

INTERSTATE COMMERCE COMMISSION
WASHINGTON

REPORT OF THE DIRECTOR
BUREAU OF SAFETY

ACCIDENT ON THE
WHEELING AND LAKE ERIE RAILWAY

CLYDE, OHIO.

NOVEMBER 23, 1937.

INVESTIGATION NO. 2228

SUMMARY

Inv-2228

Railroad: Wheeling and Lake Erie
Date: November 28, 1937.
Location: Clyde, Ohio.
Kind of accident: Side collision
Equipment involved: Engine and car : Cut of cars
Engine number: 3409
Consist: : 3 cars
Speed: 3-5 m.p.h. : 2 m.p.h.
Track: Tangent; 0.50 percent descending
grade.
Weather: Dark and slightly cloudy
Time: 5:40 p.m.
Casualties: 1 killed
Cause: Failure to set sufficient number
of hand brakes on cars left stand-
ing on grade.

December 22, 1937.

To the Commission:

On November 28, 1937, there was a side collision between a runaway cut of cars and a car being shoved by a road engine, on the Wheeling and Lake Erie Railway at Clyde, Ohio, which resulted in the death of one employee.

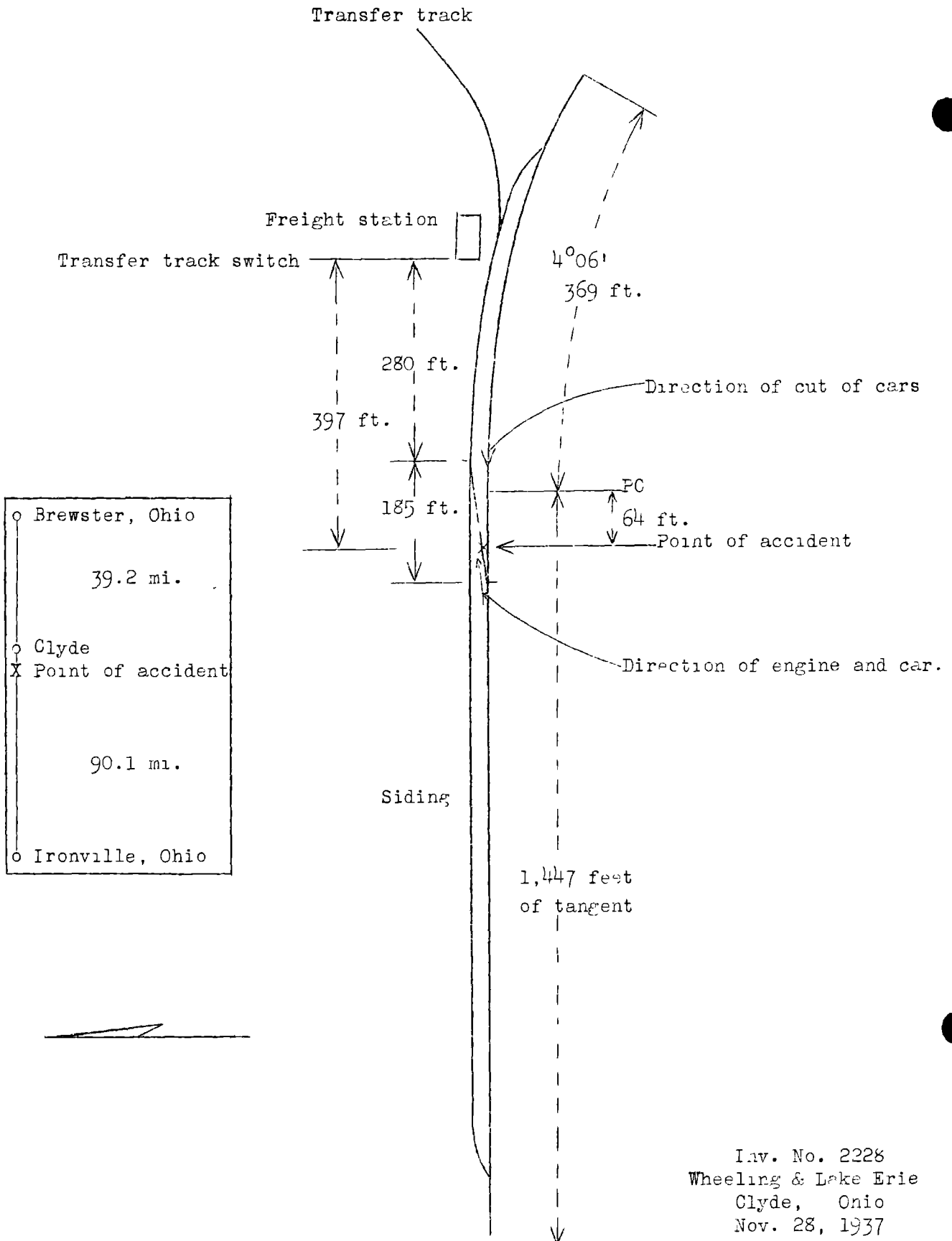
Location and method of operation

This accident occurred on the First District of the Toledo Division which extends between Ironville and Brewster, Ohio, a distance of 129.3 miles, and is a single-track line over which trains are operated by timetable and train orders, no form of block-signal system being in use. At Clyde, a siding, 1,445 feet in length, parallels the main track on the north and at the eastern end of this siding a transfer track leads off to the left. A cross-over, 135 feet in length, leads from the main track eastward to the siding; the east switch of this cross-over is located 280 feet west of the switch leading to the transfer track. The accident occurred near the main track frog of this cross-over, about 397 feet west of the freight station. The track is tangent eastward for a distance of 1,383 feet to the point of accident and for 64 feet farther, then there is a 4°06' curve to the right 369 feet in length. The grade for west-bound movements is 0.56 percent descending.

It was dark and slightly cloudy at the time of the accident, which occurred about 5:40 p.m.

Description

East-bound freight train No. 94 consisted of 39 cars and a caboose, hauled by engine 6409, and was in charge of Conductor Unser and Engineman Brahm. This train departed from Ironville at 4:20 p.m., according to the train sheet, 20 minutes late, and at 5:20 p.m. arrived at Clyde where it stopped about 1,500 feet west of the cross-over in order to clear the street crossings. The engine, light, proceeded down the main track and through the cross-over, then eastward on the siding to the transfer track where it picked up one empty car and three loaded cars, in the order named. It then backed out and shoved the cars eastward on the main track until the three loaded cars were clear of the cross-over. After stopping a cut was made between the empty car and the three loaded cars, and after moving back beyond the cross-over switch, the engine with the empty car started through the cross-over and was traveling at a speed of from 3 to 5 miles per hour when the three loaded cars which had started to drift



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westward down the descending grade cornered the empty car. The engine and empty car stopped within the distance of a few feet, but the impact drove the three loaded cars back a distance of about two car lengths, and in a very short time, they drifted back down the grade and again struck the car, this time at a speed estimated to have been about 2 miles per hour.

The east truck of the empty car was knocked off center and derailed. The right front corner of this car was damaged as was also the rear left corner of the west car of the cut. The employee killed was the head brakeman, who was on the empty car.

Summary of evidence

Engineman Brahm stated that the head brakeman assisted him in picking up the cars from the transfer track. The cars were coupled together at the time they were picked up. The cars were then placed on the main track with the three loaded cars clear of the cross-over, the engine stopping about at the frog of the cross-over switch with the cab between the frog and switch points. At this time the brakeman disappeared from view, and the engineman assumed that he was setting a hand brake. The brakeman then came to the engine and cut in the air on the four cars after which he made the cut between the empty cars and the loaded cars and gave a back-up signal. After the air was cut in the engine stood a few minutes before starting the back-up movement. After the engine and empty car had moved back beyond the switch, the brakeman lined it for the cross-over movement, gave a proceed signal, and after boarding the front end of the car, he repeated the proceed signal. About the time the car reached the frog the engineman felt a jar and saw the brakeman's lamp drop; he applied the independent air brake and the engine moved about one-half car length before stopping. He went to the head end of the car they had been shoving and found that the three loaded cars had drifted back, cornered the empty car, and crushed the head brakeman who had been standing on the brake step. The impact had driven the loaded cars back a distance of about two car lengths and he heard the conductor call out that the cars were coming back again, but he was unable to get to the engine in time to pull back before the second collision. He also stated that when the cut of loaded cars was moving westward the second time the fireman ran between the first and second cars to break the air hose, but the collision occurred about that time. After the accident, he saw that the angle cock at the west end of the west car in the cut of loaded cars was closed and the chain was wound around the brake staff of that car, indicating that the hand brake was set. He did not know whether there was any air in the cars but thought that sufficient time had elapsed between the time the air was cut in and the time the cut behind the empty car was made to permit charging the reservoirs to a pressure that would operate the brakes.

Fireman Ekard stated that it was his impression that the air was cut in on the four cars at the time their engine was coupled to them on the transfer track as the pump on the engine was working at that time. He did not see the brakeman at any time and all the signals were given on the engineman's side. When the cars were shoved eastward on the main track he thought the stop was made with the engine just about on the main track switch. After the first impact he left the engine on the engineman's side and proceeded to the front end of the car; about that time the cut of loaded cars started back down the grade. They were about one car-length away when he saw them and he ran between the first and second cars and broke the air hose; as the speed was only about 2 miles per hour he had no difficulty in stepping between the cars. He heard an exhaust of air, but it had little effect in stopping the cars and he did not think that the brake equipment on the cars had been fully charged. The angle cock on the west end of the west car of the cut was closed, but he did not notice whether the hand brakes were set, nor did he notice if any of the pistons were out.

Conductor Unser stated that after the train stopped at the west end at Clyde to clear the road crossings, he walked eastward and on nearing the main track cross-over switch he saw the engine start to shove the empty car in on the cross-over; he got on the right side step of the tender. He heard a crash and the engine stopped. He got off the tender near the switch stand, possibly 6 feet west of the switch, walked forward and saw the detached cut of cars move back slowly and strike the car at the cross-over. From the position of the head brakeman's body it appeared that he had his back turned toward the cut of cars endeavoring to apply the hand brake. After the accident he thought the rear trucks of the engine were standing on the switch points. He examined the cut of cars on the main track and found the hand brake set on the west car, and the angle cock closed at each end of the cut, but there was no air in any car but the middle one and but little in that. However, his inspection was made about an hour after the accident and the air may have bled off in the meantime. Conductor Unser stated that he had received instructions prior to arriving at Clyde to pick up these three cars, and had given the instructions to Head Brakeman Price, who fully understood the manner in which the work was to be done. It is customary to set a sufficient number of hand brakes to hold the cars, and in his opinion one hand brake on the three loaded cars on the descending grade was not sufficient. Brakeman Price was thoroughly familiar with that territory, having worked on this line for 12 years.

Discussion

The evidence indicates that after the four cars had been moved from the siding to the main track, and before the cut between the empty car and the three loaded cars had been made, the air

brakes were cut in on the entire cut, but there is doubt whether the time which elapsed between cutting in the air and making the cut between the first and second cars was of sufficient duration to permit charging the reservoirs to an effective pressure. Just what the intention of the head brakeman was in thus cutting in the air could not be established as he was killed in the accident; however, it is reasonable to assume that it was his intention to use the air brakes to assist in holding the cars stationery on the grade while the return movement to the siding was being made. If so, his failure to open the angle cock on the cut of detached cars would have defeated his purpose even if the reservoirs had been properly charged. The evidence indicates that he set one hand brake on the detached cut, but apparently this was insufficient to hold the heavy loads on the 0.56 percent descending grade.

Conclusion

This accident was caused by failure to apply a sufficient number of hand brakes to hold a cut of cars left standing on a descending grade.

Respectfully submitted,

W. J. PATTERSON

Director.