IN THE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE UNION PACIFIC RAILROAD AT COUNCIL BLUFFS, IOWA, ON FEBRUARY 8, 1929.

On February 8, 1929, there was a side collision between two light engines, coupled together, and a transfer train on the Union Pacific Railroad at Council Bluffs, Iowa, which resulted in the death of one employee.

Location and method of operation

This accident occurred on the Bridge Subdivision of the Nebraska Division; this subdivision is comprised of tracks between C. & N. W. Junction, Iowa, and Gilmore, Nebr., all of which are within yard limits. Train movements are governed by special rules contained in the time-table, supplemented by Consolidated Superintendent's Bulletin Orders. In the immediate vicinity of the point of accident there are five lead tracks which are designated, from north to south, No. 5 lead, No. 14 lead, hump yard lead, east yard lead, and west yard lead; these lead tracks are connected by crossovers. The accident occurred at the fouling-point of the crossover between the east yard lead and the west yard lead; approaching this point from the west on the west yard lead track there is a short tangent, followed by a compound curve to the right approximately 1,000 feet in length, the accident occurring on this curve at a point 252 feet from its western end where the curvature is 7 degrees 30'. The grade is level. The east switch of the crossover involved in this accident is located 116 feet east of the point of accident and is equipped with a high switch stand, located on the south side of the track. The view of this switch stand is unobscured from the south side of an engine approaching from the west. The balance of the crossover switches are equipped with low stands. There is a bulletin order in effect providing that a trainman will ride on the rear of the tender of a road engine backing up without cars while switching at stations or moving in yards.

The weather was clear and the temperature was about zero at the time of the accident, which occurred at about 10.10 p.m.

Description

The transfer train consisted of 46 cars, hauled by engines 1927 and 4444, running backwards, and was in charge of Foreman Roberts and Enginemen Katzenstein and McMullen. This train left West Yard on the west yard lead track and was moving westward at a speed of about 8 miles per hour, through the crossover to the east yard lead track and thence through the other crossovers to No. 5 lead track, when the 33rd car was struck by engines 2288 and 2204.

Engines 2288 and 2204, headed west, were in charge of Enginemen Coley and Lidgard. These engines departed from the roundhouse and were making a back-up movement eastward on the west yard lead track when they collided with the side of the transfer train while traveling at a speed estimated to have been from 4 to 8 miles per hour.

One of the cars was considerably damaged and two others slightly damaged, one truck being derailed, and a hole was torn in the rear end of the tender of engine 2204. The employee killed was a brakeman who was riding on the rear of the tender of that engine.

Summary of evidence

Engineman Lidgard, of engine 2204, stated that his engine was coupled behind engine 2288, with the air coupled up, when the movement was made from the roundhouse track, and after stopping at the tower some distance west of the point of accident a back-up movement was started eastward, with Head Brakeman Putnam riding on the sill step on the right side of the tender. The engineman was looking ahead watching for signals from the brakeman whose lantern was in full view at all times, while the brakeman was facing in the direction in which the engines were moving. The engines were moving at a speed of about 10 miles per hour but upon reaching a point about four or five oar-lengths from the two low crossover switch stands located between the west and east yard lead tracks he observed that they were displaying red indications, and as he saw the train pulling out of the yard these red indications showed him that a crossover movement was being made, as a result of which he reduced speed to about 8 miles per hour. Shortly afterwards the fireman shouted a warning, which was about the time the collision occurred, without any signal having been given by the brakeman. Engineman Lidgard said that steam was escaping from the steam hose at the rear of the tender but did not interfere with his vision as the wind was blowing it towards the fireman's side of the engine, and the fireman told him after the accident that he could not see the switch lamp any sooner than he did, due to steam. The engineman knew there was considerable steam on the fireman's side but did not tell him to shut it off, but merely to cut it down as much as possible. Engineman Lidgard further stated that he was familiar with the physical characteristics of the yard but hesitated about further reducing speed when approaching the crossover as he was relying on the brakeman to warn him of any danger, although the brakeman had informed him before leaving the roundhouse track that he was not very well acquainted with the various switches and requested the engineman to be certain that the engines moved over the proper tracks. In view of what occurred, however, he presumed that the brakeman was depending on him to make the proper movement through the yard.

Fireman Fry, of engine 2204, stated that he was watching ahead closely while the engines were moving on the west yard lead track at a speed of 7 or 8 miles per hour but that on account of steam escaping from the foot heater and tender hose the view was obstructed; he called this matter to the engineman's attention several times during the back-up movement when telling the engineman the position of various switches but did not shut the steam off as the instructions had been not to do so in order to keep them from freezing. He did not see that the switch lamp of the east switch of the crossover was displaying a red indication until his engine reached a point about 20 or 25 feet from the point of accident when he called to the engineman to stop, which the engineman attempted to do by applying the brakes and reversing the engine.

Engineman Coley, of engine 2288, stated that he brought the engines to a stop before the back-up movement was started by using the automatic brake and then cut out his brake valve. The movement was made at a speed of 7 to 8 miles per hour but this speed was reduced slightly about the time the engines entered the west yard lead track. He was constantly on the lookout and saw a train moving on No. 5 lead track but could not see beyond engine 2204 due to steam. He said that his engine was not working steam on the back-up movement and that he took no action to reduce the speed until he heard a whistle signal when he applied the independent engine brake just as the collision occurred; he was

of the impression that the brakeman, whom he had seen riding on the rear of engine 2204 would afford the proper protection. Engineman Coley estimated the speed of the engines at the time of the accident at 6 or 7 miles per hour.

The statements of Fireman Callison and Pilot Heath, of engine 2288, were to the effect that they both were looking eastward from the left cab window during the back-up movement but owing to steam escaping from the rear, of the leading engine they could not see beyond it. Fireman Callison estimated the speed at the time of the accident at 6 or 7 miles per hour and Pilot Heath at 4 or 5 miles per hour.

Engineman Katzenstein, of engine 1927, stated that his engine was on No. 5 lead track about 30 car-lengths from the crossover when the road engines started the back-up movement. He called to the crews that the crossover was being used but did not know whether they heard him; he did not sound a whistle signal.

Foreman Roberts, of the transfer train, stated that the speed of his train was about 6 or 7 miles per hour and that he was riding on the side of the 4th or 5th car from the rear end at the time of the accident. He saw two engines backing up down the lead and noticed someone on the rear of the leading engine give a back-up signal with his lantern when the engines were 15 or 20 car-lengths from the point of accident. This light remained in full view and no other signals were given. He said that he had been instructed by the yardmaster to protect crossover movements when practicable; several movements are made daily over these crossovers and the manner of protection against movements on the various lead tracks has been left entirely to him. In this particular case he did not issue any instructions about protection and did not know whether any protection was afforded.

The statements of Switchman Callahan, who was riding on the south side of about the 3rd car from the rear end of the transfer train, practically corroborated those of Foreman Roberts as to the person riding on the rear of the road engines giving a signal when the engines were some distance from the crossover; he did not see him give any other signals. Other members of the switching crew gave no testimony of consequence, and they verified Foremen Roberts' statement that the instructions were to provide protection when practicable, except that Switchman Callahan thought they applied to main line crossovers.

Conclusions

This accident was caused by the failure of Head Brakeman Putnam to maintain a proper lookout and notify Engineman Lidgard that the way was not clear and by the failure of Engineman Lidgard to bring the engines to a stop when he saw the red indication of the west crossover switch.

The rules provide that a brakeman is required to ride the rear end of a road engine backing up without cars while switching at stations or moving in yards. Head Brakeman Putnam complied with this rule but failed to signal the engineman that the track was occupied as the engines approached the point of accident; the reason for his failure to do so is not known as he was fatally injured in the accident.

The rules further provide that in this territory all trains and engines must move prepared to

stop unless the track is seen or known to be clear. After the back-up movement of the road engines was started, Engineman Lidgard observed a train moving in the opposite direction on one of the lead tracks and as his engine approached the point of accident he noticed that two of the crossover switch lamps. were displaying red indications, one of these being the west switch of the crossover involved in the accident. This was information to him that the crossover was being used, yet he failed to bring the engines to a stop but depended on the brakeman to afford the proper protection notwithstanding the fact that he had been informed by the brakeman that the latter was not familiar with the switches and to be sure that they used the right tracks.

The evidence indicated that steam was escaping from the foot heater, and also the steam hose at the rear of the tender of engine 2204, which interfered with the range of vision of the employees riding on the left side of the two engines, with the result that they did not discover that the east switch was lined for the crossover until just before the collision occurred. Engineman Lidgard knew that this condition existed and had been informed by his firemen that he could not see ahead but did nothing to correct it.

The testimony indicated that the question of providing for the safety of the various movements made through the crossovers in this vicinity had been discussed at safety meetings and that oral instructions had been issued to provide protection when practicable, the matter being left to the judgment of the crews. In this particular case no protection was afforded by the crew of the transfer; one of the switchmen was riding at the head end while the foreman and the other switchman were near the rear end.

Engineman Lidgard entered the service as fireman on February 24, 1916, and was promoted to engineman in October, 1919; Brakemen Putnam was employed on November 16, 1925. At the time of the accident they had not been on duty in violation of any of the provisions of the hours of service law.