

LANCASHIRE AND YORKSHIRE RAILWAY.

Board of Trade (Railway Department),
8, Richmond Terrace, Whitehall, London, S.W.,
12th December, 1910.

SIR,

I HAVE the honour to report, for the information of the Board of Trade, in compliance with the Order of the 26th November, the result of my inquiry into the causes of the double collision which occurred on the 25th November between a passenger train and a light engine, and between a rail motor train and a derailed coach, at Ormskirk, on the Lancashire and Yorkshire Railway.

In this case the 9.15 p.m. express train from Preston to Liverpool ran into a light engine standing on the down main line near the points of the cross-over road at the south end of the station, causing the engine and five leading coaches of the express to be derailed.

The first and second coaches fouled the up main line, and just afterwards the 9.30 p.m. rail motor car from Maghull to Ormskirk approached on the up line and collided with the leading coach of the express. One passenger in the express was killed and three were injured, as were also the driver and fireman of the express and the driver of the light engine.

The express train consisted of a four-coupled ten-wheeled express passenger engine with a six-wheeled tender fitted with the automatic vacuum brake on all wheels of the engine and tender except those of the engine bogie, and of six bogie coaches, the leading three Lancashire and Yorkshire, and the rear three West Coast Joint Stock, with the automatic vacuum brake working blocks on all wheels. All the brakes are stated to have been in very good order.

The light engine was a radial tank engine and was standing bunker in front, and the radial wheels under the bunker were derailed.

The rail motor car was a combined engine and car 69 feet 5 inches in length, and 45 feet 2 inches between the centre of the bogies. It was equipped with vacuum and hand brakes operated at either end of the car, the vacuum brake operating on all eight wheels, and the hand brake on four wheels. The brake blocks on the engine bogie are arranged one block on each wheel, and on the trailing bogie two blocks on each of the four wheels.

It was running vestibule in front at the time it collided with the derailed coach. The first collision occurred at 9.40 p.m. and the second very shortly afterwards, on a clear night.

Details of damage to rolling stock and permanent way are given in the Appendix.

Description.

The down line through Ormskirk runs approximately from north to south.

At the north end of the station are the engine shed sidings which are connected by a trailing connection to the down main line. At this end of the station there are also some up sidings connected by a trailing connection to the up line, and between these two connections is a cross-over road between the up and down main lines. Nearer the station at the north end is the double junction between the main lines and the Skelmersdale branch lines. At the south end of the station there is a down bay line and a cross-over road between the main lines, the dwarf signals relating to these being 296 yards from the signal-box which is situated on the up platform.

The light engine was standing just beyond these dwarf signals, and was 115 yards ahead of the platform starting signal, and 93 yards behind the advanced starting signal.

There are also some up sidings at the south end of the station connected to the up line by a trailing connection just at the south end of the up platform.

The following Instructions and Regulations are referred to in the evidence :—

USE OF LEVER GLIPS. INSTRUCTIONS TO SIGNALMEN.

The special attention of Signalmen is called to the revised instructions with regard to the use of Lever Clips on Page 11 of the April Supplement to the Working Time Book Appendix, which are as shewn below :—

Lever Clips.—In order that Signalmen may have something to remind them when the Line is blocked by a train or engine standing on it, small clips are supplied to fit on the lever handles and drop on to the catch, so as to prevent the lever on which the clip is fixed from being worked.

Signalmen must place a clip on the handle of the lever working the Home Signal for the Line which is fouled, and it must not be removed until the line is again clear.

The following are examples of operations for which these clips **must always** be used :—

- (a) When a train is shunted from one running line to another.
- (b) When a train has been drawn inside the Home Signal to wait acceptance from the Signal Box in advance.
- (c) When vehicles are placed upon any running line.
- (d) When carrying out the provisions of Rule 254.
- (e) When required to act as a reminder that a road in a Terminal Station or Bay Siding is occupied.

When not in use the clips must not be placed on a spare lever. If there is room on the instrument shelf they must be placed there, but if not they must be hung in a suitable position on the wall of the Signal Box, care being taken that they are not damaged through rough usage.

After the completion of a series of operations which require a Lever Clip to be used for the purpose of protecting a Train, Signalmen must see that the Lever Clip is placed on the Lever working the Signal which protects the Train, before going on with other work.

GENERAL RULE NO. 55.

Guard,
Shunter,
or Fire-
man to go
to Signal-
box.

(b) When a train or vehicles have passed a Home Signal, and are waiting to be crossed to another line, or to be let into a Siding, or have been shunted on to the opposite Running Line, or placed on either a Main or Branch Line at a Junction, or when a train or vehicles have been shunted from a Siding on to a Running Line and are waiting to be crossed to another Line, the Guard, Shunter, or Fireman must, when the train or vehicles come to a stand, proceed immediately to the Signal-box, and remind the Signalman of the position of the train or vehicles, and remain in the Box until the Signalman can give permission for them to proceed, or to be shunted clear of the Running Lines.

(c) The duty of going to the Signalman must be performed as under:—

(i.) In the case of a light engine, or of a passenger train with only one Guard, by the Fireman; the Guard in the latter case remaining in charge of the train.

Evidence.

James Johnson Bibby states: I am a driver stationed at Sandhills shed and am 49½ years of age. I entered the service in December, 1882, and have been a registered driver since May, 1902. On the day of the accident I signed on duty at 12.20 p.m. expecting to finish in the ordinary course about 10.35 p.m. I signed off duty on Thursday, the 24th at 11.30 p.m. I was working the 9.15 p.m. express passenger train from Preston to Liverpool with engine No. 702, which is a four-coupled ten-wheeled express passenger engine fitted with the automatic vacuum brake on all wheels of the engine and tender except the bogie, and the brake was in good working order. My train consisted of three Lancashire and Yorkshire and three West Coast Joint Stock coaches. We left Preston about 9.20 p.m. and were slackened by signals at Farington Curve Junction, but after this we had a clear road and all signals were off for me when I approached Ormskirk Station. I think I should be running through the station about 48 miles an hour. The first indication I had that anything was wrong was seeing a red light ahead just as I was approaching Derby Street Overbridge, but almost immediately my engine struck something and I had not time to shut my regulator or reverse, although I think I applied the brake fully. I remember nothing after this until we had come to a stand, when I found the engine leaning up against the wall. I did not know whether it was an engine or a coach we had struck. I called out to see if my fireman was on the footplate and found he was, and on both of us alighting we noticed the rail motor approaching on the up line. All our lamps had been extinguished and I was unable to show any light to the approaching driver. My fireman had been to the front of the engine to see if there was a light there, but he found there was none, so we tried to rush along the line to warn the motorman. We had only got about 20 yards, however, from the front of our engine when the rail motor passed us, and we stood in the six-foot and shouted as loud as we could. The collision

of the rail motor car with the wreckage was not a very severe one. I noticed the platform clock when passing through Ormskirk Station and it was just 9.40 p.m. I received a cut on the left cheek and a severe shock.

Thomas McLean states: I am a fireman and am 23 years of age. I entered the service in 1904 and was registered a fireman in November this year, but previous to this I had done a good deal of firing. I had signed on duty on the 24th with driver Bibby at 12.20 p.m. and signed off at 11.30 p.m. On the day of the accident I signed on duty at 12.20 p.m. and in the ordinary course should have finished about 10.30 p.m. I was firing for driver Bibby with the 9.15 p.m. from Preston to Liverpool, and we left the former place a few minutes late. We were checked at Farington Curve Junction, but were not brought to a stand, and on approaching Ormskirk we had a clear road. I think I was in the act of beginning to fire when the collision occurred, and up to this I had no indication that anything was wrong. I do not remember anything until we came to a stand with the engine leaning against the wall. We both got off, and finding there were no lamps in front of the engine we ran up the line to try and stop a rail motor which was approaching from Town Green direction. We shouted as he passed, but were unable to stop him. When we got back to the footplate my mate went to enquire if any passengers were hurt, and I threw part of the fire out, this work afterwards being finished by the fireman of the rail motor. My back was hurt and my arms and wrist bruised, and I am now off duty.

John Edward Hall states: I am a driver stationed at Southport, and am 45 years of age. I entered the service in April, 1885, and have been a registered driver since May, 1906. I signed on duty the day before the accident at 3.5 p.m. and finished about 1.5 a.m. On the day of the accident I signed on at 3.5 p.m., expecting to finish in the ordinary course about 1.5 a.m. I

had come as a passenger with my mate from Southport on the 8.12 p.m. train, and we took charge of engine No. 730, a radial tank, in Ormskirk shed, and brought it out about 9.25 p.m. in order to get hold of the carriages forming the 10.21 p.m. Ormskirk to Southport which were in the up siding. I was passing Ormskirk signal-box slowly when the signalman shouted out of the window that I was to go up to the top crossing and stand there until the motor train passed. This I did, and I had been standing about ten minutes when I saw a light approaching, which appeared to be just beyond the Preston end of the station platform. It struck me all at once it must be the express, and I reversed the engine and was able to open the regulator before we were hit. I think I was in the act of opening the engine whistle when my engine was struck. I had not felt at all easy in my mind during the time we were standing in the position we were, and I had just said to my fireman "You had better go and see that fellow" meaning the signalman, when I caught sight of the express light. I called out to my mate to look out, and I did not see him again until after the accident. When we were hit by the express I was thrown down and I remember nothing until I came to my senses, when I found the engine at a stand a considerable distance ahead. I then lighted a lamp, and on walking round the engine I found the tail lamp still showing a red light under the chimney, but I could not get at it as the buffer framing was gone. When I saw the rail motor approaching I waved my hand lamp with a white light, standing in front of him until he almost reached me. The engine was standing bunker first towards Liverpool, and the radial wheels under the bunker were off the road. While we were standing waiting to cross over after about one minute, the Liverpool to Fleetwood boat express passed, and I thought I might have been crossed over after it had gone, the same as has been done on a previous occasion when the same signalman was on duty. The reason I did not send my fireman to carry out Rule 55 was that I had received verbal instructions from the signalman to stand there until the motor had passed. He took his home signal off for me to draw down to the crossing, but I did not notice whether he put it to danger afterwards. I was standing with my engine behind the set-back signal, No. 61, and when I came to a stand clear of the crossing I whistled as an intimation to the signalman. I did not notice the tall starting signal ahead of me taken off for the express. When we get across in the sidings we give a crow for the points to be reversed if the signalman does not shut us in before. I was standing with my brake off expecting to go across after the motor had passed. My engine was actually on the move when we were struck, but I cannot say how far we had travelled. The signalman generally gives us instructions where to stand, and I have been sent up to this crossing before. I was bruised and knocked about, but did not receive any cuts.

William Henry Johnson states: I am an acting fireman stationed at Southport shed and am 22 years of age. I entered the service in July, 1906, and have done a fair amount of firing. Since July, 1909, up to 25th September, 1910, I have fired 101 days of 10 hours each. I signed on duty the day before the accident at 12.20 p.m. and signed off at 11 p.m. I signed on again on the day of the accident at 3.45 p.m., expecting to finish in the ordinary course about 2.30 a.m. I was firing for driver Hall and when we came out of the shed at Ormskirk, we drew slowly past the box, and I heard the signalman call out

"Stand over the top points." I did not hear him say anything else. When we came to a stand over the crossing I put a red light under the chimney to act as a tail lamp. I cannot say whether my driver whistled or not when we came to a stand above the crossing. We stood there for about 10 minutes. Just before the 10 minutes was up my driver said to me "I think it is about time you went to the cabin to carry out Rule 55." I was on the point of leaving the footplate when he called "Look out, the express is coming." On looking through the spectacle I saw the lights of the approaching train and then I jumped off on my side of the engine. I scratched my leg but was not otherwise hurt, and am not off duty. When I picked myself up I tried to find a way through the bridge-way, but was unable to do so owing to the blocked roads. It did not occur to me to go to the box to instruct the signalman to block the lines. I have carried out Rule 55 about twice, and I know it is the duty of the fireman of light engines to go to the cabin.

James Norris states: I am a driver stationed at Ormskirk, and am 47 years of age. I entered the service in 1881 and was made a registered driver in 1898. On the day before the accident I signed on at 1.30 p.m. and finished at 10.40 p.m., and on the day of the accident I signed on at the same time, expecting to finish again at 10.40 p.m. I left Maghull at 9.30 p.m., for Ormskirk, with rail motor car No. 6. We were running car first and I was in the front compartment with the guard. After leaving Aughton Park Halt, the up distant signal for Ormskirk was on. On approaching Ormskirk I saw a white light being shown in the six-foot, and it appeared to be given by someone who seemed to be walking towards me with a hand lamp, but it was not a stop signal of any sort. I did not hear anyone shout as we passed the light engine, and I had not got steam on at that time. I noticed the light engine standing on the opposite main line without a light and thought something was wrong and put my vacuum brake on to slow down so as to be able to stop if there was anything wrong ahead. As I could see no other light I released the brake to allow the car to run forward without steam, and I was not aware of any obstruction until we actually came in contact with it. The end of the car was derailed but not the engine, and the glass in front of the cab was broken. I practically received no injuries and have not had to stay off duty. I had three passengers in the car, and I found that they were all right.

Thomas Lea states: I am an acting fireman stationed at Ormskirk Shed and am 20 years of age. I entered the service in February, 1907, and on the day of the accident I was acting as fireman to driver Norris on the rail motor. Since July, 1909, I have fired 292 times. I was working with him the day before the accident and signed on and off duty at the same time, and also on the day of the occurrence. We were running car first from Maghull to Ormskirk and I was on the foot-plate while the driver was in the front of the car. When approaching Ormskirk I noticed a light engine on the down line and thought it was on its way to Liverpool. I did not notice anyone on the ballast or see the light of any hand lamp. After passing the light engine about 20 yards the driver applied our brake. He had shut off steam at the first overbridge from Aughton Park. The brake was not on hard and I thought the home signal must be against us, and the next thing that happened was the collision. I had felt the brake

fully applied just before this took place. I was thrown down on my face and sprained one of my wrists but have not had to stay off duty with it. I rendered assistance to the fireman of the Preston to Liverpool engine by throwing out the fire for him.

William Henry Parkinson states: I am a motor guard stationed at Ormskirk and am 33 years of age. I entered the service in August, 1889, and have been a guard for four years. On the day of the accident I signed on duty at 2.15 p.m. to work till 10.30 p.m., having signed off the day before at 10.30 p.m., after having been on duty 8 hours and 15 minutes. I was in charge of the 9.30 p.m. rail motor Maghull to Ormskirk, and we left the former place to time. I was riding in the front of the car with the driver and all went right until we got to Dyas Crossing, when we noticed a white light in the six-foot and observed an engine standing on the down line. I remarked to the driver that there was something strange about this and that there appeared to have been a breakloose. On peering through the windows I saw the express engine on its side and the driver then applied the brake as hard as he could, but we were too late to avoid colliding with the débris. The white light was near the floor when I saw it and it appeared to be held by someone walking along the six-foot. I assisted the passengers in the Liverpool express after I had been back to protect my train. I was shaken a little and my hand was out.

John William Robinson states: I am a passenger guard stationed at Liverpool, and am 51 years of age. I entered the service in 1883 and have been a guard for 19 years. On the day of the accident I signed on duty at 12.30 p.m., having signed off duty the day before at 10.10 p.m. I was in charge of the 9.15 p.m. express Preston to Liverpool and my train consisted of three Lancashire and Yorkshire and three West Coast Joint Stock coaches marshalled as follows:—

Engine No. 702	} Lancashire and York-	
Bogie Third Van		shire vehicles.
Bogie Composite		
Bogie Third Van		
Bogie Composite Brake	} West Coast Joint	
Bogie Third		Stock.
Bogie First Van		

I was riding in the rear van and had a London and North-Western passenger guard with me who was travelling home as passenger. We left Preston at 9.18 p.m., three minutes late, and the only check up to the time of the collision was at Farington Curve Junction. When my van was about half way through the platform at Ormskirk the brake was suddenly applied and then the collision followed immediately and I was knocked down. I got up and went back to the cabin to inform the signalman what had happened and to instruct him to block both roads and send for the tool-van. The signalman and his train-booker were both in the cabin and the former seemed surprised that anything had occurred. I then went back to the train and rendered what assistance I could. I found that all my train was derailed with the exception of the last coach. Only one gentleman, apparently an American, complained to me and he stated his head was hurt. A doctor, who was standing near, said he would attend to him in the waiting-room. The front portion of my train was practically empty but the Scotch coaches were fairly full. The brake was tested in the usual way before leaving Preston and the vacuum gauge in my van registered 19 inches.

John Francis Graham states: I am a signalman stationed at Ormskirk and was 61 years of age last October. I have been 35 years in the service, 33 years a signalman, and 30½ years at Ormskirk Station. On the day of the collision I signed on duty at 10 p.m., having signed off the same morning at 6 a.m. When I arrived at the box I found both roads blocked and on enquiring as to what had happened from signalman Donaldson he told me that he did not know what the cause was. The guard of the Preston to Liverpool express did not come to the box while I was there. Donaldson remained in the cabin until 10.20 describing how matters stood and then he went up to the scene of the accident to see exactly what had happened. On coming back about five minutes afterwards he said "Good God, John, it's me; I had forgotten that damned engine." It is a customary thing to send this engine down to the crossing at the Liverpool end of the station, and it is then usually crossed after the Liverpool to Fleetwood boat train has passed, but there are occasions when it can be got over before the boat train is due. The fireman has never been back to the box to carry out Rule 55, and I have never reported them for this omission, but I do not keep the light engine standing on the main line, but let it out of the sidings when I can deal with it straight away.

James Marthand states: I am a signalman at Sand Sidings box and am 38 years of age. I have been in the service 16 years, and 13 years as signalman. I signed on duty on the day of the accident at 2.15 p.m., expecting to finish at 11.15 p.m. I signed off duty the day before at 11.15 p.m., after having been on duty nine hours. The Liverpool to Fleetwood boat train passed me at 9.28, and the "Is line clear" signal for the 9.30 p.m. rail motor Maghull to Ormskirk was acknowledged by Ormskirk Station box at 9.38, and it passed me at 9.40. At 9.43 I received "Obstruction danger" signal from Ormskirk Station box, and this was the first I heard that anything unusual had happened. I had been offered the Liverpool express at 9.38 p.m. and I accepted it at 9.38 p.m.

John Donaldson states: I entered the service in 1879 and am 49½ years of age. I have been a signalman 27½ years, relief signalman since 1894. Ormskirk Station box being one of the cabins I relieve. On November 25th I came on duty at 2 p.m. to work until 10 p.m., having gone off duty the day before at 2 p.m. The light engine whistled out from the shed at 9.22 p.m.; it came straight out, and as it passed my box I shouted to the driver to go to the top crossing and come across after the boat train had passed, meaning the 9.10 p.m. Liverpool to Fleetwood. I am certain this was the instruction I gave him. I took off the inner home for the engine to draw down and placed it to danger after the driver had passed it. The 9.10 p.m. Liverpool to Fleetwood boat train arrived at 9.27 and left at 9.29, and at 9.33 I accepted the "Is line clear" signal for the 9.15 p.m. Preston to Liverpool express, and when it was accepted in advance at 9.37 I took off all my signals for it. It entered the section at 9.37 and passed my box at 9.39. The light engine standing on the down main line entirely escaped my memory, and I was under the impression it was in the siding. It is booked in the train-book as having gone into the siding at 9.31, but this is a mistake on the part of the train-booker. The engine would be standing on the down main line for 15 minutes. We have two or three lever clips in the cabin, but I have not used them under these circumstances only when trains are shunted from one main line to

another. It is not a usual thing for the fireman of this engine to come to the box to carry out Rule 55; to get our attention they give us a loud whistle. I do not think it is absolutely the rule to use the clip for an operation of this kind, and I have not seen the special notice now shewn me before. I have two kinds of tablets—the train-across and the other clips to protect the proper line. The engine was sent to the top crossing, as I had a goods train leaving, which prevented my using the crossing near the box. This goods train left the yard at 9.39. It whistled out at 9.29 p.m. There was not much traffic moving at the time, nor just after; nor was there much noise, and I never heard any whistle from the light engine. The 9.30 p.m. rail motor Maghull to Ormskirk was offered to me at 9.32 and I accepted it at 9.37, and on line at 9.39 p.m., or at the same time that I received the "Entering section" signal for the Preston to Liverpool train. I heard the noise of the accident, and about three minutes after the guard of the Preston train came and told me of it, and I blocked both roads and wired for the tool-van. I told signalman Graham of the circumstances when he came on duty at 10 p.m., and after leaving the box I stayed about the place. I returned to the box and did not then know the actual cause of the accident, the first intimation being from some man who came down and told Graham there was no engine in the siding and that it was in front of the express. I cannot say whether I saw the entry in the train-book relating to the light engine before or after the accident. I have known cases where Rule 55 has been worked to under similar conditions, both as to whistling and the fireman coming back.

John William Carr states: I am 15½ years of age and am a train-booker at Ormskirk Station box, having been in the service one year and nine months. On November 25th, the date of the accident, I came on duty at 2.30 p.m. to work until 11 p.m. I had been on the same turn the day before. At 9.22 p.m. a light engine came out of the shed on to the down main line to stand below the crossing until the Liverpool to Fleetwood boat express had passed, and then it was required in the up sidings to bring out the

coaches forming the 10.21 p.m. to Southport. After the engine had gone down to the crossing signalman Donaldson put his signals to danger. When the engine was passing the box I was booking, but I heard Donaldson shout to the driver "Go to the top crossing and follow the express across." I did not hear the driver of the light engine whistle when he had come to a stand and I did not see the engine from the cabin window. We book the engines when they get into the sidings and I have booked this engine as being in the up sidings at 9.31 because I thought Donaldson had made the movements necessary to get it there. The Liverpool to Fleetwood boat train was accepted at 9.21 and it passed at 9.29, and the Preston to Liverpool train was accepted at 9.33 and we received "Entering section" signal for it at 9.37. It passed the box at 9.39, having been accepted by Sand Siding box at 9.37. The rail motor from Maghull was offered at 9.30 and accepted at 9.37, and we received "Entering section" signal for it at 9.39. I am sure the figures as booked are correct. The first I knew there had been an accident was on hearing some noises of scraping and bumping which were followed by a sort of explosion. A man who looked like a guard called out a few minutes afterwards from the six-foot "Block both roads, the express is off the road." This was about 9.42 p.m., and the "obstruction danger" signal was then sent in both directions. A porter named Brunton came in the box about the time the signalman accepted the Liverpool express and Donaldson was taking up with him for not having rung a train in properly at the sidings. We can see the down starting signal from the box and can see the light on an engine, but I did not notice whether this driver had one or not. The Ormskirk to Rose Grove goods train was leaving at 9.39, and the noise of the collision would not be heard as well on this account. I am sure the signalman said "Go to the top crossing and follow the express across" and this is the usual way of working when the engine cannot be got across at the Preston end of the station owing to the Rose Grove goods train leaving. I have seen Donaldson on the station since the occurrence, but not to speak to.

Conclusion.

The circumstances attending this double collision were as follows:—

A light engine was ready to leave the engine shed sidings at Ormskirk at 9.22 p.m. and it was required to run down the main line to the cross-over road at the south end of the station, then to cross to the up main line, and afterwards to back on to the coaches forming the 10.21 p.m. train to Southport, which were standing in the up sidings at the south end of the station. Accordingly, signalman J. Donaldson, who was on duty at the Ormskirk box at the time, let the engine out on to the down main line, and as it passed his box shouted out to the driver "to go to the top crossing and come across after the boat train had passed," meaning the 9.10 p.m. Liverpool to Fleetwood train, which arrived at Ormskirk at 9.27 p.m. and left at 9.29 p.m. on the up line. Donaldson then entirely forgot all about the light engine standing at the southern cross-over road, and at 9.33 p.m. accepted the 9.15 p.m. Preston to Liverpool express on the down line. As soon as that train was accepted by the signalman in the box in advance at 9.37 Donaldson lowered all his signals for it. The Liverpool express passed his box at 9.39 p.m., and immediately afterwards came into collision with the light engine above mentioned. The result of the collision was that the engine and five leading coaches of the express left the rails, and the first and second coaches behind the engine fouled the up road; and the 9.30 p.m. rail motor car from Maghull to Ormskirk, which passed the signal-box in rear at 9.39 p.m., came into collision with these coaches.

Donaldson admits that the fact that the light engine was standing on the down main line had entirely escaped his memory. It is booked in the train book as having

gone into the up siding at 9.31 p.m., but this is a mistake on the part of the train booker (J. W. Carr), who says that he made the entry because he thought signalman Donaldson had made the movements necessary to get the light engine to the sidings.

Donaldson admits that he did not make use of the lever clips provided in the signal-box for the special purpose of reminding the signalman when the line is blocked by a train or engine standing on it. He states that the reason he did not do so was that he expected to cross the engine in a few minutes after it had come to a stand, and therefore did not think it was necessary; and that he only uses these clips, as a rule, when a train is shunted from one main line to another.

As regards the light engine, the driver (J. E. Hall) states that when he left the Engine Shed Sidings and passed the signal-box, he understood that the signalman shouted out to him to go to the top crossing and stand there till the motor train passed. He states that he did this, and after standing some little time saw the head-light of the express approaching; he immediately reversed his engine, and opened the regulator to go forward just as the collision occurred. He states that he did not feel *easy* in his mind about standing on the main line for so long, and was just telling his fireman to go to the signal-box to carry out Rule 55, when he saw the express approaching. He states that the only reason he did not send the fireman to the signal-box earlier was because he thought the signalman had said he was to wait till after the motor train had passed.

J. Norris, the driver of the motor car, noticed the light engine on the down road, and saw the white light shown by Driver Hall of the light engine, and thinking something was wrong applied his vacuum brake and reduced speed so as to stop if he saw anything ahead. Seeing no other light he released the brake and allowed the car to run forward slowly, and then he collided with the derailed coach before he realised the actual state of affairs. As he was running slowly very little damage was done to the motor car.

Driver Bibby of the express had no chance of avoiding the collision, as he was running at 50 miles an hour with all signals off for it, and only sighted the red light on the light engine when about 150 yards from it. He had time to apply the brake before the collision occurred. He and his fireman had a wonderful escape, as the engine mounted on the leading bogie, and the steam dome struck an overbridge 95 yards ahead of the point of collision, and the engine came to a stand 60 yards further on, and was only prevented from falling over by being against a retaining wall.

Both driver Bibby and his fireman T. McLean did their best to stop the approaching motor car, but all their lamps were extinguished, so they could only shout.

It will be seen then that the collision was due to signalman Donaldson forgetting the light engine, and to driver Hall omitting to send his fireman back to carry out Rule 55, although he stood for quite 15 minutes on the down main line before the collision occurred.

Donaldson is a signalman of long experience with an excellent record, and his mistake appears to have been the result of over-confidence, so that he omitted to use the lever clips supplied in the signal-box for use when the down line was blocked by the light engine. The use of these clips is explained in the memorandum quoted above. I think it would have been better working on his part if he had not let the light engine out of the shed sidings until the arrival of the up boat train, and then he would have crossed it at once on to the up line at 9.29 p.m. and put it into the up sidings, whereas by letting it out at 9.22 p.m. he was bound to let it stand on the down line for five minutes before he could deal with it. The red light on the light engine was in full view of the signal-box all the time, being 296 yards from it, and the line straight.

Driver Hall states that when passing the signal-box on coming out of the engine shed sidings he understood signalman Donaldson to say that he was to go to the top crossing and stand there until the motor train had passed. He did this and stood for 15 minutes without taking any steps to warn the signalman that his engine was standing on the down main line. He states he had not felt *easy* in his mind about standing so long on the main line and had just told his fireman to go to the signal box to carry out Rule 55 when he saw the express approaching. I am not satisfied with his excuse for not sending the fireman earlier, as although there is a similarity between the words "boat" and "motor" when shouted out from a signal box, yet if he had really understood the signalman to say "motor train," then there was no special reason for his feeling uneasy, as the "motor" train had not yet passed on the up line. Rule 55 is quite definite and although it is not always carried out to the strict letter by sending the fireman to the signal box immediately on coming to a stand, yet driver Hall knew quite well he should have sent his fireman to remind the signalman of the light engine's position quite

10 minutes before the collision occurred, i.e., immediately after the Fleetwood boat train had gone at 9.29 p.m. The usual working was to cross this light engine at that time, either at the cross-over road at the north end of the station, or at the end at which it was standing. When driver Hall saw the express approaching he behaved very well; he stuck to his engine, reversed it, and put it in steam, hoping to lessen the effects of the collision, and so it did not come to a stand after the collision until it had gone 400 yards ahead with one pair of wheels off the road all the way. Also, after recovering himself and seeing the motor car approaching in the up road, he tried to stop it, and so lessened the effect of the second collision.

This is not a case in which I consider it necessary to recommend the adoption of special safety appliances, such as fouling bars or track circuiting the rails inside the station limits. The light engine was standing with its red tail lamp in full view of the signal-box, and if signalman Donaldson had made use of the clips provided to remind him of the light engine standing on the down line, or if driver Hall had carried out Rule 55 after the Fleetwood boat train had gone, the collision would not have occurred.

I have, &c.,
E. DRUITT,
Lt.-Col.

The Assistant Secretary,
Railway Department, Board of Trade.

APPENDIX.

Damage to Permanent Way, &c.

110 lineal yards single line completely torn up.
In addition:—192 chairs broken; 40 fish bolts broken; 30 sleepers broken; bridge, arch, and retaining wall slightly damaged.

Damage to Rolling Stock.

Lancashire and Yorkshire Bogie, third class van, No. 1242.—Broken up.

London and Yorkshire Bogie Composite, No. 827.—Broken up.

Lancashire and Yorkshire Bogie third class Van, No. 548.—Two headstocks, 2 long footboards and 1 side sill plank broken; 1 drawbar and 1 buffer bent; both bogies twisted; and both ends of body smashed.

West Coast Joint Stock Bogie Composite Van, No. 590.—Vacuum train pipe, 2 centre castings, 1 gangway cover, 2 quarter lights, and 1 projection light broken; 2 truss bars, 1 buffer and 1 screw shackle bent; bearing springs set and wheel tyres marked.

West Coast Joint Stock Bogie third class, No. 255.—Two centre castings, 3 quarter lights and 1 corridor light broken; bearing springs set.

West Coast Joint Stock Bogie first class Van, No. 573.—One buffer casing broken; body moved and gangway scissors bent.

Lancashire and Yorkshire Steam Rail Motor Car, No. 6.—One end to each steel sole bar and buffer plate bent; vestibule end of the body smashed; both brake cylinders, 4 lights, 2 floor boards and 3 collapsible steps broken; 1 bogie twisted.

Damage to Engine 702, working 9.15 p.m. Express Preston to Liverpool.

Engine.—All wheels derailed; bogie driven under footplate between engine and tender; both main frames badly bent at the front; bufferplate knocked off; buffers broken; footframing badly bent; bogie frames bent; driving axle slightly strained; axle of small hind carrying wheels bent, and axle boxes broken; cylinders broken; steam dome cover sheared off; chimney broken off; springs on four-coupled wheels stripped off; reversing wheel pedestal broken; right hand anchor link broken; cab side plates on left side bent in.

Tender.—Back plate of tank knocked in; axle boxes broken; springs displaced.

Damage to Engine 730. (Light Engine.)

Leading bufferplate knocked off; leading buffers broken; both main frames and footframing badly bent at front; cylinders broken.

Printed copies of the above Report were sent to the Company on the 14th January, 1911.
