

LONDON MIDLAND AND SCOTTISH RAILWAY.

MINISTRY OF TRANSPORT,

6, Whitehall Gardens,

London, S.W.1.

29th May, 1936.

SIR,

I have the honour to report for the information of the Minister of Transport, in accordance with the Order of the 13th March, 1936, the result of my Inquiry into the circumstances attending the accident which occurred on the 11th March, 1936, near Lea Road, Preston, on the London Midland and Scottish Railway, when Ganger A. Reeves and Relayers J. L. Topping, J. Thompson and T. Rossall were struck by a train and fatally injured, and another relayer named T. B. Woods sustained injuries to his back from the same cause.

This regrettable accident occurred on the up slow line from Blackpool to Preston, opposite Ashton intermediate signal cabin, which is situated 1 mile 1,500 yards in the down direction from the latter station. The tracks at this point, which are four in number, run approximately east and west and are practically straight and level for more than half-a-mile in either direction. They are named as follows from the North:—Up Fast, Down Fast, Up Slow, Down Slow.

Two passenger trains were concerned in the accident, namely, the 8.28 a.m. express from Blackpool North to Liverpool Exchange, travelling on the Up Slow line, and the 8.25 a.m. Fylde Coast Express from Blackpool Central to Preston, which was running slightly in advance of it on the Up Fast line.

The weather was fine and clear, with a slight breeze from the North-East.

Report.

A mile of the Up Slow track was about to be relaid between the 1½ and 2½ mile posts from Preston, and two relaying gangs consisting of some 64 men in all, including the two gangers, John Hindle and Alfred Reeves, started the preparatory work in the down direction from the 1½ mile post at 7.30 a.m. on the day before the accident.

The gangs were merged into one from the start, but there appears to have been no definite understanding between the gangers as to which was in charge. Hindle was senior in service, but Reeves had held the position of ganger somewhat longer. Fifteen of the men under a sub-ganger and a look-out man were laying out the rails, and the remainder, forming the main gang, were engaged opening out the ballast, protected by a look-out man at each end. The men in the main gang were divided into sets of four, each set being responsible for a 45 ft. rail length. When a rail length was completed, the men concerned moved to the Blackpool end of the gang and started work on a fresh length. They were thus spread over a distance of about 495 ft. and advanced gradually until the leading men had reached a point about 106 yards on the Blackpool side of Ashton Cabin by 9.0 a.m. on the second day, when the accident occurred. The men laying out the rails were by that time half-a-mile or more ahead of the main gang.

Relayer William Armistead was the look-out at the Blackpool end of the main gang and was standing in the Down Fast track, some 30 yards from the leading man. From that point he could observe the smoke and steam of a train approaching in the up direction for over a mile, but owing to a curve and slight cutting could not determine on which line it was travelling, until it was within half-a-mile of him. That, however, gave him sufficient time to warn the men, as there was a 15 m.p.h. speed restriction over the part of the Slow line where they were working, and drivers had to approach at reduced speed in order to be travelling at 15 m.p.h. by the time they reached the "C" board, which was situated 143 yards on the Blackpool side of the leading men at the time of the accident.

Armistead made a practice of blowing his horn as soon as he saw a train approaching round the bend on the Up Slow line, but did not give warning for trains on the Up Fast line unless any men happened to be crossing that track. In the latter case, he supplemented the sounding of the horn by either a shout or sign indicating the line on which the train was travelling.

Shortly before 9.0 a.m. he noticed that the Ashton home signals, situated 55 yards on the Preston side of him, were lowered for trains on the Up Fast and Up Slow lines. He then saw smoke in the distance and later noticed the 8.25 a.m. train appear round the bend half-a-mile away on the Up Fast line. As one or two men were crossing that track, he gave the usual warning by horn and shout. After seeing that they were safe, he turned away and continued to watch for the train, which was signalled on the Up Slow line.

Owing to the direction of the wind, the steam from the Up Fast train was blowing across the other tracks and in consequence Armistead did not see the Slow Line train, which was only an engine and coach length behind that on the Fast Line, until the engine of the latter was passing him. He endeavoured to warn the men by sounding his horn and shouting, but owing to the noise of the trains his warning was not heard. At the time 18 men were actually working in the four-foot way and the rest were on the sleeper ends. Fortunately, the majority of them either noticed the train itself or heard the shouts of the other men and were able to jump aside on to the adjoining down tracks, but the five mentioned above were unable to reach positions of safety and were struck.

It is probable that all the men would have been able to move clear before the engine reached them had the train been travelling at the required speed of 15 m.p.h. George Hanley Critchlow, the driver of that train, admits that he failed to notice the 15 m.p.h. warning board, placed over half-a-mile away in the adjoining six-foot space on his side of the track, owing to the smoke from the train on the Fast line. In consequence, he passed the "C" board with the regulator still open, and travelling at a high rate of speed, probably in the neighbourhood of 50 or 60 miles per hour.

The following notice appeared in the Fortnightly Engineering Supplement covering the period 7th to 20th March:—

<i>Date</i>	<i>Locality</i>	<i>Line Affected</i>	<i>Particulars of work and Instructions</i>
Until further notice.	Between Lea Road and Maudland Viaduct. 2¾ to 1½ mile posts.	Up Slow.	7.30 a.m. to 5.0 p.m. Relaying BETWEEN TRAINS. Speed not to exceed FIFTEEN MILES PER HOUR day and night. Warning board and C and T indicators provided.

Critchlow admits receiving and signing for this notice during the afternoon of 6th March, and he remembers seeing the men standing aside, somewhat nearer Preston, when he passed with the same train on the previous day, but the warning boards were not then in position, and in consequence he was not required to reduce speed.

Conclusion.

1. The accident was due to an unfortunate combination of circumstances. The primary responsibility for it rests with Armistead as he failed to call the men off the slow track when, owing to the smoke and steam from the train on the Fast line, he was no longer able to protect them. Special stress is laid upon this duty in the form of examination, to which look-out men are subjected every two years, and his failure to comply with it is all the more surprising in view of the fact that he had seen the signals cleared for trains on both up lines.

Armistead is a man of 57 years, with a long and good record as a conscientious look-out man. He passed the test satisfactorily when last examined in September, 1934. He does not appear to me, however, to be still possessed of that quickness of mind which is an essential for a look-out man. In this

instance, he failed completely to grasp the possibilities of the situation, and his suitability as a look-out man is a matter for the serious consideration of the Company.

2. A large measure of responsibility rests upon Critchlow in that he failed to obey the speed restriction. Though these restrictions are primarily intended for the safety of trains, they also serve as an additional safeguard to the men on the track and, to a certain extent, are relied on as such. Critchlow states that although intermittent steam and smoke from the train on the East line had been interfering with his view of the actual track ahead for several miles, he had no difficulty in sighting his signals, or locating his position at any time. He should, therefore, have reduced speed as a precaution on approaching the stretch of line where he had been warned by the Notice that there was a possibility of a speed restriction being in force. He also admittedly failed to comply with Rule 127 (vi) and "sound the engine whistle . . . when unable to obtain a clear view of the line ahead owing to steam or smoke, as a warning to anyone who may be on the line". He is, in my opinion, seriously to blame for his omissions on this occasion.

3. Owing to an unexpected delay in transit, the "warning", "C" and "T" boards, bringing the speed restriction into operation were not placed until noon on the day before the accident.

While I am satisfied that this was in ample time as far as the safety of the traffic is concerned, it is to be regretted that there was a departure in this instance from the usual practice of placing them before the commencement of work. Had Critchlow seen the boards on the previous day, when he had a clear view, and realised that the restriction in connection with the relaying had commenced, it is unlikely that he would have failed to reduce speed on the day in question. I regard the failure to place the boards earlier as a contributory cause of the accident, though it does not excuse Critchlow.

Remarks and Recommendations.

4. This regrettable occurrence closely resembles the accident which occurred at Watford on 9th November, 1932, when five men lost their lives in very similar circumstances; it again draws attention to the risks incurred by men at work on or about the permanent way. During the past three years, 135 men have lost their lives and 100 have been injured while at work on the permanent way through being struck by engines or trains. Of these casualties, only 12 were due to the failure of the look-out men. Many suggestions have been received and considered from time to time, and in certain cases tests made with a view to discovering the best means of protecting men working on the line. I am still firmly of opinion that a look-out man is the most reliable form of protection.

5. It is, however, essential that only suitable men be utilised for these important duties. It is not sufficient for them to be able to answer set questions correctly; they must be men of sound judgment and capable of quick decisions and actions in an emergency.

I consider that greater importance should be attached to the selection and registration of look-out men. In order to ensure that only suitable men are chosen and that they themselves may be duly impressed with the responsibility of their duties, I recommend that in future every look-out man be interviewed by the District Engineer or his assistant before he is registered for the first time, and that afterwards he, together with all existing look-out men, should be examined at least once a year by a suitable Inspector.

6. The method of conveying the warning from the look-out man to the men at work is another matter which demands careful consideration in view of the growing tendency to concentrate and employ larger gangs of men both for maintenance and relaying work. With a view to establishing the relative value of the horn and whistle for warning purposes, I recently carried out a number of tests with 12 men shovel-packing stone ballast. The positions of the individuals and the manner in which they happened to be working, i.e., whether

in rhythm or otherwise, affected the results considerably, but the following facts emerged from the tests:—

- (i) The whistle is considerably more penetrating than the horn.
- (ii) The man working nearest to the look-out man can be relied on to hear the horn at 30 yards and the whistle at 40 yards.
- (iii) A man working in the middle of the gang cannot hear the whistle with any degree of certainty at a distance of more than 20 yards and the horn at considerably less.

It is evident that at the present time men frequently have to rely on each other to pass on the warning. This is a dangerous practice which should not be necessary. Either a more powerful means of giving warning should be provided for the look-out men, or definite instructions should be issued that in certain circumstances, having regard to the number of men and the character of work upon which they are engaged, additional look-out men must be placed alongside the gang to ensure that the warning reaches every man for whom it is intended. Further investigation on these lines is recommended.

7. Finally, I consider that work of this description and importance should not be left in charge of a ganger, especially when there is a risk of more than one being present with doubts as to their relative seniority, as in the case under review. An Inspector should be present throughout and made responsible for all the arrangements, including the protection of the men, which is a matter calling for considerable foresight and judgment on such occasions.

I have the honour to be,

Sir,

Your obedient Servant,

J. L. M. MOORE.

The Secretary,
Ministry of Transport.