August 9, 1913.

In re Investigation of Accident on the Michigan Central Relirond near Jackson, Mich., on July 13, 1913.

On July 13, 1913, there was a head-end collision between two passenger trains on the Michigan Central Railroad at a point known as Michigan Air Line Crossing, about two miles from Jackson, Mich., resulting in the death of a fireman and the injury of 42 passengers, and 2 employees, one of whom, an engineman, afterwards died.

After investigation of this accident the Chief Inspector of Safety Appliances reports as follows:

Eastbound train No. 68 was a Saginaw Division train, using the tracks of the Grand Repids Division, on which the accident occurred, from Rives Junction, Mich., to Jackson, a distance of 10.62 miles. This train consisted of 2 baggage cars, 3 coaches, 1 cafe car, 1 Pullman sleeping car, all of wooden construction except the sleeping car, which was a modern steel car. This train was hauled by locomotive No. 8073, and was in charge of Conductor Randall and Engineman Sanford. At Rives Junction the crew in charge received a copy of train order No. 315 reading as follows:

"No sixty eight (58) takes siding and meets No. one naught five (105) at M. A. L. Crossing. At ten thirty (10:30) a.m. all overdue trains have arrived at and left Jackson and Rives June ion."

Train No. 68 left Rives Junction at 10:52 and at 11:07 a.m. stopped at a point about 50 feet from the west switch of the siding at Michigan Air Line Grossing for the purpose of heading in and meeting train No. 105. Before the brakeman could reach the switch train No. 105 came around the curve, running at a speed of about 30 miles per hour, and collided with train No. 68.

Westbound train No. 105 was a Grand Rapids Division train bound from Jackson to Grand Rapids. It consisted of 1 baggage car, I combination baggage and passenger car, I coach, I cafe car and I Pullman parlor car. The coach and cafe car were of steel underframe construction and the Pullman was an all steel car. This train was hauled by locomotive No. 8087, and was in charge of Conductor Baughman and Engineman Heacock. This train left Jackson at 11:03 a.m., 28 minutes late, and covered the distance of two miles to the point of collision in about four minutes, colliding with train No. 68 at about 11:07 a.m., as previously stated.

Both locomotives were considerabley damaged, while the first baggage car of train No. 68 was practically destroyed, being telescoped its entire length by the tender of locomotive No. 6073. The baggage car of train No. 105 fell into the river which is crossed by the track at this point, while the combination on was considerably damaged.

This part of the Michigan Central Railroad is a singletrack line, train dispatching is done by telephone in connection with the manual block signal system, so arranged as to afford protection only for millowing movements. The track at the point of accident is level, and is straight for about 300 feet. On either side of this stretch of straight track there is a curve of three degrees. Approaching the scene of the accident the enginemen of train No. 105 was on the outside of the curve and his range of vision, provided his head was out of the cab window, was limited to 280 fest; if his head was inside of the cab window, his vision was limited to a distance of 170 feet. The fireman was on the inside of the curve and could have seen train No. 68 at the point where it was standing a distance of 700 feet, while for a distance of 900 feet he could have seen that the siding was not occupied by that train.

When interviewed in the hospital before his death Engineman Heacock stated that after reading the order requiring the two trains to meet at Michigan Air Line Grossing, he gave it to his fireman. Approaching the meeting point he asked the fireman if train Wo. 68 was on the siding and the latter held up his hand and replied, "All right, George"; the fireman then began to work on the fire, and as he was killed in the collision, there is no way of ascertaining why he gave the Engineman wrong information. Then the engineman had reached a point where he could see train No. 68 he was too close to prevent the collision. The emergency brakes were applied just prior to the collision. He thought he applied them, but stated that they might have been applied from the train.

Conductor Baughman stated that after leaving Jackson he went into the emoking car and began collecting tickets. When this car passed the east switch at Michigan Air Line Grossing he noticed that his brain was running quite fast and looked out of the window, expecting to see train No. 68 on the siding. As his train proceeded he did not see any train on the siding, and went into the baggage end of the smoking car and looked out of the door. At this time the enginemen had shut off steem and was applying the brakes. Thinking that the enginemen was going to bring the train to a stop he then closed the door and started toward the rear of the train. Just before he left the smoking car he heard the engine working steam. He then thought the engineman had received a proceed signal or had

seen train No. 68 occupying the siding, as when he had looked out of the baggage car door he had seen smoke around the curve. He was undecided what to do, however, as he had not been able to see the engine of train No. 68 when looking out of the baggage car door, and it did not seem possible that that train could have gotten into clear in the short space of time. As he went from the combination car into the coach he signalled the enginemen to stop, using the air whistle signal, then went into the coach, and was about to pull the emergency cord when he felt the brakes applied. The collision occurred just afterwards.

Rear Brakeman Bassett stated that when his train had reached the east end of the passing track he looked out of the side door of the sleeping car. Train No. 68 was not on the siding, and as his train apparently was not going to stop he stepped inside the car and applied the brakes by means of the emergency cord. He then started for the door, at which time the collision occurred.

Engineman Sanford of train No. 68 stated that his train had just come to a stop when he saw train No. 105 approaching. At that time the train was just west of the tower which was about 750 feet from the point of collision. When he first saw train No. 105 he thought it would stop, but when he saw the engine continue to work steam he knew that there would be a collision and at once jumped off his engine. In his opinion the engine of train No. 105 was working steam up to the point of collision. He thought that on account of the curve the engineman of that train did not see train No. 68 until it collided with it.

This accident was cauced by the failure of the crew of train No. 106 to obey train order No. 316, which required their train to meet train No. 68 at Michigan Air Line Crossing. It was the duty of the engineers and conductor to know whether or not train No. 68 was occupying the siding before passing it.

Considering his very limited range of vision, and the fact that his engine was working steam practically up to the point of collision, it is evident that Engineeum Heacock was particularly careless.

The conductor is equally responsible for not placing himself in position to know that train No. 68 was not on the siding.

Both the conductor and enginemen were experienced men, and at the time of the accident had been on duty I hour and 30 minutes. Their service record indicates that during their years of service with the company they at times had been lax in properly performing their duties.

Engineer Heacock had been employed as an engineman since 1878. In 1981 he was discharged for "Cause", being reinstated about one month later. In 1890 and again in 1891 he was suspended on account of collisions, while in 1901 he was suspended for forgetting orders and running by telegraph order board at Concord, Mich. He had also been disciplined for running by extinguished signal lasps in 1907 and 1908.

Jonductor Baughman was employed as a brakeman in 1882, and in 1884 was discharged on account of unsatisfactory service. He was reemployed as a brakeman in 1887 and in 1892 was made a conductor. Since 1892 he had been reprimended six times and suspended on fourteen different occasions. Among the suspensions was one in 1900 for leaving a switch open, depending upon a brakeman to close the same; 1901, leaving car so close to passing brack that it did not properly clear a train; 1902, failure to protect train by flag, causing collision; January, 1909, account of accident; and July, 1909, account accepting incomplete train order.