

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
DIVISION OF COAL MINE INSPECTION

FINAL REPORT OF MULTIPLE FATAL MAN-TRIP ACCIDENT
VALLEY CAMP NO. 3 MINE
THE VALLEY CAMP COAL COMPANY
TRIADELPHIA, OHIO COUNTY, WEST VIRGINIA

September 9, 1966

By

Richard E. Barr
Federal Coal Mine Inspector

and

Fred A. Williams
Federal Coal Mine Inspector
(Electrical)

Originating Office - Bureau of Mines
239 East Main Street, St. Clairsville, Ohio 43950
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St. Clairsville, Ohio Subdistrict, Health and Safety District A

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INTRODUCTION

This report is based on an investigation made in accordance with provisions of the Federal Coal Mine Safety Act (66 Stat. 692; 30 U.S.C. Secs. 451-483) as amended.

On Friday, September 9, 1966, at about 3:45 p.m., four men were killed and nine were injured in a man-trip accident at the Valley Camp No. 3 mine, The Valley Camp Coal Company, Triadelphia, Ohio County, West Virginia. Four of the nine injured men were hospitalized with injuries ranging from contusions and lacerations to fractures of the shoulders and extremities; the others were treated and released.

A man trip consisting of a 13-ton trolley locomotive which was pulling an open car, a covered man-trip car, and an 8-ton trolley-cable-reel locomotive was wrecked when the automatic coupler fell from the front bumper of the lead locomotive, causing this locomotive and the open car to become derailed. All units of the trip became uncoupled from each other at the time of derailment, and the momentum of the rear locomotive forced the covered man-trip car on top of the open car. Three men, who were riding in the open car, were killed almost instantly, as was the motorman in the cab of the rear locomotive who was squeezed between the coupler of the covered man-trip car and the sand-box on the locomotive.

The names of the victims, their ages, marital status, number of dependents, occupation, and years of experience in coal mines are listed in Appendix A of this report. The last of the injured men reached the surface at 6:00 p.m., and the last body was taken to the surface at 7:15 p.m., the day of the accident.

GENERAL INFORMATION

The Valley Camp No. 3 mine is off Route 40 at Triadelphia, Ohio County, West Virginia, and it is served by the Baltimore and Ohio Railroad.

The names and addresses of the operating officials are:

H. S. Richey	President	700 Westgate Tower, Cleveland, Ohio 44116
D. S. Cunningham	Vice President	Box 218, Triadelphia, West Virginia 26059
H. L. Littlehales	Superintendent	Do.
Wetzel Spry	Mine Foreman	Do.
Ronald L. Bell	Safety Inspector	Do.

The mine is opened by 4 shafts, ranging from 130 to 358 feet in depth, and a slope, 533 feet in length, into the Pittsburgh No. 8 coalbed, which averages 63 inches in thickness in the area being mined. Total employment was 364 men, of which number 324 worked underground on 1 maintenance and 2 production shifts daily, 5 days a week. The average daily production was 6,500 tons of coal, loaded mechanically. The preceding Federal inspection of this mine was completed June 17, 1966.

MINING METHODS, CONDITIONS, AND EQUIPMENT

Transportation: Coal was transported by shuttle cars, belt conveyors, and in mine cars hauled by trolley locomotives. Track, rolling stock, and hoisting equipment were well maintained. Adequate clearance was provided along all haulageways and the clearance space was kept reasonably clean. Shelter holes were provided at necessary places. Men were transported in five portal buses, three special covered man-trip cars and in a cut down open-type mine car referred to as an open car. The open car had a 13-inch-deep well located between the two sets of trucks.

Men entered and left the mine on an electrically-operated elevator which was maintained properly and inspected as required.

The haulage track, where the accident occurred, consisted of 60-pound rails laid on wooden ties to a 42-inch gage, and 9-inch by 6-inch steel tie plates were used. The track was well aligned and ballasted, and it was clean. Side clearance was 42 inches from the rail to the post line on the clearance side and 30 inches from the rail to posts on the wire side. The average vertical clearance from the top of the rail was 65 inches.

The rolling stock involved in the accident consisted of a Jeffrey, Model MH-110, 13-ton trolley locomotive, one open-type 8-wheel mine car, which was cut down and used as a supply car and extra man-trip car, one 8-wheel 4-compartment covered steel man-trip car having a capacity of 20 men, and one Jeffrey, Model MH-2100, 8-ton combination trolley-cable-reel locomotive. Both locomotives were equipped with trolley phones, and each had two trolley poles. All of the above equipment was provided with permanently attached automatic couplers, except that the couplers on the locomotives were installed in the bumper pockets and held in place by a 1-1/2-inch coupling pin that was readily removable. All equipment involved was in good condition, and the 13-ton locomotive had received a regular bi-weekly check-up in the underground shop during the shift preceding the accident.

The distance from the section to the portal was about 15,000 feet. About 9,000 feet was along 13 east, and the entry raised a total of 83 feet in the distance, 70 feet of which was along the 13 east entry to L south. In the immediate area of the wreck, the grade was in favor of outgoing trips for a distance of about 1,000 feet where the drop was 6 feet to the lowest point on the entry. At this point, it started to rise, and, for a distance of about 200 feet to the point of derailment, the total raise was 1 foot.

The locomotive attached to the rear of the trip served two purposes, both as a safeguard against a runaway man trip while ascending the grade coming out of the mine, and to pull the trip from the top of L south back to the man-trip station at the bottom of Orr's Run shaft.

STORY OF OCCURRENCE AND RECOVERY OPERATIONS

Participating Organizations: All the recovery operations were performed by officials and employees of The Valley Camp Coal Company.

Activities of Bureau of Mines Personnel: The St. Clairsville, Ohio Subdistrict office of the Bureau of Mines was notified by D. S. Cunningham, Vice President, about 5:45 p.m., on the day of the accident. Federal Coal Mine Inspectors Richard E. Barr and Fred A. Williams were instructed to proceed to the mine, and they left St. Clairsville, Ohio, at about 6:30 p.m., arriving at the mine at 7:15 p.m., at which time the last body was being removed from the mine.

Evidence of Activities and Story of Occurrence: All activities had proceeded normally at the mine and in the 13 east section where two production crews and one recovery crew were working on the day of the accident. Barrier pillars were being mined on both sides of the 13 east entries, and two crews of men under the supervision of one foreman were working in the pillars; all usable material was recovered as the sections were worked out.

Retreat work had started from the 21 north section and had progressed outward to 15 north and 15 south sections which were being worked on the day of the accident. Just prior to man-trip time at the end of the shift, Howard Simms, lead recovery man and one of the victims, made up the man trip with the aid of another man on the crew and pushed it a distance of about 300 feet to the man-trip station to await the arrival of all the men and for the section motorman to couple the 13-ton locomotive to the front end of the trip.

After the trip was coupled, the section foreman arrived at 3:33 p.m., and instructed the motorman to start out with the trip. The trip had traveled a distance of about 3,550 feet to a point inby 0 south when the wreck occurred. The rear of the lead locomotive was derailed, causing it to become uncoupled from the open car, and the open car became derailed which caused it to become uncoupled from the covered man-trip car which in turn was uncoupled from the rear locomotive. The lead locomotive slid sideways on the rails for a distance of about 30 feet and lodged solidly in the entry as the front end caught near the outby corner of a shelter hole. (See sketch of derailment). An employee riding on the rear of the lead locomotive jumped off when the locomotive was derailed, and he was dazed by the impact when he struck the rib. Five men were riding in the open car, three along the clearance side, one in the center and one on the wire side and all were sitting in the outby end of the recessed bottom of the car. The three men riding on the clearance side were killed almost instantly, and the other two were injured. The twelve men riding inside the covered man-trip car were jarred but not injured seriously. The motorman riding in the deck of the rear locomotive was killed and one of the two men riding in the rear deck of this locomotive was injured. Of the ten men riding outside the covered man-trip car, four were killed and four were injured so seriously that they required hospitalization.

Damage to equipment involved in the wreck included a broken journal box, a grounded field coil, two broken trolley poles and part of the trolley phone on the lead locomotive; and a broken controller, reel switch, two trolley poles, the trolley phone, and the sandbox on the rear locomotive. Many of the wooden slats in the back rests of the seats in the covered man-trip car were broken, and an 8-inch slit was burned in the roof of the car when it contacted the energized trolley wire. It was the opinion of the investigators that the broken journal box on the lead locomotive was caused by the derailment.

The investigation disclosed that timber jacks, trolley-feeder wire and other miscellaneous recovered materials were also transported on the open car with the men.

Recovery Operations: After the wreck, Charles K. Causey, Section Foreman, and Cleve Spry, Section Mechanic, both of whom were riding in the covered man-trip car, attempted to use the trolley phones on the two locomotives, but they were inoperative and it was necessary for Spry to travel on foot back to the 15 south section phone to call the surface for assistance.

Harold L. Littlehales, Superintendent and Ronald L. Bell, Safety Inspector, notified other officials and employees, and immediately proceeded underground to render assistance. Those least injured and the uninjured in the wreck went to the aid of the injured and assisted in any way possible. Stretchers and first-aid material were brought to the scene, and first-aid treatment was administered where necessary. The injured men were transported to the surface at once with the first arriving on the surface at about 5:00 p.m. Richard Warner, recovery man, was the last of the injured men to be rescued because his lower extremities were entangled with the front trucks of the covered man-trip car, and it was necessary to remove one of the wheels from the car to release him. He arrived on the surface at about 6:00 p.m., and was transported immediately by ambulance to the Ohio Valley General Hospital, Wheeling, West Virginia, as were all of the other injured men. The last of the four bodies was brought to the surface at about 7:15 p.m.

INVESTIGATION OF CAUSE OF DERAILMENT

An investigation of the cause of the accident was started on Friday, September 9, 1966, and completed on Monday, September 12, 1966. The following persons participated either in some part of or all phases of the investigation.

Investigation Committee:

The Valley Camp Coal Company

D. S. Cunningham	Vice President
A. B. Rushton	General Superintendent
H. S. Littlehales	Superintendent
Ronald L. Bell	Safety Inspector
Wetzel Spry	Mine Foreman
Neil Thompson	Master Mechanic

United Mine Workers of America

Michael Gretchen	Board Member, District 6
Louis Pavlina	President, Local Union No. 4285
Louis Zanolli	Mine Safety Committeeman
Fred Minter	Mine Safety Committeeman
Robert Shores	Mine Safety Committeeman

West Virginia Department of Mines

W. F. Eigenbrod
Leslie Ryan
Paul C. Riley

Director
Inspector-at-Large
District Inspector

United States Bureau of Mines

Richard E. Barr
Fred A. Williams

Federal Coal Mine Inspector
Federal Coal Mine Inspector (Electrical)

A hearing was conducted on Saturday, September 10, 1966, at the Orr's Run portal of the Valley Camp No. 3 mine, to obtain information from those men who were involved in the wreck, other than the four men who were under treatment in the hospital. Further information was obtained on Monday, September 12, 1966, through an interview conducted with the four men who were hospitalized.

Point of Origin: The investigation disclosed that the automatic coupler had fallen from the front bumper of the lead locomotive to the roadbed between the rails. The coupler caught the bottom of the rear traction motor of the front locomotive as it passed over it, and it was derailed with the rear wheels to the wire side. The open car was next to pass over the coupler, and the front end of this car was derailed toward the wire side while the rear wheels went off the track on the clearance side. About the time that the full length of the open car had passed over the coupler, the front locomotive lodged cross-wise in the entry and brought the trip to an abrupt stop. This forced the covered man-trip car over the top of the open car, causing it to come to rest on the open car after the bumper struck the front locomotive. The rear locomotive came to rest against the coupling of the man-trip car which overrode the bumper and seat of the locomotive, the area in which one of the victims was seated. The rear wheels of this locomotive were also off the track. The impact caused the cover plates of the front locomotive to be thrown off onto the floor on the wire side.

A coupling pin, similar to that used to secure the automatic coupler to the locomotive, was found beneath one of the cover plates. According to information given by Russel McRobie, Jr., recovery man, this pin was lying on the rear seat of the front locomotive. He stated that just before the man trip left the section, he placed the pin on top of the locomotive because he was not sure what it was needed for and that it was in his way on the seat.

There was no information obtained during the investigation that indicated the man trip was travelling at an excessive rate of speed.

Summary of Evidence: Conditions observed in the mine during recovery operations and the investigation following the occurrence, and information obtained from officials and workmen, and from the hearing, provided evidence as to the cause of the accident. This evidence is summarized as follows:

1. The coupling pin for the automatic coupler on the front end of the lead locomotive was missing, allowing this coupling to slip out of the bumper pocket and fall to the roadbed. The reason why the coupling pin was missing could not be ascertained definitely. However, information obtained during the investigation disclosed that a loose coupling pin was found on the rear seat of the front locomotive before the departure of the man trip.
2. Heavy materials were being hauled in the same car in which men were being transported.
3. Men were riding in an open car and on the two locomotives when, apparently, there was available seating space in the covered man-trip car.

Cause of Accident: The accident was caused when the automatic coupling, which apparently was not secured with a coupling pin, fell from the front bumper of the locomotive which was pulling the man trip from the 13 east section and derailed the locomotive and the first car of the trip.

RECOMMENDATIONS

The following recommendations are made to prevent similar accidents:

1. Positive means should be provided to hold the coupling pins securely in place. Motormen should be certain that the pins are in place and locked securely before haulage operations begin and at frequent intervals throughout the shift.
2. Materials or tools should not be transported in the same car with men on any man trip, except in special compartments in such cars.
3. Men should not be transported on flat open-type cars when followed by other track equipment coupled in train.

ACKNOWLEDGMENT

The cooperation of company officials and employees, representatives of the United Mine Workers of America, and representatives of the West Virginia Department of Mines during this investigation is gratefully acknowledged.

Respectfully submitted,

Richard E Barr

Richard E. Barr
Federal Coal Mine Inspector

Fred A Williams

Fred A. Williams
Federal Coal Mine Inspector
(Electrical)

APPROVED:

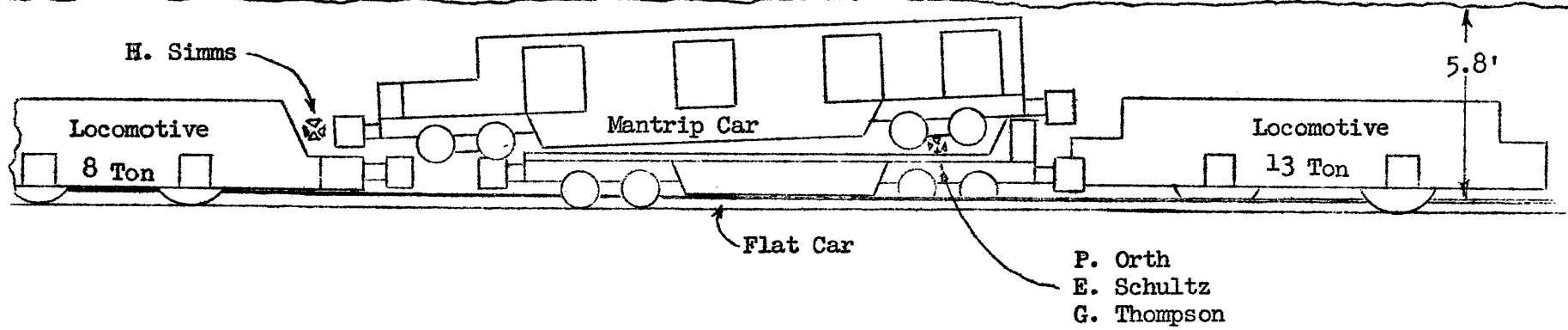
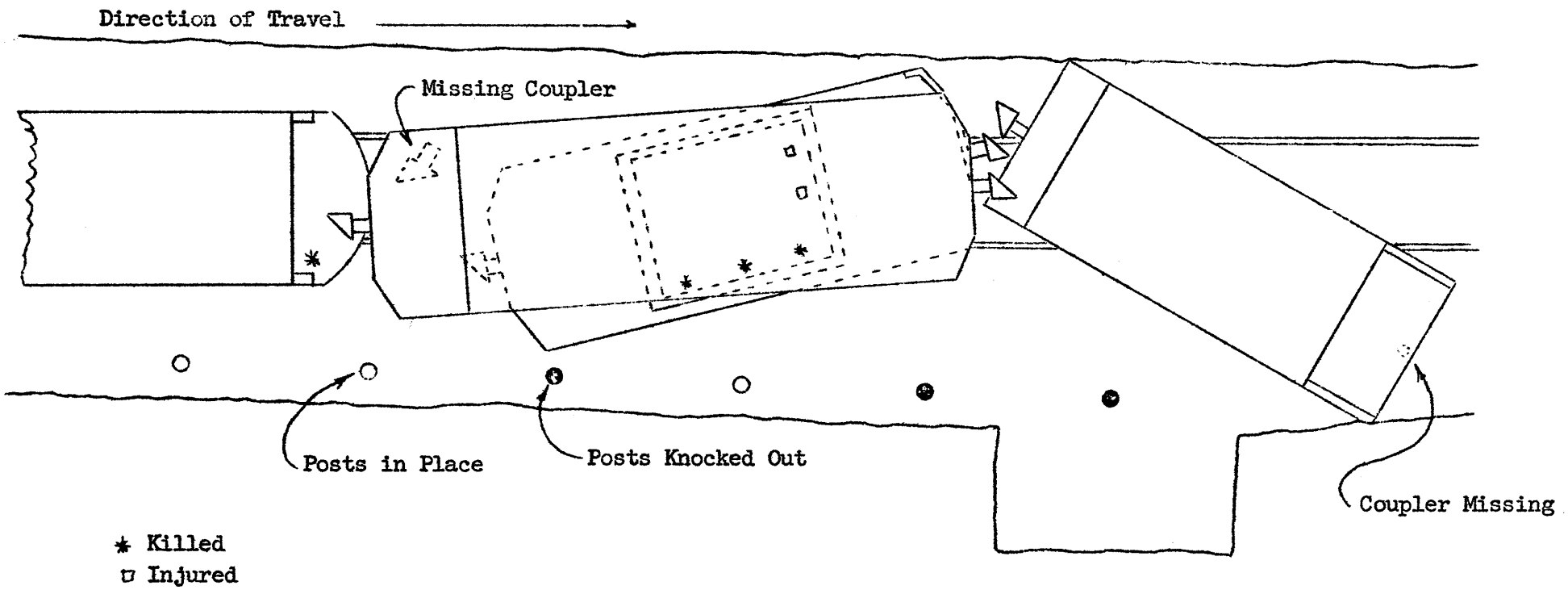
T. C. Higgins

T. C. Higgins
Subdistrict Manager

APPENDIX A

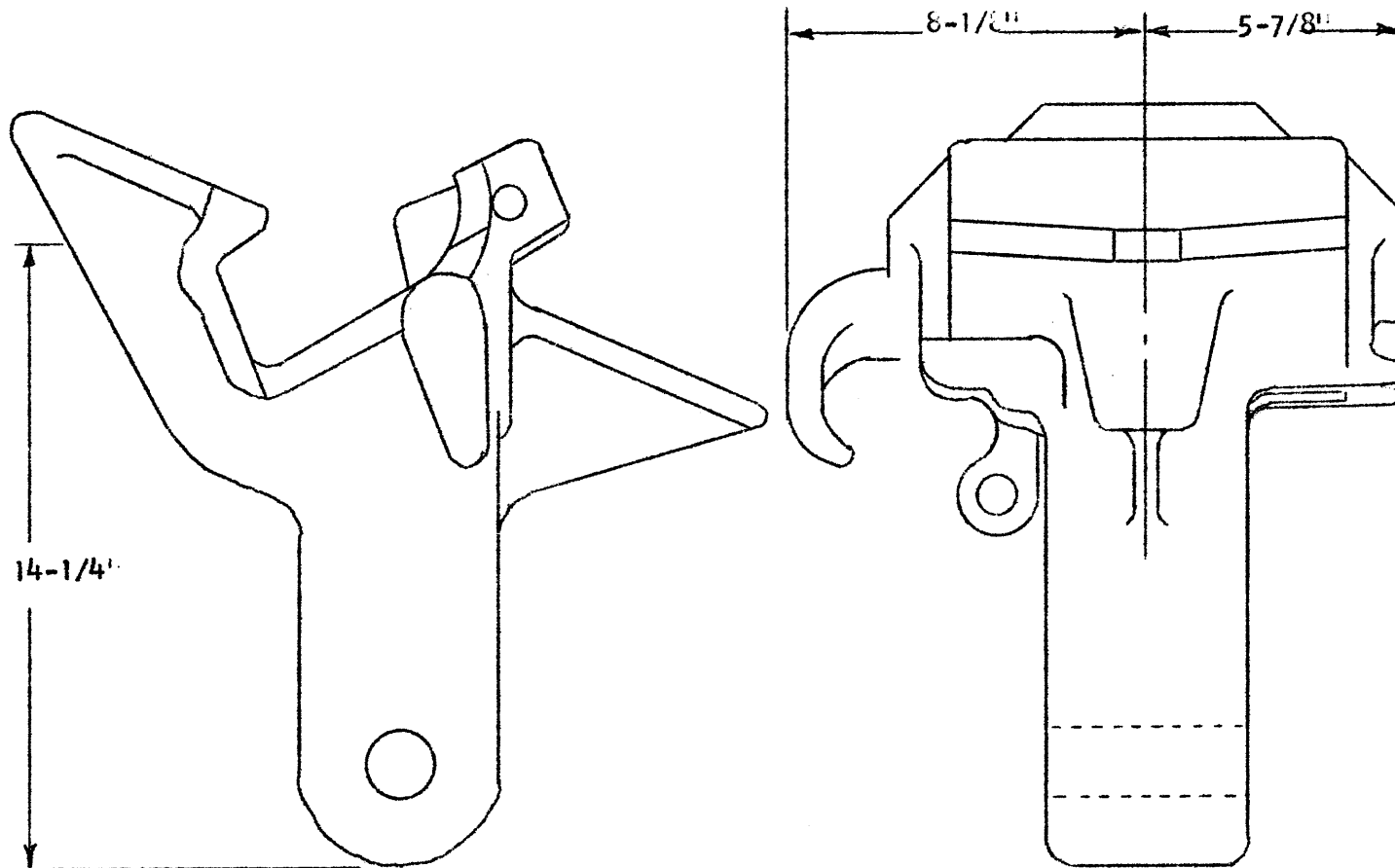
Victims of Man-Trip Accident
 Valley Camp No. 3 mine
 The Valley Camp Coal Company
 September 9, 1966

Name	Age	Occupation	Mining Experience	Marital Status	Dependents
Howard Simms	52	Recovery Man	34 years	Married	Widow Wife and
Richard Paul Orth	31	Recovery Man	3 weeks	Married	two Children
George Thompson	59	Recovery Man	22-1/2 years	Married	Widow Wife and
Edward C. Schultz	39	Shuttle Car Operator	18-1/2 years	Married	one child



SKETCH OF MULTIPLE FATAL MANTRIP ACCIDENT
 VALLEY CAMP NO. 3 MINE
 THE VALLEY CAMP COAL COMPANY
 TRIADELPHIA, OHIO COUNTY, WEST VIRGINIA
 September 9, 1966

Scale: 1" = 5'



No Scale

SKETCH SHOWING DIMENSIONS OF COUPLER
MULTIPLE FATAL MANTRIP ACCIDENT
VALLEY CAMP NO. 3 MINE
TRIADELPHIA, OHIO COUNTY, WEST VIRGINIA
September 9, 1966