

April 14, 1914.

IN RE INVESTIGATION OF ACCIDENT ON THE CLEVELAND, CINCINNATI,  
CHICAGO & ST. LOUIS RAILWAY AT BRANT TOWER, IND., ON  
MARCH 22, 1914.

On March 22, 1914, there was a derailment of a freight train on the Cleveland, Cincinnati, Chicago & St. Louis Railway at Brant Tower, near Indianapolis, Ind., which resulted in the death of the fireman and head brakeman, and the injury of five employees. After investigation of this accident the Chief Inspector of Safety Appliances reports as follows:

Eastbound extra 6830 consisted of 37 loaded cars and 2 cabooses, hauled by locomotive No. 6830, and was in charge of Conductor Johnson and Engineman Woolums. It left Kankakee, Ill., at 11.15 a. m., passed Augusta, the last open telegraph office and 7.3 miles west of Brant Tower, at 10.43 p. m., and was derailed at the derail immediately west of the home signal at the interlocking plant at Brant Tower at 10.50 p. m., having made the run from Augusta to Brant at an average speed of 62.6 miles per hour.

The locomotive and 11 cars were derailed and damaged more or less, 5 of the cars being destroyed. Three other cars were also damaged, while the track was torn up for a distance of about 170 feet.

This part of the Chicago Division of the Big Four Railway is a double-track line, and trains are operated by train orders protected by the manual block signal system. The tracks of the Chicago Division connect with the single track main line of the Peoria & Eastern Division at Brant Tower. Beginning at the switch where the two main lines connect, and extending westerly for a distance of 2,852 feet, the tracks of the Chicago Division are on a curve of  $2^{\circ}30'$ . This curve leads to the left for eastbound trains. West of this curve the track is straight for several miles, and is on a slightly descending grade. The signals and switches in the vicinity of Brant Tower are governed by an electrically operated interlocking plant, so arranged that when the tracks governed by it are being used either by a train on the Peoria & Eastern Division, or by a car on the electric line which crosses the Chicago Division just west of the tower, the distant and home signals on the Chicago Division, as well as the derail, are set against any eastbound train which may be approaching and cannot be cleared for that train until the train or car using the tracks of the interlocking plant has passed. The home signal is located at a point 1,450 feet west of the junction of the two divisions, while the distant signal is 3,250 feet

west of the home signal. The derail at which the accident occurred is 58 feet east of the home signal. On account of being on the outside of the curve an engineman can see the home signal a distance of only 400 feet with his head out of the cab window, although by leaning out of the window it is possible to see the signal a distance of about 1,100 feet. On the fireman's side of the engine, however, the home signal can be seen a distance of about 2,000 feet. On account of the track being straight the distant signal can be seen from a point about 2 miles away. At the time of the accident a freight train on the Peoria & Eastern Division was pulling through the crossover in a westerly direction, on account of which the home and distant signals were set against extra 6830, while the derail was also set against that train. The weather at the time was clear.

Signalman Frank, on duty at Brent Tower at the time of the derailment, said that his first knowledge of anything wrong was when he found the interlocking out of order. Just after this, Engineman Woolums came into the office and said that his train had been wrecked. He asked the engineman if he had not seen the freight train on the Peoria & Eastern Division and the engineman replied that he had. Engineman Woolums might have meant that he saw that train after the accident. He then asked him why he did not stop, and he replied that the firemen and head brakeman had said that the home signal was clear.

Engineman Woolums was in the hospital at the time he was interviewed, and on account of his condition could not make an extended statement. He said, however, that he saw the distant signal set in the caution position and made an application of the air brakes, reducing the speed of his train to about 15 or 20 miles per hour, which was the speed at which it was running when it passed the home signal and ran off the derail. He further stated that he asked the fireman and head brakeman about the position of the home signal and was told that it was clear. He then inquired about the position of the train order board, but received no answer from them. He then looked up and saw the home signal in the stop position, at which time he was right under it.

Conductor Johnson and Rear Brakeman Myers were seated at a table in the caboose at the time of the derailment. Conductor Johnson said that he did not notice any application of the brakes, but thought the train slowed up a little before passing the water tank located about a quarter of a mile west of the distant signal. When it passed this tank he thought it was running at a speed of about 25 or 30 miles per hour. The rear brakeman, as well as Brakeman Martin, who was dead-heading, stated that he did not notice any application of the brakes; the first information these men having of anything wrong was when they felt the shock of the derailment.

This accident was caused by the failure of Engineman Woolums properly to observe and obey the interlocking signal indications. While he stated that the speed of his train approaching Brant Tower was about 18 or 20 miles per hour, yet from the damage caused by the derailment, from the statement of the conductor that it was traveling at a speed of from 25 to 30 miles per hour, and from the fact that the average speed of the train for over 7 miles had been more than 60 miles per hour, it is believed that the speed was very much in excess of the rate of 18 or 20 miles per hour specified by Engineman Woolums. On account of the death of the fireman and head brakeman there is no way of verifying the statement of the engineman that he was informed that the home signal was set in the clear position. Regardless of this fact, however, he knew that the distant signal was set at caution and had he made the effort warranted under the circumstances, he could have seen the home signal a distance of about 1,100 feet, which would have enabled him to stop his train had its speed been properly reduced when he saw the distant signal set in the caution position.

Engineman Woolums was employed as a fireman in 1902, and in December, 1905, passed the examination for promotion to engineman. His service record as furnished by the Big Four Railway showed that he had been suspended on five occasions for responsibility for collisions, on one occasion for running by a stop signal, and on one occasion for fast running over track undergoing repairs. At the time of the derailment he had been on duty 12 hours and 5 minutes, after a period off duty of 8 hours and 30 minutes.