

INTERSTATE COMMERCE COMMISSION

WASHINGTON

REPORT OF THE DIRECTOR

BUREAU OF SAFETY

ACCIDENT ON THE
ST. LOUIS SOUTHWESTERN RAILWAY

CORLEY, TEX.

DECEMBER 15, 1936

INVESTIGATION NO. 2127

SUMMARY

Inv-2127

Railroad: St. Louis Southwestern
Date: December 15, 1936
Location: Corley, Tex.
Kind of accident: Derailment
Train involved: Passenger
Train number: 6
Engine number: 664
Consist: 7 cars
Speed: 50-55 m.p.h.
Track: 3⁰ curve; 0.65 percent ascending grade
Time: 12:40 p.m.
Weather: Clear
Casualties: 1 killed; 1 injured
Cause: Brake shoe placed on rail by children

February 16, 1937

To the Commission:

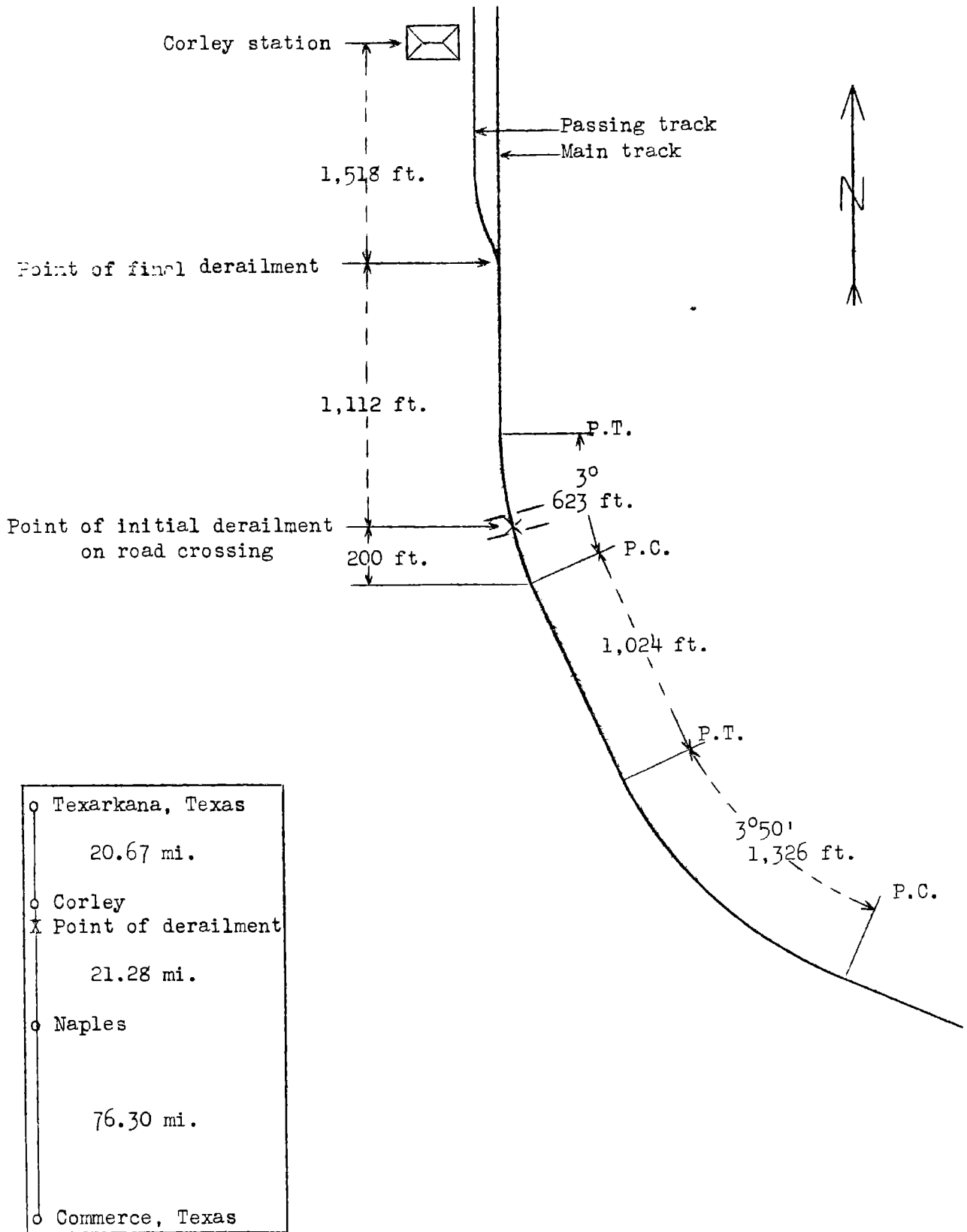
On December 15, 1936, there was a derailment of a passenger train on the St. Louis Southwestern Railway near Corley, Tex., which resulted in the death of one employee and the injury of one person carried under contract.

Location and method of operation

The accident occurred on the Commerce Sub-Division of the Texas Division, which extends between Texarkana and Commerce, Tex., a distance of 118.25 miles; in the vicinity of the point of accident, this is a single-track line over which trains are operated by timetable and train orders, no form of block-signal system being in use. Approaching the point of derailment from the south the track is tangent for a distance of 954 feet; then there is a $3^{\circ} 50'$ curve to the left 1,323 feet in length, a tangent for 1,024 feet, a 3° curve to the right 623 feet in length, then tangent track for a considerable distance beyond, the initial derailment occurring at a road crossing, 2,630 feet south of the station at Corley and approximately 200 feet north of the receiving end of the 3° curve; the final derailment occurred at the south switch of the passing track, which parallels the main track on the west, 1,518 feet south of Corley station. The grade at the point of accident is 0.65 percent ascending for north-bound trains.

The main track is laid with 85-pound rail, 33 feet in length, with an average of 20 treated hard and soft wood ties to the rail length, fully tieplated, single-spiked, with 4 rail anchors to the rail, and ballasted with pit-run gravel to a depth of 12 inches. The track is fairly well maintained. The speed limit for passenger trains is 60 miles per hour on tangent track and 55 miles per hour on curves.

The crossing where the initial derailment occurred is a slightly used, unimproved public road crossing, 20 feet wide. The approaches are graded with dirt and practically level, and the surface of the crossing is filled to within about $1\frac{1}{4}$ inches from the top of the rails with pit-run gravel. No trouble has been experienced with dirt or gravel washing between or upon the rails.



Inv. No. 2127
 St. Louis Southwestern Ry.
 Corley, Texas
 Dec. 15, 1936

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The weather was clear at the time of the accident which occurred at 12:40 p.m.

Description

Train No. 6, a north-bound passenger train, consisted of 1 combination mail and express car, 1 baggage car, 2 chair cars, 1 Pullman sleeper, 1 dining car and 1 business car, all steel-sheathed, steel-underframe cars, except the sleeper, which was of all-steel construction, hauled by engine 664, and was in charge of Conductor Scruggs and Engineman Langridge. This train left Naples, the last open office, 21.28 miles south of Corley, at 12:10 p.m., 15 minutes late, according to the train sheet, and was derailed while traveling at a speed variously estimated to have been from 50 to 55 miles per hour.

The engine stopped on its left side west of the track, at the foot of a slight fill, 1,562 feet north of the initial point of derailment, badly damaged. The tender remained coupled to the engine, practically upside down, with its rear end across the passing track, nearly at right angles to the engine. The combination car was derailed and leaning toward the east; the baggage car was derailed but remained upright in line with the track; both of these cars were badly damaged; the 2 chair cars were derailed but remained upright, both slightly damaged, and the sleeper was derailed but not damaged. The employee killed was the fireman and the person injured was a mail messenger.

Summary of evidence

Engineman Langridge stated that he inspected his engine at the passenger station at Dallas and found it to be in good condition. He made a terminal air-brake test of the train at that point and a running test immediately after leaving the station. The brakes were used several times en route and functioned properly; the engine rode well, took all curves properly and the track appeared to be in good condition. When approaching Corley, he partly closed the throttle and drifted into the reverse curve at a speed of about 55 miles per hour. He did not see anything on the rail ahead and his first intimation of something wrong was upon hearing a sound as though there was gravel on the rail, whereupon he locked out and saw dirt and gravel flying from under the engine; thinking a brake rod or brake beam had dropped, he closed the throttle and made a full service

application of the air brakes. The speed of the train was reduced to about 10 miles per hour when the engine encountered the turnout rails of the passing-track switch and headed down that track, while the train broke off and continued on the main track; the engine was moving about 2 or 3 miles per hour when it turned over. He did not realize that the engine truck was derailed until the switch was reached and he said that he did not think the circumstances warranted an emergency application of the brakes prior to that time. After the accident he examined the engine, as well as the engine trucks, and could find nothing that could have contributed to the accident.

Conductor Scruggs stated that he was in the first chair car as the train approached Corley at a speed of about 55 miles per hour, when he felt what appeared to be a service application of the brakes. After the train stopped he made a cursory examination of the track and equipment but could see nothing that might have contributed to the derailment. He said the accident occurred at 12:40 p.m.

The statements of Brakeman Gaylon and Train Porter Myart added nothing of importance.

Section Foreman Holliday stated that he passed the point of accident about 9:00 a.m. on the day of the accident, at which time the crossing was clear and the track was unobstructed. After the derailment occurred he returned to the scene of the accident and found marks which indicated that something had been hit at the crossing and had slid upon the rail for a distance of about 20 feet. In searching for the cause of the marks, he found a brake shoe about 50 or 60 feet north of the crossing at the foot of the embankment. The brake shoe was broken and cracked and had a blue cut on one side which indicated it had been struck a heavy blow.

Roadmaster Sullivan stated that he inspected the track shortly after the accident occurred and found nothing with respect to track conditions that could have caused or contributed to the derailment; a track gauge and level were used on the curve and for some distance beyond in each direction and the track gauged uniformly $\frac{1}{4}$ inch wide and the curve had a uniform elevation of between $4\frac{1}{2}$ and $4\frac{3}{4}$ inches. He found a flange mark from $\frac{1}{2}$ to $\frac{3}{4}$ inch from the gauge side on the ball of the high rail, which appeared to have been made by an engine-truck wheel. This mark continued for a distance of about 20 feet, then appeared on a spike head outside the rail

and from that point followed the edge of the tie plates; the flange of the right wheel marked the ties about 6 inches inside the base of the low rail. These marks continued until they reached the turnout of the passing-track switch where the derailed wheel encountered the turnout rail, which diverted the engine from the main track and precipitated the final derailment.

Division Engineer Nall stated that he arrived at the scene of the accident about 3 hours 20 minutes after its occurrence and immediately made an inspection of the track. The first mark of derailment appeared on the top of the left rail, about $\frac{1}{2}$ inch from the gauge side, at the center of the crossing; this appeared to be a flange mark, which extended diagonally across the top of the rail for about 20 feet to where the wheel dropped to the ties; the mark appeared to have been made by the left leading engine-truck wheel. On the day following the accident, in company with two other railway officials, another inspection was made in the vicinity of the point of accident and a freight car brake shoe was found lying about 13 feet to the left of the track and 107 feet north of the point of derailment. The brake shoe was freshly broken in the center and had a mark on the edge indicating it had been struck and then skidded along the rail.

A careful inspection of Engine 664 by the Commission's inspectors revealed nothing about the engine that would have contributed to the accident. There were several marks on the left front engine-truck wheel, some of which appeared to have been caused by striking solidly against a hard object, others by coming in contact with angle bars. Examination of the brake shoe involved disclosed it to be a standard freight car brake shoe, worn to a thickness of about $1\frac{1}{4}$ inches and broken horizontally across $7\frac{7}{8}$ inches from the top; the brake extended entirely through the shoe and the pieces were slightly separated but were held together by the reinforcement of the shoe. There was a V-shaped indentation, $11/16$ inch long, $3/8$ inch wide, and about $1/4$ inch deep, cut in one side of the shoe $5\frac{1}{2}$ inches from the top; there was also evidence of metal scorching on the edges of the shoe.

On December 18, 1936, 3 negro children, aged 9, 12 and 14 years, respectively, admitted to the Sheriff of Bowie County that on their way home from school one of them had placed a brake shoe on one of the rails at the crossing and shortly thereafter the train was derailed.

Discussion

The evidence disclosed that as Train No. 6 reached the highway crossing, running at a speed of between 50 and 55 miles per hour, the engineman noticed dirt and gravel flying from beneath the engine and thinking that some part of the brake rigging had become dislodged he made a service application of the brakes; he was unaware that any wheels of the engine were derailed until the turnout rails of the passing-track switch were encountered. Marks on the rail and ties indicated that the left front engine-truck wheel had been raised far enough to allow the flange to run on the ball of the rail until it dropped to the ties on the outside of the rail, about 20 feet north of the crossing; the ball of the rail also bore evidence of some metal object having skidded along its surface. Later a freight car brake shoe was found along the track 13 feet from the left rail and 107 feet north of the crossing. This shoe bore evidence of having been struck by a wheel flange and then pushed along the surface of a rail. Three children aged 9, 12 and 14 years, respectively, subsequently admitted that one of them had placed the brake shoe on one of the rails at the crossing.

Conclusion

This accident was caused by a brake shoe having been placed by some children upon the rail at a highway crossing.

Respectfully submitted,

W. J. PATTERSON,

Director.