In re investigation of an accident which occurred on the St. Louis-San Francisco Railroad near Welsetke, Okle.. on December 8, 1917.

January 19, 1918,

On December 8, 1917, there was a head-end collision between two freight trains on the St. Louis--Sun Francisco Railroad near Welcotka, Okla., which resulted in the death of Lampleyees and the injury of 7 employees. After investigation the Chief of the Bureau of Safety reports as follows:

The Greek sub-division of the Southwestern division, on which this accident occurred, is a single-truck line extending from Sepulpa to Francis, a distance of 101.9 miles. Train movements are governed by time table and train orders transmitted by talegraph and telephone, no block signal system being in use. By time eard rule northbound trains are superior to southbound trains of the same class.

The trains involved in this assident were northbound freight train No. 532 and southbound freight train No. 545.

Train No. 538, on route from Francis to Sapulpa, consisted of locametive 796, I empty horse our and a caboose, in charge of Conductor Revris and Engineeran Colvin. It left Francis at 2.38 p.m., 3 hours and 82 minutes late, arrived at Spaulding, 14.1 miles north of Francis, at about 2.58 p.m., and left there after the crew had received a copy of train order No. 46 reading as follows:

"No. 545 has right over No. 552 Renrysta to Folsotka."

At helootks, 50.3 miles north of Speulding, the erew received a copy of train order No. 69 reading as follows:

"No. 543 get this train and most No. 558 at Henryotta."

This train left Welcotke at 4.20 p.m. and callided with train No. 343 3-1/2 miles north of there at 4.27 p.m., while running at a speed of about 28 miles an hour.

Train No. 343, en route from Okumigee to Francis, consisted of locomotive 529, 25 care and a caboose, in charge of Conductor Fileman and
Engineman Phillips. It left Okumigee at 11.80 a.m., 4 hours and 29 minutes
late, and arrived at Henryetta, 15.5 miles south of there, at 12.35 p.m.
After doing switching and station work Conductor Hileman went to the telograph office at 2.10 p. m., received train order No. 46 and other orders
and the train left there at 2.55 p.m., and collided with train No. 538
about 10 miles south of Henryetta while running at a speed of about 25 miles
an hour.

The engineeum and head brakeman of train No. 543 and the fireman of train No. 558 were killed.

Approaching the point of accident from the south there is 4,600 feet of tangent, then a 8-degree curve to the right 945 feet long, then 999 feet of tangent, then a 4-degree curve to the left 1,895 feet long, the collicion occurring 840 feet in on this curve. Approaching the point of accident from the north there is a 1-degree curve to the right, 1,706 feet in length, then 5,867 feet of tangent, then a 4-degree curve to the right, 1,895 feet in length, the collision occurring 1,365 feet in on this curve. The accident occurred on a 10-feet fill end the track was practically level. On account of a dense growth of trees and brush on either side of the track and the curve on which the track was laid, the range of vision of both engineers was restricted to about 800 feet. The weather at the time was cloudy.

Conductor Norris of train No. 538 stated that his train left Francis at 2.38 p.m., and at Spaulding he received train order No. 46, giving train No. 543 rights over his train from Henryetta to Welcetka. He arrived at Melcetka at 4:12 p.m. asked the operator if he could give him some time on train 543, and the operator gave him a copy of train order No. 59, directing train 543 to meet his train at Henryetta, and he left there at 4:80 p.m. When his train had reached mile post 492 north of Welcetka he felt the air brakes being applied in emergency and the collision followed almost immediately. He got out of the caboese and when he met Conductor Hileman the latter asked him the number of his train, and was told it was 55E. Conductor Hileman said: "I have right over you to Welcetka," to which Conductor Horris replied, "Yes, but I had a meet with you at Henryetta." Conductor Hileman replied, "I nover did get the order."

Engineen Colvin of train 538 stated that he received a copy of train order No. 59 at Welcetka and left there at 4:80 p. m., expecting to meet train No. 545 at Henryetta. On account of the curve and timber along the track, he could see the approaching train a distance of only about 5 car lengths.

Operator Beard, on duty at Welsetin, stated that when train No. 858 arrived at Welsetin Conductor Norris came into the office and requested him to ask the dispatcher for time on train No. 845, which he did. Operator Beard said that the dispatcher called the operator at Henryetta and him at the same time to take train order 69, which he did, and gave it to Conductor Norris with a clearance, the order being made complete at 4:19 p.m. Defore the dispatcher gave him the order he heard him ask the operator at Henryetta if train 545 was out and he heard the operator reply "No." whereupon the dispatcher told him to copy a train order on form 31 and to make three copies. No heard the operator repeat this order but did not hear samplete given on train order 69.

Conductor Hileman of train 543 stated that his train left Chanless at 11.20 s.m., and upon arriving at Henryste at 12.35 p.m. the necessary switching and station work was done, after which he went to the telegraph office at 2.10 or 2.15 p.m. and received two train orders. He then said to the operator, "32 is due out of Melectha now in a few minutes and I will have to have semething on them," and the operator gave him train order No. 46 at about 2.27 p.m. and he told the operator he would be ready to go in about 20 minutes. He stated that he left Henryste about 2.50 or 2.55 p.m., arrived at Bryant, 4.7 miles south of Henryste, at 3.16 p.m. and after deling station work, waited for train No. 510, which arrived at 4 p.m., and his train left Bryant at about 4.10 p.m. Prior to the accident, he was riding in the supola of the sabcose but did not see train 532 until after the accident. Conductor Hileman said he did not receive a copy of train order No. 49.

Firemen Pool stated that his train left Bryant at about 4.10 p.m. and he was standing in front of the firebox door when the enginemen applied the air brakes in emergency and called to him to look out, the collision coeurring before he had time to get off the engine. He said the speed of his train at the time of collision was about RB miles an hour and on account of his being on the outside of the surve he did not see the approaching train before the collision occurred.

First trick operator C. S. Coldemith stated that he was on duty at Resryctta from 7 a.m. until 4 p.m., at which time he was relieved by his brother, Ralph Goldmith. He stated that he copied train order No. 46 and delivered it and a clearance card to the conductor of train Ec. 545. but as he was busy making up his ticket report and switch engines were passing the office frequently he did not see train No. 545 leave, and said it was not unusual for trains to remain at Henryetta for some time after being cleared. He did not report the train as leaving to the dispetcher, as he did not see it leave and finally forgot it, but stated he could have ascertained whether or net it had departed had he gone out into the yards and looked for it. He stated that when he was relieved by his brother he did not make a transfer of the orders to him mer give him any information consorning them. He had extered only the number of train 545 in the office register book; after the accident he went to the station and entered the arriving time of train 545 and Conductor Mileman's name, but later exceed the time. He admitted that had he reported to the disputcher the time train 543 departed and made a proper transfer to the second trick operator the accident probably would have been averted. He stated it was his epinio ${\bf n}$ that the responsibility should be placed on the dispatcher, for the reason that he had asked the dispatcher to clear that train about two hours before train order No. 69 was issued, and he should have had the second trick operator investigate and find out whether train 545 was at Henrysten before issuing train order No. 69.

Second trick overator Relph Coldsmith stated that he went on duty at Renryotta at 2 p.m., sold tickets until 4 p.m., and then assumed the duties of operator, relieving first trick operator. At about 4.18 p.m. Dispatcher Sean called him ever the telephone and maked when train No. 545 would be ready and he replied that he did not know, as he had not seen the conductor. and the dispatcher than told him to copy train order 69, addressed to train 545 at Meneratta and to train 532 at Volcetka, and again asked him if he know when train 543 would be ready, or if the conductor of that train had been around the office. Operator Coldswith replied that he had not seen the conductor since he came on duty: the dispatcher then finished giving him the order. Operator Goldanith repeated it, and he heard it completed at Welcotke at 4.19 p.m. When he excepted train order 59 he did not know it changed any other order and he had no knowledge that train 543 had been eleared: neither did he make any inquiry as to where it was and did not know whether or not it had gone. When the disputcher called him to take train order 59 he looked at the office register book and saw only the numbor of train 543 had it commised to him that that train was either at the north and of the yard waiting for a passenger train or had not arrived at Henryetta, and he did not think it had passed the train order board, as he assumed from the dispetcher's asking him if it was ready to go that it had not been cleared. Operator Coldenith said he saw Conductor Hileman at the register window about 2.20 p.m. when he was solling tickets but did not know what train he was on. He said that the rules require the operator going off duty to make a transfer to the operator that relieves him, showing all orders on hand and what trains are over-due and not by, and had there been a proper transfer to him it would have shown that train 545 had been given a clearance. The requirements of this rule had not been observed for some time, and when he wont on duty as an operator no transfer was made to him, and he therefore did not know that truly order No. 46 was in existence. it having been signed by the conductor and filed by the first trick operator. He said Operator C. S. Goldsmith ceme to the office after the aedident and entered the time of errival of train 543 in the office register book but later erased it. He thought the responsibility for this accident rested between the dispetaber and the first trick operator but admitted be abould have required the latter to make a proper transfer to him.

Dispetaker Foun stated that he issued train order 46 at 2.17 p.m., it was made complete as to train 532 at Speulding at 5 p.m. and us to train 543 at Henrystta at 2.25 p.m. When train 552 arrived at Felectha he gave

that train time over train 507 to Bryant. After that erder was completed semebody called on the telephone and it began popping and creaking but he heard welcetks any semathing about train 543 and heard enough of it to understand that that train had not arrived there. He then called Heary-etta and enid "543" and understood the operator there to say "I have not eleared them," and he then instructed the operator to copy train order 69, fixing Heary-etta as the meeting point for trains 538 and 543. This order was put out at 4.17 p.m., and made complete as to train 538 at 4.19 but was not received by train 545 at all. He said he did not receive a report showing the arrival and departure of train 545 at Henryetta and did not ask for one, as the operator said he had not cleared it; although it was not given promptly, the telephone was working badly and he did not call the operator.

Rule 222 of the book of rules of the St. Louis--San Francisco Sail-road provides that:

Operator will promptly record and report to the Train Disputcher the time of arrival and departure of all trains and the direction of extra trains.

This accident was caused by failure of the first trick operator, C.S. Coldenith, properly to record the time of arrival and departure of train 545, report the same to the disputcher, and make a proper transfer to the second trick operator.

The evidence shows that Operator 0. S. Goldsmith did not enter the time of arrival or departure of train 543 on the records, as required by this rule, nor did he make a transfer to the second trick operator, or give him any information that would indicate that train 543 had arrived or departed from Henryetta; neither did he inform the disputcher when that train departed.

Second Trick Operator Ralph Goldsmith is at fault for not requiring the first trick operator to make a proper transfer to him, when he took charge of the office.

Dispatcher Sum issued train order 46 at R.17 p.m., giving train 545 rights over train 588, Henryetta to Welcotka, and about two hours later he called the operator at Henryetta and received such vague information concerning train 545 that it should have made him doubtful as to whether it was there or not. Notwithstanding this he issued train order 59, making Henryetta a meeting point for these two trains, and made it complete as to train 558 at Welcotka without making sure that train 545 was at Henryetta, in violation of rule 560, governing train

dispatchers, which states that they:

"Under circumstances admitting of a doubt must not attempt to hold a train upon the Operatoris statement that it has not passed,"

Operator C. S. Coldanith had been employed for about 15 months prior to the accident but had had ever six years experience as an operator; when relieved at 4 p.m. he had been on duty 9 hours. Operator Salph Coldanith was employed on May 5, 1916, and had been on duty about 8-1/2 hours at the time of the accident, after having been off duty 15 hours. Dispatcher Bean had been a dispatcher on this road for about 15 years. He had been on duty a little longer than 8 hours after having been off duty 16 hours.