

## INTERSTATE COMMERCE COMMISSION.

## REPORT OF THE CHIEF OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE GREAT NORTHERN RAILWAY AT ANDOVER, MINN., ON NOVEMBER 26, 1922.

December 30, 1922.

## To the Commission.

On November 26, 1922, there was a derailment of a freight train on the Great Northern Railway at Andover, Minn., resulting in the death of two employees, and the injury of one employee.

## Location and method of operation.

This accident occurred on the Second Subdivision of the Mesabi Division, extending between Sandstone and Coon Creek Junction, Minn., a distance of 73.58 miles, in the vicinity of the point of accident this is a single-track line over which trains are operated by time-table and train orders, no block signal system being in use. The derailment occurred at the west switch of the passing track at Andover; approaching the point of accident from the west the track is tangent, and the grade is level for a considerable distance. The switch-stand is located on the engineer's side of an eastbound train, and the switch is a facing-point switch for eastbound trains, leading off the main track to the south. The single-blade target has a white disk on a red background. The weather was cloudy at the time of the accident, which occurred at about 10.53 a. m.

## Description.

Eastbound freight train extra 3068 consisted of 59 cars and a caboose, hauled by engine 3068, and was in charge of Conductor Nickerson and Engineman Searls. This train passed Coon Creek Junction, 5.68 miles from Andover, at 10.33 a. m., and was derailed at the west switch of the passing track at Andover while traveling at a speed estimated to have been about 20 miles an hour.

Engine 3068, together with its tender, came to rest between the main track and siding, leaning toward the left, at a point about 215 feet east of the switch, badly damaged. The first 10 cars were piled up in a space of 100 feet, 7 of them being demolished, the eleventh car was derailed but not materially damaged, while the twelfth car remained on the track with the south wheels of the rear truck standing on the south switch points. The employees killed were the fireman and a brakeman.

## Summary of evidence.

The first intimation members of the train crew had of anything wrong was when the accident occurred. Conductor Nickerson immediately went forward and found that the switchpoints were lined for the main track with the rear wheels of a car standing on the south point. The switch-lock was suspended from the chain, unlocked, while the switch-lever was out of the socket and rested on the collar, the left edge being practically flush with the right side of the socket. On account of injuries sustained, no statement could be obtained from the engineman at the time of this investigation.

An examination of the switch and its appurtenances disclosed that they were in good condition, with the exception of the switch-lock. The switch and switch-points operated normally, and the switch-lever when seated in the socket could not escape without assistance, even though it was not secured by a switch lock. The switch-lock was of an old type, and did not operate easily, either in locking or unlocking it.

The last train to pass the point of accident departed from Coon Creek Junction at 10.08 a. m., 25 minutes ahead of extra 3068, and nothing unusual was noticed in the vicinity of Andover by the crew of that train.

On the day prior to the accident, about 5.00 p.m. a westbound train in charge of Conductor Nickerson used this switch. Flagman Stuart, who closed the switch on this occasion, stated the lock was difficult to operate and in order to make sure that it was fastened securely he pulled on the chain after the lock was snapped. Conductor Nickerson stated he was standing on the rear platform of the caboose watching Flagman Stuart on this occasion, and is positive the switch-lock was properly secured. This is the last known use of this switch.

An eleven year old boy, upon being questioned, admitted he found the switch-lock unlocked on the morning of the accident, and lifted the lever from the socket but lacked the strength to replace it, therefore, left it in that position.

## Conclusions.

This accident was caused by a cocked or partly opened switch, due to mischievous tampering.

Whether this switch-lock was left open by Flagman Stuart, on the day prior to the accident, or subsequently by some unknown person could not be definitely ascertained.

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However, tests proved that it did not operate properly, it not always locking securely when given the normal pressure usually applied to switch-locks in closing them.

Apparently the engine and forward tender truck headed in at the passing track, while the rear tender truck and first 12 cars followed the main track, due to the switch-lever not being in the socket, thereby permitting the switch-points to shift.

All of the employees involved were experienced men. At the time of the accident none of them had been on duty in violation of any of the provisions of the hours of service law.

Respectfully submitted,

W. P. BORLAND,

Chief, Bureau of Safety.