IN RE: INVESTIGATION OF ACCIDENT ON THE DETROIT, JACKSON & CHICAGO RAILWAY NEAR MICHIGAN CENTER, MICH., ON JULY 1, 1914.

On July 1, 1914, there was a head-on collision on the Detroit, Jackson & Chicago Railway near Michigan Center, Mich., which resulted in the death of 1 passenger and the injury of 13 passengers, one of whom afterwards died, and 1 employee. After investigation of this accident the Chief Inspector of Safety Appliances reports as follows:

This part of the Detroit, Jackson & Chicago Railway is a single-track standard-gauge electric line. No block signal system is in use, trains being operated by train orders and time-card rights. Train dispatching is done by telephone. Machines containing train order blanks are located in the various telephone booths where train orders are received by trainmen. The conductor receives and writes the train order and the motorman repeats the order to the dispatcher, by whom it is then made complete. The motorman then removes two copies of the order while a third copy passes into the lower part of the machine where it remains until removed.

Westbound train No. 157 consisted of motor car No. 7790 and was in charge of Conductor Southard and Motorman Blissfield, bound from Detroit, Mich., to Jackson, Mich. On arriving at Dunn, Mich., at 9:30 a.m., the crew in charge received train order No. 39 reading as follows:

Meet train No. 38 car 7771 at Glendale.
Meet train No. 158 car 33 at Alma.
Meet train No. 48 car unknown at Pag.

Train No. 157 left Dunn at 9:38 a.m., 10 minutes late, and at 10:58 a.m., collided with eastbound train No. 48 at a point about 1 mile east of Pag, while running at a speed estimated to have been about 25 miles per hour.

Eastbound train No. 48 consisted of motor car No. 773 in charge of Conductor Rine and Motorman McCormick, bound from Jackson to Detroit. Train No. 48 left the station at Jackson at 10:38 a.m., on time, and on its arrival at the car barn at 10:40 a.m., the crew received train order No. 58, reading as follows:

"Meet train 157, car 7790 at Center."

Center, the time-card name for Michigan Center, is 2.19 miles e.wt of Pag, the meeting point provided for trains No. 48 and 157 in the order which was sent to the crew of train No. 157, and the issuance of train order No. 58, making Center the meeting point, therefore resulted in a lap order. Train No. 48 passed Pag and collided with train No. 157 between Pag and Center as above stated. The speed of the train at the time of collision had been reduced to about 5 or 8 miles per hour.
Both cars were derailed by the shock of the collision and the forward end of each was telescoped and badly damaged.

The collision occurred in the middle of a curve of 8 degrees about 700 feet in length. East of the curve the track is straight for about 600 feet, while east of the curve it is straight for about 4,000 feet. The grade is slightly descending westbound trains. On the inside of the curve there is a row of trees extending from a point 8,100 feet east of the point of collision to within 100 feet of the same. The range of vision of the motorman of the eastbound car was limited to about 700 feet, while the range of vision of the motorman of the westbound car was limited to about 200 feet. The weather was cloudy and a light rain had been falling.

Train Dispatcher Cottrell, who issued the train orders involved in this accident, stated that in issuing train order No. 59 to the crew of train No. 157, he intended to name Center as the meeting point, but in some way which he could not explain he erroneously named Page as the meeting point. When he made the entry on his train sheet about five minutes afterwards he showed trains Nos. 46 and 157 as meeting at Center, which was the point he originally had in mind. When the crew of train No. 46 asked for orders at the car barn at Jackson, more than one hour afterwards, he looked at his train sheet, saw that it showed Center as the meeting point of that train with train No. 157 and without looking at his copy of train order No. 59 issued train order No. 56, naming Center as the meeting point instead of Page.

The cause of this accident was the issuance of a lap order, for which Dispatcher Cottrell was responsible.

Dispatcher Cottrell was employed as a conductor in April, 1909, and was made an extra dispatcher in February, 1912, and regular dispatcher in September of the same year. He was considered to be a reliable and efficient employee. At the time of the accident he had been on duty about 4 hours, after a period off duty of about 16 hours.

On April 15, 1912, the Commission investigated a head-end collision on this railroad near Dexter, Mich., a point located on the same division as Center and about 24 miles distant theretofrom. It occurred under nearly the same circumstances as prevailed in this case, a lap order being the cause. The Commission has also investigated a rear-end collision near Detroit on October 15, 1911, and a head-end collision near Waterville, Mich., on June 6, 1913.

In the reports covering the accidents occurring on this system which have been investigated, attention has been called to inadequate and unsafe rules, bad operating conditions and the faults of the dispatching system in use, and in those reports the adoption of some adequate form of block-signal system has been recommended. Had this recommendation been adopted, and an adequate block-signal system been installed, this accident undoubtedly would not have occurred, notwithstanding the mistake of the dispatcher at fault.