IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED AT THE INTERSECTION OF THE CHICAGO & ALTON RAILROAD AND THE ILLINOIS TRACTION SYSTEM AT VENICE,ILL.,ON MARCH 9,1921.

May 19, 1921.

Om March 9, 1921, there was a side collision between a freight train of the Illinois Traction System and a passenger train of the Chicago & Alton Railroad Company at the intersection of their tracks at Venice, Ill., resulting in the death of 1 employee of the traction company and the injury of 1 other person. The investigation of this accident was held in conjunction with the Illinois Public Utilities Commission, and as a result of this investigation the Chief of the Bureau of Safety reports as follows:

Location and metnod of operation.

The S.& P. Division of the Illinois Traction System extends between St. Louis, Mo., and Springfield, Ill., a distance of 98.2 miles. Between Granite City,Ill.,and St.Louis, Mo., a distance of 6.7 miles, within which territory the accident occurred, trains of the Illinois Traction System move over the tracks of the St. Louis Electric Terminal Railway, a subsidiary line, this is a double-track line except where it crosses a steam line, at which places it is single track. Train movements are governed by time-table schedules, but no train orders are issued. Approaching the point of accident from the south, the traction line is tangent for 400 feet,

then there is a 57-degree 18-mirute curve to the right 100 feet in length, the track is then tangent for 175 feet to the crossing. At the point of accident the grade is .33 per cent ascending for northbound trains. In this vicinity the Chicago & Alton and the Cleveland, Cincinnati, Chicago & St. Louis tracks parallel each other and are almost at right angles to that of the Illinois Traction Company. Both of these roads are single-track lines, but in this vicinity are used jointly as double track, trains running with the current of traffic using the right hand track, the Chicago & Alton being the track for southbound movements and the Cleveland, Cincinnati, Chicago & St. Louis track being used for northbound movements. Trains are operated over the Chicago & Alton or southbound track, on which this accident occurred, by time-table, train orders, and a manual block-signal system. Approaching this crossing from the north and beginning at a point about 875 feet distant, there is a 1-degree curve to the left extending beyond the point of accident. The track is practically level and an unobstructed view of the crossing may be had from the engineman's side of an approaching southbound engine for about 650 feet and for a considerably greater distance from the fireman's side. The weather was clear at the time of the accident, which occurred at about 6.55 p.m.

Description.

Northbound freight train extra 1514, of the Illinois

Traction System, in charge of Conductor Goebel and Motorman Hubbard, consisted of motor 1514 and 6 freight cars, and was en route from St Louis to Granite City. It left St. Louis at 6.20 p.m., and on reaching Venice, 4 miles north of St. Louis, made the usual stop for the crossing, received a proceed signal from the crossing watchman, and started to cross the steam railroad tracks, but when the motor had just cleared the Chicago & Alton track, the air brake hose became disconnected between the fourth and fifth cars, and the train was immediately stopped by an automatic application of the air brakes. After standing a short time the train started, was traveling at a speed of about 2 miles an hour and had moved about a car-length when the second car was struck by Chicago & Alton passenger train No. 41.

Southbound passenger train No. 41, in charge of Conductor Eastman and Engineman Atkins, consisted of engine 555, 1 baggage car, 1 milk car and 1 day coach, in the order named, and was en route from Springfield to St. Louis. It was practically on time when approaching Venice, and was traveling at a speed variously estimated at from 10 to 40 miles an hour when the engineman and fireman saw stop signals being given by the conductor of the Illinois Traction System, and at about the same time saw extra 1514 stalled on the crossing. The engineman applied the air brakes in emergency, but too late to avert the collision, which occurred while the train was traveling about 10 miles an hour.

Engine 555 came to a stop about 35 feet south of the Illinois Traction track with the front engine-truck wheels derailed. The second car in extra 1514 was overturned to the south and the third car was turned in the opposite direction. The employee killed was the crossing flagman.

Summary of evidence.

As soon as extra 1514 was brought to a stop by the automatic application of the air brakes, the brakemen went back and began to bleed the brake cylinders. The headlight of a steam railroad train approaching from the north and one from the south were visible, the one from the south apparently being nearer. Conductor Goebel started south to flag, but the crossing flagman said he would stop that train and the conductor then went around in front of the motor and started north with a white and a red lantern to flag train No. 41 which was approaching from that direction on the Chicago & Alton track, while the motorman started the train in an attempt to move it clear of the crossing. The distance the conductor had gotten from his train when passed by train No. 41 was not definitely established, the estimates varying from 100 feet to 400 feet.

Operator Gaun, on duty at the tower located in the northeast corner formed by the intersection of the steam and electric tracks and about 65 feet north of the crossing, said that when he saw Conductor Goebel giving stop signals and realized that he was attempting to flag train No. 41 he immediately threw the train-order board from the proceed to the

stop position; at that time train No. 41 was about 350 or 400 feet from the crossing, and he said he heard the engineman shut off steam when about 300 feet from the crossing.

Fireman Locher, of train No. 41, said he saw the conductor's stop signals just after his train reached the curve and that he called a warning to the engineman. Engineman Atkins stated that he had seen the train-order signal in the clear position, and was within about 400 feet of the crossing when he realized that he was being flagged and at about the same time saw the Illinois Traction train on the crossing. He said he had just made a slight application of the air brakes and this prevented him from getting the full emergency effect when he made the emergency application. He did not acknowledge the flagman's signals as he said there was not time and he was too busy trying to stop after he realized that he was being flagged. He estimated the speed of his train at about 10 miles an hour when he first saw the flagman and about 8 miles an hour when the collision occurred.

The statements of the other employees were to the effect that the speed of train No. 41 approaching the crossing was much higher than that estimated by the engineman. Fireman Locher, of train No. 41, said the train had started around the curve at a speed of 18 or 20 miles an hour when it was flagged, Conductor Goebel said the train passed him at a speed of 40 miles an hour, while Motorman Hubbard thought its speed was 25 or 30 miles an hour at the time of the accident. Operator Gaun thought the speed was 15 or 20 miles an hour

when the train passed the tower.

The Illinois Traction System operates daily 14 trains of one or more passenger cars in each direction and several freight trains over this route, and the St. Louis Electric Terminal Railway handles an interurban service over the same rails on about a 7-minute schedule during the day. This terminal company maintains a flagman on duty daily from 6.45 a.m. until 12.10 a.m. to protect the movement of its trains over this crossing. All trains on the Illinois Traction System are required to come to a stop within 30 feet of a railroad crossing and not proceed until the proper signal has been given, and not to exceed a speed of 8 miles an hour over the crossing. Crossing gates are in service at this intersection, and the steam roads maintain a watchman there from 7 a.m. until 6 p.m., after that time the gates are not in use and no watchman is on duty.

The State law provides that:

> "All trains running on any railroad in this State, when approaching a crossing with another railroad upon the same level,* * * * shall be brought to a full stop before reaching the same, and within eight hundred (800) feet therefrom, and the engineer or other person in charge of the engine attached to the train shall positively ascertain that the way is clear and that the train can safely resume its course before proceeding to pass the bridge or crossing."

Rule 98, of the Chicago & Alton book of rules, states that where required by law, trains must stop, but the officials of the Chicago & Alton Railroad consider this crossing to be a street-car crossing and not a railroad crossing, which fact is also evident from the wording of bulletin No. 627,

signed by Superintendent Henderson of the Chicago & Alton Railroad and issued under date of August 7, 1916; this bulletin reads as follows:

> "Trains must not exceed a speed of ten miles per hour over interurban street car crossing at Broadway Street, Venice."

Conclusions.

This accident was caused by the failure of Chicago & Alton train No. 41 to be operated in accordance with the requirements of bulletin No. 627 and to approach the crossing at a rate of speed which would have permitted it to be brought to a stop before colliding with the train on the crossing.

The officials of the Chicago & Alton Railroad do not consider the Illinois Traction System to be a railroad within the meaning and intent of the law, and have not instructed their crews to stop at this crossing, the only protection provided being the requirements of bulletin No. 627 that the speed of trains shall not exceed 10 miles an hour over the crossing. A reasonable interpretation of such a requirement is that trains should approach the crossing at a speed not exceeding 10 miles an hour, under which condition trains could be brought to a stop should the crossing be found to be obstructed. The weight of evidence indicates that the requirements of this bulletin have not been strictly enforced, had the officials of this railroad enforced the requirements of this bulletin, and had Engineman Atkins reduced the speed of his train accordingly, this accident could have been prevented.

The employees involved were experienced men, and at the time of the accident none of them had been on duty in violation of any of the provisions of the hours-of-service law.