## February S4, 1915.

In re: Investigation of accident which occurred on the St. Louis & San Francisco Railroad at Olathe, Kans., on January 5, 1915.

On January 3, 1915, there was a derailment of a freight train on the St. Louis & Sen Francisco Railroad at Clathe, Kans., which resulted in the death of 2 employees, 1 person carried under contract and 1 trespassor.

After investigation of this accident the Chief of the Division of Safety reports as follows:

The St. Louis & San Francisco Railroad between Kansas City, No., and Clathe is a double track line, while from Clathe south to Fort Scott, Kans., At is a single track line. Train movements are protected by the automatic block signal system, the normal position of the signals being danger.

The train involved in this accident, train No. 135, was en route from Kansas City, No., to Fort Boott, Kans. It compaisted of S4 loaded box cars and a caboose, hauled by locomotive No. 1292 and was in charge of Conductor Reynolds and Engineers Cheney. As it approached the home signal, immediately north of where the road changes from double to single track, which point is about 400 feet north of the station at Olathe, the signal was in the danger position. The train slowed down and before reaching the signal it changed to caution, the operator having lined up the switch, at the end of the double track, for the southbound movement, and having displayed the train order board, the displaying of the board causing the signal to indicate caution instead of clear. The train then proceeded to the water crane 1,300 feet south of this signal where it remained for about ten minutes waiting for train orders and getting water. It then proceeded on its way southward and at 8:15 p.m. was derailed at an open wye switch about 2550 feet south of the water orane. The weather was clear.

Beginning at the water crane the track is straight for a distance of 700 feet; there is them a 2-degree curve leading to the right about 1,000 feet in length, followed by another tangent about 600 feet long. There is them a 3-degree curve to the left, about 250 feet in length. The wye switch at which this accident occurred is at the end of this 3-degree curve, the wye leading off to the right.

The engine traveled a distance of about 125 feet after being dereiled and then went down an embankment on the east side of the wye, turning over on its right side, crushing Enginezan Cheney and Brakeman Norrell, who was riding in the cab of the engine at the time. The tender was derailed on the west side

and was damaged to a considerable extent. The first car in the train, which was carrying stock and household goods, under the supervision of a care-taker, buckled and was completely demolished, killing the care-taker, as well as a seventeen year old boy who was hiding in the car. The wreakege of this car was destroyed by firs, which probably started from the stove. The second car in the train was derailed to the east blocking the sain line, while the third car was derailed to the west and went down the embankment.

Examination of the track showed the first evidence of the derailment to be flange marks on the guard rail, 75 feet in on the wye from the switch point and directly opposite the frog. These flange marks showed on the ties for 30 feet farther south, the track then being totally destroyed to the point where the engine and cars came to rest. These marks were evidently made by the derailment of the locamotive, followed by the buckling and derailment of the first car in the train. The switch itself was in good condition.

Firemen Weller stated that just before reaching the point of accident he was putting in a fire and on looking shead eaw that the switch was thrown. He called to the engineers to apply the emergency brakes, which was done. The engine ran in on the eye about 20 feet and turned over. He estimated that at this time the train was 60 feet from the switch. He was positive that the switch lasp was extinguished.

Conductor Reynolds stated that at the time of the derminent he was in the caboose. The first indication he had of the derminent was when he felt the jer due to the air brakes being applied in emergency. He at once went to the forward end of the train and found the switch lamp extinguished, the switch thrown for the wys track, the lever in the socket, and the lock and lock pin on the ground near the bottom of the switch stand. He estimated the speed of the train to have been between 15 and 18 miles per hour. His statements were corroborated by these of Flagman Benedict and Station Agent Bloan. Unless in possession of a switch key, the lock could not be opened by any one without being forced open, and Brakeman Benedict stated that there was no evidence of the lock having been forced open.

Operator Serrell stated that when he saw train No. 135 approaching the home signal he threy the switch at the end of the double track. The train-order board was displayed and this caused the home signal to change from danger to caution. The signals worked properly both before and efter the accident. He further stated that a southbound freight train passed at 7:20 p.m., without stopping, using the same track afterwards used by train No. 135. There was no other train or train crew in the yard between the time that train passed and the time train No. 135 was derailed.

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Section Foreman Pappas stated that he lighted the switch lamp at the point of accident on the previous day, and when he passed by the switch at \$100 p.m. on the day of the accident the light was still burning. After the accident there was oil in the lamp; he again lighted it and it burned all night. Section Foreman Pappas further stated that he lives in a car near the water tank, north of where the accident equipmed, and about 10 minutes prior to the time of the wreck three men came to the rear of the car and acked to be allowed to come in to get warm. He told them that his men were going to bed and that he could not admit them; they then started south in the direction of where the accident occurred.

A. F. Boavell, a farmer who lives across the road from the scene of the accident, stated that he say four men standing near the switch just before a southbound freight waln passed, which was a short time before the accident, and a second time after that train had passed. He could not see what they were doing and did not remember whether of not the switch lamp was lighted.

This accident was caused by an open switch. This conclusion is further supported by the fact that two southbound trains passed safetly over this switch within one hour and thirty minutes prior to this derailment. The facts that the switch lamp had been extinguished and the switch found thrown for the wye, with the lever in the socket and the look and look rin on the ground near the switch stand, indicate conclusively that this switch was opened deliverately, apparently with malicious intent. That the switch was opened after train No. 125 entered the block is apparent from the fact that the home signal changed to caution when the operator lined up the switch at the end of the double track. If the eye switch had been opened prior to that time, the signal would have indicated deager.