

INTERSTATE COMMERCE COMMISSION
WASHINGTON

REPORT OF THE DIRECTOR
BUREAU OF SAFETY

ACCIDENT ON THE
CENTRAL OF GEORGIA RAILWAY

SARGENT, GA.

FEBRUARY 7, 1939

INVESTIGATION NO. 2328

SUMMARY

Inv-2328

Railroad: Central of Georgia
Date: February 7, 1939.
Location: Sargent, Ga.
Kind of accident: Derailment
Train involved: Freight
Train number: 29
Engine number: 637
Consist: 29 cars and caboose
Speed: 25 to 30 m. p. h.
Track: Single; tangent; grade 0.16 percent
ascending for westward trains.
Operation: Timetable, train orders.
Weather: Clear
Time: 2:18 p. m.
Casualties: 3 killed
Cause: Switch damaged by defective brake
rigging.

Inv-2328

March 9, 1939.

To the Commission:

On February 7, 1939, there was a derailment of a freight train on the Central of Georgia Railway at Sargent, Ga., which resulted in the death of three employees.

Location and Method of Operation

This accident occurred on that part of the Columbus Division designated as the Cedartown District which extends between Griffin and Cedartown, Ga., a distance of 101 miles. This is a single-track line over which trains are operated by timetable and train orders, no block-signal system being in use.

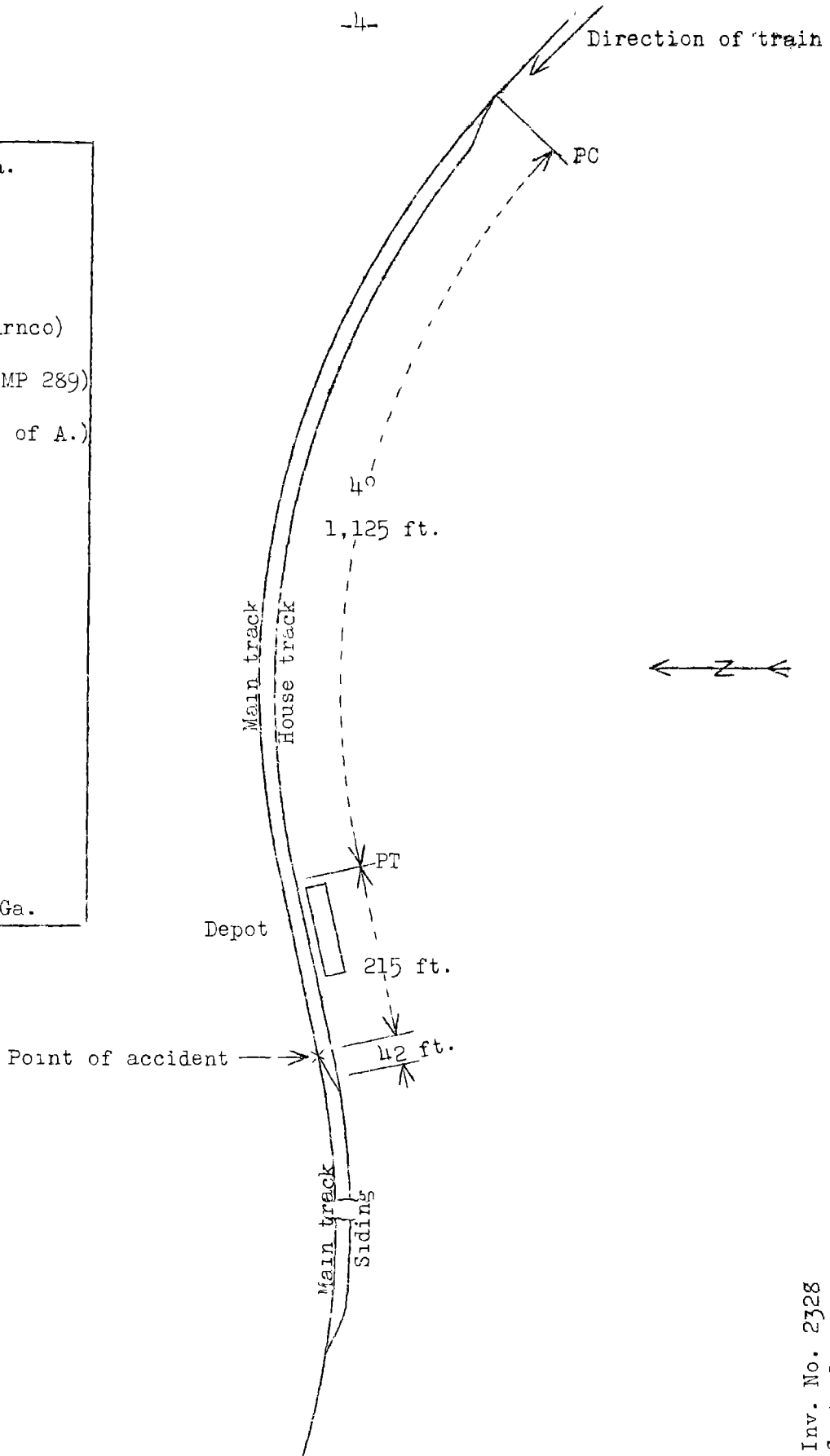
At Sargent, a house track leads from and parallels the main track on the south a distance of 1,250 feet where its west end connects with the siding. The siding then parallels the main track westward an additional distance of 1,561 feet. Westward trains enter the siding through a facing-point cross-over switch; the accident occurred at this switch.

Approaching the point of accident from the east, there is a tangent 3,365 feet in length followed by a 4° curve to the left 1,125 feet long, then a tangent 215 feet to the point of accident and 42 feet beyond. The grade for west-bound trains is 0.71 percent ascending a distance of 1,000 feet then 0.16 percent ascending 350 feet to the point of accident.

The track structure consists of 80-pound rail, 33 feet long, laid on an average of 19 treated pine ties to the rail length; it is fully tieplated, single-spiked on tangents and double-spiked on curves, provided with anti-creepers, ballasted with 10 to 14 inches of cinders and is well maintained.

The switch was equipped with a manganese No. 10 frog and was operated by a Weir type C-219 switch-stand which was secured to double head-blocks and located 7 feet $9\frac{1}{4}$ inches from the gage side of the north rail. It was provided with double targets mounted on a mast 5 feet 10 inches above the head-blocks, and displayed a circular green target 15 inches in diameter when the switch was set for the main track and an arrow-shaped red target 10 inches wide when set for the siding. The switch points were connected by two $\frac{3}{4}$ inch by $2\frac{1}{2}$ inch tie-bars and rested on 27 friction plates. The switch ties and head-blocks were in good condition.

○	Griffin, Ga.	29.4 mi.
○	Raymond	5.7 mi.
○	Newnan	1.5 mi.
○	W. Newnan (Arnco)	1.3 mi.
○	Gloverton (MP 289)	3.4 mi.
○	Sargent (P. of A.)	5.2 mi.
○	Whitesburg	7.2 mi.
○	Clem	5.6 mi.
○	Carrollton	8.3 mi.
○	Bowden Jct.	4.7 mi.
○	Bremen	7.8 mi.
○	Buchanan	6.0 mi.
○	Tallapoosa	3.6 mi.
○	Dugdown	11.4 mi.
○	Cedartown, Ga.	



Inv. No. 2328
 Central of Georgia Ry.
 Sargent, Ga.
 February 7, 1939

The view of the switch from the engineman's side of an approaching west-bound train is restricted by curvature to about 150 feet and, at the time of the accident, cars on the house track obstructed the view from the fireman's side to about the same distance.

The weather was clear at the time of the accident, which occurred about 2:18 p. m.

Description

No. 29, a west-bound second-class freight train, consisted of 29 cars and a caboose, hauled by 2-8-2 type engine 637, and was in charge of Conductor Stephens and Engineman Gober. This train left Griffin at 11:25 a. m., 6 hours 55 minutes late, arrived at Newnan, 6.2 miles east of the point of accident, at 1:20 p. m., left at 1:55 p. m., according to the train sheet, 7 hours 35 minutes late, and was derailed at the east siding switch at Sargent while traveling at an estimated speed of 25 to 30 miles per hour.

The engine and tender, considerably damaged, stopped on their left sides south of the main track about 305 feet west of the point of the switch. The first ten cars were derailed, eight being at various angles to the track and two remaining in line with the track; the first four, sixth and eighth cars were demolished; the seventh car was badly damaged and the fifth, ninth and tenth cars were only slightly damaged.

The employees killed were the conductor, the head brakeman and the fireman.

Summary of Evidence

Engineman Gober, of No. 29, stated that a test of the air brakes was made before leaving Griffin and they functioned properly en route. At Newnan, Conductor Ragan, of No. 38 which was met there, notified him that No. 38 had had a brake-beam down near Gloverton, about 3 miles west of Newnan, and advised him to look for a defective switch at Arnco, about $1\frac{1}{2}$ miles west of Newnan. He said that he reduced speed to about two miles per hour at that point to satisfy himself that the switch was in proper condition before passing over it and when passing Sargent at a speed of 25 or 30 miles per hour, his engine became derailed at the east siding switch. His examination of the switch after the accident indicated that some dragging object, apparently on an

east-bound train, had bent the tierods upward and eastward sufficiently to open the points, although the switch-stand was closed and locked for a main-track movement and the target was displaying a green aspect.

Flagman Williamson, of No. 29, corroborated the testimony of Engineman Gober relative to reducing speed at Arnco, the speed at the time of derailment, and the condition of the east siding switch after the accident.

Conductor Ragan, of No. 38, stated that he and his crew made up the train at Cedartown, approximately 60 miles west of Sargent, and their inspection before leaving disclosed no defective equipment; in several observations of his moving train, made from the cupola of the caboose when passing around curves between Cedartown and Tallapoosa, and in standing inspections at Tallapoosa and Carrollton, 15 miles and 41.7 miles, respectively, east of Cedartown, he discovered nothing defective although on Dugdown hill, about 12 miles east of Cedartown, there was a slow application of the brakes sufficient to stall the train, the cause of which was not ascertained. He said that about 3 3/4 miles east of Sargent, a brake-beam was found down on the leading wheels of the leading truck of C. of G. 7379, the thirteenth car, with the truss-rod on the north end and the bottom-rod broken, and with the dead-lever and part of the bottom-rod dragging and the body of the beam missing. After removing the dragging parts, the train continued to Newnan where he informed Engineman Gober, of No. 29, of this condition and, not knowing the extent of the damage that might have been caused, he told him to examine the switches at Arnco and Sargent, to which the engineman replied, "All right." Conductor Ragan then gave Conductor Stephens, of No. 29, the same information and wrote a message at that time relative to the defective brake beam, but this message was not filed with the operator at Newnan until 2 hours 1 minute after arriving at that point because he was occupied at the warehouse some distance from the telegraph office, and although there was a telephone there which afforded communication with the dispatcher, he did not think it necessary to inform him as he had notified the only westward train in that vicinity and no regular eastward trains were due.

Flagman Adams, of No. 38, stated that in his inspections of the train at Tallapoosa and Carrollton, he found nothing dragging. When walking over the train near Sargent, he noticed dust being thrown from under the train, whereupon he signaled Section Foreman Duke, who was standing on the south side of the track, to look under the train and the section foreman immediately

gave stop signals which he passed to the engineman from his position on top of the car. After assisting in the removal of the broken parts of the brake rigging, he went back to examine the switch at Gloverton but made no further inspection of the track.

Brakeman Hammond, of No. 38, stated that in his partial inspections of the train at various points en route, he found nothing dragging until the brake-beam was taken down at Gloverton.

Section Foreman Duke stated that he inspected the switch at the point of the accident at 7:10 a. m., February 7, and found it to be in good condition. He was standing on the south side of the track at a point about 2 3/4 miles east of Sargent when No. 38 was passing at a speed of 25 or 30 miles per hour. He saw Brakeman Adams on top of the train making signals to him and at the same time he saw dust caused by some dragging object under the train; he gave stop signals until the train passed from view, after which he saw several marks on the track, apparently caused by the dragging object. He did not make any further inspection for possible damage as he had never been instructed to do so when a brake-beam had been found down. While en route to Sargent after being notified of the accident, he found a channel-iron body of a brake-beam lying between the rails. His examination of the east siding switch at Sargent, after the accident, showed that some object had bent both tie-rods upward and eastward sufficiently to cause the points to open, but the switch-stand remained closed and locked for the main track.

Track Supervisor Chitty stated that his inspection of the switch at the point of accident about 10 a. m., February 7, showed it to be in good order and his inspection of the switch after the accident showed the point on the turn-out side to be open about 2 inches; the No. 2 tierod was slightly bent toward the east at its center and had a light scar on its west side; the No. 1 rod had a scar 1/8 to 1/4 inch deep on its west side and was badly bent in a V shape at its center, causing both points to open although all bolts in the tierod and connecting-rod remained intact, the points undamaged and the stand firmly spiked to the head-blocks. The first marks of the derailment were 14 inches west of the heel of the switch points and his inspection of the track westward from this point disclosed fresh marks, caused by the dragging rigging, on the ties about 1 foot 10 inches from the south rail to a point about 6 1/2 miles west of Sargent; an underpass guard-rail at Whitesburg, 5.2 miles west of Sargent, had been torn loose at one end; there were marks on

all the lead rails of the switches at Clem, 12.4 miles west of Sargent, and on all the highway crossings to Cedartown. It was his opinion that the brake rigging was down when No. 38 left Cedartown or shortly thereafter and that it apparently sustained further damage by striking the guard rail at Whitesburg. He said that there were no general instructions covering the action to be taken by a section foreman on such occasions, but that the matter had been discussed at length at safety meetings, held each month, and the minutes of these meetings are sent to each section foreman.

Car Inspector Waters stated that he made a mechanical inspection and an air-brake test on No. 38 before its departure from Cedartown and the only defects found were bolts missing from a running board, which were replaced; he found no brake rigging to be lower than the prescribed limit of $2\frac{1}{2}$ inches above the rail, but as he is not authorized to replace brake-beam safety supports, he did not check to see if any were missing. He said that he watched No. 38 pull by him on their departure and he did not see anything dragging.

Car Inspector Moon stated that he inspected C of G. 7379 on arrival of No. 38 at Griffin and found the No. 1 brake-beam body, truss-rod, fulcrum and dead-lever missing, but the pins, cotter-keys, broke-heads, one shoe and keys were intact; the No. 2 brake-beam body, truss-rod and live-lever were bent; the bottom-rod was broken off about 8 inches from the live-lever. The spring plank was bent upward about $2\frac{1}{2}$ inches and the safety support bar was missing but the key bolts were in place. There was no damage to the brake rigging on the "A" end of the car.

Master Mechanic Burke stated that his examination of engine 637, about three hours after the accident, disclosed no mechanical defect which might have caused or contributed to the accident.

Station Agent Gay, at Sargent, stated that he stood about ten feet from the main track and 165 feet east of the siding switch when No. 29 approached and, although he could not see the switch points, the switch target was lined for a main-track movement.

Observations of the Commission's Inspector

Inspection of the switch and the track at the point of the accident by the Commission's inspector disclosed that on the switch ties there were flange marks on the inside of the north rail and the outside of the south rail at approximately the heels

of both switch points; these marks continued to the south side of the frog. The left wing of the frog was broken. The frog, the south rail, and the switch point were forced westward about 12 inches. From the frog westward the main track and the siding were destroyed a distance of 300 feet. The switch tierods were bent, obviously by an east-bound train, and one switch point was slightly twisted. Marks appearing on the track indicated that the brake-beam truss-rod was probably broken about the time No. 38 left Cedartown and that this allowed the dead-lever and the bottom-rod to sag sufficiently to mark the switch leads and road crossings; this sagging appeared to have increased until the dead-lever and the bottom-rod struck some of the higher ties and then struck the east end of the guard rails at Whitesburg underpass, apparently resulting in the bottom-rod being broken; beyond this point the dead-lever contacted every third to fifth tie until it struck a tie rod of the east siding switch at Sargent; then it became wedged against the spring plank of the truck, bending both tie rods and the spring plank. A scar about $\frac{1}{4}$ inch deep on the forward edge of the dead-lever about 3 inches from its lower end corresponded to the dent on the west side of the No. 1 tie rod and the battered condition of the lower end of the lever indicated that it had been dragging a considerable distance. The "R" end of the truss-rod was broken off behind the nut and was so badly battered that it was impossible to determine whether or not a flaw in the metal had existed. The nut was not found. Brake hangers, hanger-pins and brake-heads were in good condition. The brake-beam, an Ajax No. 15, and the truck were equipped with one Buffalo safety-support, attached by key bolts at the center of the lower side of the spring-plank.

Discussion

After the accident the switch points of the east siding switch at Sargent were found open, but the switch-stand was locked for the main track. The condition of the bent tie rods indicated that they had been contacted by something dragging under a car traveling in an eastward direction. No. 38, an east-bound train, which passed Sargent 1 hour 5 minutes before the time of the accident, was the last train to pass that point prior to No. 29. No. 38 stopped about $3\frac{1}{2}$ miles east of Sargent and the crew removed the broken parts of a brake rigging from under the thirteenth car. According to the marks found on the track, the brake rigging on this car evidently became defective very soon after departure from Cedartown and, although it was daylight and the weather was clear, this was not discovered for more than five hours, during which time the train traveled about 63 miles. A mechanical inspection at Cedartown failed to disclose any defect on this car and inspections by the crew before leaving Cedartown and at points en route disclosed no defect.

This train proceeded to Newnan, about 3 miles beyond, where it met No. 29 and, according to the statement of the conductor of No. 38, he informed the engineman and the conductor of No. 29 about the broken rigging and advised them to watch for damaged switches at Arnco and Sargent; however, the engineman of No. 29 stated that Arnco was the only point of which they were warned; this could not be verified as the conductor of No. 29 was killed in the accident.

The conductor of No. 38 stated that he wrote a message concerning the defective brake rigging when he arrived at Newnan but did not file it with the operator until 2 hours 1 minute later, and this was more than an hour after the accident occurred. His explanation for the delay in filing the message was that he was working at the warehouse which was about forty-five car lengths from the location of the operator, and although there was a dispatcher's telephone available in the warehouse he did not think it necessary to notify the dispatcher at once as he had informed No. 29, the only other train that would pass over this territory within a considerable length of time. The conductor of No. 38 did not know and the engineman of No. 29 had not been informed what distance the brake rigging had been down, but the latter assumed that it came down between Sargent and Arnco, consequently his precautions did not extend beyond the switches at Arnco. Had the conductor of No. 38 notified the dispatcher as soon as he arrived at the warehouse at Newnan, no doubt the dispatcher would have given No. 29 instructions with regard to track conditions and thus might have averted the accident.

Although the section foreman saw the dragging brake rigging and observed the marks on the ties in the immediate vicinity, he made no attempt to follow up with an inspection of the track and the switches where damage might have occurred. As he had at least 30 minutes before No. 29 would have reached Sargent and as he was only $3\frac{1}{2}$ miles east thereof, it is apparent that he had ample time to patrol his track on his motor-car and, even though he had to protect against No. 29 which was overdue and which would have been following him, he could have reached the switch involved in time to learn its condition and to flag No. 29 and thus the accident could have been averted. His excuse for not having done so was that he had never been instructed to make an inspection after a brake-beam had been found dragging.

Conclusion

This accident was caused by a damaged switch resulting from a dragging brake-rigging on a previous train contacting and bending the switch tie rods and pulling the switch point away from the stock rail.

Respectfully submitted,
W. J. PATTERSON,
Director.