

The  
**VIRTUAL MUSEUM**  
of the  
**LANCASHIRE & YORKSHIRE RAILWAY**

Accident Reports.

31 August 1869

BoT Report into Accident at  
Shaw.

(2 Pages).

but that he did not notice any until he reached Craigs siding, when he observed the coal train in front, and he then reversed the engine, whistled for the breaks, and did all in his power to stop, but was unable to pull up in the short distance (133 yards) on a falling gradient of 1 in 100 between the spot at which he first observed the coal train and the coal train itself.

In explanation of the cause why he had not observed the signals, he says that after leaving Barnsley, it being a bitter cold day, he was engaged in putting on his top-coat, and standing with his face to the chimney of the engine, and his back towards the tender; in other words, he was not keeping a look out at all. When running with the tender in front there is no shelter whatever provided for the men, and this is one of the grounds on which it is objectionable to run engines with the tender in front.

The fireman states that he was attending to the fire, and in consequence he did not observe the distant signals.

The collision was wholly due to the neglect of the driver and fireman, who evidently did not expect a coal train to be in their way so close upon Barnsley; but it is probable that it would not have happened if the engine had been running, as it should have been, with the engine in front.

The excuse given for running with the tender in front from Barnsley to Wakefield is that, as this train

is due to arrive at Wakefield at 12.43. p.m., and the engine has to leave with the train for Manchester at 1.15. p.m., there is not time, in consequence of the blocked state of the station, to turn the engine, an operation which would not take more than three minutes to perform, independent of the time occupied in getting to and leaving the turntable; and hence it is said to be necessary to run with the wrong end in front between Barnsley and Wakefield, so that the engine may be in front between Wakefield and Manchester.

I do not consider the explanation satisfactory.

The collision would not have occurred if the line had been worked with the assistance of the telegraph on the absolute block system.

The effect of the collision, which took place when the passenger train was running about 16 or 18 miles an hour, was greatly to damage the tender, breaking the framing, injuring the tank, breaking off the buffers, and throwing two of the wheels off the rails; one piston of the engine was damaged, and the advanced end of the third-class carriage next to the engine was stove in, two compartments were damaged, and the buffers were smashed. Four of the waggons and the break van of the coal train were also damaged.

I have, &c.,  
W. YOLLAND,  
Col.

The Secretary,  
Railway Department,  
Board of Trade.

A copy of the above report was sent to the company on the 13th December 1869.

## LANCASHIRE AND YORKSHIRE RAILWAY.

1, Whitehall, S. W.,  
30th Sept. 1869.

SIR,

I HAVE the honour to report, for the information of the Board of Trade, the result of my inquiry, in compliance with the terms of your minute of the 3rd inst., into the circumstances attending a collision between two excursion trains which occurred at Shaw station on the Oldham and Rochdale section of the Lancashire and Yorkshire Railway on the 31st ult.

One poor woman is stated to have broken her leg in jumping out from one of the trains, and seventeen other passengers are reported to have been shaken and bruised.

Shaw station is approached from Oldham on a falling gradient of 1 in 192, extending for a considerable distance. The line is perfectly straight for about 600 yards next the station on the Oldham side, before which it curves. The station is provided with the usual main and distant signals. The former are low, and somewhat indistinct. The distant signal towards Oldham is situated about 700 yards from the main signal, and, in consequence of the curve, is visible from an approaching engine for a distance of only about 360 yards. There is a public road level-crossing at the Oldham end of the station, the gates being in charge of a man who also works the station signals.

Tuesday the 31st August was a great Oldham holiday, and no less than nine excursion trains, to convey altogether 6,700 passengers, were arranged to leave the Werneth station at Oldham at the following periods; viz., 4.40, 4.50, 5.0, 5.15, 5.30, 5.45, 6.0, 6.15, and 6.30 a.m., all to take up passengers at two other Oldham stations (Central and Mumps); some to stop at Shaw, and all to pass through it on their way to Rochdale, whence they were to diverge to their several destinations. Between these excursion trains there was also the ordinary passenger train from Manchester, due at Werneth station at 5.25, Mumps at 5.30, and Shaw at 5.37; the following excursion train being timed 5 minutes later, and not stopping at Shaw. On looking through the Lancashire and Yorkshire Company's excursion tables for August, I can find no other instance of anything like this number of trains following each other at such rapid intervals on the

same line of rails, and one would have accordingly expected that some very special precautions would have been taken between Oldham and Rochdale to maintain a safe interval between the following trains. The sequel will show to what extent this was done, so far as the two first trains were concerned.

Paragraphs to the following effect were inserted in the excursion time books for August:—

“The particular attention of station-masters, clerks in charge, signal-men, pointsmen, and all others concerned, is called to the proper signalling of the trains at their respective stations, when there are so many special trains upon the line. In order to ensure safety, the instructions of the Company must be *strictly observed* (in italics in the original), and care taken that the proper time is allowed to expire before the trains are allowed to follow each other past the various junctions and stations, or on any other part of the line. (See rules and regulations of the Company's Rule Book on this point.)”

“The speed of these trains not to exceed 20 miles an hour, including stoppages.”

“You must have two good patent breaks, one in front and one at the end of your train, and two good breaks in the centre of the train.” (To station-masters and guards.)

It appears from the evidence that the first excursion train, consisting of engine and tender, and 22 coaches, including a set of patent breaks, (three carriages to a set,) at each end of the train, and containing about 800 passengers, got away from the Werneth station, Oldham, for Scarborough, at 4.45 a.m., on the 31st ult., five minutes late; it lost time, however, at the two other Oldham stations, and left Mumps at 5.5 a.m. instead of 4.50, and was about 15 minutes late in arriving at Shaw (2 miles 1034 yards from Mumps), which it reached at 5.10, instead of 4.55, the time bill allowing only five minutes (including stoppage) for running this distance, requiring a speed of 31 instead of only the prescribed speed of 20 miles an hour. The driver and guards of this train both stated, that although there was some little fog hanging about the ground as they approached Shaw, the signals were visible at the usual points, and the train was stopped at the station, with its last car-



riage 15 yards outside the station signal, without any difficulty, notwithstanding a slight greasiness of the rails. Just as it was starting again, after picking up its passengers, it was run into by the second train.

This second train consisted, like the first, of engine and tender and 22 coaches, with a set of Newall's patent breaks at each end; each set, however, included only two instead of three coaches, owing to some irregularity in the formation of the train at Miles Platting. The driver, Mills, was an experienced man of excellent character; the head guard in the rear break compartment had 5½ years' service; the second guard in charge of the front break being a porter who occasionally acted as guard. The train left Werneth station, Oldham, for Rochdale and Fleetwood, at 5 a.m., ten minutes late; and finally left Mumps (the last Oldham station) at 5.10 a.m., 15 minutes late, and 5 minutes after the first train, the interval laid down in the time tables, although this second train had not to stop at Shaw or at any other station before reaching Rochdale.

It does not appear that the driver received any caution of the first train being only 5 minutes ahead, either from the station master at Mumps or at either of two intermediate signal stations between Mumps and Shaw. At one of these (a coal siding) there was no signalman on duty, notwithstanding the special order before referred to; at the other (a junction) the signalman had his semaphore at caution, which of course at a junction intimated nothing more than that the train might pass. I presume that if either the station master or signalman gave the matter a thought, each concluded that as the time apart of these trains agreed with that laid down in the time tables the driver of the second train ought to know how closely he was following the first train, and ought to require no special caution. On approaching Shaw, Mills stated that he shut off steam (his speed being 20 miles an hour) some distance before coming in sight of the distant signal, which, owing to the fogginess of the morning, was visible only about 100 yards, instead of 360 yards, off, standing at danger; that he then whistled for the signal, and as it was not taken off his fireman applied his break, and got the wheels to skid as the signal post was passed; that after passing the signal post he began to whistle for the guards' breaks, but that he could not say whether they were applied or not; that he caught sight of the Shaw station signal and rear coach of the first train at the same time, viz., only when about 200 yards from them; upon which he reversed his engine, and put on contrary steam; that the speed was thus further reduced, and did not exceed 5 miles an hour upon the collision taking place. He stuck to his engine, and was not knocked down nor hurt; his fireman jumped off just before the collision, and escaped without injury.

The fireman corroborated the driver's statement, except with regard to the speed, which he estimated at 25 to 30 miles an hour on sighting the distant signal.

The guards both stated that they applied their breaks, and got their wheels to skid, on passing the signal post, at which point the head guard estimated the speed to be no more than 8 miles an hour, the second guard 20 miles. The second guard (with the front break) was slightly hurt.

The signalman at Shaw stated that the first train came to a stand at 5.10, and that the collision occurred at 5.13; that the morning was slightly hazy (the mist lying low), but that he could see his distant signal (700 yards off) and both trains as they came round the curve, nearly 1,000 yards off; that the second train came round the curve very quickly, and whistled very sharply; that seeing plainly enough there would be a pitch in, he shouted to the driver of the first train to move ahead; that the speed at collision was 4 or 5 miles an hour.

The damage to the rolling stock consisted in one

coach in the rear of the first train being shifted on its frame, and some partitions being broken; nothing left the rails in either train, and both were able to proceed on their journey after a delay of about half an hour. The majority of the injured passengers were in the rear of the first train.

The eight following trains were, I understand, all stopped in time to prevent further accident.

The immediate cause of this accident was undoubtedly the want of care of the driver Mills in approaching Shaw station down a falling gradient on a somewhat foggy morning at a speed which practically took the control of the train out of his hands, so far as stopping at signals was concerned, and this more particularly as he ought to have known that a train due to stop at Shaw had preceded him only five minutes. His own fireman estimated his speed at 25 to 30 miles an hour on sighting the distant signal, and if the Shaw signalman's time is to be depended on the speed must have been about 40 miles an hour.

A second cause of this accident must, I think, be attributed to a want of promptness in one or both of the guards in the application of their breaks. Had the wheels of four carriages been kept skidding from the distant signal post to the tail of the first train, a distance of 680 yards, a greater effect would surely have been produced upon the speed of the train.

The short view of the distant signal (only about 360 yards at the best of times), and the indistinctness of the station signal, may also have helped to cause this accident.

Again, the break power of the train was far below that laid down in the "special train arrangements," where it is prescribed that each train is to have "two good patent breaks" (which usually consist of three carriages each), "and two good breaks in the centre of the train," making eight break carriages in all; this train having only four. I was informed also that not one of this day's nine excursion trains was provided with the "two good breaks in the centre." It must tend to bring the rules of a company into contempt in the eyes of its servants when they see such wholesale violation of them as occurred in this particular.

The station-master at Mumps was, I think, much to blame in not cautioning the driver and guards of the second train that the first was only five minutes ahead, and had to stop at Shaw. There was also neglect in there being no pointsman at Platt's sidings, and in the Royton junction signalman giving the second train no special caution signal.

There was a want of due care in the drawing up of the special train tables, in which there must have been oversight in timing the despatch of following trains, in two instances, with intervals of only five minutes between them, though the first was a stopping and the second a non-stopping train, and also in allowing in one instance only five minutes for the performance of 2 miles 1,034 yards, including stoppages, requiring a speed of 31 miles an hour in place of the prescribed speed of 20 miles an hour.

While detailing the above as the several more or less immediate causes which concurred in giving rise to this accident, I cannot but believe its true cause is to be found in the absence of the only safe way of conducting dense traffic over a line, viz., the preservation of a proper interval of *space* between following trains by means of the electric telegraph; and to this subject the occurrence of the present accident may, I trust, direct the earnest attention of the directors.

The faulty position of the Shaw distant signal and the indistinctness of the station signals are, I believe, to be at once rectified.

I have, &c.,

The Secretary,  
Railway Department,  
Board of Trade.

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

• A copy of the above report was sent to the company on the 4th November 1869.