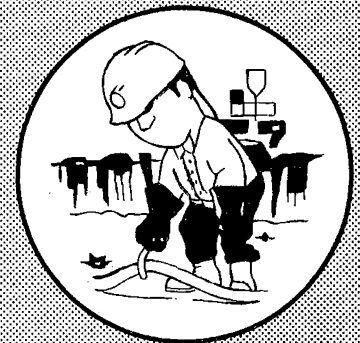


JAN 1979



BULLETIN



United States Department of Labor

MSHA

Mine Safety and Health Administration

CONTENTS

Articles

1. Introduction
2. New Chapter Members, 1978
3. Three Mine Fires (Lessons to be learned)
4. Falls
5. Plant Housekeeping
6. Makes Sense
7. Abstract From Fatal Hoisting Accident
8. Abstract From Fatal Surface Haulage Accident
9. Cartoon
10. The Last Word
11. Meeting Report Form

INTRODUCTION

It has been our pleasure having you as a member of the Holmes Safety Association. We hope you have been taking full advantage of the safety topic material your membership provides.

We have designed a new compact monthly safety bulletin that includes our safety topic material for on-the-job safety meetings. Please note that the bulletin has been simplified--the monthly meeting report form, which we hope that you will complete, tear out, fold, and return, postage-paid.

This is a landmark year--the 57th anniversary of the Holmes Safety Association. From its introduction in 1922, the Association has become one of the supreme safety organizations, assuring to the mining, mineral extractive, and allied industries a high level of safety personal services nationwide.

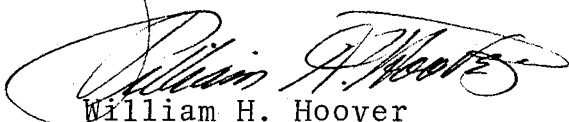
This concept has not changed in five and one-half decades. The world has changed; more employees are now traveling further and more often. The pace has quickened with less time for the most important phase of our job--Safety Meetings. As a result, accidents and serious lost-time and disabling injuries continue to climb.

To assist you in these changing times, the benefits of the "Bulletin," as a safety leader, should save you and your people time and effort and provide educational safety material at most levels of your mining operations.

In 1964, there were about 200 safety chapters in coal. To date, there are more than 1,400 safety chapters covering metal, non-metal, and coal mines.

These are only a few of the ways in which the value and usefulness of the Holmes Safety Association's services have increased during the last five and one-half decades.

We appreciate your past and continued membership and support. In the months and years to come, we will continue to search for ways to increase the value of safety material to you.



William H. Hoover
National Secretary
Holmes Safety Association



January 1979

HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

NEW CHAPTERS--1978

Two hundred eighty-one new chapter members, representing approximately 18,000 members, joined the Holmes Safety Association in 1978. In the association there are 1,444 safety chapters and a total of 195,000 members.



January 1979

HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

Three Mine Fires

The following three articles on mine fires were taken from federal reports covering investigations. Each one presents a lesson.

DON'T RUN OVER TRAILING CABLES

Normally, the trailing cable of the loading machine was laid along the rib in the clear of the shuttle-car roadway, but it was not there the day this accident occurred. When the loaded shuttle car ran over it around 9:30 a.m. that day, the loading-machine cable blew up, and the arc ignited one of the shuttle-car tires.

By the time the shuttle-car operator secured a fire extinguisher from the storage place at the discharge station and cut off the power, the smoke was so dense he could not get close enough to use the extinguisher effectively. After improving the ventilation to the extent that the smoke was moved away from the machine, the fire was extinguished by direct application of rock dust and water, but not until 3:30 p.m. Losses included a severely damaged shuttle car and production from the section for that shift.

The lesson! Never run over trailing cable and keep extinguishers handy.

A PECULIAR MINE FIRE

The electrician stated that the shuttle-car operator had neglected to remove the trailing cable nips from the power wires at the end of the shift and that the control wires in the shuttle car short-circuited, causing it to start. It traveled until it struck a coal rib in the

TRAINING IN FIRE CONTROL PAYS OFF

This coal mine fire revealed these significant facts: An arc from a short circuit in the trailing cable of a loading machine ignited flammable hydraulic oil and coal dust on the machine. The overload protective devices failed to function, but the mine foreman, who was nearby, removed the nip from the power source. He then instructed a shuttle-car operator to get the readily available 35-pound carbon dioxide extinguisher, had men erect a line brattice to carry away smoke and fumes, and promptly extinguished the blaze.

The ready availability of the fire-fighting equipment, including brattice cloth to erect the line brattice, and the clear thinking of the well-trained mine foreman in organizing his men in this emergency really paid off.

entry and then the wheels continued to revolve, causing overheating of the tires, which burst into flame. Fortunately, the fire was discovered in time and was extinguished by application of water after failure to control it by use of fire extinguishers.

January 1979



HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

FALLS

Here are some of the most common causes of falls:

1. TRIPPING HAZARDS AND POOR HOUSEKEEPING caused by one individual who leaves the tripping hazard and by the second individual who fails to detect it, trips over it and falls. Often this is the same individual.
2. SLIPPERY CONDITIONS, such as oil on the floor, ice, and other conditions which make footing less secure.
3. LACK OF ALERTNESS, haste or thinking about something else, failure to use handrails on stairways.
4. DEFECTIVE OR IMPROPER EQUIPMENT. Avoid climbing on defective ladders, scaffolding, etc., and do not use makeshift ladders or climb on boxes or other equipment. Use only good ladders equipped with safety feet.
5. DISTRACTION--People have walked off cliffs, roof tops, and loading docks while looking at something else. It pays to watch where you are going.
6. FAILURE TO USE SPECIAL PRECAUTIONS. Special conditions require special safety measures. Many jobs can be performed only by using safety belts and tielines. Never feel completely secure--this will help you remain alert. Preventing falls is your personal responsibility.

A MESSAGE FOR THE LADIES

The way some women use their electric hair dryers is enough to curl your hair. Since the dryers can be clipped to a woman's belt, they are going places they never should, such as into the laundry rooms and bathrooms. Some women wear the dryers on their heads while doing the laundry and while soaking in the tub.

Distribution: Underground and surface mining operations -
coal and noncoal

Using an electric appliance around water is dangerous, and you are much more likely to get a shock with wet skin. Also, there is the horrible prospect that the dryer could fall in the tub with you, shorting and sending an electrical charge through the water. Also, a current might be conducted through a water-soaked hose to the wearer's head.

OFF-THE-JOB-SAFETY-PAYS

January 1979



HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

P L A N T H O U S E K E E P I N G

Good plant housekeeping will help to avoid many accidents and injuries. A clean plant, both on the surface and underground, with a place for everything and everything in its place is a part of good housekeeping, but it cannot be maintained by an occasional grand cleanup and setting things in order. It must be a continuous day-to-day practice, regularly, so as to become a habit. A place is clean when it is free from unnecessary objects, dirt, and waste material. It is in order when the necessary objects, such as working tools are kept in safe designated places when not in use, properly arranged and in satisfactory condition; when in use they are protected so as not to injure the user or other nearby employees.

At some mines, little attention is given to orderliness and appearance of the surface plant or underground works. All sorts of scrap iron, old cars, and timbers are permitted to be scattered around the plant yard, shop aisles are congested, and underground haulage roads are dirty with scrap material or other refuse along the clearance side. Such conditions not only present an unsightly appearance but also are hazardous to persons required to work or travel on such haulage roads. Good housekeeping includes the removal of possible sources of injury, such as protruding nails, bolts, metal parts, broken glass, and all types of stumbling or slipping hazards.

The desire for good housekeeping must originate with the directing head of the mine organization. When the top management insists upon neatness and orderliness, in all probability the plant will be neat and orderly, particularly if the supervisors set the proper example.

Some companies provide bins for the storage of scrap iron and timbers. Timbers are kept neatly stacked according to type or size. Underground roadways are kept clean, material is not stored in shelter holes or on the clearance side of haulage roads, and the supervisors insist that the employees practice good housekeeping in their working places.

Distribution: Underground and surface mining operations -
coal and noncoal

Experience has shown that good housekeeping pays big dividends. Fewer accidents and injuries occur, accident and injury costs decrease, production increases, loss or waste of materials is reduced, mechanical equipment and tools last longer, and the general attitude of the employees is improved.

Good housekeeping is not obtained through the use of slogans alone. The supervisors must provide guidance and encouragement, but the effort must be exerted continuously. To obtain good results, the following should be included:

1. A plan for good housekeeping.
2. General instruction for employees.
3. A study of work habits and what change must be affected.
4. A constant check in performance of employees.
5. Appropriate signs, bulletins, and slogans.

A clean orderly place commands respect of employees for the company, mine, and working area. It assists in improving the quality of the product, efficiency and safety of the worker as well as his morale and pride. A customer or visitor has more confidence in an organization when the work is performed in clean, orderly surroundings.

Orderliness in the working area encourages orderliness in the thinking area of the individual. Clean and neat working places inspire the worker to keep things clean.

IF A CLEAN PLACE IS DESIRABLE IN WHICH TO LIVE, WHY
NOT A CLEAN PLACE IN WHICH TO WORK?

January 1979



HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

MAKES SENSE

It Takes 1 Minute To Write A Safety Rule.
It Takes 1 Hour To Hold A Safety Meeting.
It Takes 1 Month To Put It Into Operation.
It Takes 1 Year To Win A Safety Award.
It Takes A Lifetime To Make A Safe Worker.
IT TAKES 1 SECOND TO DESTROY IT ALL WITH 1 ACCIDENT!

When Is A Safety Rule Not A Safety Rule?

When it is seen - but not read.
When it is read - but not applied.
When it is known - but not obeyed.
When it is deliberately violated.
When it is winked at, and finally ignored.
And lastly, when after it has been found
important enough to be placed in a rule
book, it is not enforced by those who
should do so.

Distribution: Underground and surface mining
operations - coal and noncoal

January 1979

ABSTRACT FROM FATAL ACCIDENT

HOLMES SAFETY ASSOCIATION
MONTHLY SAFETY TOPIC
HOISTING ACCIDENT



General Information: A cryderman operator was fatally injured when he was struck by a falling crosshead. He had a total of 10 years mining experience and had been employed on this job for 6 months.

A company was contracted to sink the No. 1 production shaft and the No. 2 ventilation shaft. The contractor employed 96 persons who normally worked three, 8-hour shifts, 7 days a week. Conventional shaft-sinking methods had been used to sink the No. 1 shaft to a depth of 595.5 feet.

The accident occurred on the top deck of a 7-deck Galloway stage which was suspended 514.5 feet below the shaft collar. The Galloway stage was supported by four, 26.25mm., full lock coil, bright improved-plow steel-rope guides, which were 4200 feet long, weighed 2,675 pounds-per-foot, had a nominal breaking strength of 141,211 pounds, and an actual breaking strength of 151,000 pounds. The rope guides also served as hoisting ropes for the Galloway stage.

A double-drum, doubled clutched, 1500 hp. (dc) electric-powered Nordberg hoist, equipped with a 1-1/2-inch-diameter nonrotating rope (normally used to raise and lower the sinking bucket) was being used to lower a 12-inch-diameter, 20-foot-long victualic water discharge pipe at the time of the accident.

The headframe sheave deck was 110 feet above the shaft collar, and the sheave wheels were 12 feet in diameter.

The crosshead, which was estimated to weigh between 1325 and 1400 pounds, was chaired about 5 feet above the shaft collar during the water discharge pipe installation. The method of chairing consisted of attaching 1-inch Crosby cable clamps to the guide ropes upon which the crosshead then rested. The Crosby clamps had a 7/8-inch-section of threaded bolt welded into the U-bolt section to simulate the "dead" end of a rope.

Description of Accident: When the crew prepared to install the water discharge pipe, the sinking bucket was removed from the hoist rope, and the crosshead was chaired about 5 feet above

Distribution: Underground mining operations - noncoal

the shaft collar. One 20-foot-length of discharge pipe was lowered and installed without incident. The work deck was then lowered 20 feet so another 20-foot section of discharge pipe could be installed. The crosshead chairs, which were now 15 feet below the shaft collar, had not been inspected since the initial installation. Reportedly, at that time, at least three persons, including a supervisor, checked the chairs (Crosby clamps) for tightness.

The second length of discharge pipe was secured to the hoist rope and had been lowered to the work deck. The crosshead at this time was chaired 500 feet above the work deck. It was necessary to chair the crosshead far enough above the work deck to allow the pipe room to swing into the pipe compartment as the hoist cable went through the center of the crosshead. The victim and three other employees guided the suspended pipe into the pipe compartment. Immediately prior to the accident, the victim was on the top deck, the other employees were located on various lower decks, and the discharge pipe was nearly in position. At this time, the clip-chair arrangement under the crosshead failed, and the crosshead plummeted down the shaft. The 1-1/2-inch hoist rope failed (as a result of the impact) when the crosshead struck the torpedo and hook attachments at the hoist rope termination. The crosshead finally collided with the top deck of the work stage.

When the hoist rope failed, the torpedo and swivel and hook attachment (estimated to weigh about 350 pounds) fell into the No. 2 work deck compartment. The discharge pipe was connected to these by 20-foot-long slings. The victim, who was positioned between the pipe compartment and the No. 2 work deck compartment, was caught by the cable slings. The weight of the discharge pipe and the falling weight of the torpedo and swivel and hook attachment crushed the victim against the work deck. Death was believed to be instantaneous.

Cause of Accident: The direct cause of the accident was the failure of the Crosby clamp chairs to support the suspended crosshead which permitted the crosshead to slide down the rope guides.

January 1979

ABSTRACT FROM FATAL ACCIDENT

HOLMES SAFETY ASSOCIATION
MONTHLY SAFETY TOPIC



FATAL SURFACE HAULAGE ACCIDENT

General Information: A 70-year-old truckdriver was fatally injured when the haulage truck he was operating overturned. The victim had 8 years experience at this operation as a truckdriver and equipment operator.

A hot-mix plant was installed at the pit with sand and gravel being hauled from another pit, a distance of approximately 1/2 mile. The material was crushed and washed and stockpiled near the hot-mix plant for future use. Two trucks were generally all that were used to move the material.

The vehicle involved in the accident was a 1977 model 2050-A, 30,000-pound capacity, tandem axel, International Fleetside truck. The truck was equipped with rearview mirrors on both sides, seat belts, and had no known safety defects. At the time of the accident, the truck was loaded with approximately 14 tons of crushed rock. The victim was not using seat belts.

The haulage road at the accident site was constructed of compacted dirt across a 150-foot-long causeway. The roadway averaged 18-foot wide at this location, of which approximately 3 feet of each shoulder was loose fill dirt. The construction of the road resulted in a backup of water on the upper side which ranged from 4 to 5 feet in depth. A culvert was provided under the road to prevent excessive buildup of water. The top of the roadway to the water level was 15 feet on an approximate 45-degree slope. The narrow width of useable road necessitated having a bypass area for the trucks to pass each other at both ends of the causeway. The haulage road was smooth and dry but was not provided with berms on the outer elevated sides.

Description of Accident: The victim and another truckdriver were assigned to haul crushed material from the pit to another pit nearby and dump the material at the stockpile. The victim was approaching the truck bypass area at the bottom of a 1/4-mile-long 9-percent downgrade and adjacent to the approach to the causeway. The second truckdriver, who was returning to the crushing site to be reloaded, had pulled into the bypass area to allow the victim's loaded vehicle more room in which to pass. As soon as the victim had gone by, the second truckdriver continued up the hill to be reloaded. He did not notice anything unusual about the victim's approach as he came down the hill and did not see the victim's vehicle go over the embankment.

Distribution: Surface mining operations - noncoal

The second truckdriver, upon returning to the stockpile area a short time later, saw the victim's truck overturned in the water with the passenger side up. Help was immediately summoned, and the victim was removed. He was pronounced dead at the scene by the coroner. Cause of death was asphyxiation due to drowning. It is believed that the victim was knocked unconscious when the vehicle overturned.

Cause of Accident: The direct cause of the accident was failure to provide berms or guards on the outer banks of the elevated haulage road. A contributing factor was the inability of the truck operator to adequately judge the distance of his vehicle from the edge of the embankment. Failure to wear a seat belt may have increased the severity of the injury.

HOLMES SAFETY ASSOCIATION

January 1979



Habit

The Last Word

"January"

More than 150 years before the Christian era, January was the first month of the year in the Roman Calendar. It was named from Janus, the "two-faced" god who in Roman mythology presided over the beginning of things and was the doorkeeper (janitor) of heaven. The so-called temple of Janus, which was simply a gateway in Roman Forum, was open in war and closed in peace.

During the Middle Ages the year began at various dates in different times and places. In England it was not until 1751 that January was restored to its place as first month.

Our anticipation and hopes again are exalted that with the beginning of the new year, a perfect safety record may be established for 1979. This task can be realized only by a more intensified effort than practiced in the past. We know what to do, so let us put forth the extra effort to establish this goal.

* * * * *

People come in three classes: The few who make things happen; the many who watch things happen; and the overwhelming majority who have little or no idea what happened.

* * * * *

Teacher: "Willie, what is the meaning of straight?"

Willie: "Without ginger ale."

* * * * *

Safety is a Lifetime Job

With care and thoughtfulness every day, we can build up an impressive number of days without an accident. The numerous recipients of the 40-year awards have proven that it can be done.

* * * * *

The men who try to do something and fail are better than those who try to do nothing and succeed.

Daughter: "I can't marry him, he's an atheist and doesn't believe there is a hell."

Mother: "Marry him, dear, and between us we'll convince him he's wrong."

* * * * *

Waitress: "How did you find your steak?"

Customer: "Just by accident. I moved the parsley and there it was!"

* * * * *

Woman Driver: "I always drive with the emergency brake on; when an emergency happens, I'm ready."

* * * * *

Folks who live within their income are just trying to mess up our economy.

* * * * *

The janitor, a retired army man, was habitually late for work, showing up 30 to 40 minutes late each morning. Finally in desperation the manager called him in. "John, you are always late. What did they say when you showed up late in the Army?" "Not much, sir," came the reply. "Mostly they just stood up and saluted and said, 'Good morning, general.'"

Random Thoughts

Cherish your friends...without them you would be a stranger.

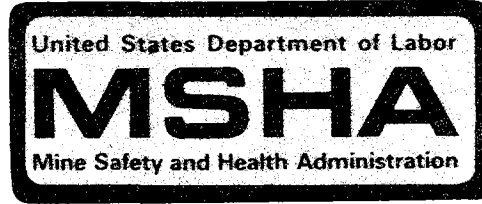
Doing nothing is the most tiresome job in the world, because you can't quit and rest.

Be careful of your thoughts. They may break into words at any moment.

You can't push yourself ahead by patting yourself on the back.



5000-22
(Rev. 3/78)



HOLMES SAFETY ASSOCIATION

For the month of _____ State _____

Company _____

Mine _____ Chapter Number _____
(See Address)

TOTAL meetings held this month _____

TOTAL attendees this month _____

Chapter Number _____ (See address label. If incorrect, please change.)

(Signature)

(Telephone No.)

(Title)

PLEASE COMPLETE EACH MONTH AND RETURN. JUST RE-FOLD AND STAPLE. (Make sure our address shows)

For uninterrupted delivery of safety material, please include any change of address:

Old Address

New Address

Postage and Fees Paid
U.S. Department of Labor
LAB 441

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

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

POSTAGE AND FEES PAID
U. S. Department of Labor
LAB 441

OFFICIAL BUSINESS