## INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE MICHIGAN CENTRAL RAILROAD AT DOWAGIAC, MICHIGAN, ON MAY 14, 1929.

September 24, 1929.

To the Commission:

On May 14, 1929, there was a derailment of a passenger train as the result of a collision with a motor truck at a grade crossing on the Michigan Central Railroad at Dowagiac, Michigan, resulting in the death of the driver of the truck and the injury of four railroad employees and one person riding on the motor truck.

Location and method of operation

This accident occurred on that part of the Middle Division extending between Kalamazoo and Niles, Mich., a distance of 48.53 miles, in the vicinity of the point of accident this is a double-track line over which trains are operated by time-table, train orders, and an automatic block-signal and train-control system. The accident occurred at Mechanic Street, which crosses the tracks at right angles at a point 2,070 feet east of the station. The railroad track is tangent for a considerable distance in each direction from the crossing; the grade is slightly undulating, being 0.37 per cent descending for westbound trains at the crossing.

At the point where Mechanic Street crosses the tracks there is a stub-end siding which parallels the main tracks on the north. At a point just south of the main tracks and on the west side of the street which is only 15 feet wide, there is a wig-wag signal. The mast of this signal is 12 feet in height; an arm projects  $6\frac{1}{2}$  feet eastward from the mast, and the wig-wag signal, which is painted red and has a red light displayed in the center, is suspended from this arm and is 9 feet above the ground. There is also a warning bell on the mast which rings as the wig-wag signal swings back and

forth; the signal and bell are manually controlled from the tower at Division Street, located approximately 800 feet west of Mechanic Street, the crossing watchman at that point receiving advance warning of the approach of trains by means of an annunciator in the tower.

From the driver's seat of the motor truck, when traveling southward on Mechanic Street, the view of an approaching westbound train is obstructed by a large two-story building, located just north of the siding and on the east side of the street, in this instance the view was still further restricted by two box cars that stood on the siding at a point about 75 feet east of the street crossing. This condition, however, in no way affected the driver's view of the wig-wag signal.

The weather was clear at the time of the accident, which occurred at about 2.08 p.m.

## Description

Westbound passenger train No. 43 consisted of one combination car, one coach and two Pullman parlor cars, all of steel construction, hauled by engine 8319, of the 4-6-2-type, and was in charge of Conductor Maher, and Engineman Gasper. This train passed Lewton, the last open office, 18.92 miles east of Dowagiac, at 1.47 p.m., two minutes late, and struck the automobile truck on the crossing at Mechanic Street while traveling at a speed variously estimated to have been between 40 and 70 miles per hour.

The vehicle involved in this accident was a GMC 3-ton motor truck, owned by the G.E. Bursley Grocery Co., and was being operated by George Wenzel. The body of the truck consisted of an enclosed cab and platform, arranged for the handling of groceries in bulk. This truck was proceeding southward on Mechanic Street and apparently made a stop for the crossing. It then started across the tracks and was moving at a speed estimated to have been between 5 and 8 miles per hour when it was struck by train No. 43.

The motor truck was completely demolished, parts of it being strewn along the track for several hundred feet; the truck frame and body both came to rest north of the tracks and west of the crossing. Apparently one

pair of engine-truck wheels of engine 8319 left the track at a point 22 feet west of the center line of the street, as a flange mark appeared on the ties about 11 inches from the gauge side of the south rail, with a corresponding mark on the outside of the north rail, and these marks continued for a distance of 687 feet to a facing-point switch that leads off the westbound main track to the north. The entire train was derailed at this point, with the exception of the last pair of wheels in the rear truck of the last car. Engine 8319 and its tender became detached from the cars; the engine came to rest on its left side across both main tracks, but the tender remained upright, as did the cars, which remained coupled and in line with the track. The railroad employees injured were the engineman, fireman, conductor, and baggageman.

## Summary of evidence

Engineman Gasper stated that on approaching Dowagiac the engine bell was ringing and that he sounded the crossing whistle signal. The speed of his train was about 50 miles per hour, or better, on nearing Mechanic Street and he said that he was leaning out of the side window, looking ahead, when he saw the truck approaching the crossing from the right. Realizing that an accident was inevitable, he applied the air brakes in emergency and shut off steam, and then stood up in preparation for the crash. Engineman Gasper said that both men on the truck appeared to be looking towards the train and that the driver apparently was endeavoring to stop or reverse the truck, but at the last glimpse the engineman had of the truck it was still moving. He said that if the truck stopped for the crossing it did so before he saw it, as it was moving from the time he first saw it until the accident occurred, and while it was not moving at a high rate of speed yet it was moving at such a rate that he knew the driver could not stop in time to avert the accident. The statements of Fireman Groothuis corroborated in substance those of Engineman Gasper; the fireman was riging on his seat box looking ahead when approaching Mechanic Street.

Conductor Maher, Flagman Kildea and Baggageman O'Dell gave testimony to the effect that the air brakes had been tested and worked properly and that the engine

whistle was sounded for the various crossings en route; they were unavare of anything wrong until the accident occurred. Fligman Kilder estimated the speed of his train to have been about 40 miles per hour, when approaching Dowagiac. None of the members of the engine or train crew was in position to state thether the crossing-protection appliances were working as intended, either prior to or following the accident.

Crossing Natchman Bebelwhymer, on duty at Division Street tower, stated that as soon as an approaching train strikes the annunciator in his tower he immediately turns on the switch that places in operation the crossing-protection appliances at Mechanic Street, he also lowers the gates at Division Street. On this occasion train No. 43 was more than one-half mile from Mechanic Street then he turned on the switch and he knew the crossing-protection appliances at Mechanic Street were working properly before train No. 43 reached the crossing as he could see the mig-mag signal and hear the crossing bell ringing. Mr. Bebelwhymer said that he saw the truck approach the crossing from the north at a speed not to exceed 5 miles per hour and that the driver apparently became confused and brought the truck to a stop on the crossing, where it stood until the train struck it.

G. A. Andrews, Agent, Sinclair Refining Co., stated that he was on a tank car about 330 feet from the crossing and witnessed the accident. According to his statements the truck stopped before reaching the tracks, about 20 feet north of the slaing, apparently for the purpose of ascertaining whether o train was approaching, after stopping the truck started shead, at a low rate of speed, probably either in first or second gear, the men on the truck looking first to the west and then to the east. At the time they looked to the east the front wheels of the truck were on the westbound main track and they both saw the train approaching and raised up, the speed of the truck was then increased, just before the accident occurred. Mr. Andrews said that he was on the side of the truck away from the driver, but that he could see both men on the truck and that they were bending over, as if they were looking. It was the crossing-protection appliances in operation that called Mr. Andrews! attention to the fact that a train was

approaching, and as was customary when working on a tank car he disconnected the tank and placed the cover on the dome in order to preclude the possibility of hot cinders falling into the tank as the engine passed. Mr. Andrews said that he makesit a practice always to look up as soon as the crossing bell and wig-wag signal start to operate and that on this occasion he knew that the crossing-protection appliances were in operation before the engine of train No. 43 reached the crossing at Telegraph Street, located about 700 feet east of M. chanic Street. He estimated the speed of train No. 43 to have been between 60 and 70 miles per hour when approaching the crossing but gid not recall having heard the engine bell ringing or the whistle sounded, although he thought he might not have noticed them. Andrews further stated that in his opinion had the men on the truck looked toward the east first, instead of toward the west, they could have seen the approaching train in time to stop before reaching the westbound main track, or had the driver reversed the truck instead of going ahead he could have backed off the track in time to have averted the accident.

Mrs. Mabel Bailey, a resident, stated that she was at the crossing at Telegraph Street as train No. 43 approached, and heard the crossing signal sounded on the engine whistle and the engine bell ringing. The crossing-protection bell at Mechanic Street was ringing before the train reached Telegraph Street, but she did not notice the wig-wag signal, which is so arranged as to work in conjunction with the bell. Mrs. Bailey could not say just how far away the train was when she first heard the crossing bell ringing at Mechanic Street.

Mr. C.F. Hopkins, a passenger on train No. 43, in a letter acressed to one of the officials of the rail-road, stated that the wig-wag signal and crossing-protection bell were working properly immediately after the accident and continued for about 15 minutes thereafter, until disconnected by some railroad employee.

The driver of the truck, George Wenzel, 19 years of age, had been in the employ of the grocery company for about one and one-half years and had the reputation of being a sober and industrious young man, of good

habits. The other person riding on the truck at the time of the accident was seriously injured, to such an extent that it was impossible to interrogate him.

## Conclusions

This accident was caused by the driver of an automobile truck proceeding upon a railroad crossing at grade directly in front of an approaching train.

The evidence indicated that the passenger train was approaching the crossing at a high rate of speed and apparently the engine whistle had been sounded and the engine bell was ringing. It also appeared that the crossing-protection appliances were in operation before train No. 43 reached the crossing and that they were operating at the time the automobile truck made the stop just north of the crossing. The truck then started over the crossing, in either first or second gear, with the two men on the truck looking first to the west and then to the east, but by the time they saw the approaching train it was too late to avert the accident.

There was nothing to prove that the watchman did not throw the switch controlling the wig-wag and bell in ample time to give warning of the approach of a train, but should anything happen to delay the taking of such action by this watchman, who also handles the gate and bell at Division Street, it would result in the creation of a very dangerous situation. The traffic density averaged 47 trains daily for the 30 days prior to the accident, and it is a question if more certain protection would not be provided by the automatic operation of wig-wag and bells.

The railroad employees involved had been on duty less than 1 hour and 45 minutes prior to the accident, previous to which they had been off duty more than 15 hours.

Respectfully submitted,

W.P. BORLAND,
Director.