

being pushed round a curve. The waggon thus jumped off the rails of the cross-over-road, and, in being pushed back after it had left the rails, it fouled the up-main-line.

It seems somewhat strange that neither the station-master who was directing the shunting of the train, nor the engine-driver and fireman who were pushing it back, nor the guard who was in the break-van, should have noticed that a waggon in the middle of this train was being pushed along the ballast for the distance of 70

yards; but nevertheless such was the case; and it is impossible to attach blame to these men, who, having none of them any reason to suspect that such an accident had occurred, could not have been expected to walk along the train for the purpose of ascertaining that all the vehicles were on the rails.

*The Secretary,
(Railway Department),
Board of Trade.*

I have, &c.,
H. W. TYLER.

Printed copies of the above report were sent to the Company on the 10th December.

LANCASHIRE AND YORKSHIRE RAILWAY.

*Board of Trade,
(Railway Department),
29th November 1875.*

Sir,

I HAVE the honour to report, for the information of the Board of Trade, in compliance with the order of the 15th instant, the result of my inquiry into the circumstances connected with the collision which occurred on the 11th inst., near Blackburn station on the Lancashire and Yorkshire Railway.

In this case the London and North-Western Company's 3.50 p.m. passenger train from Liverpool to Blackburn came into collision with the Lancashire and Yorkshire Company's 2 p.m. goods train from Preston to Normanton via Blackburn, which latter train was standing on the same main line as that on which the London and North-Western train was running, with its van very near the Darwin Street cabin in the Blackburn yard, inside the home-signal worked from that cabin.

Fourteen passengers and the guard of the London and North-Western Company's train were injured, but none of the injuries are believed to be of a serious nature.

The fracture of the buffer-plank of the engine was the only serious damage sustained by the passenger train.

In the goods train, the break-van and two waggons were slightly damaged.

The entrance to Blackburn station from the Bolton, Preston, and Wigan direction, is protected, first of all, by a cabin at the junction of the lines from Bolton and from Preston (the latter line being joined by the line from Wigan at Cherry Tree junction, 1½ miles further back) called the Darwin Street cabin, and then by another cabin called Blackburn junction cabin, 370 yards nearer the station, where a goods loop runs off from the main line with facing points. Darwin Street cabin is provided with a down home and down distant signal for the Preston line, both well placed and seen, the former 170 yards from the cabin. Blackburn junction cabin is similarly provided, its down distant-signal being by a slot arrangement, the down home-signal at Darwin Street cabin, and its down home-signal, being also 170 yards from the cabin, or 410 yards from the Darwin Street down home-signal.

Approaching from Preston, the line curves somewhat to the left. The gradients are moderate.

Close to and on the Blackburn junction side of Darwin Street cabin there is a wide over-bridge, and as the cabin is a high one for the sake of sight over this bridge, the signalman's view of the lines on the Blackburn side of it is for some distance intercepted.

The 2 p.m. goods train from Preston to Normanton, on the day in question, did not start till 4.30 p.m., having been delayed on its previous journey; it approached Blackburn at about 5.40 p.m., consisting of engine and tender, 26 waggons, and a break-van, was checked by the Darwin Street signals, which were against it, was called on by a green light from the signalman, and stopped at the Blackburn junction home-signal, there being another goods train in front

of it. The driver states that after standing at this signal for about 10 minutes, during which time he had given the loop line whistle two or three times, the collision took place, he having neither heard nor seen anything of the passenger train which ran into his train.

The guard of the train states that when his train came to a stand at the Blackburn junction home-signal, his van was a short distance past the over-bridge near the Darwin Street cabin, which latter he could not see on account of the bridge; that there were three good tail-lights burning on his van, one at the back and the side-lights at the front end of the van; that on first stopping he got out and looked ahead, and then got into his van again until he heard the noise of the coming train, upon which he jumped out at once into the 6-ft. space just before the collision; owing to the shock of which two cattle waggons mounted, and the rear of his van was damaged.

The 3.50 p.m. passenger train from Liverpool and Blackburn consisted of engine and tender, four coaches and a break van. The train left Wigan at 4.50 (right time), in charge of driver Winstanley, of 22 years service, and of guard Lebond, of two years service, in their respective capacities. It was detained four minutes by signal at Boar's Head junction, and left Cherry Tree, the next station to Blackburn, at 5.43, four minutes late. The driver states that on approaching Darwin Street junction, both home and distant signals were against him, but were both taken off—the distant signal first when he was close to it, and the home-signal immediately afterwards—upon his whistling; that his speed at the distant-signal was about 15 miles an hour, the road being, as he was able to see, clear up to the home-signal; that when about 40 or 50 yards from the home-signal, he caught sight of the tail-lights of a van standing on the line on which he was running; that he had previously seen those tail-lights 600 or 700 yards off, and had thought, owing to the curve, that they belonged to the van of a train shunted on to the other line to allow his train to pass, and that after this he had lost sight of them, from their having been hidden by the bridge, till they again came into view; that he had then time to reverse his engine, reapply steam, open both sand valves, and his fireman to put on his break, and thus to reduce his speed to about eight miles an hour on striking the van of the goods train. Neither he nor his fireman jumped from his engine; they were neither of them hurt nor knocked down.

There is no material difference between the evidence of the fireman and driver, except that the latter thinks that the speed on collision was 13 or 14 miles an hour.

The guard of the train was unaware of danger till the collision occurred, and knocked him down. He was injured in the back.

The collision occurred at about 5.49 p.m.

The signalman, John Wood, of four years service in Darwin Street junction cabin, had come on duty at 2 p.m. for an 8-hours' spell. He has 24 levers in his

cabin, and 2 electric bells; one to Blackburn junction, and the other to the next cabin in the Bolton direction. He remembers the goods train arriving at 5.43. He did not take off his signals for it, but called the driver on with a green light. He had signalled this train on with three beats to Blackburn junction, and had received back the usual acknowledgment, one beat. The driver whistled for the loop line as he passed the cabin; two other trains then passed towards Bolton on the up-line. On the London and North-Western Company's passenger train, for which he was on the look out, whistling for the signals, he signalled it on with two beats to the Blackburn junction signalman, who acknowledged the signal, and took off his slot, releasing Wood's home-signal; upon which Wood lowered first his distant and then his home-signal, having no notion that the goods train (of which he could see nothing) was standing with its van close to his cabin, but hidden by the over-bridge.

The signalman at Blackburn junction, Benjamin Watton, of 24 years' service, had come on duty at 2 p.m., to remain till 10 p.m. He states that after a London and North-Western Company's goods train from Warrington had passed at 5.39, he had received no notice from Wood of any other train till he got two beats for the passenger train at 5.49; that he had pulled off his slot on Wood's home-signal at 5.42 without any communication with Wood (the way in which they then worked); that on receiving Wood's signal for the passenger train he acknowledged it, passed it forward to the station cabin, and was pulling off his home-signal (not having a notion that the goods train was standing at this signal), and not having looked towards Wood's cabin—as, having received no signal from Wood, he had thought the

line must be clear—when the collision occurred; that he had heard no whistle for the loop line from the goods driver, but was busy at the time with a train shunting on the other line.

This collision was caused by a want of due caution on the part of signalman Watton in omitting to see that the line was clear between his cabin and Wood's before acknowledging Wood's signal for the passenger train, and proceeding to lower his own home-signal. Had he only taken the precaution of looking towards his home-signal, he would have seen the head lights of the goods engine standing there, and have had time to put up his distant-signal (which slotted Wood's home-signal) to danger.

There is a discrepancy in the statements of Wood and Watton as to the signalling of the goods train and as to the time at which Watton took off the slot. I think it probable that the slot was taken off at the time (5.42) stated by Watton, and that though Wood may have forwarded the signal for the goods train, Watton neither heard nor acknowledged it, and that Wood assumed that as Watton did not put on his distant-signal, the goods train had at once passed into the loop line.

The proper mode of working is that which is now adopted, viz., that the slot is not taken off until the approach of a train is announced.

A continuous break in the hands of the driver of the passenger train might have very probably prevented the occurrence of this collision, or at any rate have much mitigated its effects.

I have, &c.,

C. S. HUTCHINSON,
Lieut.-Col. R.E. &
Colonel.

The Secretary,
(*Railway Department,*)
Board of Trade.

Printed copies of the above report were sent to the Company on the 28th December.

LANCASHIRE AND YORKSHIRE RAILWAY.

Board of Trade,
(*Railway Department,*)
15th December 1875.

SIR,

I HAVE the honour to report, for the information of the Board of Trade, in compliance with the order of the 23rd ultimo, the result of my inquiry into the circumstances connected with the accident which occurred on the 15th ultimo, at Brighouse, on the Lancashire and Yorkshire Railway.

In this case, as the 10.15 a.m. passenger-train from Manchester to Normanton was passing over a set of facing-points just after starting from the platform at Brighouse, the engine and tender left the rails, and after running a short distance along the ballast of a loop-line to which the facing-points lead, came into slight collision with a light-engine standing in the loop, inside a set of catch-points, 45 yards from the facing-points. The other vehicles kept the rails of the main-line, with the exception of the front wheels of the first carriage.

No passengers have complained of injury.

The engine of the passenger-train had its buffer-plank damaged, and the first carriage an axle-box broken. The light-engine had its side-framing injured.

The facing-points at which this accident happened are situated at the Normanton end of Brighouse station, and are 115 yards from the signal-cabin, in which there are 27 interlocked levers. They are provided with one of Messrs. Saxby and Farmer's patent locking arrangements, the points being moved by No. 15 lever, and the locking-bar and plunger by No. 16 lever. The starting-signal, which cannot be lowered till No. 16 lever is pulled completely over, is nearly opposite the signal-cabin.

The 10.15 a.m. train from Manchester to Normanton left Brighouse on the day in question at 12.15, eight minutes late, consisting of engine, tender, five coaches, and a break-van; the last four coaches being coupled to the van with continuous breaks.

The driver states that the starting-signal applying to the main-line was lowered for him before he started; that he did not observe the position of the loop facing-points as he approached them, having been engaged in moving his reversing-lever, but that he felt the right leading-wheel of the engine strike the right switch, while the left wheel took the wrong side of the left switch, and then left the rails, followed by the other wheels of the engine, all the tender wheels, and the first wheels of the first carriage, the remaining wheels being all on the main-line rails; that the engine ran along the ballast about 45 yards from the facing-points, until it struck a light-engine standing on the loop-line, its right wheels being then outside the left main-line rail and its left wheels inside the right rail of the loop line; that he examined the points and found that the toe of the right switch had been struck, and that of the left one pared off a little on the inside, but that they were lying right for the main-line. The couplings had all held good.

The signalman on duty had served in that capacity for 24 years at Brighouse. About five minutes before the accident he had opened the loop-line points (No. 15 lever) to let a light-engine into the loop-line, and had locked them in that position by pulling over the locking-bar lever (No. 16); when the engine had passed into the loop-line he put back No. 16, then No. 15, then locked No. 15 in its new position (i.e., right for the main-line) by again pulling over