. Loskoski	Hungarian	Loader	24	m	1		1
123	A. Jones	American	Cutter	??	s	0		0
124	Andy Harvath	Hungarian	Loader	21	s	0		0
125	M Zemosky	Polish	Cutter	38	m	1		4
126	Lajos Mathe	Hungarian	??	36	m	1		2
127	Ferenc Geczy	Hungarian	??	40	m	1		5
128	Antal Gyurko	Hungarian	??	37	m	1		2
129	Mihaly Bodnar	Hungarian	??	33	m	1		6
130	Janos Hejia	Hungarian	??	33	m	1		1
131	Jozef Hejia	Hungarian	??	25	s	0		0
132	Toni Gyurko	Hungarian	??	38	m	1		3
133	Balint Nagy	Hungarian	??	18	s	0		0
134	Gaspar Toth	Hungarian	??	43	m	1		6
135	Guztav Balogh	Hungarian	??	27	m	1		2
136	Jozef Rapolti	Hungarian	??	30	s	0		0
137	Jozef Toldi	Hungarian	??	29	s	0		0
138	Lajos Nyitrai	Hungarian	??	22	s	0		0
139	Ferenc Fritz	Hungarian	??	25	s	0		0
140	Sandor Vegso	Hungarian	??	32	m	1		0
141	Janos Lipcsac	Hungarian	??	34	m	1		4
142	Jozef Flasko	Hungarian	??	23	s	0		0
143	Jozef Gecso	Hungarian	??	32	m	1		2
	Andras Szacsai							
144	Balogh	Hungarian	??	27	m	1		0

145	Janos Koscso	Hungarian	??	??	m	1	??	
146	Karoly Prokob	Hungarian	??	19	s	0		0
147	Miklos Takacs	Hungarian	??	20	s	0		0
148	Janos Harangozo	Hungarian	??	42	m	1		6
149	Mihaly Nagy	Hungarian	??	29	m	1		1
150	Marton Horvath	Hungarian	??	42	m	1		1
151	Sandor Szimaijszter	Hungarian	??	??	s	0		0
152	Janos Egri	Hungarian	??	27	m	1		2
153	Sandor Zamo	Hungarian	??	19	s	0		0
154	Jozef Steingart	Hungarian	??	19	s	0		0
155	Istvan	Hungarian	??	??	??	??	??	
156	Zemplen	Hungarian	??	??	??	??	??	
157	??	??	??	??	??	??	??	
158	??	??	??	??	??	??	??	
159	??	??	??	??	??	??	??	
160	??	??	??	??	??	??	??	
161	??	??	??	??	??	??	??	
162	??	??	??	??	??	??	??	
163	??	??	??	??	??	??	??	
164	??	??	??	??	??	??	??	
165	??	??	??	??	??	??	??	
166	??	??	??	??	??	??	??	
167	??	??	??	??	??	??	??	
168	??	??	??	??	??	??	??	
169	??	??	??	??	??	??	??	
170	??	??	??	??	??	??	??	
171	??	??	??	??	??	??	??	
172	??	??	??	??	??	??	??	
173	??	??	??	??	??	??	??	
174	??	??	??	??	??	??	??	
175	??	??	??	??	??	??	??	
176	??	??	??	??	??	??	??	
177	??	??	??	??	??	??	??	
178	??	??	??	??	??	??	??	
179	??	??	??	??	??	??	??	



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"Preserving Our Past . . . For The Future"

February 2004

Republished from *The Homestead News-Messenger*, Monday Evening, January 25, 1904

## HORRIBLE MINE DISASTER.

One Hundred and Fifty Men are Imprisoned  
With Small Chance of Escaping Alive.

A terrible explosion occurred at 8:20 this morning in the shaft of one of the mines of the Allegheny Coal Co., about two miles back of Cheswick Station on the West Penn railroad. At least 150 miners are said to be imprisoned in the burning mine, and a great loss of life is almost certain. Two of the tippemen were killed and two were fatally injured.

All the morning men had gone into the mine as usual. Several loads of coal had been taken out, and work was proceeding as usual. Suddenly a blast of flame shot from one of the shafts, which is about 300 feet deep, followed on the instant by an explosion that shook the ground for a mile in all directions.

The men at work at the tippel were hurled to the ground and were overtaken by the flames that poured from the shaft. Two men were killed almost instantly. A third was so badly burned that he will die. A mule was blown into the air and fell dead several feet from the mouth of the shaft.

The people of Cheswick and wives and families of the imprisoned miners gathered near the mine quickly. Flames were coming from the shaft and nothing could be done to stay the progress of the fire.

At 10 o'clock, nearly two hours after the explosion, nothing was known of the imprisoned miners. Wives and children, crazed from grief got as near the mine entrance as they could. Doctors were sent from Cheswick and Springdale.

Supt. George Sheets, of the mine, said at 10 o'clock that he would hold out very little hope of the safety of the men in the mine.

A rescue party was organized, and messengers were sent to Cheswick for a sheaf, by means of which it was hoped to be able to descend through the burning shaft.

The scenes around the mouth of the shaft were heartrending. It was said there was a bare chance that some of the miners might be in one of the mine chambers away from the fire, but little hope was left that any of them would come out of the mine alive.☞

## Review of the 1904 Harwick Mine Disaster

By Linda & John Asmonga

Several years have past since we first learned about the Harwick mine explosion on January 25, 1904. This disaster apparently claimed the lives of 58 members from one of our local churches, the First Hungarian Reformed Church of Homestead.

One hundred years after the tragic loss of 182 coal miners in an explosion at the Harwick Mine in Cheswick, PA, we take a look back at the circumstances surrounding this disaster.

The Harwick mine disaster was the third worst mining disaster in Pennsylvania's history. The largest in Pennsylvania was at the Darr Mine on December 19, 1907, where 239 miners lost their lives. (See the table on page 9)

In this issue, we will look at some historic newspaper accounts of the mine explosion, and examine the cause and the events surrounding the disaster.

The table on page 11 shows the inconsistencies for determining the names of the miners who died. The official report even states that 56 bodies could not be identified. We have reviewed published data which states that 58 (also 48, 37, 21 or 18 by some reports) Hungarians died that cold winter morning in 1904.

A mining map appears on pages 8-9, which shows the extensive mining by the Allegheny Coal Co. in this area of Cheswick, PA. Some of the details about the disaster can be referenced on this map.☞

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Serving the Local Communities from the original Mifflin Township of 1788: Baldwin, Clairton, Dravosburg, Duquesne, Hays, Homestead, Jefferson Hills, Lincoln Place, Munhall, Pleasant Hills, West Elizabeth, West Homestead, West Mifflin and Whitaker.

*The Homestead News-Messenger, Tuesday Evening, January 26, 1904*

## CHESWICK MINE DISASTER GROWING.

It is Now Thought All the 182 Men Im-  
prisoned Have Perished in the Mines.

ONLY ONE MAN TAKEN OUT ALIVE.

An Engineer Loses His Life in a Heroic Effort to Save the En-  
tombbed Men—Rescuers Toil All Night in Vain—Pathetic Scene  
About the Mine Entrance This Morning.

Cheswick, Pa., January 26.—  
“Help, in God’s name, help. Men  
are what we need—men from any  
place, so they get here quickly. All  
our men are dead—penned below  
the earth. Few except women are  
left.”

Pitiful, pleading, commanding  
with the right of those crushed  
down by woe, this cry rises, then  
ends with a wail. None but women  
are left. One hundred and eighty-  
two men, by the lamp tender’s  
count, are penned in the snake-like  
circle reaching around the shaft of  
the Harwick mine.

The appearance of the mine  
and the experience of the mine in-  
spectors indicate plainly that the  
miners have perished. The hope  
of the women whispers, “There is  
life; there is life.” But hope is a  
dream, and just so soon as stout  
hearts and arms go into the Har-  
wick death cavern will there be the  
awakening.

Until 5 o’clock this morning a  
score of men toiled in the shaft.  
They penetrated as far as the scene  
of the explosion, but could go no  
further. Tons of rock blocked the  
mine. Charred as black at the  
deadly damp lies scattered frag-  
ments of bodies.

At last the daring rescuers  
could stand it no longer. Their  
nerves were gone, and their mus-  
cles fairly cracked. They were fin-  
ished. By 5:30 all were soundly  
sleeping in any nook or corner that  
sheltered them. There was another  
who slept in a corner of the mine of-

fice—slept his last sleep. Praises of  
a hero, to draw the dirges of grief,  
rang about the day of Selwyn Tay-  
lor. The mine operator was the first  
to venture actual rescue. The after-  
damp stopped his heart.

The story is overpowering.  
Only by entering the homes of  
these miners’ families can the sor-  
row of it all be realized. In the vil-  
lage all are not the stoic Pole—  
more than half are natives of  
England. But to the details, as far  
as they are known.

In the mine there are 182 men.  
Joe Pusclely, the light tender, gave  
every man a light as he went down.  
He showed me the empty hooks  
where the safeties had hung. One  
of these men, John Gininyan [sic-  
Adolph Guniya], was brought out  
last night.

His clothes were stripped from  
his body, his flesh torn and  
burned, and his eyes were blown  
out. Taylor’s life was given for his.  
At 7 o’clock this morning, the  
men again bent on their gruesome  
task. There are in there now, gath-  
ering pieces of bodies, digging  
through the rock-falls and placing  
brattices to keep the air in the chan-  
nel. The report circulated early  
this morning that 50 men were  
found alive is untrue. None be-  
sides Guniyan [sic-Adolph Guniya]  
have been brought out. Inspector  
M.F. Cunningham says all are  
dear. [sic-dead] Manager George  
H. Sheetz is of the same opinion.☞

*News-Messenger, January 27, 1904*

## 81 BODIES RECOVERED.

Eighty-one bodies have been removed  
from the mine of the Allegheny Coal Co.  
at Harwick. Rescuing parties are finding  
others in various parts of the mine and  
are taking them to the bottom of the  
shaft, whence they will be taken to the  
surface. Crowds of women and children  
are braving the intense cold at the shaft in  
an endeavor to identify the bodies. They  
are not being permitted to see them how-  
ever, being prevented by a squad of police.  
None of the bodies have been identified  
and it is believed none can be recognized  
as they are charred and mangled. The  
bodies are being taken to the Harwick  
schoolhouse, where the coroner’s deputies  
are in charge. The work of rescuing the  
bodies is now rapidly going on. The mine  
inspectors are in charge.☞

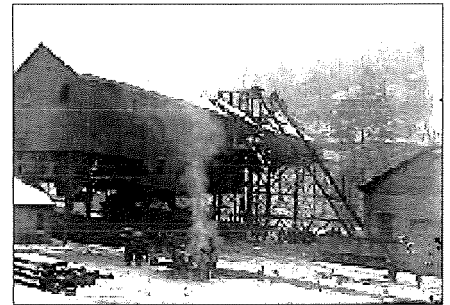


Photo from the Alle-Kiski Valley  
Historical Society, Tarentum, PA

Coal Tipples of the Allegheny Coal Com-  
pany’s Harwick, Pa. Mine, shown after  
the explosion on Monday, January 25,  
1904, at 8:15 a.m.

*News-Messenger, January 29, 1904*

## DEATHS.

SELWYN M. TAYLOR

The funeral services over Selwyn M.  
Taylor, the well-known mining engineer  
who lost his life in the Harwick mine on  
Monday, were held at his late home,  
3071 Center avenue, yesterday afternoon.  
Despite the request of the family that  
flowers be omitted, many large and hand-  
some floral pieces were sent. The consis-  
tory choir of the Masonic order, of which  
Mr. Taylor was a member, rendered [sic]  
the musical part of the services.

The funeral services were attended  
by Mr. and Mrs. J.B. Neel, of this place,  
who were close friends of the deceased,  
they being his guests last summer on a  
tour made on his yacht.☞

Republished from the Homestead News-Messenger, Saturday Evening, January 30, 1904

# APPEAL FOR THE CHESWICK SUFFERERS.

Contributions Will be Received Through the News-Messenger, and Forwarded to the Relief Committee.

## DONATIONS ARE BEING RECEIVED.

Several Citizens Have Already Placed Their Names on the List—An Appeal Also Issued by Burgess Guthrie, of Hays Borough, Through the News-Messenger—All Donations to Either Fund to be Acknowledged Through These Columns.

We have, at the request of the miners of this vicinity, decided to start a fund for the aid of the wives and children of the men who lost their lives in the Harwick mine disaster. Contributions will be received at this office and an acknowledgment made from day to day through these columns of the amounts received, and the money forwarded to the relief committee appointed to look after the widows and orphans. No appeal in recent years is as touching as that coming from the mothers who have lost their husbands and sons in the terrible disaster and who are left with numerous little ones with no means of support. Every hour the news from the scene of the accident shows the sufferings of the surviving members of the families that make up the once happy village to be increasing, and relief in the way of food and clothing is badly needed. Other communities have contributed liberally during the past three days, but much more is needed and we feel sure our citizens who have always contributed liberally in the past when they felt assistance was needed, will do their share.

We have decided to lead off with a contribution ourselves and have already received contributions from several citizens.

The contributions thus far received are as follows:  
News-Messenger..... \$10.00  
Haley Bros. .... 5.00  
Burgess Ross ..... 3.00  
Frank S. Slocum ..... 3.00  
Cash ..... 1.00  
Charity..... 2.00

We have also been requested by Burgess Guthrie, of Hays borough to announce that he will receive contributions from the people of Hays for the sufferers and will acknowledge them through the News-Messenger. The appeal to the people of Hays will be found in another part of this issue.

Burgess Ross received a letter this morning from Cheswick, making an appeal for assistance, which the burgess upon hearing the News-Messenger had already started a fund, turned over to us, along with a donation of \$5. The burgess says he will aid in every way possible to increase the fund and wishes to make a personal appeal through these columns to all the citizens of the town to contribute. Any sum, no matter how small, will be gladly received and acknowledged. ❧

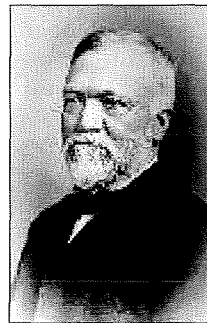


Photo from the Alle-Kiski Valley Historical Society, Tarentum, PA

## Temporary Morgue

As the coal miners bodies were brought to the surface by the rescuers, members of the mine victims families waited to identify and claim their loved ones. Many of the bodies had been burned beyond recognition. Police had to be called in to control the crowds and maintain order on the mine property. ❧

## Andrew Carnegie is a Generous Benefactor for the Widows and Orphans



Andrew Carnegie directed the local relief organization to have two gold medals prepared at his expense "in commemoration of the acts of heroism displayed by Mr. Selwyn M. Taylor and Mr. Daniel Lyle, wherein they sacrificed their

lives in an endeavor to save their fellowman." Carnegie, who was living in New York at the time, personally donated \$40,000. toward the relief fund for the wives and orphans of the miners who perished.

It was this disaster that caused Mr. Carnegie to endow the Carnegie Hero Fund Commission. Within 3 months of the explosion, Carnegie had established a \$5 million trust to carry out his wish that "heroes and those dependent upon them should be freed from pecuniary cares resulting from their heroism." This foundation is located in Pittsburgh and in other parts of Europe. In 100 years there have been 8,706 awards, many posthumously.. ❧

The Homestead & Mifflin Township Historical Society dedicates itself to Preserving our Local History for Future Generations to Read and Appreciate.

*The Homestead News-Messenger, Thursday Evening, February 11, 1904*

## MEMORIAL SERVICES HERE.

### The Cheswick Mine Victims to be Remembered---Survivors Will Attend.

Rev. Alexander Harsanyi, pastor of the Hungarian Reformed church of Homestead, who only a week or two ago read the burial service over the remains of 58 Hungarians, almost one-third of the number of victims of the Harwick mine disaster, will conduct a memorial service Sunday afternoon in the Christian church, this place, where the Hungarian Reformed Congregation worships. Hungarians of the Reformed church, with members of church and beneficial societies from Pittsburg, Allegheny, McKeesport, Duquesne and Homestead, who will be present, are expected to number over 1,500 people. Regular funeral services will be held, when the countrymen of the dead miners, who were not able to attend the general funerals, may participate.

A pathetic feature will be the presence of perhaps 20 survivors of the disaster. Forty-eight [sic] of the 63 [sic] Hungarians who were killed were members of the Reformed church and efforts were being made to start a mission at Harwick. Rev. Mr. Harsanyi said yesterday: "Early in January we arranged for services to be held in Harwick, the day we chose being three weeks ago Sunday, when at the last moment we found we could not secure the church for holding the services."

About 40 societies, including the McKeesport Reformed

Church Society, the Duquesne Reformed Church Society, the Homestead Reformed Church Society, the Homestead Sick and Beneficial Society and others will attend the memorial meeting, each society bearing its individual emblem, the Hungarian and the American flags and each member wearing his society badge. Rev. John H. Prugh, D. D., pastor of Grace Reformed church, and one of the foremost ministers of the Allegheny classis, will preside. Rev. Mr. Harsanyi will preach the first memorial sermon in the Hungarian tongue and will be followed by Rev. Paul S. Leinbach, pastor of Trinity Reformed Church, Wilkinsburg, who will preach the English memorial sermon. Rev. Mr. Harsanyi wishes to invite, through the News-Messenger, all pastors and members of Reformed churches to be present.

Souvenir programmes, mourning edged, the cover containing a picture of the funeral services at Harwick, are being prepared. The interior of the programmes will contain the funeral hymns and prayers, all in Hungarian, the names of the Hungarians of the Reformed church who were killed, with their ages, the names of their wives and children and the church to which they belonged. Twenty-one [sic] members of the Homestead church were victims of the disaster.☞

and a special car company furnished by the Pittsburgh Railways Company conveyed them to Homestead. Among the number were three widows, who lost husbands and sons in the mine horror, and with them two orphan girls. Each wore a bit of black ribbon, about the only badge of mourning displayed, and were in charge of Rev. Alexander Harsanyi, pastor of the Hungarian congregation here, who went to Cheswick early yesterday morning to escort his countrymen to Homestead

A reception committee from the church met the car when it arrived here and took the visitors to various homes for dinner. At the church the services were commenced at 3 o'clock, and the building was jammed to the doors, fully 500 being in attendance, coming from all the surrounding towns to pay respect to their dead countrymen.

Fifteen minutes of wide [sic-wild] Magyar music was followed by breathless silence as Rev. Mr. Harsanyi raised his hands in a fervent prayer for both the dead and those surviving. Rev. John H. Prugh, D. D., of Grace church, Pittsburg, in a prayer beseeched sympathy, kindness and help for the widows and orphans. An address by Rev. Mr. Harsanyi, speaking in the Magyar tongue, followed. He depicted the accident at the mine, the heartrending scenes as the bodies were brought up, describing the situation of those left behind and urging for them the pity and assistance of their countrymen.

Rev. Paul Leinbach, of Trinity church, Wilkinsburg, delivered a short address along the same line, speaking in English, and pointing out the lesson taught by the disaster, for all to be in readiness when the last call would come. At the close of the service a collection was taken for the benefit of the Harwick sufferers and a list of those making donations was read. The special car returned the Harwick visitors to the Allegheny station at 6:30 o'clock, in time to meet a train for Cheswick.☞

## CHESWICK PEOPLE ATTENDED SERVICES

*Homestead News-Messenger, Monday Evening, February 15, 1904*

The same weird chant sung over the coffins of the dead miners at Harwick was repeated yesterday afternoon in the Christian church, where the Reformed Hungarian congregation worship, when memorial services were held for the Hun-

garian victims of the Harwick disaster.

A special car furnished by the West Penn railroad brought 66 people--relatives and friends of the dead miners--from the little town of Harwick to Allegheny at 10 o'clock yesterday morning,

*Homestead News-Messenger,  
Monday Evening, February 1, 1904*

At the Harwick Mine:  
"Already 156 deaths have been reported to the coronor from the mine. This number will be increased, as all the victims have not been recovered."

## TIMELINE for MINE SAFETY

As early as 1865, a bill was introduced in Congress to create a Federal Mining Bureau. However, little was done until a series of serious mine disasters occurred after the turn of the century. In response to these disasters, the public demanded Federal action to stop the excessive loss of life in America's mines.

### 1891

The first Federal mine safety statute applies to mines in U.S. Territories. Its provisions cover underground coal mine ventilation and bar mine operators from employing children who are under the age of 12.

### 1888-1910

Roof falls, haulage accidents, and explosions kill thousands of miners. The deadliest year is 1907 when 3,242 miners perish. Over 360 are killed in the Monongah explosion, the deadliest mining accident in U.S. history.

### 1910

Congress establishes the Bureau of Mines.

### 1941

Congress passes the Coal Mine Health and Safety Act a year after 257 miners die in four separate explosions.

### 1947-1951

The Centralia explosion claims 111 victims in 1947. In 1951, just before Christmas, 119 miners die in an explosion at the Orient No. 2 Mine.

### 1952

Congress passes the Federal Coal Mine Safety Act.

### 1966

The 1952 Act is amended. Congress passes the Federal Metal and Nonmetallic Mine Safety Act.

### 1969

The Federal Coal Mine Health and Safety Act of 1969 takes effect a year after an explosion at the Consol No. 9 Mine at Farmington, West Virginia kills 78 miners.

### 1972-1976

Ninety-one miners die in a fire in 1972 at the Sunshine Mine at Kellogg, Idaho. In 1976, a pair of explosions at the Scotia Mine at Ovenfork, Kentucky kill 26 people.

### 1977

The Federal Mine Safety and Health Act of 1977 combines coal and metal/nonmetal health and safety law into one piece of legislation.

**NOTE:** You can write to the U.S. Department of Labor, Mine Safety and Health Administration for additional information about Mines and Historical events. Visit their website at [www.msha.gov](http://www.msha.gov) or E-mail them at [library@msha.gov](mailto:library@msha.gov).



*John J. Asmonga, H&MTHS Secretary*

The research for this month's newsletter is a project that was started many months ago.

The reason it came about is because my grandmother, Julia Karnis, was one of the early members of the First Hungarian Reformed Church of Pittsburg[h] and was married at the little wooden church on Bates Street on February 19, 1895.

My grandfather, Laszlo Aszmongya and his wife, Julia, had settled in Homestead and grandma was Hungarian Reformed and grandpap was Roman Catholic.

Grandmother Julia was in the Sick Benefits Society and helped in raising money for an altar cloth for the new church in Homestead.

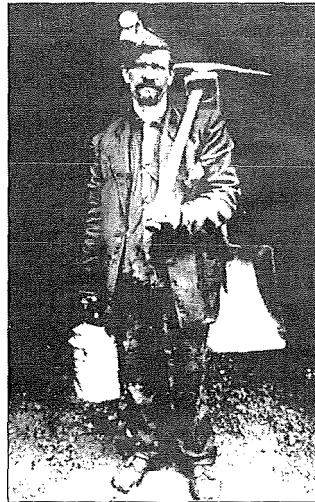
In looking for family history with the Reformed church, I found out about the 58 Hungarians who died in the Harwick Mine Disaster in 1904 and wondered why so many of the men from this local church in Homestead were working in Cheswick, PA and not in the local steel mills? That question has still not been clearly answered.

We recently received a copy of the Souvenir Programme of the burial services in Cheswick, PA which names the 58 Hungarian miners from the First Hungarian Reformed Church of Homestead.

The research still shows 25-27 names missing from the official records from the Coroner. In this Souvenir Programme, there are 31 of the 58 miners whose names do not appear on the official list of the miners who perished in the

explosion. (See the table on page 11). The official report also indicated that 56 bodies could not be identified by the Coroner at the morgue.

On Saturday, January 31, 2004, we were able to view microfilm records showing the deaths of 58 members of the First Hungarian Reformed Church of Homestead. This death index showed the same information that was listed on the Souvenir Programme, with only a few differences in the spelling of Hungarian surnames. The record confirms that the 58 Hungarian men all died on January 25, 1904 and were buried in Cheswick, PA on January 29, 1904. The original hand written entries by the Rev. Alexander Harsanyi include the names of their villages and counties. He was also careful to note the names for wives. What a remarkable historical find.☺



### **Typical Coal Miner c.1907**

On December 6, 1907, there was a mine explosion at Monongah, WV that claimed the lives of 362 miners. There was only one survivor, Peter Urban, who is shown above.

## Mine Inspections Every 3 Months

F.W. Cunningham was commissioned Inspector of Mines for the 14th Bituminous District of Pennsylvania on January 27, 1903. He had worked in the mines for 16 years, a miner for 5 years and foreman for 10 months. There were 73 mines in the 14th District, 20 of which generated gas. The miners took precautions with safety lamps. The dust conditions were controlled by sprinkling with water and this was not considered to be a problem.

Mr. Cunningham was charged to inspect the mines in his district every 3 months or more frequently if the conditions warranted more inspections. The Harwick mine was known to have mine gas in the tunnels. Mine operators and inspectors are always vigilant when there can be a problem in a mine.

Mr. Cunningham, from Wilkesburg, PA made an inspection of the Harwick mine on November 4, 1903. In his inspection of the south main entries and butt, which he considered to be the most likely to contain gas, no gas was found. Another inspection on January 7, 1904 also found nothing unusual. The mine owner, Allegheny Coal Company could continue mining operations as usual. ❧

## Hard Times for the Hungarian Immigrants

In the early days (1880-1890), immigrants would come from Hungary to settle in this area. Sometimes the jobs were sporadic and the men had to travel to seek employment in other areas. The railroads were the main source of transportation. The newly built railroads that spanned the United States, allowed men to travel to parts of Pennsylvania, Ohio and West Virginia to work. With little or no skills, they became laborers in the coalmines and steel mills of our area.

Because of limited money, they were boarders and traveled to wherever the jobs were available. Boarders shared a room and a bed with other men, sometimes two men sleeping together in the same bed, other times working shifts and trading the warmth of a bed

## Oral Histories of Mine Disasters

One of the people recently interviewed about the Harwick Mine Disaster, Rev. Jozsef Posta, had been a minister at the Hungarian Reformed Church in Springdale, PA. One of the oral histories of the mine disaster was that a Hungarian immigrant, recently arrived in the United States, started to work the morning of the explosion. No one had yet asked him his name. No one knew his age. Would he have been one of the 56 unidentified in the blast? Or was he named in the list?

Another individual who is interested in the history of coal miners, Ann Toth, mentioned sometimes an immigrant's correct name did not appear in records—surnames were misspelled, nicknames were given to the new arrivals to this country. Names that begin with a "B" sometimes were replaced with a "P" or a "V" in the records.

"Andy" or "Steve" or "Mike" were the chosen names given to Slovaks and Hungarians who had names which the other workers were unfamiliar with and had difficulty in pronouncing.

Sometimes men did not furnish all of their family information—they wanted to be able to move on to the next job. ❧

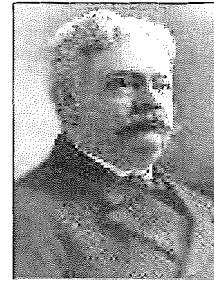
with another man at the end of a long shift in a coal mine or a steel mill.

Sometimes men would work on a farm for meals and lodging. Times were tough in the 1900's and often a passing train loaded with coal would be boarded and somebody would throw lumps of coal off to use in a fire to keep themselves warm. Often a traveler would find food on the train and could feed himself for a day or two.

Saving money was difficult and sacrifices were made to pay for clothing. Clothes were worn until they looked like rags. Socks wore out so fast that the men hardly had any to wear. Shoes wore out and sometimes men had to wrap their feet with rags or pay to have their shoes repaired. ❧

## Failed Rescue Attempt at the Scene

Two men attempted to rescue any trapped miners and they too



lost their lives. Selwyn M. Taylor, 42, a mining engineer was summoned to the mine within a few hours of the disaster. Repairs had to be made to the fans and their

Selwyn M. Taylor supports and the ventilation fans had to be operational to remove the smoke and dust from the mine. At 6:00 p.m. a rescue party attempted a descent into the mine. One man was found alive and transported to the surface. Adolph Gunia 17, who was severely burned, would be the only survivor of the Harwick Mine Disaster.

Mr. Taylor went back in an effort to find other survivors and was



700 feet inside the mine, when he was killed by the "afterdamp," an asphyxiating gas that is the byproduct of the gas explosion in the mine.

Daniel Lysle

Coal miner, Daniel Lysle, 43, from Castle Shannon, PA, staying in nearby Leechburgh, was on the scene the following day to assist other miners in a rescue attempt.

Lysle went back into the mine before daybreak on January 27, and was preparing to bring some of the bodies of the miners to the cage and be transported to the surface. He was overcome with "afterdamp" and perished in his efforts.

Upon hearing of his death, Andrew Carnegie was quoted as saying "Lysle made a valiant effort to rescue entombed men. He left a widow and five children. What a tragedy that his life had to go with his deed! He was a hero." ❧

## Major Mine Disasters In Pennsylvania

The term "mine disaster" historically applies to mine accidents claiming five or more lives. The tables below are a sampling of the disasters that occurred throughout mining history in the United States. Many changes have occurred over the years to prevent major mine disasters from occurring in the United States. The U.S. Department of Labor, the Mine Safety and Health Administration, and Labor Unions have played a major role in insuring the safety of mine workers.

### 10 Worst Coal Mining Disasters in Pennsylvania

Date	Name of Mine	Location	Killed	Cause
12-19-1907	Darr (Rostraver Twp.)	Van Meter, PA	239	Explosion
05-19-1928	Mather No. 1	Mather, PA	195	Explosion
01-25-1904	Harwick	Cheswick, PA	179	Explosion
11-28-1908	Rachel and Agnes	Marianna, PA	154	Explosion
07-10-1902	Rolling Mill	Johnstown, PA	112	Explosion
09-06-1869	Avondale	Plymouth, PA	110	Fire
01-27-1891	Mammouth	Mt. Pleasant, PA	109	Explosion
04-23-1913	Taylor Mine	Finteyville, PA	98	Explosion
06-05-1919	Baltimore Tunnel	Wilkes-Barre, PA	92	Explosives
11-22-1922	Relly No. 1	Spangler, PA	79	Explosion

### 3 Worst Coal Mining Disasters in U. S. History

Year	Name of Mine	Location	Killed	Cause
1907	Monongah	WV	362	Explosion
1913	Stag Canon	NM	263	Explosion
1909	Cherry Mine	IL	259	Explosion

### Worst Coal Mining Disasters in the Recent Years

Year	Name of Mine	Location	Killed	Cause
1951	Orient Mine	IL	119	Explosion
1947	Centralia Mine	IL	111	Explosion
1940	Pond Creek Mine	WV	91	Explosion
1968	Farmington Mine	WV	78	Explosion
1943	Smith Mine	MT	74	Explosion
1940	Willow Grove Mine	OH	72	Explosion

### Worst Metal & Nonmetal Disasters in U. S. History

Year	Name of Mine	Location	Killed	Cause
1917	Granite Mountain Copper Mine	MT	163	Fire
1972	Sunshine Mountain Silver Mine	ID	91	Fire
1926	Barnes Hecker Iron Mine	MI	51	Flood

### Worst Metal/Nonmetal Disasters in Recent Years

Year	Name of Mine	Location	Killed	Cause
1972	Sunshine Mountain Silver Mine	ID	91	Fire
1942	Standts Eddy Limestone Mine	PA	31	Explosion
1968	Cargill Salt Mine, Belle Isle,	LA	21	Fire
1943	Cane Creek Potash Mine	UT	18	Explosion
1943	Foyd Copper Mine	TN	9	Explosion

Data republished from Mine Disasters, MSHA Booklet published by the U.S. Dept. of Labor c.2000

#### Mine Company Benefits

Coal Companies did not offer many benefits to their workers. No retirement plan, no health care. In 1907, a miner's family could expect to receive, upon his death, a wooden casket, and \$12. in benefits. The first mining safety laws were not passed until 1910.☞

#### Harwick Mine History

On January 12, 1938, 10 miners perished in another mine explosion at the Harwick mine. In 1970, the Harwick mine finally closed.☞

## Causes of Mine Explosions

The many causes of mine disasters include: Fire, Explosion, Cave-in, Cage fall, Suffocation, Inrush of water, Haulage, Blasts from explosives, Roof-fall/Bump, Drowning, Inundation, Dam failure, Collapse. The single overwhelming cause of fatalities in mines is an explosion.

The cause of the explosion on January 25, 1904 was a build-up of methane mine gas, also called "fire damp," which was not exhausted properly by the fans. A "blown-out" or demolition charge shot in the face of "No. 1 monkey entry" off of the rear of the mine was the chief cause. The sparks ignited the mine gas, resulting in an explosion. The build-up of "marsh gas" and carbonic oxide gas created by the blast and the coal dust generated by the first explosion, also exploded in a chain reaction in the tunnels. After the disaster, inspectors found evidence of the heat generated by the explosion, for coke had been formed on the walls and floors of the tunnels.

An analysis of the coal showed that it was as high as 37.4 percent of volatile matter, which would render the coal dust very flammable. The practice of blasting the coal seam with heavy charges was not the best method for extracting coal in these conditions.☞

## Mine Accidents in PA

In 1904, 203 coal miners died in mining accidents, including the 182 men who perished in the Harwick Mine Disaster on January 25, 1904. The 21 other deaths occurred in other mines in both Westmoreland (West. Cty.) and Allegheny County (Alleg. Cty.):

- 1 – Penn Manor Shaft West. Cty.
- 1 – Hall West. Cty.
- 1 – Brackenridge Alleg. Cty.
- 1 – Lyons Run West. Cty.
- 1 – Oak Hill No. 6 West. Cty.
- 3 – Larimer West. Cty.
- 6 – Westmoreland shaft West. Cty.
- 1 – Guffey West. Cty.
- 1 – Penn Gas No. 5 West. Cty.
- 2 – Export West. Cty.
- 1 – Plum Creek Alleg. Cty.
- 1 – Penn Manor shaft West. Cty.
- 1 – Braeburn West. Cty.



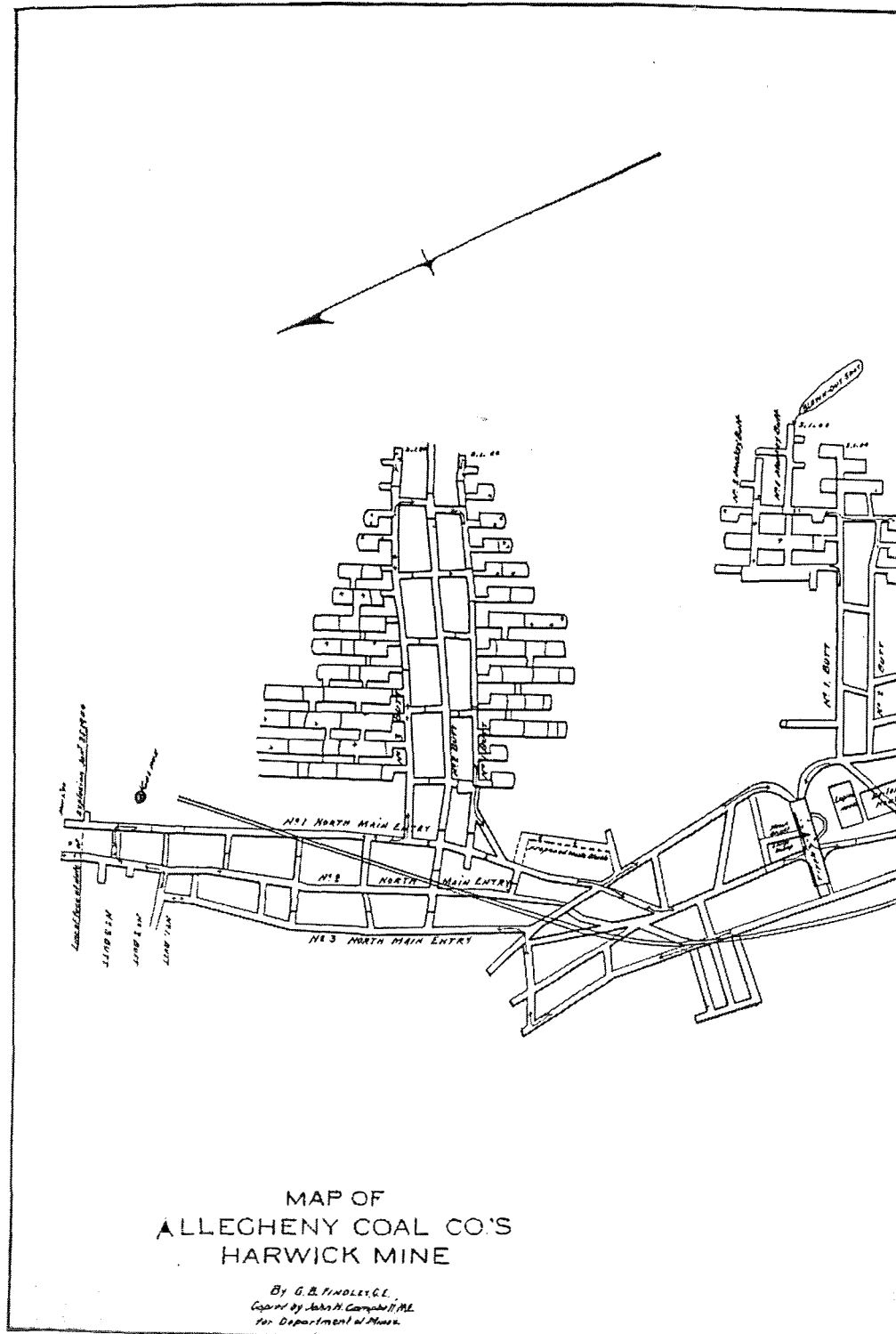
# Harwick Mine Disaster

Published in the *Report of the Department of Mines of Pennsylvania, Part II Bituminous, 1904*. Harrisburg, PA: Harrisburg Publishing Co., State Printers, 1905.  
 Page: 663 Off. Doc. No. 23  
 14th Bituminous District  
 Report by F.W. Cunningham, Mine Inspector

On January 25, at 8:15 A. M., an explosion occurred in the Harwick mine, operated by the Allegheny Coal Company.

I was at Penn Station, on duty at the time of the accident, and, as I had left no word at the office where I was going that day, I did not know about the accident until I arrived home late in the afternoon. It seemed incredible to me, on account of the conditions prevalent in regard to ventilation, which were among the best in the district. The report of 1903 shows that 96,000 cubic feet of air were circulating per minute and 65 percent of this amount was carried up to the face of the workings in five different splits. On learning from the company's office by telephone that the report was true, I proceeded to the mine at once, arriving there at 7:30 P. M. After notifying the department of Mines of the accident by telegraph I went down into the mine where 177 lives were lost in less time than it takes to tell about it. Two rescuers also lost there lives in the deadly after-damp. Mr. Selwyn M. Taylor, a mining engineer, was at the scene of the accident soon after it occurred, and had made preliminary arrangements to get a current of air down in the mine by temporary repairs to the fan, which was not damaged beyond the fan shed over the shaft. He arranged a bucket in the hoisting shaft in which he and a party went down into the mine about 6 P. M.. They found one man [Adolph Gunia, age 17] alive at the bottom of the shaft. This led Mr. Taylor to believe that more men were still living in the mine, and he advanced to explore the south side of the mine, where I later found him lifeless, in No. 3 south main.

Another rescuer, Daniel Lysle, went into the workings of the mine, which had not yet been explored, without the knowledge of any of the persons in charge, and was afterwards found dead in No. 4 left butt south. None of the dead bodies showed any



sign of suffering before the victims met death, which was caused by the ignition of fire-damp and dust in No. 1 monkey butt, on the south side of the mine by a blown-out shot. The shot was placed 18 inches over on the solid coal and lighted by gas, which, by the fine particles of coal dust suspended in the air, traveled into every place in the mine like a streak of lightning, carrying destruction in its path, until it

finally expended its fore up the air and hoisting shafts. From what I have seen and can learn since the explosion, the ventilation on this particular morning had been very nearly if not altogether cutoff from the workings of the mine by ice forming at the bottom of the down-cast air shaft, which was very wet at the entrances to both sides of the mine. This being the case, it would allow the gas to transpire



## Harwick Mine Reports from the Fire Boss

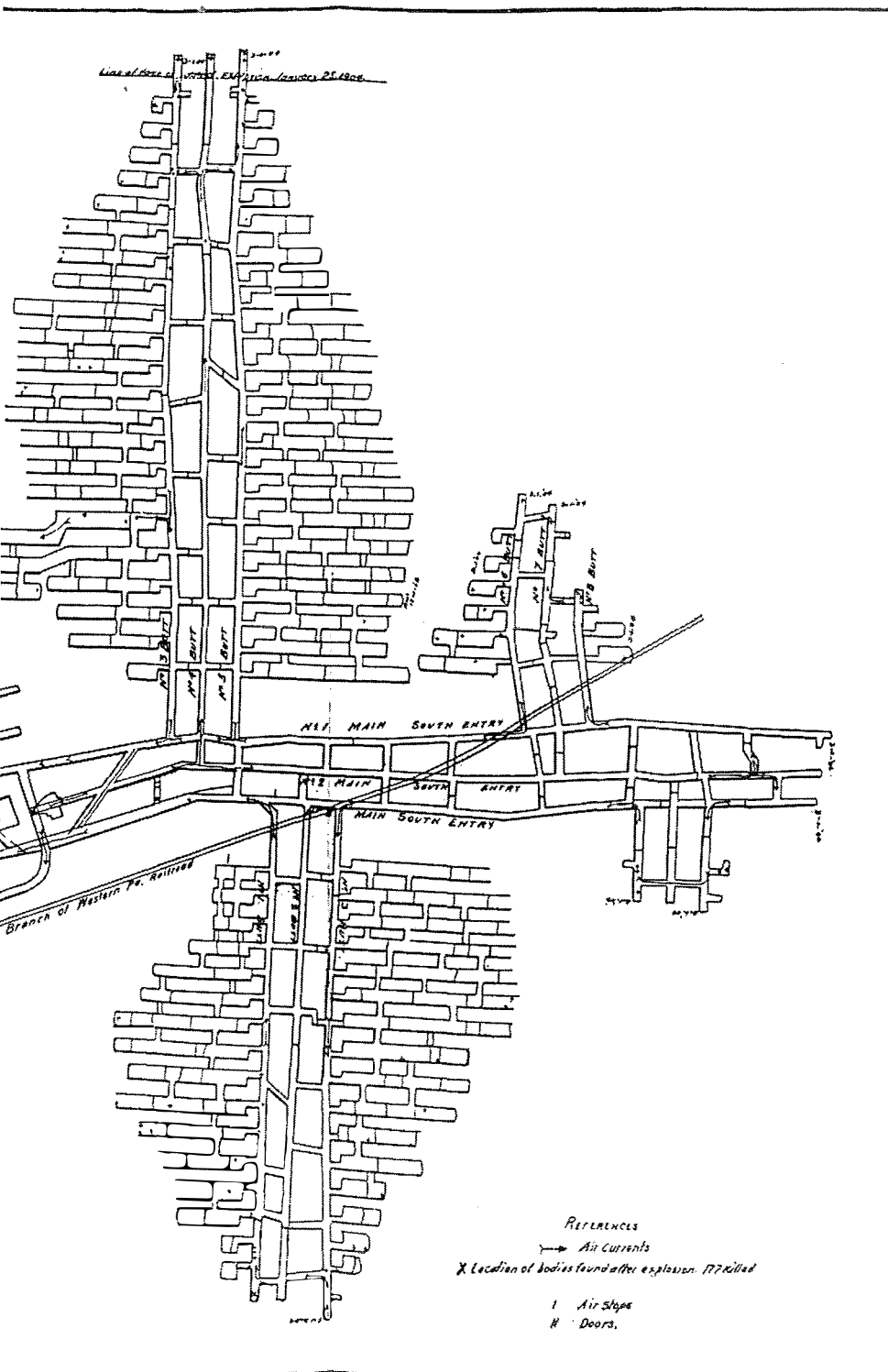
The Harwick Mine fire boss was Mr. Joseph A. Gordon and it was his responsibility to inspect the mine every day prior to the miners entering the mine. These daily reports are kept on file for the state mine inspectors to review when they came to inspect mine safety.

On Thursday, January 21, 1904, the records show: that gas was found in No. 1 room, of No. 1 left, No. 1 room of No. 8 left, No. 17 room of No. 3 right and in No. 3 right north. In entries No. 6 left, 1 south main, 1 north main and No. 1 right north butt. On Friday, the 22nd of January the report was practically the same. On Friday, January 23, 1904, gas was found in the following places: Room No. 17 on No. 3 right, gas in entries No. 6 left, 3 south and 1 north.

Reports indicate that the ice build up had not been removed from the mine inlet for several weeks prior to the disaster. On Saturday and Sunday, the temperatures dropped below zero and ice continued to accumulate at the inlet to the mine around the fans. There may have been as much as three feet of ice build-up. On January 23rd, the air circulation volume was perhaps only 50 percent of the ideal conditions.

On Monday, January 25, 1904 gas conditions in the mine contributed to the problem, which was further exasperated by the build up of ice at the mine entrance, restricting the circulation of air and the venting of the gases. Some evidence suggests that the Fire Boss did a mine inspection that morning and allowed the miners to begin work. Several loads of coal were brought out of the mine without incident.

Joseph A. Gordon, age 34, the fire boss at the Harwick mine for the Allegheny Coal Company died on January 25, 1904 and left a wife and three children. His last mine safety report was filed on Saturday, January 23, 1904. ❧



more freely, and the very fine particles of coal dust (which is the most dangerous) to be suspended in the air, thus rendering the atmosphere of the mine highly explosive. The question is asked: "Did the fire boss examine the mine this morning?" If he did, we have no official record of this visit. Under the law the fire boss is required to make out his report and sign it before re-entering the mine, stating conditions as he

finds them. The mine forman [sic] is also required to make a daily report of the condition of the mine, and on Saturday previous to the accident he reported that the mine was safe. The mine foreman's report is not made until the end of the day. These requirements are for the daily safety of the employes [sic] and the mine and are called for by the Mine Law. ❧

The Harwick Mine was reopened on Wednesday, March 9, 1904. Sixty men were sent back into the mine to clean up the mine rooms in preparation for mining coal. F.F. Taggart has been appointed the new manager for Allegheny Coal Company.

## Comparison of Hungarian Miners Listed

A Souvenir Programme for the Memorial Service on February 14, 1904 was recently found, and is a history lesson. It contains a list for 58 Hungarian Miners, and was received from Endre Csoman, a representative of the William Penn Association in Pittsburgh. This detailed list is apparently from the graveside services held in Cheswick, PA several weeks after the Harwick Mine Disaster occurred. Many of the miners were interred in a mass grave at the nearby cemetery.

The gravesite is located on the west bank of the Allegheny River adjacent to old St. Mark's Lutheran Church, Springdale, PA. A granite monument with a folk carving of the scene in the mine is located there. It shows workers and mine mules falling dead, from the explosion, and is installed on this site.

The Souvenir Programme was written in the Hungarian language and was printed on 8.5" x 14" paper, double sided. This reproduction of the original flyer had a list of the names of the 58 victims and some of the information about them, including: Village of their birth in Hungary; County (*megye*); Surname; Given Name; Age (*eves*); Church Affiliation: Roman Catholic (*r. k.*), Greek Catholic (*g. k.*), Evangelical Reformed (*ev. ref.*); Married (*nos*); Single (*notlen*); Children (*gyermek*). (See the Table on page 11) The opposite side of the Souvenir Programme has a tribute to the miners in a Hungarian poem/song.

Additional mine information was received from Phillip J. Zorich, special collections librarian for the Coal Mining Archives at the Indiana University of Pennsylvania (IUP). This library has archives for Pennsylvania Coal Mining history. Mr. Zorich provided a document entitled *Report of the Department of Mines of Pennsylvania, Part II Bituminous from 1904*, published in Harrisburg, PA by the Harrisburg Publishing Co., 1905. This information contains a record of the State Bureau of Mining's investigation of the Harwick Mine explosion, which claimed the lives of the miners. Their records indicate in Table No. 4, the names of 121 miners who died inside the mine, 2 outside the mine and 2 rescuers that died as a result of the explosion. The report commented that another 56 men were unknown Americans who died. This indicates a total of 181 miners who lost their lives in the explosion.

Various records show that 177-179 men died at the time of the mine explosion at 8:15 a.m. on Monday, January 25, 1904. Some records reviewed state the total eventually increased to 182 dead inside and outside of the mine on the 25th. Some reports state that there were eight (8) rescuers who died, instead of only the two (2) men confirmed in reports.☞

### KEY TO SOME HUNGARIAN > ENGLISH WORDS

ezek	= these	feleség	= wife
eves	= years	kis	= small
nős	= married (31)	r. k.	= roman catholic (30)
gyermec	= children (72)	g. k.	= greek catholic (4)
nötlen	= single (22)	ev. ref.	= evangelical
megye	= county		reformed (21)

## 1904 Harwick Miners List Reviewed

**Table 4** – Fatal Accidents Inside and Outside of Mines.

Published in the *Report of the Department of Mines of Pennsylvania, Part II Bituminous from 1904*, published in Harrisburg, PA by the Harrisburg Publishing Co., 1905.

A review of this 1905 document provided an official record for the 179 miners who died as a result of the explosion. Their official list shows the names of Hungarians and other nationalities who died at the Harwick Mine, including two (2) rescuers, Selwyn M. Taylor and Daniel Lysle. Two (2) tipplemen, John Waltman, a Check Weighman and D. Numet, a Dumper, were killed outside of the mine by the force of the explosion.

The rescue party pulled 121 bodies out of the mine to be identified. An additional 56 bodies "Fifty-six unknown—Americans" were not identified at the temporary morgue in Cheswick. The list from Table 4 was reviewed and it shows the names of thirty-nine (39) Hungarians who were among the 179 miners killed in the Harwick Mine Disaster on January 25, 1904.

Twenty-seven (27) of these Hungarian men from the 1904 List were also shown on the list of the 58 Hungarians on the Memorial Souvenir Programme. (See the left side of the Table on page 11)

There were also an additional twelve (12) Hungarian men who were not on the list of the 58 Hungarians and they are as follows:

**KEY:** n/a = Could not get the information (not available)

Joe Bioll, age 45, Loader, Married, wife n/a, orphans n/a  
 Andy Balogh, age 27, Loader, Married, wife, orphans n/a  
 Joe Ballow, age 32, Loader, Married, wife, orphans n/a  
 George Gregor, age 36, Roadman, Married, wife n/a, orphans n/a  
 Peter Rayher, age 27, Driver, Married, wife, orphans n/a  
 Joseph Pyszka, age 32, Loader, Married, wife, orphans n/a  
 Joseph Rutzna, age 25, Loader, Single  
 L. Fabin, age 18, Loader, Married, wife, orphans n/a  
 Lawrence Bulay, age 39, Loader, Married, wife n/a, orphans n/a  
 Joseph Hay, age 18, Loader, Single  
 C. Dapra, age 30, Loader, Single  
 W. Tokash, age 21, Driver, Single

With the information available, it cannot be determined if these twelve (12) men listed above were members of our local Hungarian Churches. The Hungarians would have been able to attend the First Hungarian Reformed Church of Homestead, or the churches in Pittsburgh (est. April 6, 1890), Hazelwood, (est. 1903).

Another local Hungarian church was St. Elias Byzantine Catholic Church, formerly called St. Elias Magyar Greek Catholic (Byzantine Rite), but it was not established until in 1907 in Homestead.

Are you a descendent of any of the original families who were the founding members of any of our local churches? Do you recognize any of the surnames from the above list or in the table on page 11? We would like to determine if there are any family members still living to participate in a memorial service later in the year. Contact Linda or John Asmonga, via E-mail: jasmonga@hotmail.com or at (412) 653-7842.☞

**14Feb1904 Souvenir Programme  
Lists the 58 Hungarian Miners**
**Report of the Department of Mines of Pennsylvania, Part II Bituminous from 1904 (Published in 1905)**

	Name of Victim Harwick Mine	Nationality	Occupation	Age	Single or Married	No. of Widows	No. of Orphans	Nature and Cause of Accident (From Table 4, pages 655-58)
I. Tisza-Ujlakrol, (Ugocsamegye) czek:								
1. Kovacs Istvan, 36 éves, r. k. nos, 5 gyermek.	Steve Kovach	Hung.	Loader	30	Married	1	n/a	Killed by explosion of gas
2. Kovacs Janos, 38 éves, r. k. nos, 4 gyermek	John Cavach	Hung.	Loader	36	Married	1	n/a	Killed by explosion of gas
3. Antal Ferenc, 40 éves, r. k. nos, 4 gyermek.	Frank Anton	Hung.	Loader	38	Married	1	n/a	Killed by explosion of gas
4. Lasoczky Jozsef, 28 éves, r. k. nos, 1 hetes gyermek.	J. Loskoski	Hung.	Loader	24	Married	1	1	
5. Orloczky Sandor, 32 éves, r. k. nos, kis fia maradt.	Steve Orlosky	Hung.	Loader	36	Married	1	1	Killed by explosion of gas
6. Mathe Lajos, 36 éves, r. k. nos, 2 gyermek								
7. Geczy Ferenc, 40 éves, r. k. nos, 5 gyermek								
8. Toth Istvan, 38 éves, r. k. nos, 3 gyermek.	Steven Tote	Hung.	Loader	n/a	Married	1	3	Killed by explosion of gas
9. Gyurko Antal, 37 éves, g. k. nos, 2 gyermek.								
10. Bodnar Mihaly, 33 éves, g. k. nos, 6 gyermek.								
11. Hejja Janos, 33 éves, r. k. nos, kis fia maradt.								
12. Hejja Jozsef, 25 éves, r. k. notlen.	Frank Hijza	Hung.	Loader	29	Single			Killed by explosion of gas
13. Hejja Ferenc, 23 éves, r. k. notlen.								
14. Gyurko Toni, 38 éves, r. k. 3 gyermek.								
II. Kis Szekeresrol, (Szatmar megye.)								
15. Varadi Bernot, 45 éves, cv. ref. nos, 1 gyermek.	Varady Bernot	Hung.	Loader	45	Married	1	n/a	Killed by explosion of gas
16. Hajdu Jozsef, 30 éves, cv. ref. nos, csalados.	Joseph Hayder	Hung.	Loader	29	Married	1	n/a	Killed by explosion of gas
17. Kovacs Laszlo, 42 éves, r. k. nos, 4 gyermek.	L. Kovach	Hung.	Loader	32	Married	1	n/a	Killed by explosion of gas
18. Nagy Balint, 18 éves, cv. ref. notlen.								
19. Katrus Janos, 18 éves, cv. ref. notlen.	John Katres	Hung.	Loader	19	Single			Killed by explosion of gas
III. Nagy-Szekeresrol, (Szatmar megye.)								
20. Kozak Antal, 36 éves, cv. ref. nos, 1 gyermek.	T. Kosak	Hung.	Loader	36	Married	1	n/a	Killed by explosion of gas
IV. Darnorol, (Szatmar megye.)								
21. Tukacs Karoly, 18 éves, cv. ref. notlen.	Charlie Tuckacs	Hung.	Loader	18	Single			Killed by explosion of gas
V. Fehér Gyarmatrol, (Szatmar megye.)								
22. Toth Gaspar, 43 éves, cv. ref. nos, 6 gyermek.								
VI. Nagy Ar-bol, (Szatmar megye.)								
23. Balogh Gusztav, 27 éves, cv. ref. nos, 2 gyermek.								
VII. Riese, (Szatmar megye.)								
24. Garda Lorinc, 35 éves, cv. ref. nos, 1 gyermek.	Lorance Gardu	Hung.	Loader	35	Married	1	n/a	Killed by explosion of gas
VIII. Szamos Beccs, (Szatmar megye.)								
25. Rapolti Jozsef, 30 éves, cv. ref. notlen.								
IX. Szatmar-rol, (Szatmar megye.)								
26. Toldi Jozsef, 29 éves, cv. ref. notlen.								
X. Erszodoro, (Szilagy megye.)								
27. Sck Janos, 19 éves, g. k., notlen.	John Sck	Hung.	Loader	22	Single			Killed by explosion of gas
XI. Budapestrol.								
28. Jaeger Jozsef, 33 éves, r. k. notlen.	Joseph Yeager	Hung.	Laborer	31	Single			Killed by explosion of gas
XII. Oskorol, (Veszprem megye.)								
29. Nyitrai Lajos, 22 éves, r. k. notlen.								
XIII. Csóthrol, (Veszprem megye.)								
30. Fritz Ferenc, 25 éves, r. k. notlen.								
XIV. Babotrol, (Sopron megye.)								
31. Nemeth Dencs, 30 éves, r. k. nos, 3 gyermek.	D. Numet	Hung.	Dumper	n/a	Married	1	1	Killed by explosion of gas
XV. Abararol, (Zemplen megye.)								
32. Vegso Sandor, 32 éves, r. k. nos.								
XVI. Nagy-Raskarol, (Zemplen megye.)								
33. Lipszak Janos, 34 éves, g. k. nos, 4 gyermek.								
XVII. Mecszerol, (Borsod megye.)								
34. Flasko Jozsef, 23 éves, r. k. notlen.								
XVIII. Abodrol, (Borsod megye.)								
35. Gecso Jozsef, 32 éves, cv. ref. nos, 2 gyermek.								
XIX. Buza-Pint, (Gomor megye.)								
36. Balazs Major, 27 éves, r. k. notlen.	Balaza Mayor	Hung.	Loader	27	Single			Killed by explosion of gas
XX. Gonorol, (Abauj megye.)								
37. Balogh Szacsari Andras, 27 éves, cv. ref. nos, a felesége varandos.	Andrew Balog	Hung.	Loader	28	Married	1	n/a	Killed by explosion of gas
XXI. Galvacsrol, (Borsod megye.)								
38. Koscsó Janos, idos ember, cv. ref. nos, csalados.								
XXII. Edelenyrol, (Borsod megye.)								
39. Prokob Karoly, 19 éves, r. k. notlen.								
XXIII. Vaszarrol, (Veszprem megye.)								
40. Ihasz Gyorgy, 42 éves, r. k. nos, 1 gyermek.	Gabriel Ihasz, Sr.	Hung.	Loader	42	Married	1	1	Killed by explosion of gas
41. Ifj. Ihasz Gabor, 17 éves, r. k. notlen.	Gabriel Ihasz, Jr.	Hung.	Loader	17	Single			Killed by explosion of gas
42. Orban Gabor, 25 éves, r. k. notlen.	Gabriel Orban	Hung.	Loader	25	Single			Killed by explosion of gas
43. Takacs Miklos, 20 éves, r. k. notlen.								
44. Nemeth Vendel, 45 éves, r. k. notlen.	Vendel Nesmith	Hung.	Loader	25	Single			Killed by explosion of gas
XXIV. Laz, (Veszprem megye.)								
45. Harangozo Janos, 42 éves, r. k. nos, 6 gyermek.								
46. Nagy Mihaly, 29 éves, r. k. nos, 1 gyermek.								
47. Horvath Marton, 42 éves, r. k. nos, 1 gyermek.								
48. Horvath Andras, 21 éves, r. k. notlen.	Andy Harvath	Hung.	Loader	21	Single			Killed by explosion of gas
XXV. Teth, (Gyor megye.)								
49. Szimajszter Sandor, ifju, éves, cv. ref. notlen.								
50. Egri Janos, 27 éves, r. k. nos, 2 gyermek.								
51. Kukuri Gyorgy, 23 éves, r. k. notlen.	George Kukura	Hung.	Loader	22	Single			Killed by explosion of gas
52. Zamo Kalman, 21, éves, cv. ref. notlen.	Kalman Zambo	Hung.	Loader	22	Single			Killed by explosion of gas
53. Zamo Sandor, 19 éves, cv. ref. notlen.								
XXVI. Gecse-Gyarmatrol, (Gyor megye.)								
54. Steingart Jozsef, 19 éves, r. k. notlen.								
55. Steingart Mihaly, 21 éves, r. k. notlen.	Mike Stengart	Hung.	Loader	18	Single			Killed by explosion of gas
XXVII. Sopron megye.								
56. Balogh Sandor, cv. ref. nos, 4 gyermek.								
XXVIII.								
57. _____ Istvan, cloneve, születési helye kikutathatlan.								
58. _____ egy Zemplen megyei nos, csalados ember, 2 gyermek atya, neve, illetosegi helye kikutathatlan.								

**NOTE: See the list of the 12 Hungarian miners missing from this Table on Page 10 on the left.**

## Hungarians Practice Their Faith

The men and women, who came here from Europe to find a new life for themselves, brought their religious practices with them. A Hungarian village may have only had one church and the churches that they found in America, were not the churches of their homeland. Hungarians, Slovaks and other ethnic groups found themselves worshipping together.

There was usually a minister who was a circuit rider and traveled to the various towns to hold a service in the native tongue. Parishioners met in homes, social halls, and churches of other denominations. Worshipers were more comfortable when they attended services that were conducted in their native language. When a group became large enough, and funds became available, they built their own house of worship.

A new congregation attracted people from other communities to a worship service. Some church members would travel for hours to get to a service. In the early days, it did not matter if you were Protestant, Roman Catholic, Greek Catholic or Evangelical Reformed. If you wanted to go to church, you went to whichever church served your needs, and you took your family. Prayers were offered and the congregants sang songs.

The First Hungarian Reformed Church of Pittsburgh was established on April 8, 1890 and grew quickly and soon built a small wooden church on Bates Street in the Oakland section of Pittsburgh, which was dedicated on October 23, 1892.

The congregation traveled from the communities of: McKeesport, Homestead, Duquesne, Rankin, Brad-dock, and some who worked on the B&O Railroad came by train from as far as Ohio to attend services at the little wooden church, sometimes called the "rooster church."

The First Hungarian Reformed Church of Pittsburgh was chartered on January 20, 1901. In 1903, the congregation moved to Bayard Street and Dithridge Street, in the Oakland area of Pittsburgh.

Many of the parishioners came from the Hazelwood section of Pittsburgh and soon a new brick church and a manse for the minister, his wife and eight (8) children was built on Johnston Avenue and dedicated on July 3, 1904.

As the Hungarians immigrated to this area to work in the steel mills, and another church was needed to hold the many worshippers from the Homestead area. In 1903, the congregation of the First Hungarian Reformed Church had a new house of worship in Homestead. The congregation included members from Homestead, Munhall and the surrounding Pittsburgh area.

The pastor, Rev. Alexander Harsanyi was the first minister of the church and was considered a great organizer. The new building was designed by architect, D.S. Piatt and built by W.B. Johnson Contractors. At the dedication of the new church, over 5,000 attended the celebration.

Only a few months later, on January 29, 1904, church members would be commemorating 58 members of their congregation with a funeral service for the

Hungarian miners who lost their lives in the Harwick Mine. Services were conducted by Rev. Alexander Harsanyi from the Homestead Reformed Church. He was assisted by Dr. John H. Prugh, D.D., with the Grace Reformed Church of Pittsburgh; Rev. Paul S. Leinbach, of the Trinity Reformed Church, Wilkinsburg, at the gravesite in the Cheswick Cemetery. Hungarians of the Reformed Church, as well as, members of the Church and Beneficial Societies from Pittsburgh[h], Allegheny, McKeesport, Duquesne and Homestead were in attendance.

The town of Cheswick is about 20 miles away from Homestead and these local men working at the Harwick mine would have been boarding in the nearby communities. A few trolley lines connected these towns.

On October 19, 2003, the First Hungarian Reformed Church of Homestead celebrated 100 years of worship in the same location on 10th Avenue at the top of Dickson Street in Munhall.☼

## Hungarians were Evangelical Reformed

This is a list of the 21 Hungarian men who could have been Evangelical Reformed Church members, who would have been attending a Hungarian Reformed Church, either in Pittsburgh, Homestead or perhaps another Reformed Church. They died in the Harwick Mine Disaster on January 25, 1904 in Cheswick. Their names were shown in the Hungarian style, with their given name last and the last name or surname first: Balogh Gusztav, Balogh Sandor, Balogh Szacsari Andras, Garda Lorinc, Gecso Jozsef, Hajdu Jozsef, Ifj Ihasz Gabor, Katrus Janos, Kozak Antal, Koscsó Janos, Nagy Balint, Nemeth Vendel, Rapolti Jozsef, Szimajiszter Sandor, Takacs Miklos, Toldi Jozsef, Tukacs Karoly, Toth Gaspar, Varadi Bernat, Zamo Kalman, Zamo Sandor.

The Hungarians shown above were listed as "ev. ref" (21-Evangelical Reformed) and others listed as "g. k." (4-Greek Catholic) and "r. k." (30-Roman Catholic). The possibility exists that all of these 58 Hungarians still could have been attending services at a Reformed Church, where a minister preached in the Hungarian language.☼

## Accuracy in Reporting on the Dead

In articles reviewed, some reporters stated different and conflicting facts. The *Homestead News-Messenger* of February 11, 1904 (Reprinted in this Newsletter) reports that there may have been "perhaps 20 survivors of the disaster. Forty-eight of the 63 Hungarians who were killed were members of the Reformed Church." The same article continues: "Twenty-one members of the Homestead Church were victims of the disaster."

A Souvenir Program with a list of 58 Hungarians has also been uncovered from the graveside services.

It has been difficult to sort through the inconsistencies and find the true numbers for the men who died. Some records indicate 186, others 182 miners. It is equally difficult to list the local Hungarians who died in the Harwick mine: 58, 48, 37, 21 or 18.

I have even heard a report that there were eight (8) rescuers who died in an attempt to bring out the bodies of the miners. Only two (2) names appear on records checked.☼

# BÁNYA = ROBBANÁS MAGYAR ÁLDOZATAINAK TEMETÉSE.



(Ezt a fényképet a Pittsburg Dispatch újság közölte.)

E gyász isteni tisztelet végzésénél segédkeznek: Nagytiszt. Dr. J. H. PRUGH, a pittsburgi első ref. angol lelkész és nagytiszt. LEINBACH PÁL, wilkinsburgi ref. lelkész urak. — PRUGH ur angol imát, LEINBACH ur pedig rövid angol beszédet tart a jelenlévő angolok részére.

## Verdict of Coronor's Jury Inquest—Harwick Mine Disaster

PITTSBURGH, APRIL 16, 1904

First—The explosion was caused by blown-out shot, igniting gas and coal dust.

Second—Insufficiency of ventilation, due to accumulation of ice at the bottom of air shaft.

Third—It is the duty of mine foremen to have ice removed and have air shaft in proper condition for the safety of the men and property.

Fourth—We find that Mine Foreman Brown and Fire Boss Gordon, of the Harwick mine, at the time of the explosion, were negligent, and did not comply with the mining law of Pennsylvania.

Fifth—We find Superintendent Sowden violated the mining law of Pennsylvania in not signing mine foremen and fire boss report hooks, as required by law.

Sixth—We find by the testimony of Mine Inspector Cunningham that he violated the mining law by not enforcing the requirements of the law, by not having an indicator placed on the fan and for allowing longer time to elapse than the law required in making his official inspection.

Seventh—We, as jurors, do not consider the November 4, 1903, visit by Inspector Cunningham an official in-

spection, as required by law.

Eighth—We, as jurors, recommend that the Allegheny Coal Company see that no friction exists between the officers of the Harwick mine for the safety of life and property.

Ninth—We find from the evidence that Inspector Cunningham and Superintendent Sowden be held for the action of the grand jury on the charge of murder.

Tenth.—And we further censure the Allegheny Coal Company for not attending to the said Harwick mine according to law.

Eleventh—And we further recommend that the Legislature of the State of Pennsylvania enact laws that are more specific in governing mines.☞

## Souvenir Programme from Memorial Services at the Cemetery

The Photograph above was taken at the time of the burial services in Cheswick, PA. It appeared in a local newspaper, the *Pittsburg Dispatch* and was reprinted at the top of the Souvenir Programme. If anyone is familiar with the Hungarian language, we could use a translation. I am 2 generations removed from my knowledge of Hungarian.

Contact John Asmonga (412) 653-7842

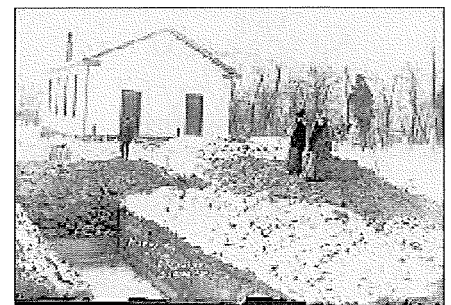


Photo from the Alle-Kiski Valley Historical Society, Tarentum, PA

## Harwick Mine Disaster Graves and Monument

A makeshift morgue was setup in the nearby school. Friends and relatives came to try to identify the remains of the explosion's 179 victims. Burial was in a mass grave as shown above.

There is a graveside marker in Cheswick just off S.R.0028 and it is a grim reminder of the 1904 mine disaster that took 179 lives. The graves and monument are in the old Lutheran Cemetery beside a road leading into the Colfax Power Station of Duquesne Light Company. One granite monument is a folk carving of the scene in the mine, with workers and mine mules falling dead from the explosion.


Local cemetery records only indicate 3-4 separate burials of miners. Most of the dead were interred in a mass grave.☞



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**JANUARY 2004**

Sue Vargo 37415      Viola's Pizzeria 15122

**HAPPY BIRTHDAY— FEBRUARY**  
**To the members of our Society.**

- |                       |                  |
|-----------------------|------------------|
| 10 — Robert Cavanaugh | 20 — Gerald Rihn |
| 11 — Fred Matson      | David West       |
| 13 — Kenneth Andney   | 25 — Lance Maha  |
| 18 — Tom Peters       |                  |

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Work Telephone: ( \_\_\_\_\_ ) \_\_\_\_\_ Ext.: \_\_\_\_\_

Home Telephone: ( \_\_\_\_\_ ) \_\_\_\_\_

May we have your e-mail address, to keep you informed on our activities? \_\_\_\_\_

Birth Date: \_\_\_\_\_ (for our monthly newsletter)

ACTIVE INDIVIDUAL	
<input type="checkbox"/> 1 Year	\$20.00
<input type="checkbox"/> 2 Years	\$35.00
<input type="checkbox"/> 3 Years	\$50.00

ACTIVE FAMILY	
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<input type="checkbox"/> 2 Years	\$45.00
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 Example: Asztmondja or Aszmongya in Austria-Hungary, Hungary, Czech Republic, Slovakia, or Romania.  
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Please make checks payable to H&MTHSociety and mail to:  
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*For information, please contact our Membership Chairperson, Jim Hartman at (412) 600-0229*

## BECOME A MEMBER TODAY !!!

*You are invited to become a member of the Homestead & Mifflin Township Historical Society.*

When you become a member of the Homestead & Mifflin Township Historical Society, you join others who are dedicated to the excitement of lifelong learning. Your support celebrates the vitality of the old Mifflin Township of Allegheny County . . . a history that not only tells us where we have been, but guides us toward the future. At the present time we have four (4) types of membership: Active (Individual & Family), Contributing, Student and Sponsor.

**ACTIVE MEMBERSHIP** has both Individual and Family rates. Individual is for a single person and Family entitles all members of the same household to participate. This membership entitles you to discounts on multiple year membership, upcoming H&MTHSociety affairs, publications and the use of our research resources. New members will receive a "Welcome Packet" with information for doing research for genealogy and guides to research for the history of the local areas. You will receive a yearly subscription to our newsletter mailed to your home address. You can attend meetings and participate in H&MTHSociety events. This type of membership has ONE VOTE per membership in the H&MTHSociety.

**CONTRIBUTING MEMBERSHIP** is offered to those who live out of town. There are no discounts on affairs, publications or research. A yearly subscription of the newsletter is mailed to your home address. You may attend meetings and participate in committee groups. This type of membership has NO VOTE in H&MTHSociety affairs. There are no discounts for multiple year membership.

**STUDENT MEMBERSHIP** is offered to those in school, and under 22 years of age. There are no discounts on affairs, publications and research. A yearly subscription of the newsletter is mailed to your home address. You may attend meetings and participate in committee groups. This type of membership has NO VOTE in H&MTHSociety affairs. There are no discounts for multiple year membership.

**SPONSOR MEMBERSHIP** is offered for the business community. This membership has ONE VOTE in society affairs. A yearly subscription of the newsletter is mailed to your business address. Anyone may attend meetings. Your business name will be listed in our monthly newsletter sponsor's column. Our calendar year is January—December.

**CORPORATE SPONSORS** will be quoted a special rate for sponsoring one of our public events or a speaker. They are encouraged to support our worthwhile endeavors in preserving our local history, culture and ethnic heritage.

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The Homestead & Mifflin Township Historical Society Newsletter is published monthly and mailed to all Paid Members.

The H&MTHS Office is located at the rear entrance to the Carnegie Library of Homestead. The office is staffed by volunteers and our hours of operation are:

Friday NOON until 7:00 pm Saturday NOON until 5:00 pm  
Correspondence can be addressed to any of the Board Members in the adjacent column and sent to:  
Homestead & Mifflin Township Historical Society  
c/o Carnegie Library of Homestead  
at the return address shown above

## FEBRUARY MEETING

The next meeting will be on Tuesday, February 10, 2004. At the General Meeting of the H&MTHSociety.

We will be showing the video "George Washington's First War," this is the sequel to "When The Forest Ran Red." In the dark time of 1755 to 1776 Virginia turned to its most experienced young leader. This time period set George out to become the 'revolutionary hero' of our country.

Our doors open at 6:00 pm and Committees meet at 6:30 pm. The general meeting begins at 7:00 pm We welcome anyone to come and enjoy an evening of conversation and history.

There is *No Admission* to our meetings.

## Acknowledgements

We would like to thank the following individuals for their help in gathering all of the information to enable us to write this Newsletter: Elmer W. Toth, Rev. Jozsef Posta, Endre Csoman, William F. Horosz, Sr., Bert Olah, Ray Washlaski.

We would also like to thank the Historical Archives and the individuals who cooperated with our research: Alle-Kiski Historical Society; Carnegie Library of Homestead, Archives and Collections; Phillip J. Zorich, Special Collections Librarian, Indiana University of Pennsylvania and the Mine Safety and Health Administration Technical Information Center and Library.

For more information about the Homestead & Mifflin Township Historical Society, visit our website at [www.15122.com/mths](http://www.15122.com/mths)  
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