INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT THICH OCCURRED ON THE BLUE RIDGE RAILWAY AT ANDERSON, S.C., SEPTEMBER 1, 1926.

September 30, 1926.

To the Commission:

On September 1, 1926, there was a derailment of a passenger train on the Blue Ridge Railway at Anderson, S.C., which resulted in the death of one employee and the injury of one employee.

Location and Method of Operation

This railway extends between Benton and Valhalla, S.C., a distance of 44.2 miles, and is a single-track line over which trains are operated by time-table and train orders, no block-signal system being in use. The accident occurred at the west wye-track switch, located 1,670 feet west of the station at Anderson, approaching this point from the west the track is tangent for a distance of more than one-half mile, extending to and beyond the point of accident. Beginning at mile post 11, 3237.4 feet west of the point of accident, the grade is slightly undulating for a distance of 2687.4 feet, from which point it is practically level to the point of accident.

The switch involved in this accident is a facing-point switch for eastbound trains and leads off to the north or left through a No. 6 turnout. The switch stand, which is of the low New Century type, is located on the left or fireman's side of an eastbound train, no target or switch lamp is used to indicate the position of the switch, nor was the switch stand equipped with a lock.

The main track in the vicinity of the point of accident is laid with 60-pound rails, 30 feet in length, with about 18 ties to the rail-length, ballssted with cinders. The track is maintained in fairly good condition.

It was daylight and the weather ras clear at the time of the accident, which occurred at about 5.57 a.m.

Description

Eastbound passenger train No. 18 consisted of one combination mail and express car, one combination baggage and passenger car, one coach, and one Pullian sleeping car, hauled by engine 1002, and was in charge of Conductor Fredericks and Engineman Coleman. It left Seneca, 24.3 miles west of Anderson, at 5.10 a.m., 25 minutes late, and was derailed at the west switch of the wye track at Anderson while traveling at a speed estimated to have been between 12 and 14 miles an hour.

Engine 1002 was derailed to the left and overturned, coming to rest at a point 173 feet beyond the switch; the tender was also derailed and overturned, while the first car and the forward truck of the second car were derailed. The employee killed was the fireman.

Surmary of evidence

The equipment composing train No. 18 had been turned over to the Blue Ridge Railway at Belton by the Southern Railway on August 31 and had been operated from that point to Seneca, its turn-around point, as westbound train No. 17, in charge of the same employees as were in charge of train No. 18 at the time of the accident, Examination of the switch, which was a facingpoint switch for train No. 18, indicated the probability that it had been damaged on account of naving been run through by a westbound train; the last westbound train to pass was train No. 17. Engineman Coleman stated, however, that when passing over this switch on train No. 17 he did not notice anything unusual. When making the return trip on train No. 18 he reduced the speed of his train to about 15 miles an hour when approaching Anderson, following which he further reduced the speed to about 4 miles an hour while passing over a street crossing at a point approximately 3,300 feet west of the point of accident; he then worked a little steam, after which the train was allowed to drift towards the station at a speed of about 12 miles an hour. Upon reaching a point about 200 feet west of the point of accident he made a slight air-brake application for the purpose of reducing speed for snother street crossing and then stood up for the purpose of putting on the injector. When about 90 or 95 feet from the switch he noticed that the left switch point did not fit up to the stock rail and immediately placed the brake-valve handle in the crergency position. The engine passed over the switch, on the main track, but on looking back he saw the rear of the tender start to turn over and it was about at this time that the engine became derailed.

Conductor Fredericks was unaware of anything wrong until the emergency application of the air brakes was hade and the train was brought to a stop. Shortly afterwards he inspected the equipment and found nothing that would have contributed to the cause of the accident. He threw the switch for the main track and found the points fitted properly, although the switch latched rather hard; he did not notice how the points fitted when the switch was open. He further stated that the special rules governing the speed of trains within city limits were couplied with and estimated the speed of his train at the time of the accident at about 12 or 14 hiles an hour.

Baggageran Lynch stated that about an hour after the derailment occurred he examined the switch and found that the left switch point did not fit properly for the wye track. He estimated the speed of the train at the time of the accident at 12 to 15 miles an hour. The statements of Flagman Mathews added nothing of importance.

Section Foreman Drennan stated that he arrived at the scene of the accident about 15 undersafter it occurred and immediately examined the switch. He found the switch set for the wye track and latched, with a car truck standing on the points, which fitted tightly at that time. After the truck was moved from the points, however, he noticed the switch was partly open, due to a bridle bar having been bent, which narrowed the gauge. He did not think this condition necessarily indicated that the switch had been run through prior to the accident. He further stated that it is not the practice to lock the switches, except in the case of three switches located in the yard, and that frequently he finds almetrack switches set for side tracks.

Roadmaster Sutphen stated when he arrived at the point of accident a few minutes after it occurred he immediately examined the track and found it badly damaged beyond the frog, but from the switch points to the frog it was only slightly damaged. He found the switch completely thrown and latched for the wye track, but when set for the main track the left point remained partly open. He thought of the possibility of west-bound train No. 17 having run through the switch, but in this event the points would have been scarred and damaged and he found no evidence of anything of this kind. Roadmaster Sutphen stated, however, that it was possible for a train to run through a switch, with the lever unlatched, and produce the same condition as existed when the derailment

occurred. He further stated that in his opinion the switch had been tampered with prior to the arrival of train No. 18 and left in a partly-opened position. The statements of Superintendent Archer, who was also at the scene of accident shortly after it occurred, practically corroborated those made by Roadmaster Sutphen.

Inspection made of the equipment of train No. 18 subsequent to the accident failed to disclose anything that might have caused or contributed to the derailment. Inspection of the switch showed that the bridle bar, which was secured to the points 12% inches from their tip ends, extending under the left rail to its joint with the connecting rod, was bent downward about 2 inches on the inside of the left rail, and was also bent about 2 incres out of line, there were no marks on it to indicate that it had been struck violently by any foreign object.

Conclucions

This accident was caused by the damaged condition of a switch which had probably been run through by another train.

While the evidence is not clear as to the cause of the damaged condition of the switch, it is believed that it had been run through by train No. 17 on its westbound trip. There was no damage to the switch points, but the bridle bar had been bent in such a way as to permit the switch to stand partly open when set for the main track.

The testimony of the crew of this train indicated that the air brakes were tested and had functioned properly prior to the accident. Engineman Coleman testified that he made a service application of the brakes when about 200 feet west of the point of accident and an emergency application when about 90 feet from the switch; the distance the train traveled, however, indicated that it was moving much faster than 12 or 14 miles an hour at the time the brakes were first applied.

The testinary shows that only three of the switches in Anderson are root locked, that the tracks are used as public thoroughfares, and that on many occasions the main-track switches are found changed for the side tracks; it further appears that all of the switch stands are of the low type with neither targets nor lamps to mark their positions. This is a very unsafe condition for the operation of trains, and is one which should be remedied with the least possible delay. Had the switch involved in this accident been equipped with a lock, this

accident probably would not have occurred.

The employees involved were experienced men and none of them had been on duty in violation of any of the provisions of the nours of service 12π .

Respectfully subsitted,

W. P. BORLAND,

Director.