IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE LOUISVILLE & NASHVILLE RAILROAD NEAR CRANDALL, GA., ON DECEMBER 29. 1920.

March 12, 1921.

On December 29, 1920, there was a head-end collistion between two freight trains on the Louisville & Nashville Railroad near Crandall, Ga., which resulted in the death of 5 employees and the injury of 2 employees. After investigation of this accident the Chief of the Bureau of Safety reports as follows.

## Location.

The Atlanta Division, on which this accident occurred, extends between Etowah, Tenn., and Junta, Ga., a distance of 88.3 miles, and is a single-track line over which trains are operated by time-table and train orders, no block-signal system being in use. Southbound trains are superior to trains of the same class moving in the opposite direction. Approaching the point of accident from the south, beginning at the north switch of the passing track at Crandall, there is a curve of 20 to the right, 440 feet in length, followed by a tangent 1040 feet in length and a curve of 30 30' to the left 675 feet in length, the accident occurred on this curve about 100 feet south of its northern end. North of this curve the track is tangent for 4,600 feet. From the passing-track switch to a point some distance north of the point of accident the grade is about .6 per cent descending for northbound trains. The view south of the point of accident is materially restricted by woods and a cut, the walls of which are about 18 feet in neight. The weather was clear.

## Description

Northbound freight train second No. 54, consisting of 6 cars and a cabcose, hauled by engine 1174, was in charge of Conductor Rymer and Engineman Johnson. At North Yard, Ga., the crew received several train orders, among which was train order No. 35, form 31, reading as follows:

Second No. 54 eng 1174 has right over Nos. 49, 43 and 53 engs 859, 1148 and 1 North Yard to Crandall.

It left North Yard at 11.30 a.m., and on arriving at Crandall at 12.49 p.m. pulled into clear on the passing track; the conductor and engineman went to the station and received train order No. 47, form 19, reading as follows

Second No. 54 eng 1174 meet No. 49, first and second No. 53 engs 859, 1165 and 1314 at Tennga, third No. 53 and No. 45 engs 1 and 2 at South Etowah.

After receiving this order the train left Crandall at 12.57 p.m., Without having received any orders concerning train No. 43, which was an overdue train, superior by direction, and at about 1.00 p.m. collided with train No. 43 at a point about 3,692 feet north of Crandall while moving at a speed estimated to have been from 20 to 25 miles an hour.

Southbound freight train No. 43, consisting of 25 cars and a caboose, hauled by engine 1148, was in charge of Conductor Pinson and Engineman Gurley. It left South Etowah at 10.15 a.m., passed Tennga, 8.6 miles north of Crandall, at 12.40 p.m., and collided with train second No. 54 while travelling at a speed of about 20 or 25 miles an hour

The engine and first five cars of train second No. 54 were detailed and considerably damaged. The engine of train No. 43 was turned over on its right side and quite badly damaged, while the first two cars in this train tere also detailed and damaged. The employees killed were the nead brakeman of train No. 43 and the engineman, fireman, conductor and head brakeman of train second No. 54.

Summary of evidence.

The only surviving member of the crew of second No. 54 was Flagman Saffell. He said that while the train was in the passing track at Crandall he was making an inspection of the train and that he did not see the order received at that point inasmuch as the conductor boarded the engine when ready to depart. After the train had pulled out upon the main track, he closed the passing track switch and was about to climb up in the cupola when the accident occurred. Saffell also said that if any application of the brakes was made it was only a second or two prior to the accident. Engineman Johnson had been removed from the wreckage he remarked to Engineman Gurly, of train No. 43, that he had overlooked that train, and according to Conductor Pinson of train No. 43, Engineman Johnson said he had overlooked train No. 43, that the conductor was running the engine and that he was standing behind the conductor.

Operator Mantooth, on duty at Crandall at the time of the accident, delivered train order No. 47 to Conductor Rymer and Engineman Johnson. "hen he saw the train pulling out on the main track at the north passing track switch, which is nearly 1,700 feet from the station, he reported its departure to the dispatcher. The dispatcher then inquired if train No. 43 had arrived and was told that it had not, it was at about this time that the wires went down Operator Mantooth said that when he saw train second No. 54 pulling out on the main track he supposed the crew had received orders regarding train No. 43 before reaching Crandall.

## Conclusions.

This accident was caused by train second No. 54 being operated against an overdue superior train without train orders, for which Conductor Rymer and Engineman Johnson are responsible.

While train order No. 35 gave train second No. 52 right over train No. 43 and several other trains from North Yard to Crandall, train order No. 47, received at Crandall, provided for meeting points with all of the trains mentioned in train order No. 35 except train No. 43. With respect to train No. 43, therefore, train second No. 54 had only its time-table rights, and inasmuch as it was an inferior train it should have remained on the passing track until the arrival of the opposing superior train, which was several hours overdue on its time-table schedule. While it is impossible to advance any definite reason for the failure of this train to wait for train No. 43, the engineman's remarks just after the occurrence of the accident indicate that in some manner he had overlooked that train.

Conductor Rymer was employed as a brakeman in August, 1909, and promoted to conductor in February, 1919, engineman Johnson was employed as an engineman in 1906.

At the time of the accident the crew of train second No. 54 had been on duty about 7 hours, after periods off duty varying from 8 hours to more than 13 hours. The crew of train No. 45 had been on duty about 3 hours, after periods off duty ranging from 9½ hours to approximately 28 hours.