In re Investigation of an accident which occurred on the Union Railway at Memphis, Tenn., April 6, 1916.

On April 6, 1916, there was a collision between two cuts of cars on the Union Railvay at Memphis, Tenn., which resulted in the death of one employee, and the injury of two employees. After investigation of this accident, the Chief of the Division of Safety reports as follows:

The Union Railway Company is a switching corporation, operating 20.19 miles of single-track main line. Its total trackage, including three yards, and industrial and interchange switches, is about 26 miles, all of which is in and around the city of Memphis. Train movements are governed by telephone instructions and by the authority of a yardmaster. No written orders are used, and no book of rules or tile-table is in effect upon this railway.

At 5.10 p. m., April 6th, Missouri Pacific locomotive 9421, leased and operated by the Union Railway, and in charge of Enginemen Woods and Engine Foreman Rider, left Sargent yard with 48 loaded cars and E empty cars, on route to Georgia Street yard, about 3 miles west. There being more cars in the cut than could be handled the entire

distance to Georgia Street yard, 17 of them were left standing on the main track at a point about 4,500 feet west of the west end of Sergent yard, and the remaining 33 cars were taken on to Georgia Street yard.

At 7.80 p. m., Missouri Pacific locomotive 9475, also leased and operated by the Union Railway, in charge of Engineers Shaphard and Engine Foreman Lanier, left Sargent yard, running backward and ulling a out of 5 loded cars and 18 empty cars, en route to Georgia Street yard, and at 7.27 p. m., while running at a speed of about 15 miles an hour, collided with the cut of 17 loaded cars standing on the main track.

The accident resulted in the death of the engineman of locomotive 9475, and considerable damage to that locomotive, one of the cars healed by it, and five in the cut of cars standing on the main track, which was pushed forward about six or eight car lengths by the i pact.

Approaching from the east there is a 2-degree curve, 145 feet in length, leading to the left, followed by a tangent about 1,500 feet in length to the point of accident. The section of track described is on a descending grade of from 1% to .7% for westbound trains. At the time of the accident the weather was slightly cloudy.

Engineman Woods, of locomotive 9421, stated that his locomotive, with 50 ears, left Sargent yard at about

6.30 p. m., left 17 of them on the main track at the point of accident, and proceeded westward to Georgia Street yard with the remaining 33 dars. Between 7.30 p. m. and 8.00 p. m., after doing some work in the yards, he and his orew started back with the locomotive to get the cars that had been detached. When about 1,000 feet from the west end of the cut of cars he brought his locomotive to a stop, in compliance with the signals of the colored helper of the crew of locomotive 9475, and was infrmed of the accident. Engineeran Woods stated that it was a daily practice, if a train was composed of more than 40 cars, to leave cars standing on the main track without any protection, as in this instance, and that he and other enginemen, including Enginemen Shephard. have often had to bring their locomotives to a stop behind such cuts of cars in the vicinity of where the cut stood at the time of the accident. Be further stated that the only cause to which he could attribute the failure of Engineman Shaphard to operate his train at such a speed as to be able to stop before striking the cut of cars, was the fact that locomotive 9421 left Sargent yard about 1 hour and 10 minutes before locomotive 9475, Enginemen Shapard then probably supposing that the entire train had already bean taken to Georgia Street yard, and was not expecting to find any cars standing on the main track. Engineena Woods further stated that he had never seen any instructions relative to train crews looking for cars standing on the main track,

although it was always understood that train crows would be on the lockout for such cars.

Engine Foreman Rider, of locomotive 9421, stated that the 17 cars were left standing on the main track because of the sharp curve on an ascending grade of .93% approaching Georgia Street yerd, one locomotive therefore being unable to haul as many cars as were in the cut when it left Sargent yerd. He stated that it was customary to leave cars standing on the main track without protection as in this instance and that it was the practice to be constantly on the lockcut for cars occupying the main track in the vicinity of the accident, although he knew of up instructions to do so.

Engine Foremen Lanier, of locomotive 9475, stated that his out of cars left Sargent yard at about 7.20 p. m., that he did not go with it on this trip, and that his helper told him that it was running at a speed of about 12 miles an hour when the collision occurred. He stated that he had once read a notice permitting cars to be left on the main track in the vicinity of the point of accident, that it was cushmary, when a out was too heavy to haul all the way to Georgia Street yard, to leave cars there without protection, and that all crows kept a lookout for them.

Colored Switchman Helper Donahue, of locomotive 9475, stated that appeaching the point of accident he was

riding on the rear footboard of the tender, the frait
of the locomotive as it was backing up, that the speed was
18 or 20 miles an hour, that he did not see the sut of cars
standing on the track until within about two car lengths of
it, when he saw the light from a switch lamp shining on the
wheels of a car. He immediately signaled the engineman and
jumped. Switchman Helper Donahue stated further that it was
the custom to leave cars on the main track at this point without potection, that he had often found cars there and that in
no instance had he ever found a cut of cars protected by a
light or flagman. He stated that Engineman Shaphard usually
reduced speed approaching the point of the accident and that
had be done so in this instance the collision would at least
have been less severe.

Engineman Shaphard usually reduced speed to about 6 miles an hour approaching the point where the cars were standing on the main track, and that on this occasion Engineen Shaphard asked him whether the entire out of ears hauled by locomotive 9421 had been taken to Georgia Street yard, and he replied that he did not think so, as there were 50 cars in that out. He stated that his engine was equipped with an oil headlight and that it was burning brightly but that he did not see the out of cars until the engine was within one-half oar length of them. He

stated that the speed was reduced but little, it being fully 20 miles an hour when the brakes were applied in emergency about 1-1/2 car lengths from the point of collision.

Switchman Edwards, of locomotive 9475, stated that he was riding on the last par of the out as it left Sargent yard, that it was running at a speed of about 12 miles an hour when the brakes were applied, and about 60 feet beyond that point his out of pars same to a stop, the joint of which threw him from the car. When he got up he tried the air to learn whether or not the trin had separated. He then started toward the engine and was not by the negro helper, who told him that a cut of cars had been struck. He stated that he met the negro helper at 7.30 p. m., and therefore thought the collision occurred at about 7.27 p. m.

On April 9, 1912, instructions over the signature of Superintendent Rapp were issued, reading as follows:

## FTO All Concerned:

Instructions have been issued to the effect that crews going from Sargent Yard to IMAS yerd, must look out for cars on main line on Broadway (the vicinity in which this accident occurred), which have been left by crews taking shipments into IMAS yard and on account of having more cars then can be brought in in one cut, it was necessary to make two trips and sometimes three trips in order to get all the cars in.

"We recently had a accident at Porter St. due to one of our switch crows turning in from Sargent, striking the rear and of out of shipments which had been left standing on the main line at Porter St. Your attention is again called to this matter una should we have a repetition of the accident which occurred recently, parties responsible will be severely handled. All concerned will keep a close lookout and be governed accordingly."

The direct cause of this accident was the failure of Engineers Shaphard, of locomotive 9475, to run his train under full control and maintain an effective lookout for cars standing on the main track, in accordance with the instructions of the superintendent. According to the statements of other members of his erew, Engineers Shaphard knew that cars might be expected to be found standing on the main track at this point, and that on other tris he ned always reduced the speed of his train in this vicinity, and his failure to do so in this instance is inexplainable.

The investigation of this accident developed the fact that no overating rules are in effect on this rail-road; that no orders are used to govern train novements; that cars are left standing on the main track situat any markers being displayed either day or night, or any other sort of protection being provided.

The Union Railway of Memphis has permitted to grow up and continue in vogue lax and slipshod methods of operation which led directly to this collision. In view of the conditions prevailing, it is remarkable that there have not occurred on this railroad more accidents of this character, and they may be expected to occur until such time as those in charge adopt such measures as will furnish a greater degree of safety in train operation. The dangerous practices now in effect should be abandoned immediately and some safe method of operation should be adopted before more discatrous accidents occur.

All of the employees involved had good records and at the time of accident the crew of locatorive 9475 had been on duty 12 hours and 50 minutes.