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INTERSTATE COMMERCE COMMISSION

WASHINGTON

REPORT OF THE DIRECTOR

BUREAU OF SAFETY

ACCIDENT ON THE

WESTERN PACIFIC RAILROAD

FRANKLIN, CALIF.

NOVEMBER 8, 1936

INVESTIGATION NO. 2110

SUMMARY

Railroad:	Western Pacific
Date:	November 8, 1936
Location:	Franklin, Calif.
Kind of accident:	Derailment
Train involved:	Freight
Train number:	No. 61
Engine number:	52
Consist:	49 loads, 9 empties, caboose
Speed:	33-40 m.p.h.
Track:	Tangent
Weather:	Clear
Time:	3:35 p.m.
Casualties:	1 killed; 3 injured
Cause:	Defective truck side-frame

December 22, 1936.

To the Commission:

On November 8, 1936, there was a derailment of a freight train on the Western Pacific Railroad at Franklin, Calif., which resulted in the death of 1 trespasser and the injury of 3 trespassers.

Location and method of operation

This accident occurred on the Second Subdivision of the Western Division, extending between Oroville and Stockton, Calif., a distance of 111.3 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 block-signal system being in use. The accident occurred opposite the depot at Franklin; approaching this point from either direction the track is tangent for several miles, and the grade is practically level.

The track is laid with 85-pound rails, 33 feet in length, with an average of 22 ties to the rail length, partly tieplated, single spiked, ballasted with crushed stone to a depth of 8 to 10 inches below the ties and is maintained in fair condition. The maximum authorized speed for freight trains at the point of accident is 40 miles per hour.

The weather was clear at the time of the accident, which occurred about 3:35 p.m.

Description

Train No. 61, a westbound freight train, consisted of 49 loaded cars, 9 empty cars and a caboose, hauled by engine 52, and was in charge of Conductor Miller and Engineman Metzger. This train left South Sacramento, the last open office and 11.8 miles east of Franklin, at 3:05 p.m., according to the train sheet, and was derailed while passing Franklin at a speed estimated to have been between 33 and 40 miles per hour.

The fortieth car in the train, U.P. 21791, a steel gondola loaded with pig iron, was the first car to become derailed, this being caused by a truck side-frame breaking at the bottom on the forward end, left side, this being the B-end of the car; the next two cars, also steel gondolas, loaded with pig iron, and the forward truck of the forty-third car, a flat car, loaded with car wheels, were also derailed.

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Western Pacific R.R.,
Franklin, Calif.
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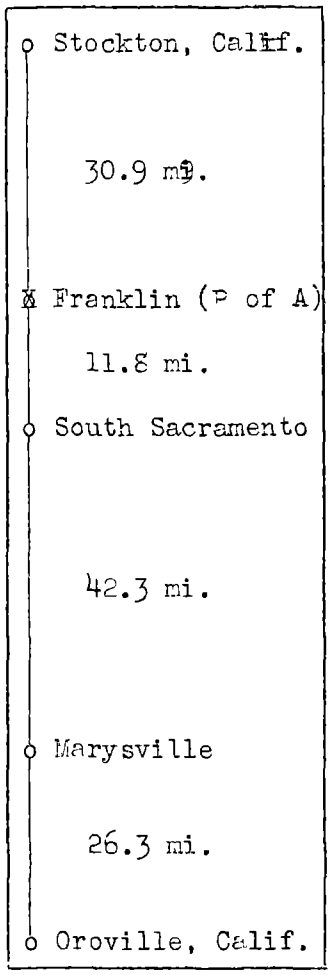

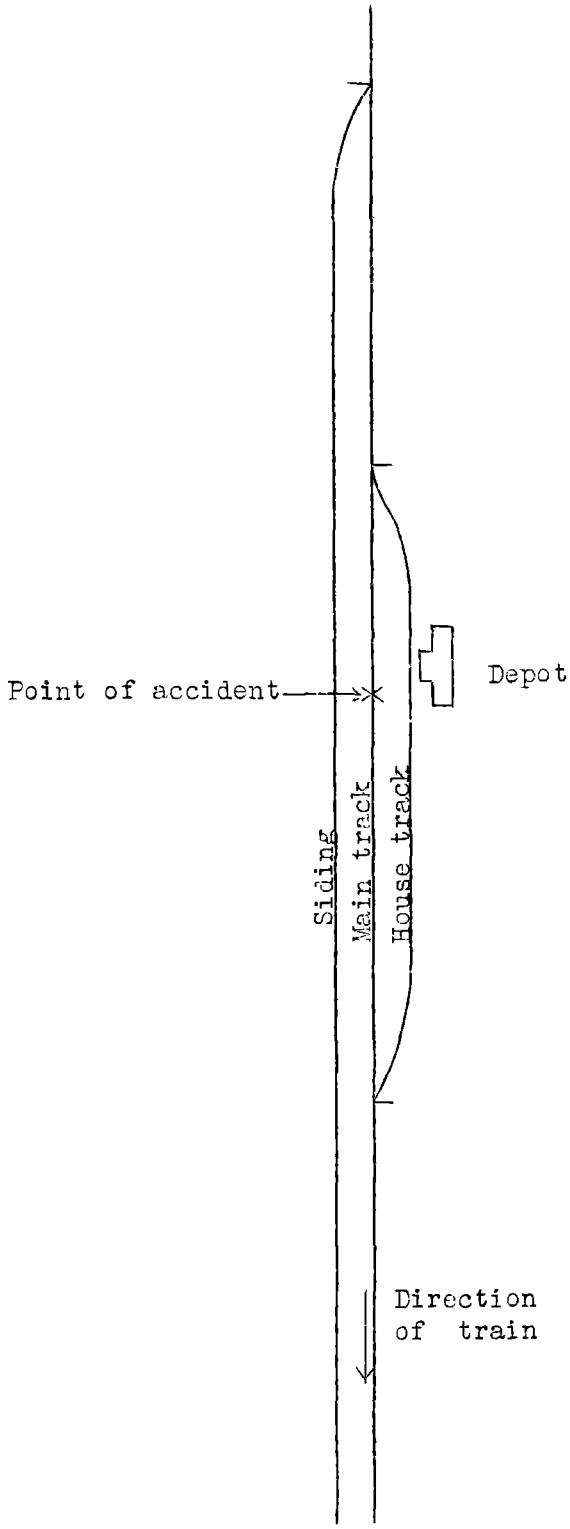

Summary of evidence

Engineman Metzger, Fireman Pierce and Head Brakeman Fielder made statements to the effect that the air brakes were tested and worked properly and no trouble was experienced in making stops en route. At Marysville, 54.1 miles east of Franklin, a rolling inspection was made by members of the crew as the train slowly passed them. About the time the engineman sounded the station whistle signal for Franklin the fireman and head brakeman looked back along the train, but saw nothing wrong. The first indication of trouble was when the air brakes were applied in emergency from the rear as the train was passing the station at Franklin at a speed of about 33 to 36 miles per hour. The fireman and head brakeman did not make a close inspection after the accident to determine the cause but the engineman found a piece of a truck side-frame near the station on the left side of the track and later he fitted this broken piece to one of the trucks. There was no indication of dragging equipment and the engineman was of the opinion that the truck side failed, due to a flaw in the pitted metal, and that this caused the derailment.

Conductor Miller, Brakeman Stene and Flagman Carson were in the caboose; they looked the train over at several places en route but saw nothing wrong. The first indication they had of trouble was when the air brakes were applied in emergency, due to the accident, at which time they estimated the speed to have been between 35 and 40 miles per hour. Brakeman Stene did not make an inspection of the derailed equipment, but Conductor Miller went forward on the left side of the train and found a piece of a truck frame, about 15 inches in length; there was an old flaw in the metal of the broken piece and he thought this defect caused the truck side to fail under the car load of pig iron.

Wrecking Foreman Miller stated that upon his arrival at the point of accident he viewed the derailed cars and also saw the portion of a truck side-frame which supports the spring bed, broken and lying on the ground near the station. He examined this broken piece and found that the metal was defective. The following morning he saw the Vulcan truck which had failed, and the broken piece was fitted to it; in his opinion the accident was caused by a broken truck side-frame.

Trainmaster Barry arrived at the scene of the accident about 5:40 p.m. He saw the broken piece of the truck near the depot, and the metal contained a flaw; he also looked over

the trucks of the derailed cars and saw the truck from which the broken piece came. About two rail lengths west of where the broken piece was found, the ties were torn up and marked on top. He concluded that the accident was caused by the broken side-frame.

Car Inspector Kocos, at Oroville yard, stated that he inspected the rear portion of Train No. 61, including the cars involved in the derailment. He did not see any defects on the left side of the cars involved in the accident and the truck side-frames appeared to be in good condition. He also participated in the air brake test on the train and the brakes worked properly.

Superintendent Beem stated that an investigation developed that as Train No. 61 was passing Franklin, Calif., at a speed of between 33 and 37 miles per hour a Vulcan truck side-frame gave way on the forward truck, left side, of Union Pacific steel gondola, 21791, the fortieth car in the train, causing the derailment. This was a 100,000-pound capacity car with a load limit of 128,400 pounds, and was loaded with 115,250 pounds of pig iron, billed from Ironton, Utah, to Pittsburg, Calif. Superintendent Beem arrived at Franklin about 7 p.m., and after making a thorough inspection of the derailed cars, he was satisfied that the derailment was due to a broken side-frame on the leading truck, left side of this car. A part of this broken side-frame was found in front of the depot at Franklin on the left side of the main track, and the ends of 6 or 7 ties on the left side of the main track at this point were scarred where the side-frame struck them; the balance of the broken side-frame was found lying between the main track and a side track, where the derailed cars stopped. At least 50% of the broken side-frame showed defective metal. Most all of these defects were hidden defects on the inside of the side-frame, and were so located that none of the defective metal could have been discovered by the ordinary inspection given by car inspecting forces. Beginning at the point where the truck failed in front of the depot, flange marks on the ties indicated that but one pair of wheels had been off the track; however, when the broken truck came in contact with the house-track frog, 837 feet west of the first marks on the track, this car and the following two cars became entirely derailed. U.P. 21791 was derailed to the right of the track and the weight of the following cars caused it to go crosswise of the track, partially burying the east end of the car on the south side of the track. Careful inspection of the track for some distance east of Franklin showed no signs of dragging or derailed equipment, the first indications being at the depot where the side-frame collapsed, track conditions in no way con-

tributed to the accident. The train had been properly inspected, speed was not excessive and no difficulty was encountered with the train en route; the air brakes were tested and worked properly, and the crew had inspected the train at several points but nothing wrong was observed; Superintendent Beem concluded that the accident was due to hidden defects in the metal causing the truck side-frame to fail at this point.

Inspection of the defective truck side-frame by the Commission's inspectors disclosed that there were several old flaws or breaks in the metal at the bottom on both sides of the spring seat, and there were numerous sand holes. Most of these defects, however, were concealed on the inside of the truck side-frame casting, and could not be discerned in ordinary inspection.

Discussion

The investigation developed that steel gondola car U.P. 21791, loaded with pig iron, the fortieth car in westbound freight Train No. 61, was the first car to become derailed; this was caused by a defect at the bottom of the truck side-frame on the left side and forward end of the car. The side frame failed as the train was passing Franklin station at a speed of about 35 or 40 miles per hour, resulting in the derailment of four cars. The car involved was not overloaded and it was inspected in the train by a car inspector at Oroville and also by the crew at several points en route. The air brakes were tested and worked properly. Neither speed nor track conditions had any apparent bearing on the accident, and there was no indication of dragging equipment. Examination of the failed truck side-frame disclosed that there were several old flaws or breaks in the metal at the bottom of the truck on both sides of the spring seat and there were also numerous sand holes in the casting; these defects, however, were concealed on the inside of the truck and were not discernible by ordinary inspection.

Conclusion

This accident was caused by the failure of a truck side-frame.

Respectfully submitted,

W. J. PATTERSON,

Director.