## INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT FICH OCCURRED ON THE CENTRAL PAILROAD OF NEW JERSEY AT JERSEY CITY, NEW JERSEY, ON NOVEMBER 29, 1924.

January 13, 1925.

To the Commission

On November 29, 1924, a cut of cars ran away and collided with some standing cars on the Central Reilroad of New Jersey at Jersey City, N.J., resulting in the death of one person and the injury of one person, both of them being employees of an industrial company.

### Location and method of operation

This accident occurred on the Lafayette branch in what is known as the Communipaw switchin- district of the Jersey City Terminal. This switching district is entirely separate and a art from any main tracks and is wholly within yard limits, and consists of a lead track diverging from the westbound main track, with numerous spur tracks leading to local industrial plants, there are also other tracks adjacent to and paralleling the lead track for convenience in switching movements From the point where the lead track leaves the main track the grate is sharply descending for several hundred feet, level, a distance of about 300 feet, and then ascending approximately 800 feet to a bridge crossing Communipaw Avenue, the greater part of which distance is 3 91 per cent ascending, the grade is level across the bridge which is about 75 feet in length, and is then 3.73 per cent descending for approximately 750 feet, level a short distance, and then 0 82 per cent descending about 300 feet to the loading platform of a local printing company at which point the collision occurred.

It had been raining and the weather was misty at the time of the accident, which occurred at about 4,30 p.m.

# Description

Yard enrine 95 and switching crew, in charge of Conductor Doherty and Engineman Simms, had finished switching in the Communipaw switching district and had assembled about 25 cars on the lead track preparatory to moving them to a nearby freight yard. The train stood with the engine in the hollow or lowest level of the track between the main track and the bridge over Communipaw Avente,

while the rear of the train was on the grade leading toward the bridge, it being customary to stand in this position to enable the engine to secure a start for the ascending grade to the main track. It was then lectied to move the rear of the train farther back on the bridge in order to obtain a better start, and while making this back-up movement the six rear cars broke sway from the train, ran down the sharply descending grade on the opposite side of the bridge and collided with several other cars standing at the loading platform of the printing company.

The collision resulted in considerable damage to the first car in the runaway cut and also to the first car standing at the loading platform. Several other cars standing apart from each other on the same track were carried along a distance of about 200 feet, the force of the successive collisions resulting in slight damage to several couplers and draft riggings. An employee of the printing company was killed and another employee was injured as a result of the collision.

# Summary of evidence

Conductor Doherty stated that it was customary to assemble the cars which were to be taken from the Communipaw dwitching district to the fain yard and place them on the lead track. On the day of the accident about 25 gars had been assembled for this movement and Conductor Doherty and the two brakemen left the train and went to a nearby shanty to remove their oilskin chats and rubber boots preparatory to going off duty, shortly after entering the shanty, an employee of the printing company informed them of the accident. The remaining cars in the train were then placed on another track and Conductor Doherty proceeded with the engine to the scene of the accident Conductor Doherty said he examined the coupler of the last car that remained on the bridge and found it closed, and upon reaching the scene of the accident he examined the coupler of the car that had broken away and found it closed also, and was of the opinion that one had slipped over the top of the other, either when those cars reached the top of the ascending grade or when they reached the top fithe descending rade on the opposite sideof the bridge. He also stated that it was not unusual for the engineman to move thetrain farther back on the bridge with . no one on the rear end and that he had done so on other occasions whenever he thought it necessary to insure his hauling the train out without stalling on the ascending grade to the main tracks. Conductor Doherty further stated that on a similar occasion several years previously the train had parted on this bridge but a runaway was prevented on account of the air being coupled on the cars. The statements of Brakeman Weil and Van Alastyn corroborated those of

Conductor Doherty's except that each stated he had helped couple the air on the two cars next to the engine.

Engineman Simms stated that after assembling the cars for the movement to the main freight yard the train stood with the engine in the hollow and the rear of the train at the top of the grade over the bridge. While standing in this position, waiting for the conductor and brakemen to return from the shonty, he inscussed with Fireman Burns the possibility of ascending the grade to the main track without stalling, and on account of the neavy train and wet rail it was decided to move the train farther up the grade over the bridge, which would enable them to obtain a better start; the train was pushed about 8 or 10 car lengths up the grade and then allowed to come to a slow stop, without the use of enough braking power to cause any far or shock. Engineman Simms then got off on the ground and was inspecting his engine when one of the crew informed him of the accident. Shortly afterwards Conductor Doherty arrived and at his direction Engineman Simms moved the remaining cars to another track and proceeded with the engine to the scene of the accident. He did not look at the couplers of the cars that parted nor make any inspection of the resulting langue. When questioned about his action in backing the train on the bridge, knowing that there was no one on the rear end, he explained that it was a common practice and that he had ione so many times before. The statements of Fireman Burns corroborated those of Engineman Simms and brought out no additional facts of importance

Passenger trainmaster Young and General Air Brake Inspector Sand has stated that there were no orders or official bulletins in effect which required the crew working in the vicinity of the point of accident to couple the air on the cars being moved to the freight yard, and they did not think the crew involved in this accident had violated any existing rule or order in this respect.

Careful examination of the couplers of the cars which parted after they had been removed to the shop yard showed them to be in good working order. There was a small dent and a slight scratch across the top of the knuckle of one of the couplers involved which appeared to have been recently made. The height of this coupler was  $3l\frac{1}{4}$  inches, which is  $\frac{1}{4}$  inch below the minimum height prescribed by law, the other coupler involved measured  $34\frac{1}{2}$  inches, the maximum height prescribed.

Assistant Superintendent English stated that the switch crew has since been instructed to discontinue the practice of backing the cars over the bridge to secure a start for the run up the grade to the main tracks and that if there are more cars than the engine is able to haul out of the Communipaw switching district, without backing over the bridge to secure a start, the switch wrew is to leave them and some other engine will be sent to bring them to the yard.

#### Conclusions

This accident was caused by the rear portion of a draft of carsbreaking away and as the air brakes were not coupled and in use the cars ran down a sharply descending grade colliding with other cars standing on an industry track.

The draft of cars apparently broke in two on account of the fact that a low coupler on one of the cars slipped under the coupler of the aljacent car on reaching the summer of the grade; the height of the low coupler was  $3l_{+}^{1}$  inches, and below the prescribed minimum height, and the other coupler was at the prescribed maximum height  $34\frac{1}{2}$  inches, while the grade changed abruptly from nearly 4 per cent to practically level.

It had not been customary to couple the air hose and place the air-brake system in operation when moving these drafts of cars out of the Communipaw switching district on to the main track, and there were no printed instructions of any kind prescribing how the movement should be made, al though it appeared that instructions had at one time been issued in connection with main-track movements of switching crews. This draft of cars was to be moved out on the main tracks of what is known as the Lafayette Branch, and a proper regard for safety should have prompted the making of such a movement with the air-brake system in use, as is now required under instructions issued as a result of the occurrence of the accident. Had the air brakes on this draft of cars been coupled and in use at the time, the cars which broke away would have been brought to a stop in ample time to have averted the accident.

All of the employees involved were experienced men; at the time of the accident the engine crew had been on duty 10 hours and 20 minutes, and the train crew 9 hours and 30 minutes, previous to which they had been off duty 12 hours or more.

Respectfully submitted,
W. P. BORLAND
Director.