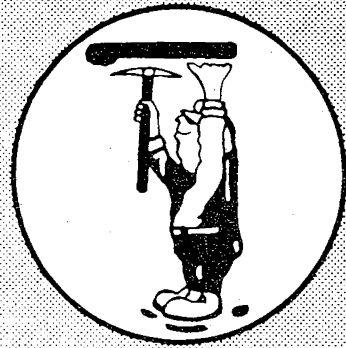


NOVEMBER 1980



BULLETIN

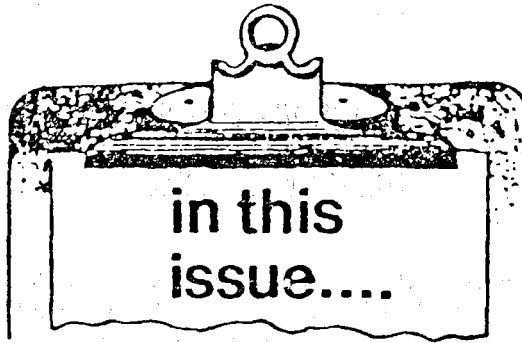


United States Department of Labor

MSHA

Mine Safety and Health Administration

HOLMES SAFETY ASSOCIATION



NOVEMBER 1980

1. Safety Topic, "The Role of Rules"
2. Safety Topic, "Test Your Tool Knowledge"
3. Safety Topic, "Proper Roof Testing"
4. Safety Topic, "Safe Hoisting"
5. Safety Topic, "First Aid--Wounds, Bruises, and Strains"
6. Safety Topic, "Part 55.6--Transportation"
7. Abstract, "Fatal Fall-of-Material (Suffocation) Accident"
8. Abstract, "Fatal Roof-Fall Accident"
9. Poster, "Rings Are a Hazard at Work"
10. Poster, "On the Job, Keep in Mind to Wear Your Safety Belt and Line"
11. Safety Topic, "Holmes Safety Association Chapters Established Third Quarter 1980"
12. The Last Word
13. Meeting Report Form (chapters only)

**SAFETY HAT DIRECTIONS:
GO ON AHEAD!**



November 1980

HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

THE ROLE OF RULES

When God created man, He knew His creation would not be capable of living in the world without a set of rules to govern the lives of individuals and the society in which they lived. The history of civilization is continuing to prove that individuals, families, tribes, or nations must pay the price for failure to live by the rules.

The mining industry certainly has its share of rules, regulations, standards, and requirements, but we continue to have occurrences resulting in injuries. What is wrong? Do we need additional or more stringent rules? We can trace and attribute all mine injuries, either directly or indirectly, to some failure in applying existing rules. Why not promote mine safety through two basic fundamentals - Training and Follow-up?

Training - Safety training has only one purpose and goal, it cannot succeed until someone has learned. When a person has learned, they reach first base. When they have the incentive for applying this learning, they reach second base. When they remember, they reach third base, but when they use the training, EVERYONE SCORES!

Follow-up - The never-ending job of follow-up keeps the game going by inspections, additional training, and constant practice. All good supervisors are safety inspectors and must see that all hazards must be minimized and controlled, the wrong way corrected, and the right way stressed.

Two ardent golfers, who skipped Church one Sunday morning to play a few holes, were feeling guilty about it. "I couldn't have gone to Church today anyhow," one said. "My wife is sick in bed." Excuses have no place in safety.

KNOW AND USE THE RULES. IF WE CANNOT AFFORD SAFETY WE CANNOT SURVIVE!

(For use in both surface and underground mining operations)

SAFETY IS EVERYBODY'S BUSINESS



November 1980

HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

TEST YOUR TOOL KNOWLEDGE

The tools we use everyday are well known to us. However, the degree of care we give them and the way in which we use them can contribute to an accident. Test your tool knowledge by taking this short quiz.

1. To increase leverage when using a ratchet wrench, it is recommended that a substantial piece of pipe be slipped over the handle. TRUE OR FALSE
2. When using an adjustable wrench, it is recommended that the open jaws face the user. TRUE OR FALSE
3. An adjustable wrench should be pushed rather than pulled. TRUE OR FALSE
4. The screwdriver is one of the most universal of tools. It can be used as a drill or a punch as well as for turning screws. TRUE OR FALSE
5. A roughness on the handle of a screwdriver may be smoothed by light sanding. TRUE OR FALSE
6. The plastic covering on long nose pliers is for protection against hazardous voltages. TRUE OR FALSE
7. When using a hacksaw, pressure should only be applied on the forward stroke. TRUE OR FALSE
8. Tape may be used to secure the fraying ends of a rope. TRUE OR FALSE
9. Temperature has no affect on tools. TRUE OR FALSE
10. If a chain hoist is hard to operate, a good dose of oil will cure it. TRUE OR FALSE

SAFETY IS EVERYBODY'S BUSINESS

(For use in all mining operations)

ANSWERS:

1. FALSE - This is a dangerous practice.
2. TRUE - This action tends to force the wrench onto the nut.
3. FALSE - This is asking for sore knuckles.
4. FALSE - A screwdriver is only a screwdriver.
5. TRUE.
6. FALSE - It is there for comfort only.
7. TRUE - That is how the blade is designed to cut.
8. FALSE - Tape will trap water which will rot the rope.
9. FALSE - Metal tools can become somewhat brittle below 50°F.
10. FALSE - Oil a chain hoist only at the indicated oil holes; otherwise, return for repair.



November 1980

HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

PROPER ROOF TESTING

1. Always make a visual examination of the area first. If you can see the roof is bad, why test it?
2. Always stand under supported roof to start testing.
3. In face areas, test only far enough to erect next supports.
4. Always start from supported roof and examine toward face.
5. Never turn your back to the face or ribs while testing.
6. Always use bare fingers against roof with your thumb pointed toward you. (This will make it difficult for you to walk out under supported roof.)
7. Start tapping the roof lightly at first with your sounding rod, then increase your stroke to hear the sound of the roof or feel vibration.
8. Always use an approved testing tool.
9. Always use goggles to protect your eyes.
10. Test roof frequently while working. (Roof conditions can change frequently.)
11. Test closely for cracks, slips, kettle bottoms, horsebacks, or any irregular formation.
12. Always test ribs and face as well as the roof.
13. Always test roof, face, and ribs before any other work is done.
14. In high places, use a sturdy bench or long testing tool.
15. Always be sure of a safe line of retreat.
16. Always take enough time and be serious minded enough to satisfy yourself that you have made a good examination.

(For use in underground coal mining operations)

SAFETY IS EVERYBODY'S BUSINESS



November 1980

HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

SAFE HOISTING

1. Single-leg hitches do not provide good load control and are not to be used for long loads.
2. Sling legs should be as nearly vertical as practical to reduce the dangerous tension strains imposed by large angles between legs.
3. Hands should be kept from between slings and the load.
4. Padding (wood facings, soft metal guards) should be used when slings pass around sharp corners on the load -- even when the sling is tough wire rope or chain.
5. Work should never be turned in a basket hitch. When turning in a choker hitch, the eyes of the sling must be placed so they face opposite to the direction of turn.
6. Sling materials must never be knotted.
7. Care should be taken to assure the lifting hook is over the center of the load to be lifted.
8. Choker hitches made with shackles or special choker hooks are safer than simply running the sling through its own terminal loop.
9. Slings should hang from the center of the hoist hook, not ride out toward the tip.
10. Hooks should never be forced into chain by hammering.
11. Loads should never be left suspended.

(For use in both surface and underground mining operations)

SAFETY IS EVERYBODY'S BUSINESS



November 1980

HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

FIRST AID--WOUNDS, BRUISES, AND STRAINS

WOUNDS

Any time there is machinery, heavy objects to be lifted, or vehicles operating around people, there is a danger that someone will experience a wound. Add those hazards found in a mine--especially an underground mine--and the dangers increase. Being on guard to prevent accidents is most important!

You can get an open wound even though you are careful. The term open wound describes a wound in which the skin is broken.

One kind of open wound is what many people call a scrape. (The medical name is abrasion.) This happens when the skin is rubbed against a hard surface. In a mine you might scrape your hand on a timber, or the wall of the mine, for example. A scrape isn't usually very deep and blood sometimes seems only to ooze out through the wound.

A laceration is a jagged, irregular wound that is usually caused when great force is exerted against the body.

Another kind of open wound is a cut made by any sharp object, such as a knife. The cut is smooth and goes through the skin and blood vessels. This kind of open wound is called an incision.

The fourth kind of open wound is a stab (puncture) wound. This can happen not only from a knife (which "stab" makes us think of) but any pointed object such as a nail, ice pick, or splinter.

CAUTION: Any time there is a break in the skin there is a danger of infection.

To carry this warning a step farther, infection can cause serious illness or a loss of a part of your body, such as a finger, toe, arm, or leg.

The wound should be covered. Covering a wound keeps germs from getting into it, thus keeping it from further chance of infection.

Sometimes an open wound will be a surface sign of a more serious injury. For example, someone who has an open wound on the head

SAFETY IS EVERYBODY'S BUSINESS

(For use in all mining operations)

might also have injured the brain. Since you will not always be certain how serious an open wound is, take the victim to a physician.

A closed wound is one where there is no break in the skin. A closed wound can happen within any part of the body. Blood isn't lost through the skin, but it may flow through natural cavities of the body, such as ears, and nose, or mouth.

Some closed wounds are small injuries, such as a black eye. Other closed wounds may involve a lot of internal bleeding-- for example, those due to damage of internal organs.

BRUISES

The most common closed wounds you will see in a mine and elsewhere are bruises. Bruises are caused by a blow from a hard object. A fall or a bump is likely to cause bruises.

At first a bruise might appear red and there will be some swelling. Then it will change to a darker blue or purple. The larger the vessel which is broken the more blood will be gathered and the greater the swelling will be. It will be painful to touch.

The aid to be given to a victim of a bruise is to try to keep the swelling down. Cold will do this. Holding the bruised part under cold water, or putting ice in a cloth and applying it to the bruise will help.

If the bruise is severe, raise the injured part and encourage the victim to rest. He should be seen by a physician because a bruise on the surface may be an indication of a more serious injury underneath.

STRAINS

Another type of closed wound is a strain. A strain is the overstretching of a muscle or a tendon. In severe strains the muscle or tendon may be torn. (Think of stretching a wide rubber band until it weakens, perhaps breaks.)

By using your muscles correctly you can usually avoid strains, since they are caused by sudden movements or violent exertion in lifting or moving heavy weights.

When someone gets a strain there will be a sharp pain or cramp right away. Then, the muscle or tendon which has been affected will be painful to move for awhile. There may be some swelling.

To aid a victim of a strain, first make the victim comfortable as possible. Hot application will help, but you may not have them available.

Also, rubbing the strained part gently with alcohol or witch hazel may help to relieve the pain. Again, these may not be available in the mines. Wherever you are, keep the injured part at rest.

People often confuse a strain with a sprain. If you remember that a sprain involves a joint, this will help you to remember it. Sprains are injuries due to the stretching or tearing of ligaments or other tissue around a joint.

You may have had a sprain at some time. A minor sprain may cause only some discomfort for a few hours, such as in a "twisted ankle" you may have had when you stepped off a curb and landed "wrong" on your foot.

Severe sprains may need many weeks of medical care before the joint can be used again.

When a sprain occurs swelling usually happens immediately and the skin at the joint may be discolored.

CAUTION: You may hear "rules of thumb" about how to tell a sprain from a break by the swelling or no swelling--pain or no pain, etc. Never assume that an injury is one or the other in this way. Take the victim to a physician who will probably not be able to tell for sure and most likely will x-ray the part to find out.

In the meantime, the affected joint should be raised and given absolute rest. Cold applications will relieve pain. Do not wrap the joint. A sprain should be treated like a fracture.

An injury that you may have thought of as a kind of "strain" is a rupture or hernia. Someone might say, "Don't strain yourself; you'll get a hernia." Most commonly, a hernia is a part of an internal organ (usually the bowel) which protrudes through the wall of the abdomen. You'll probably find that this occurs in or just above the groin, but it can happen anywhere in the abdomen.

Ruptures happen as a result of a combination of weakness of the tissues and muscle strain. This can happen during violent coughing, sudden jars in jumping, lifting, or pushing. The victim of a rupture will feel a sharp, stinging pain and the feeling of something giving way where the rupture is. The victim may be nauseated and may vomit. In examining the rupture victim, you might see swelling that will range from the size of a marble to that of a doubled-up fist.

The victim will be in pain. Position them in a way that is most comfortable and proceed to a physician. Do not attempt to do anything to or for the rupture.

The tissue is already weak when a rupture occurs and it is the

combination of that weak tissue and muscle strain which causes the rupture. Other strains can be caused by lifting heavy objects. To avoid strains, learn how to lift heavy objects correctly. The idea is to put "strain" on muscles which are not as likely to be injured by lifting--leg muscles.

1. Plant your feet firmly and apart.
2. Squat down, keep your back as straight as possible and get a good grip on what you will be lifting (do not lean forward).
3. Lift slowly, pushing up with your strong thigh and leg muscles.
4. Do not jerk the object upward or twist your body as you lift.

If you are placing a heavy object from a height to the ground, you just reverse the procedure.



November 1980

HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

Excerpts from Code of Federal Regulations

Subchapter N--Metal and Nonmetal Mine Safety

Part 55.6--Transportation

All of the standards are mandatory; violation of a standard will subject the mine operator to an order or notice of violation as required by Section 8 of the Act.

- 55.6-40 Mandatory. Explosives and detonators shall be transported in separate vehicles unless separated by 4 inches of hardwood or the equivalent.
- 55.6-41 Mandatory. When explosives and detonators are hauled by trolley locomotive, covered, electrically-insulated cars shall be used.
- 55.6-42 Mandatory. Self-propelled vehicles used to transport explosives or detonators shall be equipped with suitable fire extinguishers.
- 55.6-43 Mandatory. Vehicles containing explosives or detonators shall be posted with proper warning signs.
- 55.6-44 Mandatory. When vehicles containing explosives or detonators are parked, the brakes shall be set, the motive power shut off, and the vehicles shall be blocked securely against rolling.
- 55.6-45 Mandatory. Vehicles containing explosives or detonators shall not be taken to a repair garage or shop for any purpose.
- 55.6-46 Mandatory. Vehicles containing explosives or detonators shall be maintained in good condition and shall be operated at a safe speed and in accordance with all safe operating practices.
- 55.6-47 Mandatory. Vehicles used to transport explosives, other than blasting agents, shall have substantially constructed bodies, no sparking metal exposed in the cargo space, and shall be equipped with suitable sides and tailgates; explosives shall not be piled higher than the side or end enclosures.

SAFETY IS EVERYBODY'S BUSINESS

(For use in surface metal and non-metal mines)

- 55.6-48 Mandatory. Explosives and blasting agents shall be transported without undue delay, and over routes and at times that expose a minimum number of persons.
- 55.6-49 (Reserved)
- 55.6-50 Mandatory. Other materials or supplies shall not be placed on or in the cargo space of a conveyance containing explosives, detonating cord or detonators, except for safety fuse, and except for properly secured, nonsparking equipment used expressly in the handling of such explosives, detonating cord or detonators.
- 55.6-51 Mandatory. Explosives or detonators shall not be transported on locomotives.
- 55.6-52 (Reserved)
- 55.6-53 Mandatory. Only the necessary attendants shall ride on or in vehicles containing explosives or detonators.
- 55.6-54 Mandatory. Explosives or detonators shall not be transported on man trips.
- 55.6-55 (Reserved)
- 55.6-56 Mandatory. Substantial nonconductive containers shall be used to carry explosives to blasting sites.
- 55.6-57 Mandatory. Nonconductive containers with tight-fitting covers shall be used to transport or carry capped fuses and electric detonators to blasting sites.
- 55.6-58 through 55.6-64 (Reserved)
- 55.6-65 Mandatory. Vehicles containing detonators or explosives, other than blasting agents, shall not be left unattended except in blasting areas where loading or charging is in progress.
- 55.6-66 through 55.6-89 (Reserved)

ABSTRACT FROM FATAL ACCIDENT

November 1980

HOLMES SAFETY ASSOCIATION
MONTHLY SAFETY TOPIC



FATAL FALL-OF-MATERIAL (SUFFOCATION) ACCIDENT

General Information: An assistant mill operator was suffocated when bridged material he was standing on collapsed and he was buried under about 7 feet of crushed ore. The victim had a total milling experience of about 6 years, the last 3 years as an assistant mill operator.

Description of Accident: The victim had been performing his duties as a second mill operator until he and a coworker entered the bin to air lance material into a chimney over a conveyor belt. The material extended from the belt to the top of the ore surface. Work proceeded without incident until the bridged material the victim was standing on collapsed under him. The victim was engulfed by 6 to 8 feet of ore. Neither worker was wearing safety belts with safety lines when the accident occurred.

Rescue efforts started immediately and after 1 hour and 25 minutes, the victim was removed from the bottom of the bin. Attempts at digging him out from the top failed due to sloughing of material. The victim was checked for vital signs but none were detected.

Cause of Accident: The cause of the accident was supervisors condoning the practice of persons working inside ore bins without safety belts or lines. Contributing factors were:

Failure of the operator to provide reliable method of hooking up safety lines;

Poor illumination may have been a factor in assessing the conditions that existed;

The victim did not properly evaluate the hazards of working in a bin without safety lines;

The supervisors apparently did not enforce safe practices in bin work.

Recommendations: Safety belts and lines shall be worn when work is performed where there is danger of falling. A second person shall tend the lifeline when bins, tanks, or other dangerous areas are entered.

(For use in surface metal and nonmetal mining operations)

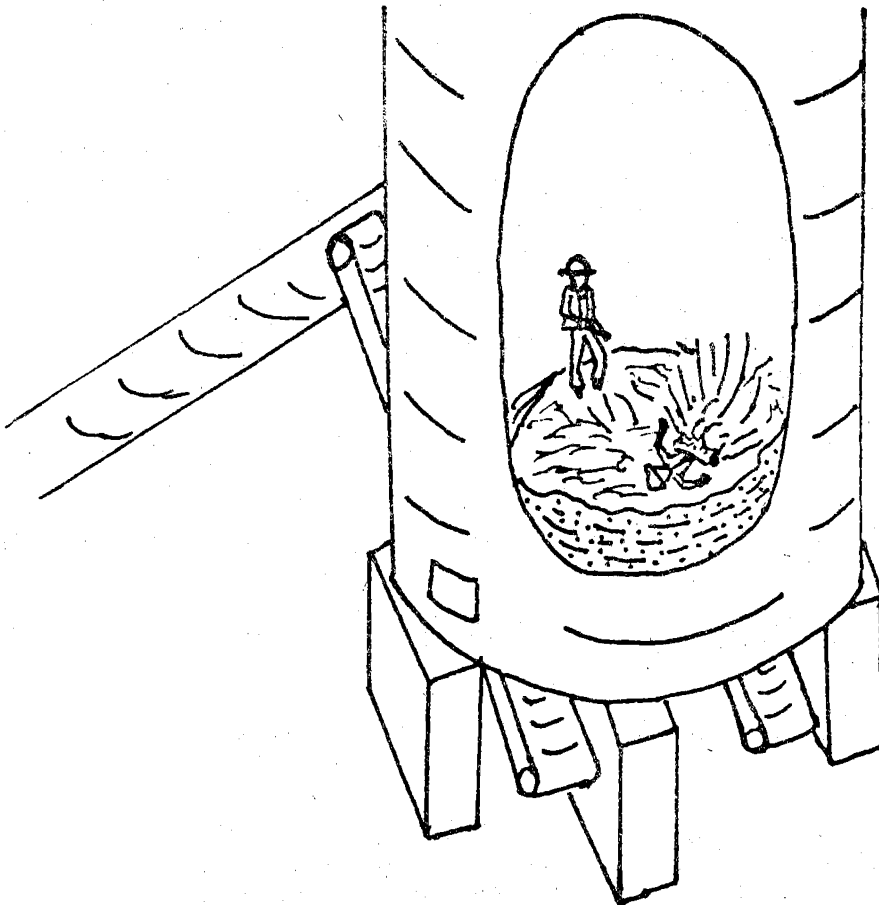
All employees and officials should be familiar with company, State and Federal health and safety regulations applicable to their jobs.

Each working place should be visited by a supervisor at least once each shift and more frequently as necessary to insure that work is being done in a safe manner.

Illumination sufficient to provide safe working conditions shall be provided at all work areas.

Employees should be constantly alert to the potential of accidents on their jobs.

FATAL FALL-OF-MATERIAL (SUFFOCATION) ACCIDENT



ABSTRACT FROM FATAL ACCIDENT

November 1980

HOLMES SAFETY ASSOCIATION
MONTHLY SAFETY TOPIC



FATAL ROOF-FALL ACCIDENT

General Information: A roof-fall accident occurred resulting in the death of a loading-machine operator. The victim had about 3-1/2 years mining experience, the last 2-1/2 of which were as a loading-machine operator.

Description of Accident: The section crew, under the instruction of their supervisor, entered the mine and proceeded to the working section. Their supervisor informed the crew members as to the location of the mining machinery and examined the working places.

The loading-machine operator (victim) began loading operations in the entry and loaded out a cut of coal in the crosscut between the two entries. The supervisor instructed the victim to clean a third entry with the loading machine, where an overhanging rib had been sheared down with the cutting machine. He further instructed him to knock the temporary supports out with the loading machine. Mining activities in this entry had previously been hampered when water and soft bottoms were encountered. Management decided to stop the face and hole back into this entry from a crosscut on the inby side. This left an area ranging from 24 to 28 feet where there were no permanent roof supports (roof bolts).

The victim moved the loading machine into this entry and with the assistance of the shuttle-car operator, began removing temporary supports. The shuttle-car operator stated that after removing three temporary supports he commented to the victim that the roof did not look too good. The victim agreed and proceeded into the unsupported area toward the temporary supports that were on the outby side. According to the shuttle-car operator, he then asked the victim what he planned to do and the victim answered that he intended to clean it up so they would not have to come back.

The shuttle-car operator proceeded into the unsupported area with the victim and again commented that the roof looked "scaly." The victim answered by remarking that there was no weight on the supports. After the shuttle-car operator removed one of the supports, he turned and was about to place the jack along the rib when he heard the roof fall. Evidently, the victim was attempting to remove a jack when the roof fell, crushing him. Upon seeing what had happened, the shuttle-car operator yelled for assistance from the other crew members, who arrived at the scene within

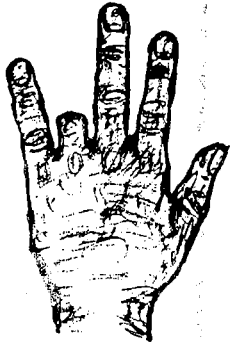
(For use in underground coal-mining operations)

seconds. The victim was freed from underneath the rock. The rescuers detected a pulse, but it was rapidly growing fainter. First aid was administered for about 15 minutes until the victim was transported to the hospital. Death was attributed to a crushed chest, fractured pelvis, and crushed right leg.

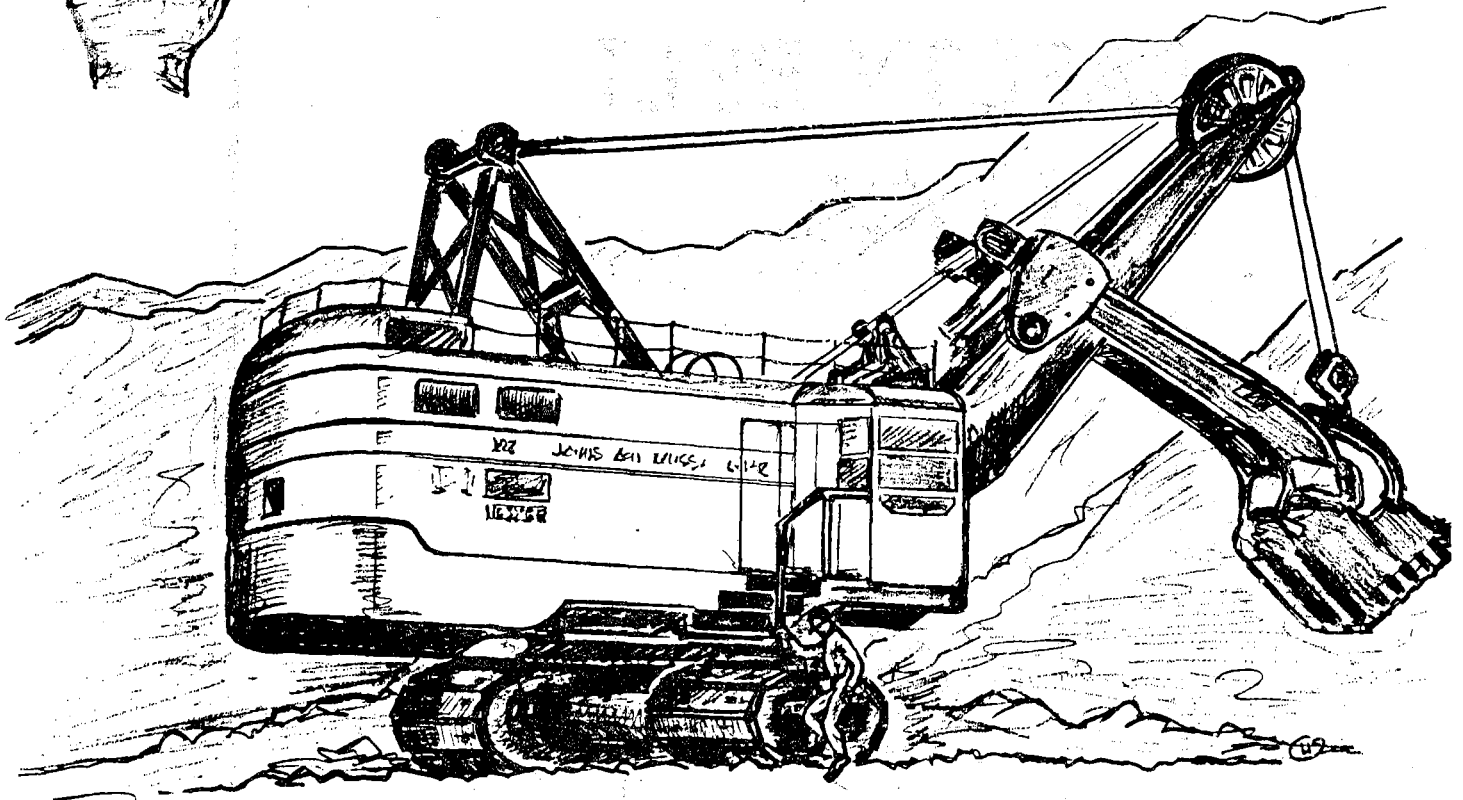
Cause: The fatal accident occurred because the approved roof control plan was not being complied with.

Contributing factors were the fact that the victim did not follow the instructions issued by the supervisor and that management did not succeed in the areas of training to ensure that compliance with the approved roof control plan was achieved.

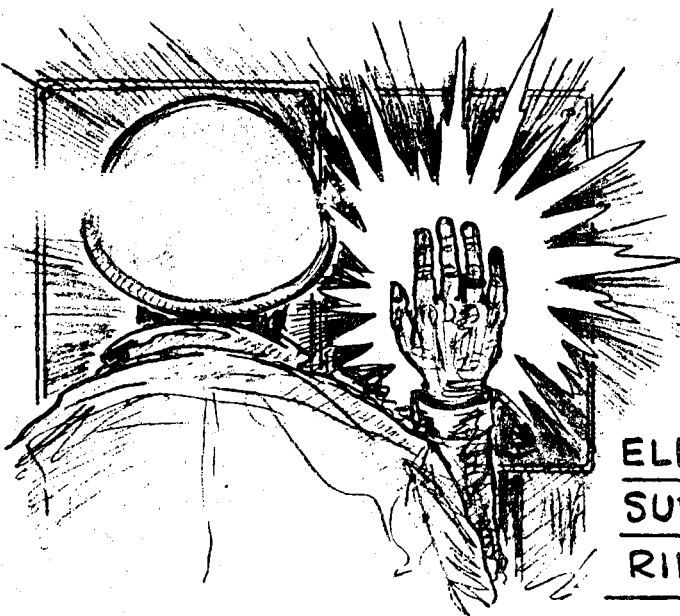
RINGS ARE A HAZARD AT WORK



MANY MINOR INJURIES TO FINGERS BECOME AN AMPUTATION DUE TO A RING BEING INVOLVED



IN CLIMBING DOWN FROM SHOVEL WORKMAN PLACED HAND ON BOTTOM STEP. RING CAUGHT ON EDGE OF STEP RESULTING IN AMPUTATION



ELECTRICIAN WORKING ON PANEL SUFFERED A SEVERE BURN WHEN HIS RING CAUSED A SHORT AND MELTED

HOLMES SAFETY ASSOCIATION

**On the job,
keep in mind
to Wear your
SAFETY BELT
and LINE.**



V
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T
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**FOR SAFETY
IN 1980**



Report of Holmes Safety Association Safety Chapters

U = Underground
 S = Surface
 P = Plant

Established July through September 1980

Chapter	Mine	Company	Product	U	S	P	Member- ship	Charter No.	City	County	State	Established By	Date	Council Affiliation
HDL Coal	HDL #1	HDL Coal Co.	coal		X		9	2889	Lanse	Clear- field	PA	¹ G. Walaitis ³ L. Baumgard- ner	7/10	Clearfield
Wyomac Coal	Wyomac Coal	Wyomac Coal Company	coal	X	X	X	7	2890	Welch	McDowell	WV	¹ Kirk Harmon ³ Sid Green	7/17	Nonaffiliated
Levy	Levy	The Levy Co. Inc.	slag			Mill	200	2891	Portage	Porter	IN	³ G. Kassal	8/1	Nonaffiliated
Will's Construc- tion	Mine #1	PBS Coals Inc.	coal		X		15	2892	Somerset	Somerset	PA	³ H. Will	8/6	Richard Maize
Mobil Chemical	Mobil Chemical	Mobil Chemical Company	phosphate	X	X	Mill	590	2893	Nichols	Polk	FL	³ J. Boswell	9/2	Nonaffiliated
F & E Erection	F & E Erection	F & E Erection Co. Inc.	construc- tion	X	X	Mill	200	2894	San Antonio	Bexar	TX	³ H. Hickman	9/23	Nonaffiliated
Oldham County Stone	Oldham County Stone	Ready Mix Concrete Co.	crushed stone		X		25	2895	Browns- boro	Oldham	KY	¹ J. Johnson ³ E. Kessler	9/26	Nonaffiliated
Bullitt County Stone	Bullitt County Stone	Ready Mix Concrete Co.	crushed stone	X	X	Mill	30	2896	Shepherds- ville	Bullitt	KY	¹ J. Johnson ³ E. Kessler	9/26	Nonaffiliated

Total chapter established during the third quarter of 1981 8 - Membership - 1,076

Total chapters nationwide 1,531 - Membership - 215,583

THE LAST WORD

November 1980

NEW WONDER DRUG

Of all the wonder drugs today, there is one which is 100 percent effective. It develops no allergy in the user and it provides instantaneous relief if applied. Unlike other drugs, it does not build up an immunity to itself if used daily, but rather has a tendency to make one rely upon it. It can prevent broken bones, twisted backs, loss of sight, even death itself. It is cheaper than aspirin, but not enough people buy it. It is not a narcotic, but people generally agree that we would all be better off if we became addicts. It is called SAFETY-MYCIN.

SOUND FAMILIAR?

In the course of accident investigation, how often have you heard this said? "I don't know how it could have happened--she or he was one of the most careful people I ever worked with!"

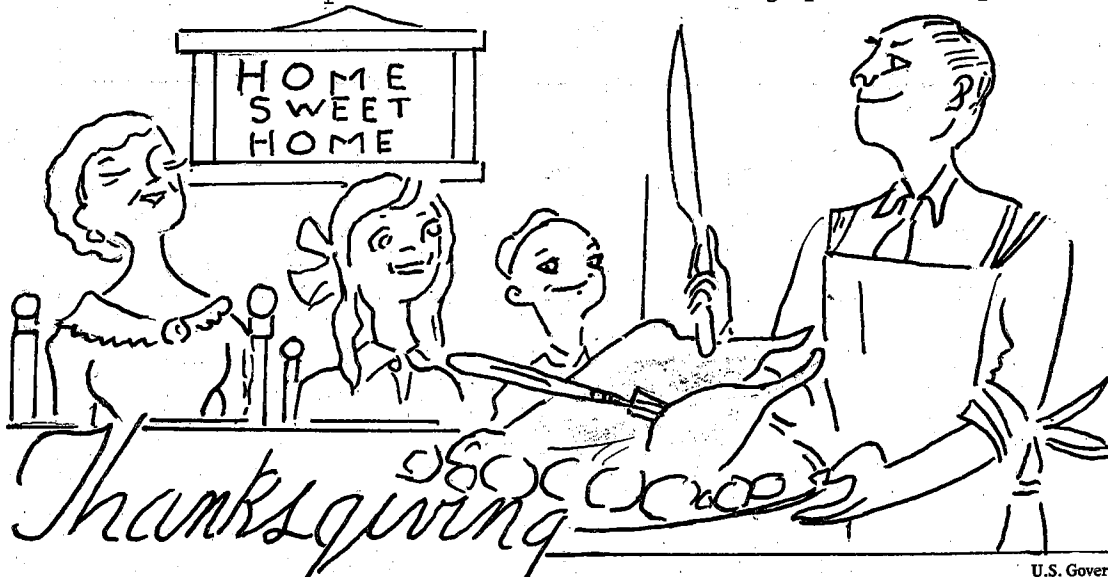
If that is true of a careful worker, then what of the workers who are lukewarm regarding safety and accident prevention?

THANKSGIVING

DEFINITION: (Webster's Dictionary)

"Act of rendering thanks, especially to God. A prayer expressing gratitude. Thanksgiving Day: A day (usually the fourth Thursday in November) set aside each year for Thanksgiving and to praise God."

At this time of year, we in the mining industry should be especially thankful for the safety records established year-to-date. There have been some rough spots, and a number of serious accidents have occurred. However, we are thankful that the "near accidents and close shaves" experienced by many of our miners and supervisors occurred in such a manner as to permit them to still enjoy this day of thanks giving.



MSHA, Holmes Safety Association
Education and Training
P.O. Box 25367
Denver, Colorado 80225

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