### INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE PERE MARQUETTE RAILROAD AT GLEN LORD, MICH., ON MAY 28, 1929.

September 30, 1929.

To the Commission.

On May 28, 1929, there was a derailment of a mixed train on the Pere Tarquette Railroad at Glen Lord, Mich., resulting in the death of one employee and the injury of one employee.

# Location and method of operation

This accident occurred on that part of the Subdivision No. 1 of the Chicago-Petoskey Division, extending between New Buffalo and Grand Rapids, Mich.,
a distance of 114.86 miles; in the vicinity of the point
of accident this is a single-track line over which trains
are operated by time-table, train orders, and an automatic plock-signal system. The accident occurred at
the north switch of the passing track at Glen Lord,
approaching this switch from the north the track is
tangent for 4,824 feet, this tangent continuing for a
considerable distance south of the passing track.
The grade is practically level.

The passing track is 1,204 feet in length and parallels the main track on the east; the turnout is a No. 10, the switch being a facing-point switch for southbound trains. The switch-stard is located on the east side of the main track, and has a yellow banner or semaphore target, measuring 2 feet by 5 inches, which is located 8 feet 2 inches above the base of the stand, this banner assumes the horizontal position when the switch is open, and 45° above the horizontal when the switch is closed.

The automatic block signals are of the three-position upper-quadrant type. The last southbound signal is located 3,573 feet north of the switch involved, near the south end of the passing track at Vine, while the last northbound signal is located 8,551 feet south of the switch involved, at the north end of the passing track at Stevensville.

In the vicinity of the point of accident the main track is laid with 110-pound rails, 39 feet in length, with an average of 21 oak ties to the rail-length, and is ballasted with gravel to a depth of about 12 inches, the track is well maintained.

The weather was clear and the sun was shining at the time of the accident, which occurred at about 6.02 p.m.

## Description

Southbound first-class mixed train No. 16 consisted of one express car, two baggage cars, one coach and a caboose, in the order named, hauled by engine 1022, and was in charge of Conductor Hepfinger and Engineman Haskins. The third car was of all-steel construction, the fourth car of wooden construction, and the remainder were of steel-underframe construction. This train left Benton Harbor, the last open office, 6.05 miles north of Vine, at 5.35 p.m., according to the train sheet, and upon arrival at Vine was brought to a stop in obedience to the stop indication displayed by the automatic block-A back-up movement was then made as far as the telephone booth, where Conductor Hepfinger reported to the dispatcher that the block was in the stop position. The dispatcher issued a caution card to the conductor granting permission to proceed to the next signal under control expecting to find an open switch or the track broken or obstructed, and the conductor personally delivered it to Engineman Haskins. The train then proceeded, and was derailed at the north switch of the passing track at Glen Lord while traveling at a speed estimated to have been about 20 miles per hour.

At the time of the accident there were some freight cars standing on the siding, at a point about 240 feet south of the switch, and engine 1022, after being derailed, struck these cars and came to rest between the passing track and main track leaning sharply toward the right. The tender and first car were derailed, but remained upright; the forward truck of the second car was also derailed. Four of the freight cars standing on the siding were derailed and damaged, the car at the extreme north end being practically demolished. The employee killed was the engineman of train No. 16, while the employee injured was the fireman of that train.

### Summary of evidence

Fireman Damaska, of train No. 16, stated that after the train backed up to the telephone booth at Vine, Conductor Hepfinger went into the booth and then came to the engine and delivered a caution card to Engineman Haskins; the engineman looked at the card and then handed it to the fireman. According to Fireman Damaska, the conductor said that the block was out of order and started back toward the rear end of the train. train then departed and a speed of about 20 miles per hour was attained approaching Glen Lord. Fireman Damaska was sitting on his seat box looking ahead at the rail, watching for an obstruction on the track or a piece of missing rail, and did not notice the position of the switch target. On nearing the switch he looked ahead toward the grade crossing a few hundred feet beyond the switch, a bus having come to a stop near the crossing, and the first he knew of anything wrong was when the lead, truck of the engine headed in at the switch, whereupon he shouted a warning of danger and at about the same time the engineman applied the air brakes. After the accident he went back and saw the switch lock lying on the north head-block tie, unlocked, and the ball of the switch-lever thrown in the open position. Damaska further stated that he had not been paying particular attention to the manner in which the train was being handled, nor had he noticed whether the whistle was sounded after leaving Vine, as he was looking ahead at the rail, which he could see plainly for a couple of car-lengths, but in his estimation the speed of the train was such that it could not have been brought to a stop within that distance had he noticed anything wrong.

Conductor Hepfinger, of train No. 16, stated that at the time his train backed up to the telephone booth nothing was seen of a train between that point and Stevensville, located 2.9 miles south of Vine. receiving the caution card from the dispatcher and personally delivering it to the engineman the train departed, and Conductor Hepfinger boarded the baggage car and rode in that car until the accident occurred. After the accident he inspected the switch and came to the conclusion that it had been left open, and then had been run through by a northbound train. Conductor Hepfinger was of the opinion that the engineman operated the train with caution after passing the stop indication displayed by the signal at Vine, estimating the speed to have been not more than 20 wiles per hour and saying that it was broad daylight, with the sun shining brightly and the track straight. He could not account for the farlure of the engineman to notice the indication dis-

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played by the switch-banner, unless it was that he was not looking at it. He felt the air brakes take effect about the time that the cars standing on the siding were struck, and said that just after Engineman Haskins was released from the wreckage the engineman said to him, "Hep, I never saw that switch until I nit it."

Statements of Brakeman Covert and Baggageman Miller, of train No. 16, were to the effect that the speed was not over 20 miles per hour and that the air brakes were applied immediately prior to the impact. After the accident they examined the switch and found it to be open, with the switch lock unlocked and lying on the switch-tie, a bridle rod bent, and the switch points badly battered.

Track Supervisor Meier arrived at the scene of the accident within less than one hour after its occurrence and his examination of the switch at that time disclosed it to be open and latched; the switch-lock was unlocked and lying on the end of the head-block tie. ing rod was bent downward at a point about 2 feet from the rail and the No. 1 head rol had also been bent, with both of the switch points slightly rolled at their top edges, indicating that the switch had been run through. He did not see any indication of the switch or its appurtenances having been tampered with, and said that so far as he knew the signals in this vicinity were in proper working order on the day of the accident. Supervisor Meier further stated that his section crew passed over the track at Glen Lord, southbound, the switch being a facing-point switch for such a movement, about three hours prior to the accident and at that time nothing wrong was noticed.

Trainmaster Gondor arrived at the scene of the accident several nours after its occurrence and on examining the switch he found conditions to be as described heretofore. He thought that the switch had been run through previously by some northbound train, and was of the opinion, judging from the condition of the derailed equipment, that the speed of train No. 16 was about 35 miles per hour at the time of the accident.

The last time the switch was used prior to the accident was by the crew of the local switch run, extra 902, at about 4.40 p.m., Glen Lord being the turn-around point of this train prior to its return movement southward. Conductor Kubberness, of extra 902, stated that after some cars had been moved in on the siding at the north switch, he personally closed and locked the switch and it was not used by any other member of his crew, and on departing southward he noticed that the switch still

was in the clear position. After the arrival of his train at Stevensville it went in on the passing track to meet northbound extra 1004, at about 5.20 p.m. Extra 1004 then proceeded toward Glen Lord and passed the north switch at that point at about 5.25 p.m., at a speed estimated by the crew to have been between 25 and 35 miles per hour. The crew did not observe the position of the switch target nor did they notice anything unusual at the time their train passed over the switch, and they also stated that the northbound signal at Stevensville was clear when they departed from that point, this latter statement being verified by members of the crew of extra 902.

### Conclusions

This accident was caused by the damaged condition of a facing-point switch, which had been run through by a train moving in the opposite direction.

Examination of the switch immediately after the occurrence of the accident showed that it had been left open and that the switch lock was lying on one of the head-block tics, and the condition of the switch points, connecting rod and bridle rod, indicated that the switch had been run through py some northbound train; there was no indication of Halicious tampering. Undoubtedly it was this condition of the switch which caused the signal at Vine to be in the stop position when train No. 16 approached it, and resulted finally in the issuance of a clearance card authorizing the train to proceed past the signal with caution expecting to find a switch open or For some reason which the track broken or obstructed. is not entirely clear, the engine crew apparently failed to notice anything wrong until about the time the engine reached the switch, and it was then too late to avert the accident. The results of the accident, however, probably would have been much less serious in their nature had the train been operated through this block at a low rate of speed; the condition of the wreckage, and its extent, indicated that the estimate of 35 miles per hour made by the trainmister was such more nearly correct than the estimate of 20 miles per hour made by the crew.

The conductor of extra 902 was the last person to have occasion to use the switch and he was positive he closed and locked it, while the crew of extra 1004 did not notice anything inusual when they passed over the switch shortly afterwards. Unless some unknown person was in possession of a switch key and opened the switch after the departure of extra 902, it would appear that this was the crew which left the switch open. In either

event, however, it is certain that extra 1004 ran through the switch, there having been no other train movement over this portion of the line between the departure of extra 902 and the time of the accident.

All of the employees involved were experienced men and at the time of the accident none of them had been on duty contrary to any of the provisions of the hours of service law.

Respectfully submitted,

W. P. BORLAND,

Director.