

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE
LEHIGH VALLEY RAILROAD NEAR OWEGO, N. Y., ON MAY
3, 1929.

August 2, 1929.

To the Commission:

On May 3, 1929, there was a derailment of a freight train on the Lehigh Valley Railroad near Owego, N. Y., which resulted in the death of two employees and the injury of three employees.

Location and Method of Operation

This accident occurred on that part of the Auburn Division extending between North Fair Haven, N. Y., and Sayre, Pa., a distance of 116.9 miles which is a single-track line over which trains are operated by time-table, train orders, and a manual block-signal system. The accident occurred at a point approximately 2 miles east of Owego, approaching this point from the west the track is tangent for a distance of more than 1 mile, and for some distance beyond the point of accident. The grade is 0.72 per cent descending for eastbound trains at the point of the accident.

The track is laid with 90-pound rails, 33 feet in length, with an average of 20 hardwood ties to the rail-length, and is ballasted with about 2 feet of cinders and ashes upon a subgrade of gravel. There is a bridge, which spans what is known as Young's Creek, located about 400 feet west of the point of accident.

The weather was cloudy at the time of the accident, which occurred at about 2.25 a.m.

Description

Eastbound freight train extra 1803 consisted of 65 cars and a caboose, hauled by engines 1803 and 710, and was in charge of Conductor Quinn and Enginemen Thrall and Flummerfelt. This train left Owego at 2.15 a.m., according to the conductor's record, and shortly after passing over the bridge at Young's Creek it was derailed while traveling at a speed estimated to have been between 18 and 30 miles per hour.

Engine 1803 came to rest on its right side to the left of the main track; its tender was to the right of the

engine in a reversed position.

Engine 710 was derailed but remained upright and stopped to the right of the track while its tender came to rest partly overturned and to the rear of engine 1803. The first four cars in the train was also derailed but none of the other cars in the train were derailed or damaged. The employees killed were the engineman and fireman of engine 1803; the employees injured were the head brakeman, who was riding on engine 1803, and the engineman and fireman of engine 710.

Summary of evidence

Head Brakeman Stevens stated that heavy showers were encountered between Auburn and Owego but it did not rain between the latter point and the point of accident. He was riding on the left side of the leading engine leaning out of the window looking ahead, and a good view could be had as the headlight was burning brightly, but he received no warning of danger nor did he notice any indication of high water or a washout, the track appearing to be in its proper place. The engine suddenly lurched to one side and turned over into the water; he thought the engineman shut off steam just as the derailment occurred and estimated the speed at the time of the accident to have been between 25 and 30 miles per hour.

Engineman Flummerfelt, of the second engine, stated that the crew received a message at Auburn to run carefully at points where washouts or land slides might occur, and that one stop was made at Ensenore, 55 miles west of Owego, account of high water. It rained heavily at intermittent points until his train arrived at Owego, but only a light rain was falling when the train left that point. He noticed a small pool of water a short distance west of Young's Creek but did not see any more water along the track after passing that point, while he could not remember of having ever seen high water east of the bridge. His first intimation of anything unusual was when the derailment occurred and at that time the speed of the train was not more than 18 or 20 miles per hour, which he considered a safe speed in that locality.

The statements of Fireman Sullivan, of the second engine, practically corroborated those of engineman Flummerfelt as to the weather conditions. He said that the engineman of the leading engine told him that a message had been received at Auburn to lookout for washouts but he did not see this message. While at Freeburg the leading engineman instructed him to inform his engineman that on account of the heavy rain the train would be

operated at a low rate of speed after passing over the hill at North Harford. He estimated that his train was not exceeding a speed of 20 miles per hour at the time of the accident. He did not look out after leaving Owego and therefore saw no indications of high water, also they usually do not look for trouble until their train reaches Tioga Narrows, located some distance east of Young's Creek where the trouble is more likely to be from landslides than from high water.

The statements of Conductor Quinn were to the effect that in addition to receiving the message at Auburn regarding weather conditions he communicated with the dispatcher by telephone from Freeburg and the dispatcher informed him that the operator at Owego reported heavy rainfall in that vicinity, which information Conductor Quinn gave to both enginemen. He said his train was traveling at a speed of 18 or 20 miles per hour at the time of the accident. The statements of Brakeman Wride and Flagman Shutter brought out nothing of importance.

Engineman Vanderhoff, of eastbound extra 746, which left Owego at 9.30 p.m., May 2, stated that he encountered heavy rain all the way to Sayre. There was water in Young's Creek and also on the lowland adjacent to the track in that vicinity, but it did not appear to be any more than usual during a stormy season. There was no water running over the track and no indications of the roadbed washing out.

Section Foreman Stella, in charge of the section on which the accident occurred, stated that on the morning of May 2 he worked on the track about one-fourth mile east of Young's Creek until about 9 a.m., and then proceeded to Owego, and when he passed over the bridge he noticed there was very little water in the stream and that the channel under the bridge was open. Between 6 and 7 p.m. there was a heavy rainfall at Owego which lasted about 20 minutes and then it started raining lightly which continued until he retired at about 8.30 p.m. He was awakened by an alarm of fire at 10 p.m. and after returning from the fire he again retired, at about 10.30 p.m., at which time it was still raining lightly. As there was no indication of high water he did not consider it necessary to have the track patrolled.

Supervisor of Tracks Christianson stated that he arrived at the scene of accident at 7 a.m., May 3, and after examining the surrounding territory he formed the opinion that high water coming down Young's Creek had broken through the bank at a curve in the creek about 300 feet south of the right of way, cutting a channel to the east of the original channel and forming a pocket of water at the fall along the

right of way, and that the pressure created a current or swirl which gradually ate away the base of the fill until it finally washed a channel under the track, leaving the track suspended. At the time of his examination there was water coming down the original channel and passing through under the bridge and also through the new channel and out through the washout. He found a small tree lodged under the bridge but as there was no indication of high water at this point except in the middle of the channel where the water had splashed against the bridge, he concluded that the bridge had nothing to do with causing the water to break through the embankment south of that point. He described Young's Creek as a mountain stream originating 6 or 7 miles south of the right of way. An examination of this stream from its point of origin to about 3 miles from the right of way showed that small trees had been uprooted and brush washed from its banks, indicating that a cloudburst had occurred near the source of the stream, and the rush of water apparently caused the bank to give way and form a new channel at the bend in the creek south of the bridge. Supervisor Christiansen further stated that he had worked as section laborer, foreman, and supervisor on the Auburn Division since 1885, and during that time he had never known of trouble from high water in the vicinity of the point of accident.

Supervisor of Bridges and Buildings Hofacker stated that he had been employed in that capacity on the Auburn Division for the past 20 years and to his knowledge there never has been any difficulty with high water at Young's Creek bridge.

Farmers Young and Vangelder, who own the land on each side of the embankment where the washout occurred, volunteered the information that the stream involved has given them trouble for years. After a heavy rainstorm the water would bring down from the mountain loose gravel and roots of small trees, which would collect in the channel in the low land and build up the bed of the stream to about even with the land, causing the water to break through or overflow the banks and frequently causing new channels to form. They would repair the banks after such storms but this only caused the bank to break or overflow at some other point when the water again became high.

Conclusions

This accident was caused by a washout.

Young's Creek is a stream that originated in the hills about 6 or 7 miles south of the right of way and passes under the track approximately 400 feet west of the point of accident. A definite report of the weather conditions in that locality could not be obtained, but apparently an unusual amount of rain fell at intervals between 7 p.m. and midnight of May 2 in the territory south and east of Owego, causing the creek to swell to such an extent that it broke through its embankment about 300 feet south of the right of way and formed a new channel which carried the water against the roadbed, finally washing the embankment out from under the track for a distance of 70 feet and to a depth of 12 feet, and it appeared that the track was left suspended across this gap until the train involved encountered it.

Some of the railroad officials indicated that no trouble from high water had been experienced in this vicinity for the past 40 years, but information obtained from the farmers who own the land through which the creek flows was to the effect that they have had trouble at various times due to the stream becoming clogged with debris causing it to break through or overflow its banks and flood the surrounding lowlands, and their statements seem to be supported by the conditions existing after the storm of May 2. In view of this situation some action should be taken to keep the channel of this stream free from obstructions in order to prevent a recurrence of an accident of a similar nature.

The employees involved were experienced men and at the time of the accident they had not been on duty contrary to any of the provisions of the hours of service law.

Respectfully submitted,

W. P. BORLAND,

Director.