

May 15, 1914.

IN RE INVESTIGATION OF ACCIDENT ON THE GREAT NORTHERN
RAILWAY, NEAR THAMA, IDAHO, ON MARCH 25, 1914.

On March 25th, 1914, there was a head-end collision between a freight train and a passenger train on the Great Northern Railway near Thama, Idaho, which resulted in the death of 2 employees and the injury of 26 passengers and 13 employees. After investigation of this accident, the Chief Inspector of Safety Appliances reports as follows:

This part of the Great Northern Railway is a single track line and trains are operated by train orders and time-card rights, trains moving in the same direction being spaced 10 minutes apart. Beginning just east of the east passing track switch at Thama, and extending in an easterly direction there is a curve to the left of $3^{\circ}10'$, nearly 3,100 feet in length; the track is then straight for about 2,000 feet. The collision occurred at the eastern end of the curve. The range of vision of eastbound trains is limited to about 150 feet on the engineman's side, while on the fireman's side it is about 200 feet. The weather at the time was cloudy and it had just commenced to snow.

Eastbound passenger train No. 24 was en route from Seattle, Washington, to Kansas City, Missouri. At the time of the accident it consisted of 1 baggage car, 2 coaches, 1 dining car, 1 Pullman tourist sleeping car, and 1 Pullman standard sleeping car, hauled by locomotive No. 1426, and was in charge of Conductor Crennens and Engineman Carle. It left Priest River, 3.4 miles west of Thama, at 3:23 p.m., one hour and four minutes late, passed Thama at 3:27 p.m., one hour and one minute late, and collided with westward extra 733 at about 3:29 p.m., while running at a speed estimated to have been between 38 and 40 miles per hour.

Westbound freight train extra 733 was engaged in switching work between Keepport, Idaho, 10 miles west of Thama, and Sand Point, Idaho, 18.9 miles east of Thama. At the time of the accident it consisted of 5 loaded cars, 6 empty cars and a caboose, hauled by locomotive No. 732 and was in charge of Conductor Cartwright and Engineman Ciese. After finishing its switching at Leclade 4.6 miles east of Thama, extra 732 pulled to the western end of the passing track. The engine was then cut off, headed out on to the main line and backed to the water tank east of the station to take water. After this had been done the engine returned, stopping in front of the station while some member of the crew delivered orders to the engineman, after which it was coupled to the train. As soon as eastbound passenger train No. 2 had passed, at about 3:23 p.m., extra 733 pulled out on to the main line, waited until the rear brakeman closed the switch and gave the

No. 44 while running at a probable speed of 35 miles per hour.

Both locomotives were badly damaged. The baggage car was destroyed by fire, while the first coach was damaged to some extent as well as being partially burned. The first three cars of the freight train were destroyed by fire while the fourth car was slightly damaged. None of the other cars in either train sustained damage.

Among other train orders, the crew of extra 733 held train order No. 40, which provided that train No. 44 was running one hour late, and train order No. 41, advising that train No. 28 an eastbound train about one-half hour behind train No. 44, was running one hour and ten minutes late. Train No. 44 was due west Thama under the time-card schedule at 2:26 p.m., but under train order No. 40 it was due to pass that point at 3:26 p.m. Extra 733 left LaCade at 3:23 p.m., or very shortly afterwards and it therefore only had about three minutes, or less, in which to cover the distance of 4.8 miles to Thama for train No. 44, without observing the rule requiring inferior trains to clear superior trains at least 5 minutes at all meeting points.

Engineman Oiese stated that he received a copy of several train orders at LaCade, among them Nos. 40 and 41. He thought they were handed to him by the conductor as he backed his engine down to the water tank but was not sure. After returning to his train the head brakeman looked at a time-card and after train No. 2 had gone said that they had time enough to go to Thama. He did not remember exactly how much time the head brakeman said they had; he remembered that he said "8" and thought he said "3:26". The brakeman then went forward, opened the switch and at the same time gave him a signal to come ahead. He looked at his watch; saw that it indicated 3:16 p.m., and therefore supposed that he had 11 minutes in which to reach Thama. Consequently he pulled out on to the main line, the brakeman getting on the engine as it passed the switch. The engineman then said that he wondered if the conductor was aboard and Head Brakeman Orton replied "Yea; if he isn't he ought to be." The brakeman then stood in the gangway on the left hand side looking back at the switch and saw the signal given from the rear end after the switch had been closed by the rear brakeman. When this signal was given the engineman supposed that the conductor was aboard and that it was all right for his train to proceed. He further stated that he thought he compared his watch with that of the conductor before leaving Newport.

Examination of the engineman's watch, which was damaged to some extent in the accident, showed that it had stopped at 3:21 p.m. Inasmuch as the accident occurred at about 3:29 p.m. it seems apparent that his watch was about eight minutes slow, assuming that the watch stopped when the accident occurred.

Head Brakeman Orton stated that while the switching was being done, he went into the office for a few seconds. He saw some orders already written, picked them up and read them, but did not do anything with them. The conductor had told him he was figuring on train No. 2 being late and that he might get some more time on train No. 44, but when the engine backed down the main line for water, the conductor delivered orders to the engineman, at the same time telling Brakeman Orton that he did not believe that they would be able to leave before train No. 2 arrived and that he would stay in the station to see if he could get anything else on them. Brakeman Orton afterwards stated that the conductor might have given the orders to him and he in turn have given them to the engineman; in any event he did not read them himself. After coupling to the train the engineman was reading over the orders while he himself was looking at the time-card. Between them they figured that they had 14 or 15 minutes in which to go to Thama for train No. 44. He understood the engineman to tell him that train No. 44 was running one hour and ten minutes late, which would have made that train due by Thama at 3:36 p.m. He further stated that when his train left Laclede he did not know whether or not anyone gave them a signal to pull out of the siding on to the main line. When they were pulling out, however, he looked back and when he saw the rear brakeman give a proceed signal after the switch had been closed he supposed that the conductor was aboard. He also stated that he did not know what time they left Thama, but thought it was between 3:15 p.m. and 3:20 p.m. While talking with the engineman about the time the train had in which to reach Thama, they compared watches, but did he not remember what time it was. He thought, however, that there was not much difference between the time shown by the engineman's watch and the time shown by his own watch.

Conductor Cartwright stated that his train reached Laclede at 12:28 p.m. After completing some switching at about 2:35 p.m. or 2:45 p.m., the train proceeded to the western end of the passing track. While the engine was going for water Head Brakeman Orton came into the telegraph office and the conductor told him that he was going to stay in the station in the endeavor to get more time against train No. 44. The brakeman then left the station and the engine proceeded to the western end of the passing track and coupled to the train. When train No. 2 passed Laclede, the agent was billing lumber which was to leave on Conductor Cartwright's train and in order to help him out, the conductor was copying another order for his train. The station agent went out to pick up a sack of mail left by train No. 2 and while doing so noticed that extra 733 was departing and immediately notified the conductor. The latter at once ran out and attempted to stop the train by hand signals. At this time, however, the train was on the main line some distance west of the passing track and he failed to attract the attention of any member of the crew. Conductor Cartwright

then got into communication with the dispatcher in the endeavor to have train No. 44 stopped before it left Priest River. Train No. 44, however, had already left that point. Conductor Cartwright further stated that the train orders named in the clearance received by him at LaCleda were Nos. 38, 40, 41, 45 and 50. He did not deliver them to anyone; they were lying on the desk when the head brakeman came into the station and the latter picked them up and read them, while he himself was copying the order. Conductor Cartwright supposed that the brakeman took the orders with him when he went out, although he had not told him to deliver them to the engine-man. When he discovered that he only had one set of orders, he did not think anything about it because he had another order to deliver to the engine-man and supposed that the latter would remain at LaCleda for train No. 44. At both of the previous stations at which orders were received, Newport and Sand Point, he had delivered the orders personally to the engine-man and the latter had read them in his presence. He further stated that when he compared time with Engine-man Giese before starting on the trip, the engine-man's watch was nearly one minute slow.

The west passing-track switch at Thama is about 1,300 feet west of the station and on account of the short train of 733 the caboose was probably 400 or 500 feet west of the station. This undoubtedly accounts for the failure of Conductor Cartwright to know that his train was pulling out until notified by the station agent.

Fireman Bergen stated that no orders were received at LaCleda, the only orders on the return trip being received at Sand Point. After taking water the head brakeman left the engine and went to the station. When he came out he said nothing about any instructions having been given to him by the conductor but looked at the time-card and talked with the engine-man about the time they had in which to go to Thama. The head brakeman and engine-man compared watches, and the engine-man read over the orders again and also gave them to Fireman Bergen to read, and he stated to them that they had one hour on train No. 44. After train No. 2 passed, the engine-man and brakeman talked some more about the amount of time they had and finally the brakeman went ahead, opened the switch, and the train pulled out on to the main line. At no time did Fireman Bergen look at his own watch being busy cleaning the fire.

Rear Brakeman Sharpe stated that the conductor was in the station at the time the switching was being done. When they finished the conductor came out of the station and handed orders to the engine-man, and he heard the latter say that they had an hour on train No. 44 and one hour and ten minutes on train No. 28. He did not read the orders himself. Then they pulled down to the western end of the passing track, and he remained in the caboose while the train was standing there. Just as train No. 2 passed, he felt his train start ahead and supposed that the conductor had boarded the head end of the train and that they

were going to leave. He looked at his watch and thought that they would have 16 or 18 minutes in which to reach Thama, this estimate being based on the fact that train No. 44 was one hour late. When the train had pulled out on the main line he closed the switch and gave a proceed signal. The shock of the collision knocked him unconscious. When he recovered consciousness the first person he saw was Enginemen Geise. They then looked at their watches; the enginemen's had stopped while his own indicated 3:28 p.m. The watch he was carrying was one loaned by the jeweler while his own watch was being repaired. It had been compared the night before at which time it was two minutes out of the way.

Inasmuch as Brakeman Sharpe's watch showed that his train had 16 or 18 minutes in which to reach Thama, based on train No. 44 leaving there at 3:26 p.m., then his watch showed 3:08 or 3:10 to be the time extra 733 left Laelege; it therefore must have been 13 or 15 minutes slow.

Agent Morrison stated that at about 1:15 p.m. he copied four orders for extra 733, these orders were then torn off and were laid on the table together with a clearance. He did not hand them to any member of the crew of the extra, but saw the conductor hand the orders to the brakeman at the same time telling him that he was going to remain in the station and endeavor to get more time against train No. 44. Agent Morrison was then busy attending to the billing of lumber to go out in Conductor Cartwright's train, and the conductor copied another order for him.

The statements of the various employees are very conflicting in many important details. It is believed, however, that while the engine was being backed down the main line for water the head brakeman went into the station and after reading the orders lying on the table took them with him and gave them to the enginemen. After the engine had returned and been coupled to the train Head Brakemanorton was looking at the time-card while the enginemen read the orders, and in some manner they figured that they had time enough to go to Thama for train No. 44. The enginemen seem to have understood that train No. 44 was only one hour late and would therefore leave Thama at 3:26 p.m., but according to his own statements his error was due to the fact that his watch was eight minutes slow, indicating 3:15 p.m. as the time at which he left Laelege, thus apparently giving him 11 minutes in which to reach Thama. In this connection, however, it should be noted that extra 733 would have had to get under way at Laelege, come to a stop at Thama, 4.8 miles distant, head in on the passing track, and close the switch, all in six minutes, in order to comply with the rule requiring inferior trains to clear superior trains at least five minutes. The head brakeman, however, understood that train No. 44 was one hour and ten minutes late, claiming that this was what the engineer told him. This would make train No. 44 due to leave Thama at 3:36 p.m. instead of 3:26 p.m.

On the other hand, however, he states that his watch showed that they left LaCade at between 3:15 p.m. and 3:20 p.m. According to the head brakeman's watch, therefore, extra 733 had between 16 and 21 minutes in which to reach Thana, which does not agree with his further statement that he figured they had 14 or 15 minutes. The rear brakeman stated that he understood train No. 44 to be an hour late, and said that when extra 733 left LaCade he looked at his watch and thought they had 15 or 18 minutes in which to reach Thana.

If the statements of the engineman and rear brakeman are correct, and assuming the statement of the head brakeman to be correct that his watch showed that they left LaCade between 3:15 p.m. and 3:20 p.m., then the engineman's watch was 2 minutes slow, the head brakeman's watch was from 3 to 8 minutes slow and the rear brakeman's watch was from 15 to 18 minutes slow.

This accident was caused by extra 733 occupying the main track on the time of train No. 44, for which Engineman Giese is directly responsible. The engineman stated that this was due to his watch being eight minutes slow. Notwithstanding this fact, however, even had the time indicated by his watch been correct he would not have had sufficient time in which to reach Thana and clear train No. 44, as required by the rules.

The records of the official time inspector of the Great Northern Railway showed that Engineman Giese's watch was last compared on March 22nd, at which time it was 15 seconds slow. Head Brakeman Orton's watch had been left with a jeweler two or three days previously for repairs, and temporarily he was carrying a watch loaned by the jeweler. It had been compared with Engineman Giese's watch on several occasions and was about 1 minute faster than the engineman's watch. The watch carried by Rear Brakeman Sharpe was one loaned him two or three days previously by the railway company's watch inspector while his own was being repaired. He compared it the night before with Head Brakeman Orton's watch at which time there was about 2 minutes difference between them.

A condition of the character here found to exist, where watches carried by three of the employees connected with the movement of a train, not only were far from being correct but also did not, according to the statements of the employees themselves, compare favorably with each other, is decidedly unusual, and if such a condition did exist, then it may safely be stated that the watches carried by these employees were not such as to insure correct time or to provide for the safe movement of their train.

Engineman Giese entered the service of the Great Northern Railway as an engineman on August 12, 1907, and in August, 1909, was discharged on account of an accident. In May, 1910 he was reinstated, since which time he had received a ten-day record suspension in September, 1910, and a suspension of fifteen days in December, 1913, both for responsibility in connection with