

The
VIRTUAL MUSEUM
of the
LANCASHIRE & YORKSHIRE RAILWAY

Accident Reports.

10 October 1871

BoT Report into Accident at
Bury, Low Level Junction.

(1 Page).

LANCASHIRE AND YORKSHIRE RAILWAY.

*Board of Trade,
Railway Department,
27th October 1871.*

SIR,

IN compliance with the instructions contained in your minute of the 13th inst., I have the honour to report, for the information of the Board of Trade, the result of my inquiry into the circumstances attending the collision which occurred on the 10th inst. at Bury Low Level Junction on the Lancashire and Yorkshire Railway, between two goods trains.

The fireman of one of the trains was fatally injured, and died in about an hour after the collision.

At Bury Low Level Junction, where this collision occurred, a fork about 220 yards in length connects the East Lancashire line from Preston, through Bury and Heywood, to Manchester, with the main line from Liverpool and Bolton, through Bury, to Blue Pits, &c. The fork falls from its junction with the East Lancashire line on a gradient of 1 in 90, for the first 66 yards, and then on one of 1 in 59 for the remaining 154 yards. The main line rises towards the junction at 1 in 60 for the 154 adjoining yards, and afterwards continues to rise at 1 in 600. The cabins at the junctions are not at present provided with locking apparatus, but are among those for which it has, I am informed, been ordered. For trains descending the fork the Low Level Junction is provided with a home signal, visible 45 yards off, and a distant signal 140 yards from the home signal, which can be seen from a distance of only 30 yards, when an engine is nearly opposite the High Level cabin. The latter cabin is provided with a distant signal for trains from Preston, which can be seen for some distance off; and for trains proceeding down the fork with a home signal, which appears, however, to be never used, and was not in working order when I visited the spot.

The practice with regard to trains proceeding down the fork is this: the signalmen at the two junction cabins communicate by means of gongs; on a train approaching the High Level Junction the signalman there gives two gongs to the Low Level junction; upon this, if the signalman at the latter is ready for it, he takes off his distant signal; and the High Level signalman, having, if ready, taken off his distant signal, gives the driver of the approaching train a white light with his hand lamp. If the Low Level distant signal is not taken off in response to the gong, the driver gets no white light from the High Level cabin, but understands that he may creep down past the High Level cabin to the Low Level junction.

Soon after 4 a.m. on the 10th inst. a goods train from Preston to Oldham Road, consisting of engine and tender, 23 loaded waggons, (6 with pig iron, 4 with stone, and 13 with mixed goods,) and a break van, approached Bury High Level junction cabin, about half an hour late, to proceed down the fork. The proper load was stated by the guard to be 25 waggons of ordinary goods and a break-van; but that as three waggons of iron are considered to be equivalent to four of ordinary goods, and two of stone to three ordinary, the load, according to this reckoning, was equal to 27 waggons of ordinary goods, or to two more than the proper load. The driver, a man of 12 years service, as such, states that his engine was in good order, and also his tender breaks; that the night was rather frosty, and the rails slippery; that he approached the High Level junction, of which the distant signal had been taken off in answer to his whistle, at a speed of about two miles an hour, understanding that he might creep down to the Low Level junction.

He accordingly proceeded down the bank at a very slow speed, with his tender break hard on, and both he and his mate applying sand; but on getting near the Low Level junction he found that he could not stop without reversing. He accordingly reversed, and put on contrary steam; but the reversing lever flew back, and the engine bounded forward. He then shut off steam, reversed again, and put on contrary steam; but before these measures took effect his engine had fouled the crossing, and struck, at a speed of about one mile an hour, the fourth or fifth waggon from the tail of a goods train from Liverpool which was running through the junction at a speed of from 15 to 20 miles an hour. The driver missed his fireman as he was reversing the second time, and the poor fellow was picked up under the damaged waggons of the Liverpool train, with his legs and body injured, blood being found upon the right step of the engine, showing that the waggons most likely caught him as he was imprudently attempting to alight. The engine had its buffer plank broken and footstep bent. The waggons in this train sustained no damage, and nothing was thrown off the rails except two wheels of the waggon next the engine. The guard of this train had put on the break of his van, which weighed 9 tons, before reaching the High Level junction, and fully expected that from the low speed, barely more than one mile an hour, at which they descended the bank, that they would stop in ample time. He states that none of the waggon breaks were pinned down.

The signalman at the High Level junction observed nothing unusual in the speed of the train as it slowly passed his cabin. The Low Level distant signal not having been taken off in answer to his gong, he gave the driver no white light with his hand lamps.

The Low Level junction signalman was watching the Liverpool train, and did not observe the other one till it was passing his cabin. Its speed was then very slow, and the engine appeared to be reversed.

The Liverpool train, which consisted of engine and tender, about 26 waggons and a van, was struck about the fourth or fifth waggon from the van, the last five waggons and the van being all knocked off the rails, but not sustaining much damage. The driver was not aware till he had gone on some distance of what had happened to his train.

This collision was caused by a want of judgment on the part of the driver of the Preston train in estimating his power of controlling his train in descending a steep gradient.

To work a junction, especially of this kind, safely, no two trains ought to be allowed simultaneously to approach it. The signal arrangements for carrying out this mode of working will most likely be put up in connection with the contemplated improvements; and it is to be hoped that the Company will then, if not before, insist on the disuse of hand signals as a substitute for a home signal at the High Level cabin.

Fresh positions may be found for some of the signals, whereby the view of them would be much improved.

The rule as to the number of waggons that can be safely carried up and down steep inclines should be strictly enforced, and not, as in the present case, be broken by an equivalent to two more than the prescribed number being taken.

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

I have, &c.,
C. S. HUTCHINSON,
Lieut.-Col. R.E.