The

VIRTUAL MUSEUM

of the

LANCASHIRE & YORKSHIRE RAILWAY

Accident Reports.

18 November 1871

BoT Report into Accident in

Walton Tunnel.

(1 Page).

The indicator also was out of order, so that it did not show when the points failed to be close to the stock rails.

I do not think the station master is free from blame, as he had previously had occasion to find fault with the yardsman for the manner in which he had attended to the points in the yard; and he should, in consequence, have made it his duty to look more closely after him, and to the manner in which he kept the points.

Bacup station requires to be re-arranged, and the points concentrated and worked from a signal box, with the proper interlocking of the points and signals. The facing points at the mouth of the tunnel should also be bolt-locked by the distant signal. But the greater part of the station is situated on a falling gradient, on which carriages will not remain at rest unless there are breaks to hold them. For this reason there should be a signal box at the tunnel mouth, with proper arrangements for preventing vehicles that may break away from running down the incline towards Rawtenstall.

I have, &c.

W. Yolland,
Colonel.

The Secretary,
Railway Department,
Board of Trade.

LANCASHIRE AND YORKSHIRE RAILWAY.

Board of Trade
(Railway Department),
Whitehall, 2nd December 1871.

Sir,

I have the honour to report for the information of the Board of Trade, in obedience to your minute of the 22nd ultimo, the result of my inquiry into the circumstances which attended a collision that occurred in the Walton tunnel, near Liverpool, on the Lancashire and Yorkshire Railway, between a passenger train and a goods engine on the 18th ultimo.

Two persons are stated to have been slightly hurt.

The Walton tunnel is about 1,140 yards in length; it is situated between Bootle Lane station, 2¼ miles from Liverpool, and Walton junction, 3¼ miles from Liverpool. It is worked on the absolute block system with the assistance of the electric telegraph; the telegraph signal stations being at Bootle Lane station and Walton junction.

There are extensive sidings at Bootle Lane station, and the telegraph signal box is situated about 370 yards on the Liverpool side of the mouth of the tunnel. The entrance to the sidings is from the up line, and the points are close to the signal box. Bootle Lane passenger station platforms are just to the north of the signal box.

In consequence of a deficiency in the length of the sidings for the shunting and marshalling of goods trains at Bootle Lane station, it had been found necessary to establish a draw-ahead or stop semaphore signal, placed within a few yards of the mouth of the tunnel, and worked from the signal box, to enable any train to pass the station signals, and to draw close up to the mouth of the tunnel, and to stop there until the signalman had received "line clear" from Walton junction by telegraph, if the train was going through the tunnel, and had taken off the stop signal; or to back again into the sidings if it was merely engaged in shunting or marshalling the waggons prior to leaving.

This stop signal was not placed in its proper position at the left of the up line, but at the other side, to enable it to be seen from the signal box, the view being obstructed by the arch of an overbridge, about 115 yards north of the signal box; but a double disc down distant signal is placed in the position which the stop signal should have properly occupied; this down distant signal being also worked from the signal box and intended to protect Bootle Lane station and the down line.

It appears that on the day in question the 10h. 30m. a.m. up passenger train from Liverpool to Preston, which consisted of an engine and tender, two vans, and five carriages, reached Bootle Lane station about 10h. 40m., stopped at the up platform to put down and take up passengers, and left at 10h. 41m. At this time the engine of a special goods train from Bolton to Liverpool had returned from Liverpool, and was standing in the Bootle Lane sidings, having attached a guard's break van while in the sidings, and was waiting for permission to proceed on its way back to Bolton; and when the 10h. 30m. passenger train had left the station the signalman took off the signal for this goods engine to come out of the sidings, and put on the stop signal at the mouth of the tunnel, intending to keep the goods engine standing there until the 10h. 30m. a.m. passenger train had been telegraphed back as having arrived at Walton junction, and he wanted to bring out another goods train to do some shunting. But the driver of the goods engine, it appears, was not well acquainted with the line, as he told me that he did not get to Liverpool oftener than once in six or nine months, and on coming out of the sidings he failed to observe the stop signal at the right side of the mouth of the tunnel, and proceeded through the tunnel, in ignorance that he was intended to wait at the south end of it until he got special permission from the signalman to proceed by the latter taking off the stop signal.

The driver of this goods engine says he travelled very gently along the tunnel, hardly as much as at the rate of 10 miles an hour; but, at all events, he overtook and ran into the passenger train just before the latter got to the north end of the tunnel, but rather more than half way through the tunnel, according to the driver of the passenger train, who says he was travelling at 15 or 16 miles an hour. The lights at the tail of the passenger train were not visible to the driver of the goods engine on account of the steam. The driver of the passenger train felt something had happened, but he did not know what, and the guard experienced a great shock.

When the engine of the passenger train emerged from the tunnel it was found that the train had broken into two parts, four vehicles remaining attached to the engine, and the three last travelling apart from the front part of the train. A shackle of the coupling chain and the side chains between the fourth and fifth vehicles had snapped, and the shackle of a coupling between the last van and the carriage in front of it had also broken, but the side chains kept up the connexion in this case.

No damage was done to the goods engine and break van; but the buffers of the guard's van at the tail of the passenger train were broken, and two carriages were slightly damaged.

The collision was caused by the mistake of the engine driver of the goods engine in having failed to see the "stop" signal at the mouth of the tunnel.

The Railway Company are about to lengthen the siding accommodation at Bootle Lane station, and when this is done there will be no necessity for resorting to this exceptional mode of working the block system; but while it is retained the stop signal should be placed in its proper position at the left of the up line, and whether it stands at "danger" or at "all right" can be shown in the signal box, by an electric or mechanical repeater. The down distant signal should also be shifted to the other side of the lines.

Again, it is desirable that the same kind of signals should be used throughout the Company's lines, and not a double disc signal at one side of the line and a semaphore signal immediately opposite to it.

I have, &c.

W. Yolland,
Colonel.

The Secretary
(Railway Department)
Board of Trade.