

INTERSTATE COMMERCE COMMISSION
WASHINGTON

REPORT OF THE DIRECTOR
BUREAU OF SAFETY

ACCIDENT ON THE
DENVER & RIO GRANDE WESTERN RAILWAY

DOMINGUEZ, COLO.

APRIL 26, 1937

INVESTIGATION NO. 2171

SUMMARY

Inv-2171

Railway:	Denver & Rio Grande Western
Date:	April 26, 1937
Location:	Dominguez, Colo.
Kind of accident:	Derailment
Train involved:	Passenger
Train number:	319
Engine number:	777
Consist:	4 cars
Speed:	25 to 30 m.p.h.
Track:	2° right curve 315 feet, then tangent 1996 feet, then 3° left curve to point of accident; level grade.
Weather.	Cloudy
Time:	8 p.m.
Casualties:	2 killed, 7 injured.
Cause:	Burned-out bridge.

Inv-2171

June 14, 1937.

To the Commission:

On April 26, 1937, there was a derailment of a passenger train on the Denver & Rio Grande Western Railway near Dominguez, Colo., which resulted in the death of two employees, and the injury of five passengers, one railway mail clerk, and one express messenger.

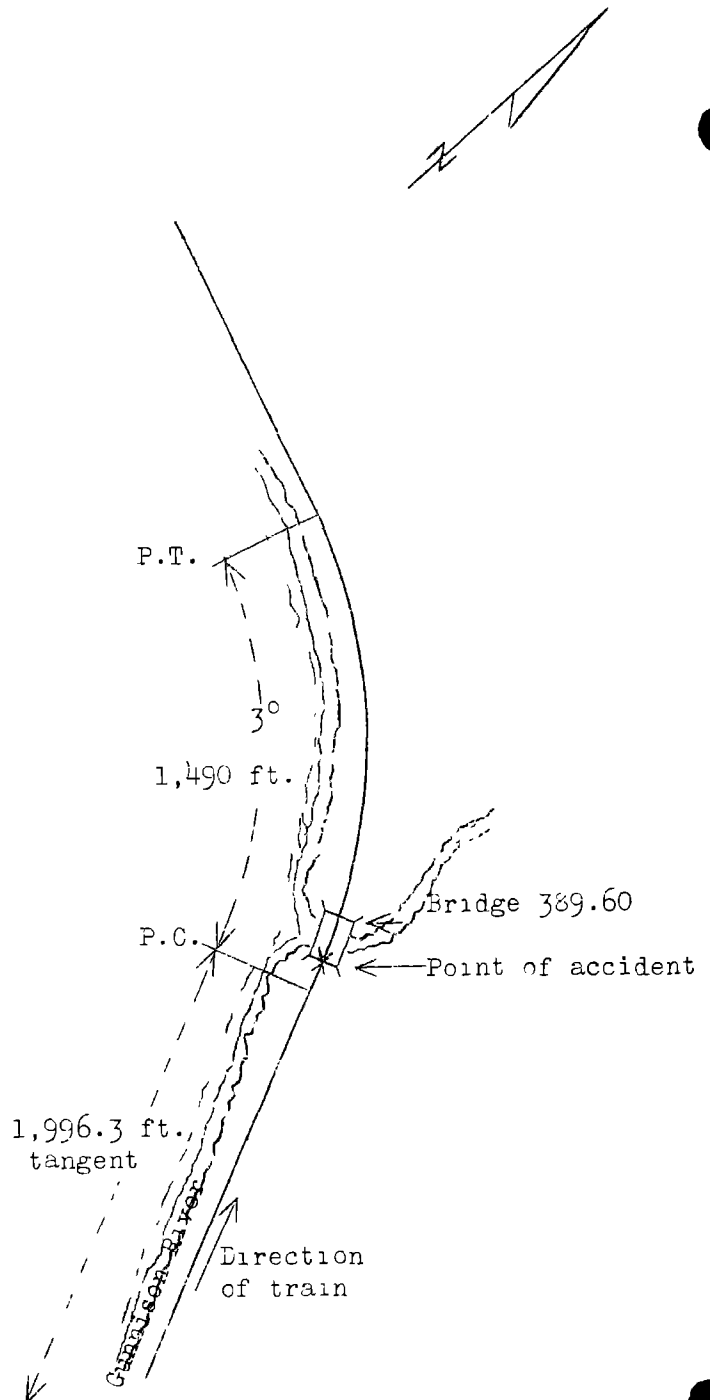
Location and method of operation

This accident occurred on Subdivision 16, of the Grand Junction Division, which extended between Grand Junction and Montrose, Colo., a distance of 72.7 miles, and 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 at the east end of bridge 389.60 located approximately 1 mile east of Dominguez.

Approaching this point from the east the track parallels the Gunnison River. There is a series of curves and tangents followed by a 2° curve to the right 315 feet in length, then a tangent for 1,996 feet, followed by a 3° curve to the left 1,490 feet in length, the accident occurring at the east end of bridge 389.60 on this latter curve 426 feet from its eastern end. The grade for west-bound trains approaching the scene is generally descending, with a maximum of 0.50 percent, but is level at the point of accident. In the vicinity of the point of accident the track is laid with 90-pound rails in 33-foot lengths on 20 ties per rail-length. It is single-spiked, fully tieplated, has four rail-anchors to the rail, is ballasted with gravel to a depth of six inches, and is well maintained. Seventy-five percent of the ties are treated.

Bridge 389.60 was of untreated wooden construction, 174 feet in length built on a 3° curve to the left, and spanned a gulch having a maximum depth of 15 feet. All caps and sills were covered with galvanized sheet iron, but the ties were not covered. At the time of the accident there was a back-wash from the Gunnison River, approximately 10 feet wide and 2 feet deep under the bridge. There were no water barrels or other fire protection on the bridge. There is considerable brush in the vicinity, but it is kept cleared to a distance of from 15 to 25 feet from the bridge. Because of the curvature of the track and the brush in the vicinity, the engineman's view of the bridge is restricted to a very short distance, and that of the fireman is less than 600 feet by day, and considerably less by night.

o	Grand Jct., Colo.
	33.3 mi.
o	Dominguez, Colo.
	1.0 mi.
X	Point of accident
	17.1 mi.
o	Delta
	21.3 mi.
o	Montrose, Colo.



Inv. No. 2171
D. & R.G. W. Ry.
Dominguez, Colo.
April 26, 1937.

The weather was somewhat cloudy and it was dark at the time of the accident, which occurred about 8 p.m.

Description

Train No. 319, a west-bound passenger train, consisting of one combination mail and baggage car, one baggage car, one coach, and one Pullman sleeping car, all of steel underframe construction, hauled by engine 777, was in charge of Conductor Miller and Engineman Freeman. This train left Montrose at 6:40 p.m., 40 minutes late, passed Delta, the last open office approximately 17 miles from the point of accident, at 7:25 p.m., according to the train sheet, still 40 minutes late, and while running at a speed estimated at 25 to 30 miles per hour was derailed at bridge 389.60 which had been destroyed by fire.

The engine stopped in an upright position in the gulch bed and in line with the track; the tender was demolished and the debris lay along the left side of the engine; combination mail and baggage car 629 stopped at an angle of approximately 45° to the left of and parallel with the tender; baggage car 708 was almost upright with the front end resting on the gulch bed and the rear end on the east abutment. The coach and sleeping car were not derailed. The employees killed were the engineman and fireman.

Summary of evidence

Conductor Miller stated that before leaving Montrose the air brakes were tested and functioned properly. He conversed with Engineman Freeman who seemed to be in normal condition. He noticed that the headlight was burning when the train left Delta. He did not feel an application of the air brakes prior to the accident, which occurred at 7:59 p.m. He inspected the wreckage and found that the bridge had been entirely burned. The brush had burned for some 300 yards to the right of the track, but not at all on the left side. On his eastward trip that morning he noticed that the bridge was all right. The bridges in this district are kept free from brush and woods, and are in good shape. He did not notice any campers or other persons in the vicinity of the bridge on his morning trip. The statements of Brakeman Lampert and Express Messenger Filbert corroborated that of Conductor Miller.

Roadmaster Rask stated that he last inspected this line on April 15th, on a motor car. He found the bridge involved to be clean and free from brush and weeds, which had been removed for about 25 feet on both sides of the bridge. Arriving at the scene of the accident at 8:10 a.m. April 27, he made an inspection of the wreckage and found that except for a few bulkheads at the end, the entire bridge had burned. On the north side of the bridge the brush had burned over an area about 50 feet wide and 200 feet long, and on the south side there was a burned area about 30 feet wide and 50 feet long. In his opinion these two burned spots were caused by back-fire from the bridge, which was of untreated wooden construction, with the exception of two piles which were treated. The stringers were protected with tin, but the ties were not.

Section Foreman Thompson stated that on Saturday, April 24th he worked 2 miles east of the bridge and crossed it at 4:30 p.m. at which time it was all right. There were no weeds or other debris under the bridge and they had been cleared away for a distance of about 15 feet. The brush in this vicinity is small and not very inflammable. There were no water barrels on the bridge for fire protection, but there was water under the bridge. On the day of the accident he was working about 9 miles from the scene of the accident and it was quite windy, especially about noon. His gang consists of three men, in addition to himself, who maintain 18 miles of track, and he patrols his section about every other day.

Roundhouse Foreman Gates stated engine 777 was inspected at Montrose on April 26th, on its arrival from Grand Junction, and as far as he knows it was not throwing or dropping fire, and the headlight was in good condition when the engine departed that night on Train No. 319.

Boilermaker Clark stated that he inspected engine 777 at Montrose at 11 a.m. April 26th, and the front end was all right, and would pass fire inspection. The ashpan was in good condition and was closed tightly. The air brakes and headlight were functioning properly.

Inspection at the scene of accident by the Commission's inspectors disclosed conditions as previously described.

Engine 777 uses coal for fuel and is equipped with a slide dump ashpan. The top of the pan fits closely to the mud ring except for a space at the rear some 2 feet long from which the emission of coals would have been possible.

Discussion

The investigation disclosed that the train involved in this accident apparently came upon the burned bridge without warning as there was no application of the brakes prior to the derailment, ~~which destroyed the bridge.~~ The cause of the fire was not determined. The investigation developed no indication that the bridge had been maliciously destroyed, and no camp fires or burning brush had been noticed. The fact that the ties of the bridge were not protected by metallic covering suggests that hot cinders from the ashpan may have been responsible for fire, but there is evidence that the smoke box and ashpan of the engine involved were in good condition.

East-bound Train No. 320, with the same engine and crew, the last train to pass over the bridge, crossed it at 7:40 a.m. on the day of the accident and at that time it was in good condition.

Traffic on this line averages only three trains daily and the track is patrolled only every other day.

Conclusions

This accident was caused by a burned-out bridge.

Respectfully submitted,

W. J. PATTERSON,
Director.