INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY CONCERNING AN ACCIDENT ON THE SOUTHERN RAILWAY NEAR BREMEN, GA , ON FEBRUARY 14, 1933

May 19, 1933.

To the Commission:

On February 14, 1933, there was a derailment of a passenger train on the Southern Railway near Bremen, Ga., which resulted in the death of 1 employee, and the injury of 2 passengers and 2 employees

location and method of operation

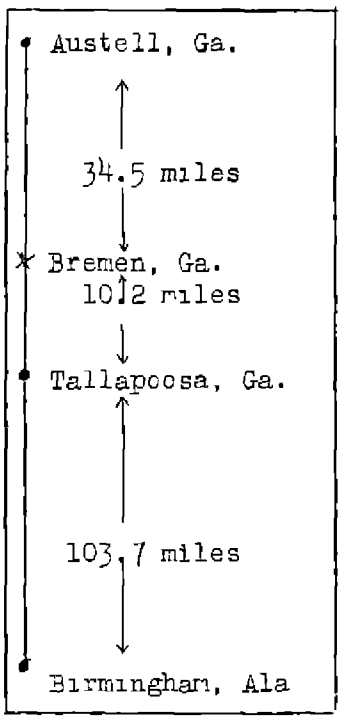
This accident occurred on that part of the Alabama District of the Birmingham Division extending between Birmingham, Ala., and Austell, Ga., a distance of 148 4 miles, in the vicinity of the point of accident this is a single-track line over which trains are operated by time table, train orders, and an automatic block-signal and train-stop system, the latter being of the intermittent-inductive type. The east passing track at Bremen parallels the main track on the south and the initial point of derailment was 3,406 feet west of the west switch of this passing track, on a 6° curve to the left for east-bound trains, approximately 1,350 feet in length. East of this curve the track is tangent for about 140 feet, followed by a 6° 10' curve to the right 892 feet in length and then tangent track to the passing track switch, a distance of 1,400 feet, at which latter point the final derailment occurred. The grade is about 1.25 percent ascending for east-bound trains at the point of accident.

The track is laid with 100-pound rails, 39 feet in length, with an average of 24 ties to the rail length, fully tieplated, and is ballasted with slag to a depth of about 8½ inches.

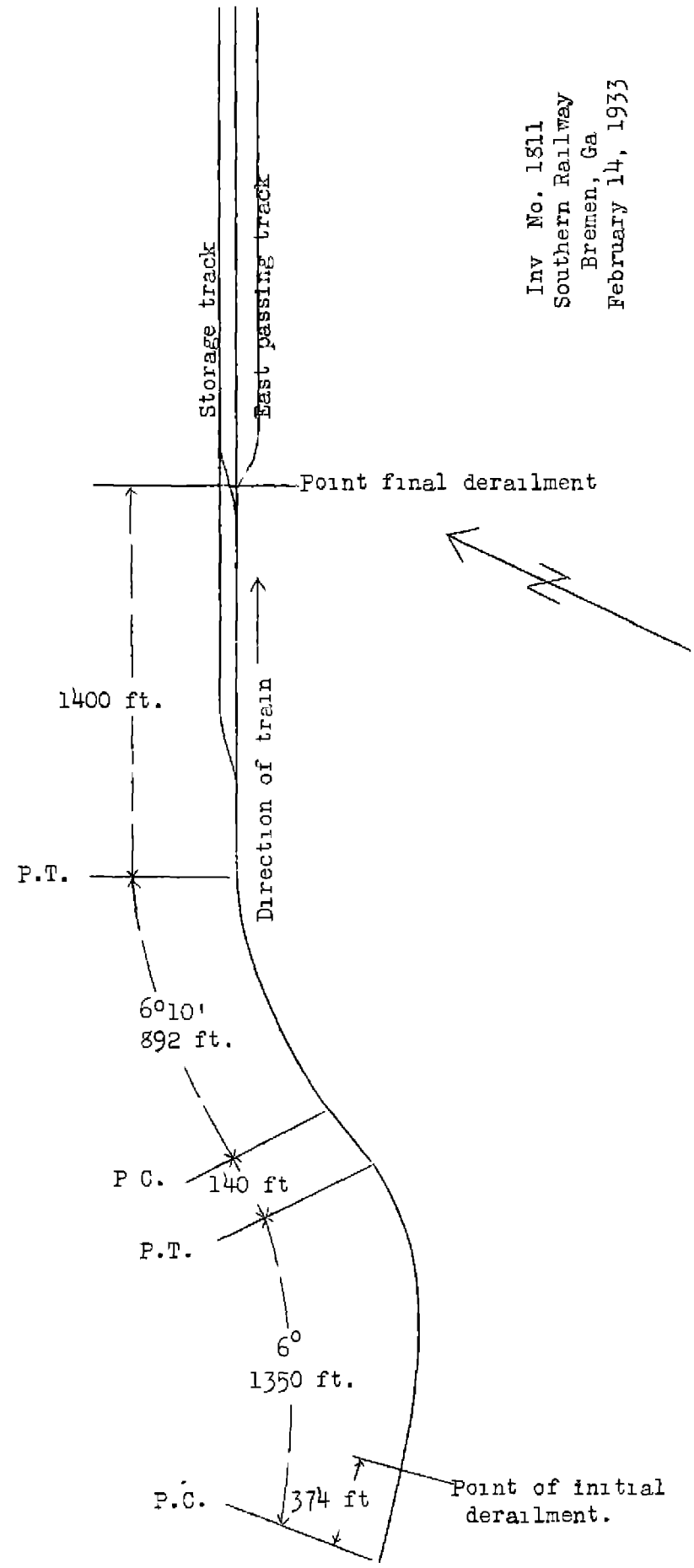
It was raining at the time of the accident, which occurred about 10.15 a.m.

Description

East-bound passenger train no 40 consisted of 1 combination baggage and mail car, 1 combination baggage car and coach, 1 coach, 1 Pullman car, 1 dining car, and 1 coach, all of steel construction, and in the order named, hauled by engine 1483, and was in charge of Conductor Davis and Engineman Cox. This train left Tallapoosa, Ga., 10.2 miles west of Bremen, at 9 58 a m., 5 minutes late, and was approaching Bremen when it was derailed while traveling at a speed estimated to have been between 40 and 45 miles per hour.



Inv No. 1511
Southern Railway
Bremen, Ga
February 14, 1933



The engine, tender, the first three cars, and the forward truck of the fourth car were derailed. The engine and tender were overturned on their right sides and stopped with the forward end of the engine resting on the passing track 358 feet east of the switch. All of the derailed cars remained upright and in general line with the passing track. The engine was damaged to some extent and the first three cars sustained slight damage The employee killed was the engineman, and the employees injured were the fireman and a baggageman

Summary of evidence

Fireman Goree stated that the brakes were tested before the train left Birmingham and nothing out of the ordinary occurred en route until the train was approaching Bremen. He had just returned to the cab from the tender when he felt something unusual and heard a peculiar noise, but the engine began turning over before he could call this situation to the engineman's attention. He also thought the engineman heard the noise about the same time, but the derailment occurred so soon afterwards that he did not know whether the engineman closed the throttle or applied the brakes Fireman Goree estimated the speed at the time of the accident at between 40 and 45 miles per hour.

Baggageman Dowdle was riding in the first car of the train and his first knowledge of anything wrong was when the derailment occurred, he also estimated the speed at 40 or 45 miles per hour.

Conductor Davis talked with the engineman before departing from Birmingham and said he appeared to be in normal condition, while no trouble was experienced in handling the train between that point and the point of accident. He was riding on the platform of the third car approaching Bremen and the first he knew of anything wrong was when the car suddenly was derailed, he immediately entered the car and tried to reach the emergency cord but was unable to do so on account of the severe jolting of the car while it was still in motion.

Flagman McLaughlin was riding in the third car at the time of the accident and as soon as the car stopped he got off and started towards the engine, then returned and went back to flag. He examined the track on his way back and observed marks on the ties which indicated that the engine truck had been derailed. Between $\frac{1}{2}$ and $\frac{3}{4}$ mile west of where the final derailment occurred the engine truck was first derailed and about $\frac{1}{2}$ rail length west of these marks there was crushed rock on top of the south or outside rail of the curve, about 8 inches in length, and several broken pieces of rock lying on both sides of the rail. Rain had been falling, and upon making a further examination in that vicinity he found small footprints which led him to believe that a child had placed the rock on the track

Supervisor Lawler stated that the last time he inspected the track in the vicinity of the point of accident was about

two weeks previous to its occurrence and the track was then in good condition. He again inspected it on the morning of February 15 and found no evidence of any repairs having been made between a road crossing located a short distance west of the passing track, and the initial point of derailment, he also inspected the track west of the latter point to satisfy himself that track conditions did not contribute to the cause of the accident. Supervisor Lawler observed the crushed rock on both sides of the rail and it was his opinion that this rock caused the leading wheels of the engine truck to be derailed and that they then followed along in line with the track until they came in contact with the west switch of the passing track, resulting in the final derailment.

Engineer Maintenance of Way Tobien stated that upon his arrival at the scene of accident he walked westward, following the marks on the track until he reached the point where they stopped. He found that a rock had been placed on a rail 8 feet 6 inches from its receiving end, causing the flange of the right front engine-truck wheel to mount the rail, after which it traveled on the running surface of the rail a distance of 15 feet 6 inches before dropping off on the outside. After the leading wheels were derailed they followed close to the rails until they reached the west passing-track switch, where the engine became entirely derailed. Mr. Tobien considered the track in that vicinity to be in first-class condition, with the elevation on the curve sufficient for a maximum speed of 55 or 60 miles per hour.

Master Mechanic Goff stated that the engine involved, which was of the 4-8-2 type, was equipped on the engine truck with what is known as a Wright "Little Watchman", a device so arranged that when an engine truck is derailed it is supposed to open an air valve and apply the brakes in emergency. An examination of the engine before it was picked up disclosed that the truck was lying at the front end of the engine with the safety chains intact and in good condition. The clearance around the valve stem of the "Little Watchman" inside of the guide was approximately $2\frac{1}{2}$ inches while the center castings were engaged about the same distance, and in his opinion the reason the valve did not open when the truck wheels were derailed was because of the fact that the safety chains held the truck high enough to prevent the truck from slewing and the center castings from parting, which in turn prevented the valve from opening. This mechanism was removed from the engine and tested, and it was found to be working properly.

General Superintendent Madden stated that after examining the track and equipment he was of the opinion that the safety chains on the engine truck became slightly twisted when it was derailed, thereby not allowing the wheels to put very much weight on the ties. For a considerable distance from the first mark of derailment there were no marks on the ties from the right wheel, while the left wheel barely disturbed the ballast. The fact that the truck was held in such a position that it only slightly marked the ties and could not drop down

and disengage the castings, accounted for the non-operation of the "Little Watchman". General Superintendent Madden further stated that the local officers at Bremen arrested a 10-year old negro boy who confessed to him that he had placed a rock on the track, but he had no thought or intention of causing any harm.

Conclusions

This accident was caused by a rock having been placed on the track by a 10-year old boy.

An examination of the track and the engine did not disclose any defects that could have contributed to the cause of the accident, but at a point 3,406 feet west of the east-bound passing track, there was evidence that a rock had been placed on the track, and it was just east of this point that the first mark of derailment appeared. The evidence indicates that the front wheels of the engine truck were the first to be derailed, afterwards following the rails closely until they encountered the west switch of the passing track, where the train was finally derailed. A 10-year old boy was later arrested and confessed that he had placed the rock on the track, but without malicious intent.

The engine truck was equipped with what is known as a Wright "Little Watchman", which is intended to apply the brakes in the event the truck becomes derailed. On this occasion, however, the device failed to function for the reason that the safety chains, possibly twisted in the derailment of the truck, may have prevented the truck from dropping down a sufficient distance to cause the device to be operated. This condition was evident from the fact that the ties were only slightly marked, particularly on the right side of the track where marks appeared only at intervals. Examination of the truck, as well as of the "Little Watchman", revealed no pre-existing condition which could have contributed to the occurrence of the accident.

Respectfully submitted,

W. P. BORLAND,

Director.