In re Investigation of accident which occurred on the line of the Chicago, St. Paul, Minneapolis, & Omaha Railway at Mountain Lake, Minn., March 4, 1916.

April 15, 1916.

On March 4, 1916, there was a rear-end collision between two freight trains on the Chicago, St. Paul, Minneapolis, & Omeha Railway at Mountain Lake, Minneacte, which resulted in the death of 4 persons and the injury of 3 persons, all of whom were in charge of live stock and emigrant outfits. After investigation of this accident the Chief of the Division of Bafety reports as follows:

This part of the Chicago, St. Paul, Minneapolis & Cmaha Railway is a single track line. Trains are operated by time-table and train orders, train movements being protected by a manual block system under which trains may enter an occupied block after receiving a caution card. Under rule No. 98-C of the rules of the operating department the responsibility for collisions occurring at stations rests with the approaching train. This rule reads as follows:

"All regular freight trains, extras and work extras will pass into and through all stations, and will approach all isolated sidings, and all water tanks and coal sheds, with train under full control, expecting to find trains at such points. Speed must be reduced; engineers and trainmen must commone to get their train under control one mile from all such specified points, so that under no direumstances whatever shell it be possible for them to strike any train, car or engine that may be within the switches or yard

limits of any station, or that may be taking coal or water at any coal shed or water tank.

Entire responsibility for safety rests on approaching train."

The collision occurred at a point about 1,350 feet east of the west passing track switch at Mountain Lake, a short distance west of the station. Approaching from the west the track is straight between Bingham Lake and Mountain Lake, a distance of 6.2 miles. The grade is descending for a distance of 6,000 feet, varying from .25% to 1%, most of it being 1%. Then there is 1,200 feet of level track, and an escending grade of .75% for 1,200 feet, the top of this last grade being about 650 feet west of the station. The weather was clear.

(

Eastbound extra 314 consisted of 29 cars and a caboose, hauled by locomotive 314, end was in charge of Conductor Leverich and Engineman Hill. It left Bingham Lake at 1:27 a.m. and arrived at Mountain Lake at about 1:42 a.m., stopping with the caboose 1,360 feet east of the west passing track switch. There were several cars to be set out at this point and these cars were placed at the stock chute, which is on the western end of the house track nearly opposite where the caboose stood. The locomotive was returning to the train, after setting out the cars, when the rear end of the train was struck by eastbound train No. 20.

Restbound fast freight train No. 20 consisted of 25 cars and a caboose, hauled by locomotive 378, and was in

charge of Conductor Hart and Engineers Peterson. At Bingham Lake the engine crew received a train order that westbound passenger train No. 11 would wait at Butterfield, 7.3 miles beyond Mountain Lake, until 7:35 a.m. for train No. 20, and also a caution card showing that the block was occupied by extra 114, and that train had left Singham Lake at 1:27 a.m. The rear brakeman, however, missed the hoop, holding the order and caution card, and the train crew had no knowledge as to what orders were there for their train. The conductor said he took it for granted that there was only a caution card and made no attempt to stop his train, although the train order board was in the stop position when his train passed. Train No. 20 passed Bingham Lake at 1:54 a.m. and collided with the fear end of extra 314 at Mountain Lake at about 2:00 a.m.

All of the seven sen who were sleeping in the caboose of extra )14 were killed or seriously injured. The caboose was demolished, while the two cars issediately shead of it were considerably damaged. Slight damage was sustained by one other car and by the locomotive of train No. 20. None of the wheels under the locomotive of train No. 20 was dereiled and no damage was sustained by the equipment of this train.

Engineers Peterson of train No. 20 stated that he received a train order and a caution eard as his train passed Bingham Lake. When he reached the top of the hill, a mile and a half west of Mountain Lake, he could clearly see the switch

lights, but did not see enything of the caboose lights on the extra. Shortly afterwards he sounded the station whistle and after that the crossing whistle. When within 10 or 15 car lengths of the west passing track switch he saw someone giving stop signals with a white lantern. It then occurred to him that possibly the extra might be there, and he shut off steam and applied the energency air-brakes. He thought the speed was about 40 or 45 miles an bour and thought it had been reduced to 20 miles an hour when the collision occurred. He stated that he did not see the oaboose of the extra until his locomotive was close enough to it to allow him to see the reflection of his electric headlight on the window glass on the rear of the caboose, and he thought that the tail lights of the caboase were either extinguished or were so smoked that he could not see them. He said that when he got to his feet after jumping from the locomotive the head brakeman remarked. "Not a tail light lit." Enginemen Peterson further stated that his locomotive was equipped with an electric headlight, but that it was burning poorly and illuminating to the right and up into the air, but that he did not know what was the matter with it. Thelecomotive was not giving him any trouble at all and the airbrakes were in good condition. He also stated that he had his head out of the window from the time his train started down the hill approaching Mountain Lake.

Firmen Jennings stated that before reaching the top of the bill west of Mountain Lake, Engineman Peterson pushed

open the window and was looking out of the window from that point to the point of the accident. The first thing he knew of denger shead was when the enginemen shut off steam, applied the sir-brakes, and told him to jump. Fireman Jennings then looked out of the gangway and saw the caboose of the extra a short distance ahead, but sid not see any lights on the rear of it. He thought his train must have been 25 or 30 car lengths from the caboose when the brakes were applied; and he stated that when he first noticed the speed, after the brakes had been applied, it was about 20 or 25 miles an hour. He thought the collision occurred at about 2:00 a. m. He also stated that after the accident, Engineman Peterson told him that he did not see any red lights; he first saw stop signals being given with a white lantern and at about the same time he saw the rear end of the caboose.

Hond Brakeman Walker stated that he thought his train passed Bingham Lake between 1:45 a.m. and 1:50 a.m., but was not positive. Bosides the caution card an order was received at this point advising them that an opposing passenger train was late, and he stated that after leaving Bingham Lake they were thinking of that order. When the engineers sounded the station whistle approaching Mountain Lake he looked out of the window and began watching the switch lights; the speed at this time was about 40 or 50 miles an hour. Suddenly he saw the asboose of the extra revealed in the rays of the electric head-

(

light, at which time the locomotive was close to the west switch. At about the same time the engineman shut off steam and applied the emergency brokes. Brakeman Walker thought the engine by this time was nearly opposite the switch and at first thought that the engineman would be able to step the train. Brakeman Walker further stated that when he first saw the caboose, he did not think anything about the red lights which should have been on the rear of the caboose; he did not remember seeing them and said that he was unable to say definitely whether or not they were there. After the accident he remarked to the engineman that he did not see the tail lights. He thought that the headlight on his locomotive was in good condition. He further stated that the engineman did not say anything to him about the cention cord, only saying that train He. Il was late.

Conductor Hart stated that he did not notice at what time his train passed Singher 1.40, but that he had a light train, and that the track are retty fast, and that they can right along. Coming into Monatain Lake, the rear brakemen told him that he could see someone siving stop signels, his caboose being at this time about 70 or 30 oar lengths west of the switch. About the same time he falt the sir-brakes being applied in emergency. He thought the speed of the train when the collision occurred was about 15 or 20 dive as hour, but said that this estimate was based on the drace done, and not on his personal observation of the speed.

Ing Mountain Lake he looked out of the side window in order to be in readings to watch the train as it rounded the curve just beyond the station, and that he saw stop signals being given with a white lantern, the air-brakes being applied at about this time. He thought that the speed between Bingham Lake and Mountain Lake varied from 25 to 40 miles an hour.

Sconductor Leverich of extra 314 stated that his train stopped at Mountain Lake, and that when he got off he saw the markers and they showed a red indication to the rear and were burning brightly. While switching at Mountain Lake, he saw the electric headlight of train No. 20 some distance away, and as he looked in that direction he noticed that the light on his side of the esbosse, which would be the right side going east, was burning. As the train approached the enginemen whistled for the station and shut off steam. Conductor Leverich thought it was coming pretty fast and began to give stop signals with his lantarn. At this time he thought he was about 17 or 15 car lengths from his caboose.

Flagman Taylor of extra 314 stated that the markers on the caboose were in good condition; while Fireman Albricoht stated, that when leaving Bingham Lake, he looked back and saw that they were burning, showing a green indication to the front. Engineman Hill further stated he looked at his watch, while switching just before the collision occurred, and it was then 2100 a.m.

Operator Morrow, on duty at Binghem Lake, stated that extra 314 left that point at 1:27 m. m., at which time the markers on the rear of the caboose were burning and showing a red indication to the rear. He also stated that train No. 20 passed at 1:54 m. m. at a speed of about 20 miles an hour.

(

This socident was caused by the failure of Enginemen Peterson to have his train under full control coming into Mountain Lake. His responsibility is definitely determined by rule No. 98-C. quoted above, which provides that the apove of all freight trains coming into and passing through stations and certain other points shall be such that under no circumstances will it be possible to strike any train, car or locomotive. In this case, extre 314 and stopped between the switches at the station for the purpose of switching out some cars, and under rule No. 98-0 the responsibility rested with the orew of the approaching train. The evidence indicates that the markers on the orbins of all all mere burning, but in view of the provisions of rule So. 98-C the question of whether or not they were burning has nothing to do with the question of responsibility; meither is rule No. 99 involved. as that rule requires fluszon to protect their trains only when they stop between stations.

This Engineer Peterson is directly responsible for this accident, attention is called to the fact that when passing Bingham Lake, Flagman Reagan closed the hoop holding the

board was in the stop position and by allowing his train to pass this board, in the stop position, without receiving any authority to do so Conductor Hert violated rule No. 302 of the rules of the operating department. This rule prevides that trains arriving at a block station where the signal is at stop must obtain proper authority from the signalman before proceeding.

In October 1907 and was promoted to engineers in January 1913. In Pedruary 1914 he had been dismissed for violation of the rules regarding the securing of clearance, and for not testing his sir-brakes before reaching the top of a 1% grade. At the time of the accident he had been on duty over 12 hours after a period off duty of about 18 hours.