#### IMPERSTATE COLMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUFEAU OF SAFETY IN RE IN-VESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE PENNSYL-VANIA RAILROAD AT BRAEBURN, PA., ON AUGUST 27, 1925.

December 28, 1925

To the Commission.

On August 27, 1925, there was a derailment of a passenger train on the Pennsylvania Pailroad at Braeburn, Pa., resulting in the death of one employee, and injury of four passengers, one mail clerk and one employee.

# Location and method of operation

This accident occurred on that part of the Conemaugh Division extending between Pittsburgh and Kiskiminetas Junction, Pa., a distance of 28.9 miles, in the vicinity of the point of accident this is a double-track line over which trains are operated by time-table, train orders, and a manual block-signal system. The derailment occurred at the south switch of the passing track at Braeburn, approaching this point from the south there are 528 feet of tangent and then a 20 curve to left 850 feet in length, followed by tangent track to the point of accident, 938 feet distant. The grade in this viecinity is practically level.

The passing track at Braeburn is located between the north and southbound main tracks and is used by trains in both directions. The south switch leading from the northbound main track to the passing track is a No. 10 turnout and is a facing-point switch for north-bound trains. It is equipped with a New Century switch stand, from which the position of the switch is indicated by a red or a green light for the open or closed position respectively, there are no banners on this switch stand, the light indications being used both day and night.

There is a northbound distant signal at Braeburn, located 2,316 feet south of the point of accident while the home signal is located near BR tower, 275 feet north of the point of accident. After the distant and home signals have been cleared by the signalman at ER tower for a northbound movement, and the train has passed the distant signal, there is nothing to prevent the opening of the passing-track switch without the knowledge of the signalman unless he is closely watching the indicators in the tower.

The weather was clear at the time of the accident, which occurred at 10 a.m.

# Description

Northbound passenger train No. 907 consisted of one express car, one combination mail and baggage car, two coaches, two Pullman cars and one coach, in the order named, hauled by engine 838, and was in charge of Conductor Hastings and Engineman Miller. The cars were of all-steel construction except the express car, which was of wooden construction. This train passed New Kensington, 4.7 miles from Braeburn, at 9.50 a.m., on time, and was derailed at the south passing-track switch at Braeburn while traveling at a speed thought to have been between 35 and 40 miles an hour.

Engine 838 came to rest on its left side, diagonally across the passing track, with its head end 343 feet north of the switch, the express car was practically demolished. The combination car and the two coaches were also derailed but remained upright on the roadbed. The employee killed was the engineman.

### Summary of evidence

Fireman Fiddler said a clear indication was received at the distant and home signals as his train approached Braeburn and after rounding the curve south of the point of accident he noticed a man working near the south passing-track switch; as his train drew nearer to the switch the man dropped his wrench and started to run away and he noticed that the switch was open, with the switch level standing in an upright position. Apparently Engineman Miller also had observed the open switch as it was at this time that the engineman shut off steam, applied the air brakes in emergency, and sounded one blast on the whistle.

The statements of Conductor Hastings and of the other members of the crew of train No. 907 were to the effect that the brakes were applied in emergency at a point a few carlengths south of the switch; their estimates of the speed just prior to the brake application varied from 40 to 50 miles an hour. Conductor Hastings also stated that Engineman Miller told him as he was removing the engineman from the cab after the accident that the derailment was due to an open switch. This statement was made within the hearing of Assistant Road Foreman of Engines Heighley, Conductor McCollum and Fireman Heighley, all employees of this railroad.

Division Engineer Wilson, who was a passenger on train No. 907, said he went forward after the accident and found the switch set for the passing track with the lever in the keeper and the lock laying on the head-block tie. Mr. Wilson also said he did not think the speed had been materially reduced prior to the occurrence of the derailment. Engineman McCartney, who also was a passenger on the train, said he saw the distant signal in the clear position as the train approached Braeburn,

while after the accident he found the conditions at the switch as described by Mr. Wilson.

Signal Maintainer Hurst said he reported for duty at New Kensington on the morning of the accident and was sent to Braeburn for the purpose of changing the switch circuitcontroller on the switch at the south end of the passing track. Immediately after arriving at Braeburn on train No. 9001 at 8.57 a.m., he went to BR tower, inspected the home signal and telephone batteries and then went to the tool house, located south of the tower and just beyond the south switch to the passing track, took the track dolly, a small car which runs on one rail and is used for handling small-sized material, etc., placed it on the east rail of the northbound track and proceeded to the station where he loaded on the switch controller and his tool bag, returned to the south switch, using the same rail, which he could not have done had the switch been fully open at that time, unloaded the controller at the switch and then rolled the track only down to the tool house and untracked it. He said he did not start immediately to renew the controller but was doing other work around the switch and had been in the immediate vicinity from 6 to 10 minutes when he was warned of the approach of train No. 907 by a whistle signal and barely had time to get his tool kit from between the rails and clear the track before the train reached the switch. He did not see any one at or near the switch from the time he arrived at Braeburn until after the accident.

Supervisor of Telegraph and Signals Snyder said Signal Maintainer Hurst told him that he was in the vicinity of the switch just prior to the time of the derailment but that he did not throw the switch for the passing track and had not started to renew the controller. Mr. Snyder stated, however, that he found indications that the signal maintainer had begun his work at this point and that from his own examination of the switch circuit-controller, it appeared that the track was shunted at the time of the derailment.

Signalman Meodinger, who was on duty at BR tower at the time of the accident, stated that a track motor car in charge of the section foreman had used the switch at the south end of the passing track at 7.29 or 7.30 a.m., but that no trains had used this switch between that time and the time of the accident, and that several northbound trains had passed over it after it was used by the section foreman and prior to the time of the derailment. He also said Signal Maintainer Hurst passed his tower with a track dolly loaded with a circuit controller en route to the switch at the south end of the passing track just previous to the arrival of train No. 907, but he did not notice what he did at the switch or whether he opened it, but said it would have been possible for the switch to have been opened without his knowing it. It also appeared from his statements that if the signals had been cleared for a northbound movement and the switch had then been opened,

prior to the arrival of train No. 907, it would have thrown the distant signal back to the caution position.

Section Foreman Paleno said he used the switch at about 7.35 a.m. and that he personally closed and locked it before leaving it, while a track-walker who passed this point at about 7.45 a.m. said he noted that the switch was properly lined for the main track and locked in that position.

Nothing was found about the track, signals or equipment which it was thought could have caused or contributed to the occurrence of the accident.

#### Conclusions

This accident was caused by an open switch.

The switch in question was last used at about 7.35 a.m., at which time it was said to have been closed and locked, and that this was the case is evidenced by the fact that four northbound trains passed over it between that time and the time of the accident. On the other hand, the investigation clearly established the fact that the switch was open when encountered by train No. 907 and it was found latched in the open position when examined immediately after the accident.

The cyidence indicated that a clear indication was displayed at the distant signal as train No. 907 approached Braeburn, which would not have been the case had the switch been open at that time, and it seemed apparent that Signal Maintainer Hurst, who was working at the switch, opened it in connection with this work after train No. 907 passed the distant signal, although he denied having done so.

The employees involved were experienced men and at the time of the accident none of them had been on duty in violation of any of the provisions of the hours of service law.

Respectfully submitted,

W. P. Borland.

Director.