

IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE
WABASH RAILWAY AT MOULTON, IOWA, ON FEBRUARY 1, 1921.

March 22, 1921.

On February 1, 1921, there was a yard collision between two freight trains on the Wabash Railway at Moulton, Iowa, which resulted in the death of 2 live stock caretakers and the injury of 1 employee. After investigation of this accident the Chief of the Bureau of Safety reports as follows:

Location.

This accident occurred in the yard at Moulton. At this point only single-track line leads to Des Moines and another to Ottumwa. There are two yards, the line from Des Moines being between them. The east yard, in which this accident occurred, is in the angle formed by the intersection of the Des Moines and Ottumwa lines. Eastbound freight trains from Des Moines pass the passenger station, proceed to the intersection of the two lines, known as the main line switch, then back westward on the Ottumwa line, passing a switch leading to the coal chute incline, to a switch known as the Ottumwa wye switch, about 350 feet west of the main line switch, the train then backs through this wye, switch to the yard lead track. On this yard lead there are switches leading to the various yard tracks, that leading to yard track 1 being known as No. 1 switch; that leading to yard track 2 as No. 2 switch, etc. The accident occurred at No. 1 switch, which is about 75 feet from the Ottumwa wye switch. The weather was cloudy.

Description.

Eastbound freight train No. 96 on the Des Moines line consisted of 23 cars and a caboose, hauled by engine 862 and was in charge of Conductor McGriff and Engineman Kornegor. It passed the passenger station at Moulton, about 1,100 feet from the point of accident, at 7.30 p.m., stopped east of the main line switch, and was backing into the east yard at a speed estimated to have been from 8 to 12 miles an hour, intending to back in on yard track 2, when the rear end of the train entered yard track 1 and collided with engine 694, which was standing on that track.

Engine 694 was to handle train No. 96 east of Moulton and was in charge of Conductor Shiflett and Engineman Kappler. After doing some switching in connection with making up its train, engine 694 had been moved into clear on yard track 1 for the purpose of allowing incoming train No. 96 to back in on yard track 2. While standing at this point, with the headlight either dimmed or entirely extinguished, the engine was struck by the rear end of train No. 96.

The rear end of the caboose of train No. 96 was badly damaged, and the front end of engine 694 slightly damaged. With the exception of the rear truck of the caboose, none of the equipment in either train was derailed.

Summary of evidence.

When train No. 96 passed the passenger station, in which is located the yard office, Conductor McGriff got off, delivered his way bills to the outgoing conductor, and registered, leaving to other members of the crew the duty of

putting away the train, which was in accordance with the usual practice at this point. Trainmaster Newcomer was at the station at the time and called to Flagman Beggs that the train was to be put away on yard track 2, these instructions were fully understood by the flagman. Head Brakeman Bridal got off at the main line switch and lined it for the back-up movement into the yard as soon as the rear end of the train had cleared it, then transmitted to the engineman the back-up signal which he said was given by Flagman Beggs. Flagman Beggs had gotten off at the coal chute in order to line up the switches leading to yard track 2 and he said he met Head Brakeman Byrd of the outgoing crew and was told that the switches were already lined up, that he then started eastward to board the caboose of his train, passing the switches en route, boarded the rear platform, and was riding there handling the tail hose when he suddenly saw something in front of him; he said he then opened the valve to apply the air brakes in emergency and jumped. Flagman Beggs said he had not lined any of the switches; he was positive No. 2 switch was properly lined, and although he thought it possible that he might have overlooked No. 1 switch, he did not think he could be mistaken as to its position and said the switch points looked as if it were lined for the lead track.

Head Brakeman Byrd, of outgoing train No. 96, said that after engine 694 had backed into clear on yard track 1 he lined the switches, including No. 1 switch, and then gave a signal to the crew of incoming train No. 96 that the track

was clear for the back-up movement. He saw Flagman Beggs come under the coal chute and walk east on the lead track toward the caboose and called to him that yard track 2 was clear and the switches lined for movement to this track. He did not notice whether Flagman Beggs handled No. 1 switch, although he was within 20 feet of the switch. Fireman Adams, of engine 694, heard Conductor Sniflett tell Head Brakeman Byrd to line the switch for yard track 2 and when the brakeman went in that direction he supposed that he was going to do as instructed; he did not know whether the head brakeman threw the switch. According to the fireman's statement, Head Brakeman Byrd went up on the coal chute incline and gave a back-up signal, and when he looked out to see the train as it passed his engine, he saw that it was backing in on yard track 1; the collision occurred almost immediately afterward.

The switch stand of No. 1 switch, which is on the engineman's side of an engine headed eastward, had been broken off below the target. It is about 4 feet in height and has no target or switch lamp. It had been installed a few days previously because the slight clearance between the former switch stand and the coal chute track made it dangerous for employees riding on the sides of cars. It is a Ramapo stand, operated by a lever which when fully raised disengages the shoulder from its socket and permits a free movement of the lever and the switch points. It is so constructed that when the lever is raised far enough to disengage the shoulder from its socket, and not thrown entirely over, the switch points will move to a position about $1\frac{1}{2}$ inches from either rail,

making it impossible for wheels to follow either switch point. Immediately after the occurrence of the accident, incoming train No. 96 was moved forward in order to permit the injured men to be removed from the wreckage, stopping clear of the switch point. When the switch was examined by several employees within about half an hour after the accident, it was found that the lever was out of the socket, about half way over, while the points were not lined for either track. Had the switch points been in this position when the train was backed over the switch the cars undoubtedly would have been derailed. Examination showed that the switch operated freely, and that when properly thrown the switch points fitted tightly against the rails; there were no marks of any kind to indicate that the switch had been split.

Conclusions.

This accident was caused by a switch being improperly set for the movement intended to be made.

It was not determined whether Head Brakeman Byrd failed to line the switch for the movement to yard track 2. Flagman Beggs, however, was responsible for the safe movement of his train through the switches and should have made certain that they were properly lined before the movement was made. The absence of a switch lamp from the stand of No. 1 switch, however, undoubtedly was the underlying reason for the occurrence of this accident. If at this point it is impracticable to use the ordinary form of switchstand, target and lamp, some other form of switch-operating device and sig-

nal should be used which would enable employees in the vicinity of this switch to note its position; had a device of this kind been used the accident undoubtedly would not have occurred, for it seems certain that it was lined for a movement to yard track 1 at the time of the accident.

The employees involved were experienced men, and none of them had been on duty in violation of the provisions of the hours of service law.