

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY CONCERNING AN
ACCIDENT WHICH OCCURRED ON THE NEW YORK CENTRAL RAILROAD
AT CLAY BANK, OHIO, ON JUNE 18, 1932.

August 5, 1932.

To the Commission.

On June 18, 1932, there was a head-end collision between two freight trains on the New York Central Railroad at Clay Bank, Ohio, which resulted in the injury of three employees.

Location and method of operation

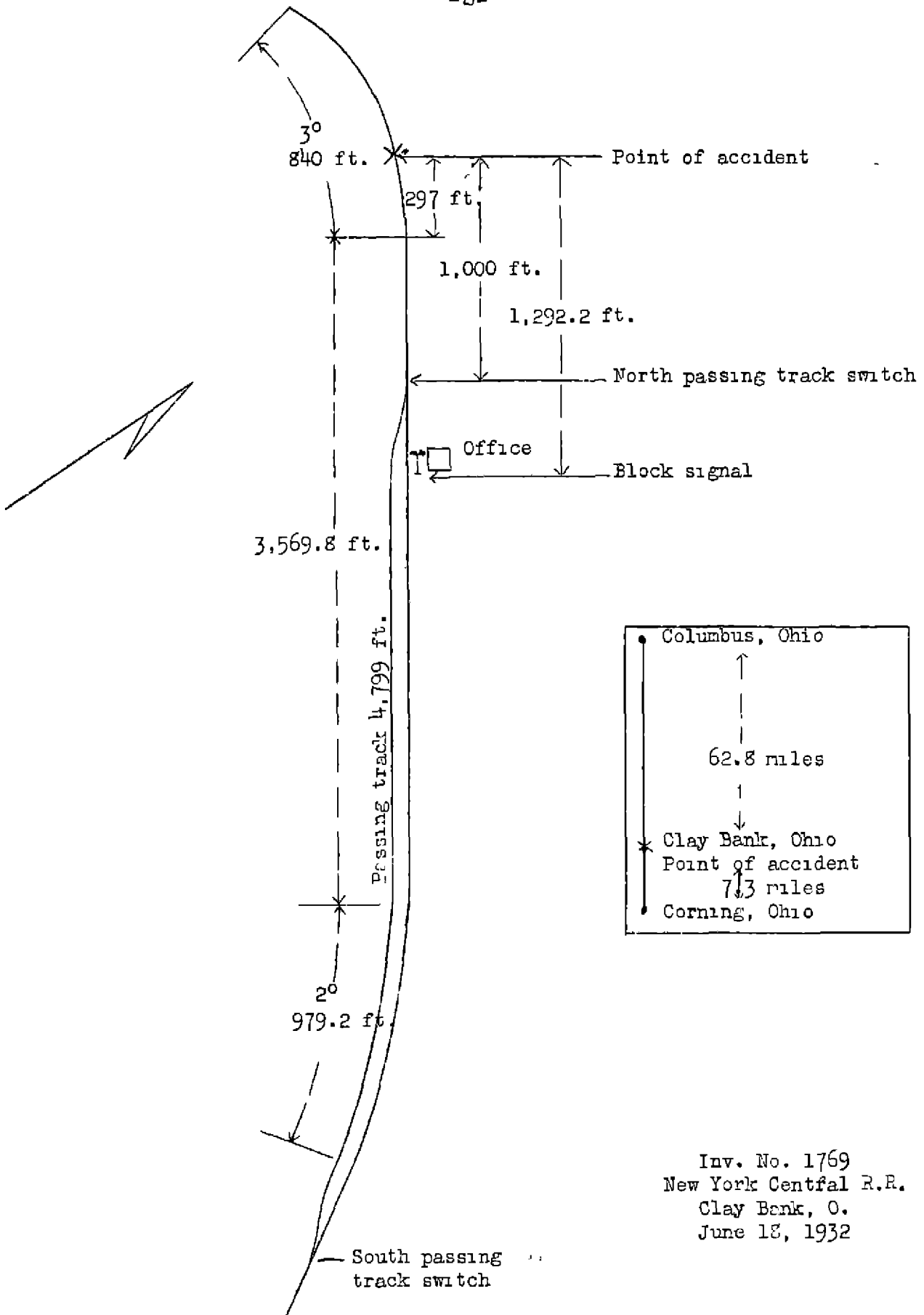
This accident occurred on that part of the Ohio Division extending between Corning and Columbus, Ohio, a distance of 70.1 miles, in the vicinity of the point of accident this is a single-track line over which trains are operated by time-table, train orders, and a manual block-signal system. The accident occurred 1,000 feet north of the north passing-track switch; approaching from the south, there is a 2° left curve 979.2 feet in length, 3,569.8 feet of tangent, and then a 3° left curve 840 feet in length on which the accident occurred, 297 feet from its southern end. Approaching from the north there are 1,186 feet of tangent, followed by the curve on which the accident occurred. The grade is generally ascending for northbound trains, being 0.4 per cent at the point of accident. The north end of the curve on which the accident occurred is in a cut, and the view had by crews of southbound trains is limited to about 750 feet. Northbound trains are superior to southbound trains of the same class. The speed of freight trains is restricted to 40 miles per hour.

The combination train order and block signal at Clay Bank is of the three-position upper-quadrant type, operated from an office located just north of it. The northbound signal in stop position can be seen by the engineman of a northbound train for a distance of 2,682 feet, and by the fireman for a distance of 3,138 feet. Its position is difficult to determine during the day, however, on account of an unfavorable background.

The weather was partly cloudy at the time of the accident, which occurred about 4.37 p.m.

Description

Northbound second-class freight train first No. 91 consisted of 80 cars and a caboose, hauled by engine 47, with engines 17 and 37 coupled in between the seventy-eighth and seventy-ninth cars, and was in charge of Conductor Tracy and Engineman Carey.



Inv. No. 1769
New York Central R.R.
Clay Bank, O.
June 18, 1932

This train left Corning, 7.3 miles south of Clay Bank, at 4.15 p. m., 30 minutes late, without any orders concerning train No. 62, and approached Clay Bank, the next open office, at a speed of 35 or 40 miles per hour, it passed the block signal, which was in the stop position, passed the north switch, and collided with train No. 62 at a speed estimated to have been between 7 and 20 miles per hour.

Southbound second-class freight train No.62 consisted of four cars and a caboose, hauled by engine 3736, and was in charge of Conductor Hancock and Engineman Patterson. At New Lexington, 4.9 miles north of Clay Bank, the crew received a copy of train order No. 45, Form 19, reading as follows:

"No 62 eng 3736 meet first 91 eng 47 at
Clay Bank and second 91 at Corning. First
91 gets this at Clay Bank"

Train No. 62 left New Lexington at 4.28 p.m., 3 hours and 43 minutes late, and was approaching Clay Bank when it collided with train first No. 91 while traveling at a low rate of speed.

Train No.62 was shoved back about 75 feet, the engine, one car, and caboose being damaged. The engine and the seventy-eighth car in train first No.91 also were damaged. The employees injured were the flagman and two brakemen of train No. 62.

Summary of evidence

Engineman Carey, of train first No. 91, stated that his train rounded the curve south of Clay Bank at a speed between 30 and 35 miles per hour. On reaching the straight track he saw the block signal in the stop position and immediately shut off steam and made a 15 or 20-pound brake-pipe reduction. When about 35 or 40 car-lengths south of the office the operator came out and gave stop signals with a red flag and the engineman then moved the brake valve handle to emergency and opened the sanders, but for some reason the brakes did not appear to take proper hold, resulting in the train passing the signal and the north switch, and colliding with train No. 62. It was Engineman Carey's opinion that the brakes were applied a sufficient distance from the signal to have brought the train to a stop, and the only explanation he could offer was the fact that the engines on the rear end of the train must have continued to shove while he was attempting to stop. After the accident he went back 15 or 20 car-lengths to see if the angle cocks were open and pistons out, but did not find anything wrong. Subsequently engine 17 was coupled to the head end of the train and after testing the brakes, he operated the train to Columbus without any difficulty. It further appeared from his statements that he was familiar with the territory but this was the first heavy tonnage train he had handled north from Corning.

Fireman Martin, of train first No. 91, stated that as soon as the block signal came into view he called its indication to the engineman and the engineman in turn made a heavy service reduction and then shoved the brake-valve handle into emergency position, about 15 seconds later, or when the train was about 25 car-lengths south of the station. This brake application was the first that had been made after leaving Corning, and he felt the slack run in and then the brakes appeared to hold, but the train did not reduce speed as rapidly as should have been the case.

The statements of Enginemen Marran and Varner, who were operating helper engines 17 and 37, respectively, were to the effect that the cut-out cocks under the brake valves of their respective engines were closed before the brakes were tested at Corning and were not opened again until after the accident. Each engineman said his engine was working steam while approaching Clay Bank, but that when he felt the brakes apply, which was when the engines were in the vicinity of the south switch, he eased off on the throttle but did not entirely close it, which they said was the usual procedure while operating helper engines. Engineman Marran thought the throttle he was using had some effect on the movement of the train, but at the same time he thought the speed was reduced in about the usual manner.

Fireman Kochs, also of engine 17, seemed to think there was enough power at the rear to keep shoving the train ahead.

Conductor Tracy, of train first No. 91, stated that the gauge in the caboose showed a pressure of 70 pounds until the caboose was about 10 car-lengths from the south switch, at which time he felt the brakes apply, and when the train came to a stop the gauge registered zero. He did not notice the helper engines easing off, it sounding from the caboose as though they were working full steam, and it was to this fact that he attributed the failure of the train to reduce speed as rapidly as usual.

The crew of train No. 62 had read and understood train order No.45, directing them to meet train first No.91 at Clay Bank, but as the train rounded the curve just north of Clay Bank, Engineman Patterson saw train first No.91 approaching, and he immediately applied the brakes in emergency, opened the sanders, and jumped off.

Operator Cowley, on duty at Clay Bank, stated that train order No.45 was made complete at 4.26 p.m. and that the train-order signal was displaying a stop indication. He heard train first No.91 approaching, judging it to be about at Moxahala, 1.9 miles south of Clay Bank, and told the dispatcher it was coming, the dispatcher replying that he would make a meet for it with train No. 4 at New Lexington, and it was while Operator Cowley was taking this latter order that he saw train first No.

91 rounding the curve and went out to flag it, the train was then about 2,000 feet south of his office. The engineman answered his flag and shut off steam, and Operator Cowley went back to finish copying the order, and while doing so the train passed his office at a speed of about 20 miles per hour.

Dispatcher Wiseman stated that after train first No. 91 had departed from Corning the operator at New Lexington reported at 4.20 p.m. that train No.62 would be ready to leave in about 10 minutes. The dispatcher then issued the order for train first No.91 to meet train No.62 at Clay Bank, telling the operator at Clay Bank to flag train first No.91, and he had started to give the operator the order covering the meet with train No.4 at New Lexington when the operator had to leave the telephone in order to flag train first No.91. Dispatcher Wiseman stated that while he did not like to issue orders to a train at the meeting point, yet in order to facilitate the movement of trains it is frequently necessary to do so at Clay Bank, especially when a train is being doucled and he is not sure of the time it will consume in making the grade near Clay Bank. In this particular instance, had he not issued the order, train No. 62 would have been delayed about 40 minutes at New Lexington.

After the accident Wreck Foreman Latta tested the brakes on train first No.91, and found three cars with piston travel in excess of 9 inches, the measurements being $9\frac{1}{4}$, $9\frac{1}{2}$, and 10 inches. Subsequently the broken pipes on the front end of engine 47 were plugged, and examination and test of the air-brake apparatus was made by the assistant supervisor of air brakes and the road foreman of engines, this examination and test developed nothing wrong.

Conclusions

This accident was caused by the failure of Engineman Carey, of train first No.91, properly to control the speed of his train so as to stop before passing a block signal which was in the stop position.

Some of the evidence indicated that the train ran an excessive distance with the brakes applied, but the fact that after the accident none of the employees could find anything wrong with the brakes or the train line, that the test made shortly afterward showed only three cars with piston travel in excess of 9 inches, that the same engineman found the brakes working well when he handled the train for the balance of the trip, and that subsequent tests of the damaged engine showed nothing defective with the air-brake apparatus, makes it reasonable to believe that the brakes were in working order immediately prior to the occurrence of the accident. Under these circumstances, and considering the fact that the train was making good time and had two engines as helpers at the rear end, it seems more than probable that the underlying reason for the occurrence

of the accident was the failure of Engineman Carey to begin braking soon enough to enable him to stop.

The rules provide that a train order must not be sent to a superior train at the meeting point if it can be avoided. The investigation, however, developed that to some extent there was a practice of issuing meet orders to superior trains at Clay Bank when that point is the meeting point. Every effort should be made to eliminate putting out such orders, for it is under these circumstances that accidents of the kind here under investigation can occur.

All of the employees involved were experienced men and none of them had been on duty in violation of any of the provisions of the hours of service law.

Respectfully submitted,

W. P. BORLAND,

Director.