## INTERSTATE COMIERCE CONMISSION

REPORT OF TEE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT :HHICH OCCURRED ON THE LOUISVILIE \& NASHVILLE RAILRCAD NEAY VULCAN, ALA., ON VOVEMBER 15, 1923.

Jomary 14, 1924.

To the Commission.
On November 15,1923, there was a rear-end collıslorl between two freygnt trains on the Loulsville \& NashVille Rallroad near Vulcan, Ala., resulting in the death of one employee and the injury of three employees.

Location and method of operation.
This accident occurred on the Caln Creek Brancn of the Birmingham Mineral Division, extenajng between Powhatan and Miadle Yard (Boyles), Ala., a distance of 35.23 miles, in the vicinity of the point of accident this is a single-track line over whoch trains are operated by time-tuble and train orders, no block-signal system being in use. The accident occurred in a rock cut, about one-half mile soutn of Vulcan approaching this point from the north there is a curve of $9^{\circ}$ to the right l, 241 feet in length, then 180 feet of tangent, followed by a curve of 50 to tie left l, 470 feet 1 n length, the accident occurring on this curve at a point about 500 feet from its southern end. The grade is ascending for southbound trains, varying from 0.694 to 0.943 per cent, belng at its maximum at the point of accident. At Vulcan there 15 a spur, to the east of the man track, 1.37 mlles in length, which leads to Sayre Mines. The View of the point of accident ia considerably restracted. The weatner was clear at the time of the accident, which occurred at about $7.55 \mathrm{p} . \mathrm{m}$.

## Description.

Soutnbound freight train extra 1246 consisted of 12 cars ana a caboose, hauled by engine 1246, and was in charge of Conductor Truss and Engineman Luster. This train reached the branch from the Sayre ilmes spur and after havirg proceeded about one-half mile south of the spur-track switch, while traveling at a speed of about 4 or 5 miles an hour, its rear end was struck by extra 1199.

Southbound freight trair extra ligg consisted of 10 cars and a caocose, hauled by ergine 1199, and was in charge of Conductor Leonara and Engineman Pressley. This train left Colta, 8.66 mlles north of Vulcan, at 7.15 p.an., and shortly aster passing Vulcan, while trave? ing at a speed esirmaied to have been between 12 and 16 miles an hour, it collided with the rear end of extra 1246.

The caboose of extra 1246 was demolushed, while the first two cars ahead of it were oamaged. Engine 1199 was derailed and bady damaged, but remarned upright. The employee killed was a brakeman of extra 1199.

## Summary of Evidence.

Vulcan is not considered a spur, and trains leaving the spur protect by flag. On arrival of extra 1246 at Vulcan, from Sayre innes, tonnage in excess of the engine's rating was being hauled, therefore, as was customary, the major portion of the train was left stanjung on the spur at this point, and Flagman Wright remeined with this portion, the first three or iour cars of which vere blocking the main line, to afford protection alle the engine took the excess tonnage, consisting of four cars to Chetopa, 1.86 mlies south, aid returned. Conauctor Truss remained at Chetopa to comminicate with the disoatcher, and also to protect against a northbound train, while the engine returned light to Vulcan. After couplang to the remaining portion of the train, Flagman Wright was called in, and tne train departed. While rounding the cirve at a low rate of speed, Flagian Wright heard extra 1199 approaching, decided he did not have trme to accomplish any good with a fusee, and romediately got off with a lighted red lantern, after which he saw the headlight of extra 1199. He estimated the speed of extra 1199 to have been about 20 miles ar. hour wnen the engrne passed hum, and said his flaggirg signal.s were acknowledgad, the accident occurring shortly afterwards. Flagman Wright stated that extra 1199 was about 20 car lengtns away when he first saw $1 t$, while the ceboose of his train was about 7 car lengtns from him at this time, and when the collusion occurred he was about 2 car lengths south of the caboose of extra 1299 . He admitted that ae did not afford proper protection at Vulcan, while the ergine went to Chetopa and returned, going back only about 8 or 10 car lengtns with only a red lantern. When called in he was only back about 4 or 5 car lenguts, and admitted tact on returning to his train he neither placed torpedoes on the rall, nor left ourning fusees, and he was of the 1 mpression the accicent occurred about 10 mnutes after leaving Vulcan. Engineman Iuster stated that the sanders were not workng propemly and that the train was traveling at a low rate of speea on the ascend-
ing grade, onirg to tne drivirg wneels slipping, he was unaware of anythu..g vromg untul he heard tne following traln son na whe whistle just cefore ne felt the lmpacu of the collision.

Engireman Pressley, of extra 1799, sala he had verbel instructions to lock out for ex re, lu46 at Vulan, but on encounvering no torpedoes or fusees at that point began worling the engune hard un orcer to get up the asceading grade, and stated the first jntiration he nad of any thing brong was on seeing the lanter ot the flagman of extru 1246 in the cut, and just ac re soxnaed the whistile, the brakemar. riGing on the fireman's side snouted to hir $a_{i} a$ he $1 n$ nedrately snut off stem and applied the alr brakes la evergency, reducang the apeed from 18 or 20 mmles cor nuur to 10 or 12 miles an hous at the trme of the accident. Engraeman Pressley staitej trat the flagran of extra 1346 was only ajout for: car lengths from the cacoose of his train wren he first gen nim, also thut the aur biakes on his tran were testea and vorked properly en route, ana that the neadligat bus burmirg brigntly, but oning to the curve in the cut nus vialon was restricted to about four car lergtns Other members of the crew Nere unaware of anything wronp until the whastle weas sounded just oefore the acciaent vccurrea.

Corclusions.
Thrs acoldent was causea by the fod lure of Flagman Mright, of extra l24o, properly to protect his train.

The flagging rule of this railroad reyuires that a flagman go back a certair specified distance, place one torpedc on the ralls, go pack an adartronal distance, place two torpedoes, and then return to the location of the first torpeco, when recallea, ne picks up the single torpeao out at night, before rethrning, is required to leave a lightad fusee. After being called in at Vulcan, Flagman Wrignt returned to has train witnout placing torpeaces on the rail or leaving a lighted fusee, he adrnitted that he dil not afford proper proteotion at this point. He was fully aware that his isaln was moving under crrcunstances in ihioh $1 t$ was liable to os overtaken by Enother trair, yet took no ection waz:ever to afford protection until $2 t$ was tov late. Han he thrown off lignted fusees at proper interva?s, this accident undouotedly woula have been frevertea.

Inls accide.t is ore of those whioh ulght have been prevented had an adequate system of automatio train control Deen in use.

All of the employees involoec nere experienced men. At the time of the accident tne crei of extra 1246 had been or futy 7 nours ard 5 mantes, while the crev of extra 2199 há been on duty 1 hour ana 25 nirutes, previous to whicn both crevs had beem oif auty wpproximately 17 hours.
IV. P. BCRLAND,

Director.

