Please return to C.I.O's office.

SOMERSET AND DORSET JOINT RAILWAY

Ministry of Transport,
7, Whitehall Gardens
London, S.W.1.
8th December, 1936

SIR,

I have the honour to report for the information of the Minister of Transport, in accordance with the Order of 4th August, 1936, the result of my Inquiry into the accident which occurred between Radstock and Bath, on the Somerset and Dorset Joint Railway, at about 10.0 a.m. on 29th July.

During shunting operations at Braysdown signal box, near Radstock, an engine ran away on the right line towards Bath, with neither driver nor fireman on the footplate; it was propelling eight empty wagons. The line becomes single at Midford, some 5¼ miles nearer Bath. The wagons left the rails there, wrecking the signal box and doing considerable damage in the vicinity of the station. The greater part of the debris was thrown clear of the track, but the engine remained on the line and ran on towards Bath, pushing a portion of one of the wagons. After passing through two single line tunnels it was derailed under a bridge, some 3 miles further on, on the outskirts of Bath.

While the runaway was approaching, shunting was in progress at a private siding on the single line, between Midford and the point where the final derailment took place; fortunately the work there was finished shortly before its arrival, and the engine concerned had returned to Bath.

There were no personal injuries in this series of accidents; the weather at the time was fine and clear.

Description of the Line.

2. The line runs northwards from Radstock to Bath, a distance of about ten miles; north is also the up direction. On this section of the line there are signal boxes at Braysdown, at Wellow Station, and at Midford Station, respectively about 1, 3¾, and 6¼ miles from Radstock; the line is double between Radstock and Midford, and single thence to Bath Junction, where it joins the L.M.S. line from Mangotsfield to Bath.

Approaching Radstock from the south, the line crosses the Mendip Hills, rising steeply for about eight miles, mainly at 1 in 50, from Evercreech Junction to the summit between Masbury and Binegar, and then falling for about 7½ miles at 1 in 60 and 1 in 50 to Radstock. North of Radstock the line first rises at 1 in 100 and 1 in 330 for ¾-mile, and then falls at 1 in 120 for ¼-mile to Braysdown signal box. Thereafter it is undulating, and gradually falling, for the 5¼ miles to Midford, which is approached down a gradient of 1 in 60 about ½-mile in length. North of Midford it rises sharply, at 1 in 100 and 1 in 50 for about a mile, to Combe Down Tunnel, which is just over a mile in length and mainly on a rising gradient of 1 in 100. From the northern end of this tunnel the line falls at 1 in 50 and 1 in 66 for two miles to Bath Junction; Devonshire Tunnel, ¼-mile long, is situated on this section. The final derailment took place beneath Claude Avenue Bridge, about ¾-mile beyond the north end of Devonshire Tunnel and about the same distance south of Bath Junction. There is much curvature over the whole length of the line between Radstock and Bath.

3. At Braysdown signal box, which is on the east side of the line, there are two trailing crossovers between the running lines, that to the north of the box being worked by lever No. 14 and that to the south of it by lever No. 6. There are also sidings on both sides of the line. Those on the west serve Braysdown Colliery and have a trailing connection (No. 5 lever) in the up line, while those on the east, serving Writhlington Colliery, have a trailing connection (No. 7 lever) in the down line.

Relevant distances, measured from Braysdown signal box, are approximately as follows :—

Radstock East signal box	1,416	yards	South
Braysdown up distant signal, below Radstock East up advanced starting signal	1,116	,,	,,
Up home signal	160	,,	,,
Trailing connection (No. 7) to Writhlington Colliery, in down line	93	,,	,,
South crossover (No. 6) between running lines,			
far end	61	,,	,,
near end	5	,,	,,
Trailing connection (No. 5) to Braysdown Colliery, in up line	51	,,	North
North crossover (No. 14) between running lines,			
near end	92	,,	,,
far end	156	,,	,,
Up starting signal	239	,,	,,

The signalman at Braysdown box works facing the line; his view of it between the up home and starting signals is good, but is limited by curvature to a few yards beyond the last-named signal.

4. With regard to the view of the signals obtained by drivers of up trains, Radstock East up advanced starting signal can be seen at a distance of over 500 yards, but, owing to the presence of an overbridge, the Braysdown distant signal below it only comes into view at a distance of about 200 yards. Braysdown up home signal can be seen, for a short period, at a distance of about 600 yards; it is then lost to view, an account of the curvature of the line, but becomes visible again, from the right-hand side of the footplate, at a range of 300 yards or thereabouts.

Report.

5. The engine which ran away unattended was No. 7620, 0-6-0 side tank type, weighing 49½ tons in working order, and driven from the right-hand side of the footplate. It was running bunker first, and had arrived at Braysdown from Radstock at about 9.10 a.m., drawing a train of 12 wagons and a brake van; this shunting trip is worked each morning to clear the sidings at the two collieries. On its arrival some of the wagons were shunted into the Braysdown Colliery siding, and the engine subsequently placed the remainder of the train in the Writhlington Colliery sidings.

After a light engine had passed, at 9.41 a.m., on its way to Bath, a number of wagons from Writhlington Colliery sidings were propelled on to the up line through No. 6 crossover; engine No. 7620 then returned to the sidings by the same route, leaving eight empty wagons, coupled together, standing on the up line.

6. At 9.50 a.m. an up freight train (8.10 a.m. from Evercreech Junction to Bath) was accepted from Radstock East, in circumstances which are set forth later, by Signalman Haines, who was in charge of Braysdown signal box. This train consisted of 37 wagons and a brake van, drawn by 2—8—0 type (Class 7) tender engine No. 13803, running chimney first, and driven from the right-hand side of the footplate. The engine and tender, weighing 108 tons in full working order, were fitted with the steam brake acting on all wheels except those of the leading pony truck. The weight of the train, including engine and tender, was estimated at about 368 tons, and its overall length was approximately 286 yards. After accepting it on the block, Signalman Haines arranged with Shunter Ash for engine No. 7620 to return to the up line to push the eight stationary wagons further in the Bath direction, and it crossed from the down to the up line through No. 6 crossover for this purpose; according to Haines' statement, this was done in order to provide the regulation overrun of 440 yards inside the up home signal.

Almost immediately afterwards the freight train overran the up home signal, at slow speed. Driver Brewer endeavoured to stop it, and then, thinking that a collision with engine No. 7620 was imminent, told his fireman to jump from the footplate, and followed him, but without fully closing the regulator. The engines bore no sign of having collided, and there was some conflict of evidence whether they actually came into contact.

7. The men in charge of engine No. 7620 only became aware of the proximity of the freight train when Shunter Ash shouted to them. The driver opened the regulator fully as soon as his engine touched the wagons, and then jumped from the footplate and boarded the engine of the freight train, which he stopped in a short distance. But as the fireman also jumped off the engine when he thought a collision was unavoidable, it steamed away unattended, propelling the eight wagons, to which it had not been coupled. The brake on the wagon next to the engine had been applied when the wagons were left on the up line, and the engine appears to have kept in contact with them during their 5¼ mile journey to Midford. They passed Wellow at high speed, estimated at 50 m.p.h. by the signalman there.

8. Approaching Midford Station from the south, the line is carried on a masonry viaduct about 150 yards long, crossing a branch of the Great Western Railway, a stream and a road. The points connecting the double and single line sections (trailing in the direction in which the runaway was travelling) are on this viaduct. The signal box from which they are worked is about 110 yards away, at the north end of the viaduct and immediately south of the station platform. Both the signal box and the platform are west of the line, which runs along the side of a hill at this point; to the east the ground falls away steeply opposite the platform and the line is supported by a retaining wall about 40 feet high for some 60 yards north of the viaduct.

9. When the engine and wagons reached Midford, still travelling at high speed, the points on the viaduct were set and bolted for the down line. The leading wagon left the rails at the points and, diverging slightly from the track, struck the signal box, partly wrecking its lower part, which is of masonry, and displacing and damaging the locking frame and connections. Signalman Larcombe, who was in the box at the time, fortunately escaped without injury. A portion of the wagon, including a pair of wheels of which one had its centre crushed and its tyre broken by the violence of the impact, came to rest between the signal box and the station building. The remainder of the body of this wagon was found on the other side of the line, about 90 yards north of the signal box, and its second pair of wheels was discovered among the other debris at the foot of the embankment, opposite the platform.

The next six wagons left the rails in succession while passing through the station and rolled down the embankment opposite the platform, the wreckage being spread over a distance of about 140 yards. A signal post and two telegraph poles on the east side of the line were demolished and the retaining wall supporting the track was damaged. A house stands close to the line, at the foot of the retaining wall, its roof being several feet below rail level; fortunately it was undamaged, though the wreckage of two of the wagons fell close to it, apparently having been diverted from it by the fallen signal post. Some damage was done to the station platform and buildings by flying debris.

The track through the station was damaged and distorted but the engine kept on the rails. Apparently the wagon next to it did not begin to break up until it reached a point about 220 yards north of the signal box. Portions of its body and underframe were distributed over the next 300 yards, including one pair of wheels which were found alongside the line under an overbridge about midway in this length. The remainder of the wagon was pushed by the engine for a further distance of some 3 miles, through the Combe Down and Devonshire single line tunnels, to Claude Avenue overbridge, below which the end door of the wagon became jammed under the wheels of the engine, and derailed it. Among the debris at this point were portions of the solebar of the wagon, and the other pair of its wheels, one of which had shifted laterally on the axle, clear of the wheel seat.

10. The water level in the boiler of the engine was found to have fallen below the firebox crown, and the fusible plug had melted. With this exception the damage to the engine was only superficial; the plating of the bunker was bent, the cab steps, injectors, feed pipes, &c., were broken or bent, and the tank on the left-hand side (right-hand in the direction of travel) was pierced.

11. The Control Office at Bath had been warned of the approach of the runaway by Post Office telephone from Midford, the railway wires having been carried away, and arrangements had been made for it to be diverted at Bath Junction into the goods yard.

Except at Midford there was no damage of importance to the permanent way or adjacent structures.

12. Signalman Haines had been in charge of Braysdown box for about eight weeks. He had been warned by the Control Office, shortly after he came on duty at 8.0 a.m., to expect the 8.10 a.m. freight train from Evercreech Junction, which only runs when required. He said that when he accepted it from Radstock East, at 9.50 a.m., the stationary wagons appeared to be standing north of the up starting signal, but that Shunter Ash, who returned with the engine after placing the wagons on the up line, informed him shortly afterwards that they were a little closer to the box, with one wagon south of that signal. He accordingly arranged with Ash for the engine to return to the up line to push the wagons beyond the starting signal, in order to provide the regulation 440 yards overrun. The " warning " acceptance (Line Clear to home signal only) is not authorised at this box, and though Haines admitted that the distances from the box to the up home and up starting signals, totalling 399 yards, were clearly shown on the signal box diagram, he stated that, prior to the accident, he was under the impression that there was a distance of 440 yards between them. Hence he had not previously regarded acceptance of a train, while vehicles were standing on the line north of the starting signal, as an infraction of the Company's Block Telegraph Regulations, though he said that this was the first time that he had accepted one under such conditions.

He accounted for his impression that the up starting signal was the clearance point for block acceptance by stating that the signalman who had instructed him in the working of the box had always " knocked out " when a train passed that signal. But subsequent to the Inquiry the man in question, Signalman Crouchen, denied that this was the case. He stated that he had told Haines that the clearance point was 50 yards beyond the signal, almost out of sight round the curve, and had explained to him that his practice was to wait until a train had passed the signal and then, after replacing its lever, to call the attention of the signalman at Radstock East preparatory to " knocking out," by which time the train would be beyond the clearance point.

13. Examination of the block registers showed that Haines had made a practice of sending the Blocking Back signal to Radstock East, in accordance with the regulations, when wagons were placed on the up line, but he admitted that he had not done so on the day of the accident. In explanation of this omission he stated that when the movement was being made he was rung up by the Control Office and instructed to shunt the freight train on to the down line when it arrived, in order that a passenger train might overtake it; this, he said, caused him to forget to block back.

He thought that the " Train entering section " signal for the freight train was received from Radstock East at about the same time as the shunting engine went from the Writhlington sidings to the up line to push the wagons further forward. Almost immediately afterwards he saw that the freight train was running past the up home signal, which was at danger, and he thought its engine passed the signal box " about as fast as a man can run "; he saw both enginemen on the footplate. He then heard what he assumed to be the sound of the engines colliding, and seeing the shunting engine and wagons passing out of sight round the curve he sent the " Train running away " signal to Wellow. Shortly afterwards he learnt from Ash that the engine had gone away unattended, and telephoned to Wellow to that effect; he said that he also tried to inform the Control Office, but without success.

14. According to Shunter Ash, who had been stationed at Radstock for nine years and so was thoroughly familiar with the working of the colliery sidings, it was not an uncommon occurrence for wagons to be left on the up line while shunting was in progress, but he had never known a train to be accepted from Radstock while the up line was thus obstructed. He said that when he shunted the empty wagons on to it, through the southern crossover (No. 6), he was unaware that the conditional freight train was running and that he first learnt that it was approaching when Haines asked him, after his return to Writhlington Colliery sidings with the engine, to push the wagons beyond the starting signal. He was certain that he had left the wagons in such a position that only one or two were south of that signal, though he said that he did not make a regular practice of leaving wagons so far to the north. He had already placed some empty wagons in the Braysdown Colliery sidings, and had intended to return there later with the engine to propel laden wagons on to the up line; he stated that he left the empty wagons at the up starting signal in order to have room for this.

Ash said that he was preparing to couple the engine to the wagons when he noticed the freight train approaching, not many yards away, and that he shouted to Driver Rawlings to push the wagons away smartly to avoid a collision. He thought that the two engines just came into contact, after which engine No. 7620 steamed away; he had not been able to couple the wagons to it, but followed it for a short distance, and on returning found that Rawlings and his fireman had left the footplate; he therefore ran to the signal box to tell Haines what had occurred.

15. The load of the freight train was about one half of the maximum laid down for Class 7 engines between Radstock and Bath. Passed Fireman Brewer, its driver, was well acquainted with the road, but his fireman, Hiroms, who had not worked with him previously, was comparatively inexperienced, being one of a batch of passed cleaners sent to Bath a short time before to assist in working the summer services.

When passing Radstock Hiroms was breaking up clinker in the fire, in preparation for the climb from Midford to Combe Down tunnel. Brewer said that he was watching this operation and so failed to see that the Braysdown distant signal was " on "; he had seen that the Radstock East advanced starting signal, on the same post, was " off " a few seconds earlier. He stated that as the train approached Braysdown, at about 20 miles an hour, he was supervising Hiroms firing, and consequently did not notice that the Braysdown home signal was " on " until his engine was close to it, when he applied the steam brake fully; he saw the shunting engine ahead of him at the same time, so reversed his own engine and opened the regulator. But he said that as he failed to secure the handle of the screw reversing gear in the back gear position by the catch provided for the purpose, it spun round, and the engine went into forward gear again. He then tried to close the regulator, but it jammed partly open.

Though he could not see whether the shunting engine was in motion or not, on account of steam from a leaky gland, he felt that a collision was bound to occur, so told Hiroms to jump off the footplate, and followed him; he asserted that the driver of the shunting engine jumped to the ground, on the west side of the line, before he himself did so. He also said that as the speed of the train had fallen to about 10 miles an hour he was satisfied that it would not travel far, even though the regulator was partly open, since the engine brakes were fully applied. He thought that the engines collided gently almost immediately after he reached the ground.

16. With regard to his previous experience, the fireman, Passed Cleaner Hiroms, said that prior to his transfer to Bath he had worked 182 firing turns, mainly in and between shunting yards in the Birmingham area, but including a few trips between Birmingham, Gloucester and Derby; he had fired a Class 7 engine once previously, and had worked over the line between Evercreech Junction and Bath three or four times. He had had no particular trouble with the fire when climbing the Masbury bank and knew that attention to it would be needed at Radstock; he agreed that Brewer was watching him at his work, though not assisting him. He had not seen the signals and did not realise that anything was amiss until he heard the shunting engine whistling. Though he did not see Brewer trying to close the regulator, he remembered seeing the handle of

the reversing gear flying round. He thought that the two engines were about 20 yards apart when he jumped from the footplate, on Brewer's instructions; he was looking ahead on the west side of the line at the time, and did not see anyone getting off the shunting engine. His description of the spot where he left the footplate showed that he did so close to the points leading to the Braysdown Colliery siding.

17. The driver of the shunting engine, Passed Fireman Rawlings, gave evidence regarding the position of the stationary wagons which conflicted with that of Signalman Haines and Shunter Ash, stating that they had been left " well inside the starting signal, and quite close to the points leading to the Braysdown Colliery siding." He was looking ahead, towards the wagons, as his engine approached them, and was unaware of the proximity of the freight train until Ash shouted a warning; he thought that its engine was then about 30-40 yards away from his own, and that there was a distance of about 10 yards between his own engine and the wagons. He said that after opening the regulator fully, and getting the wagons on the move, he left the footplate on the west side of the line, after shouting to Fireman Parker to look after the engine. In explanation of this, he stated that he had come to the conclusion that there was nobody on the other engine, for he could see neither driver nor fireman through its cab windows, or leaning over the side of the cab; he had not noticed them leaving their engine, but when on the ground himself he saw them applying wagon brakes.

He thought that the engines did not collide, and stated that when he left the footplate his intention was to apply wagon brakes as the train passed him, but that as its speed was only some 5 or 6 miles an hour he was able to board the engine. He found that it was in full forward gear, with the regulator " on the first valve," i.e. partly open, and had no difficulty in closing it; he said that as the steam brake was already fully applied the train stopped in 50 or 60 yards, with the engine close to the up starting signal.

18. Fireman Parker's excuse for leaving the footplate was that he was afraid that there was going to be a serious collision. Like Rawlings, he was unaware that the freight train was near until shouts from Ash drew his attention to it, when he noticed that its engine was under steam. He had no recollection of hearing Rawlings tell him to take charge of the engine and was not certain whether he or Rawlings was the first to leave the footplate. He was, however, able to corroborate Rawlings' statement that the wagons had been left at no great distance from the Braysdown Colliery siding points, for he said that he remained on the footplate until the engine had begun to propel the wagons, and he recollected clearly that he jumped from it near to the north end of No. 14 crossover, that is to say about 100 yards ahead of the colliery siding points and about 240 yards short of the starting signal. He thought that the two engines collided, though with no great force, after he had reached the ground.

19. Signalman Banfield at Wellow and Signalman Larcombe at Midford were powerless to stop the runaway, and at neither box was there any connection by which it could be diverted from the running line. The former stated that he got detonators and a red flag ready as soon as he received the " Train running away " bell signal from Signalman Haines, who telephoned shortly afterwards that a shunting engine was running away, but did not explain that nobody was in charge of it. The runaway arrived before Banfield could put detonators on the line, and as soon as it had passed, at a speed which he judged to be about 50 miles an hour, he returned to his box and sent the " Train running away " signal to Larcombe, supplementing this at once by a telephone message to the effect that there was nobody on the footplate. He then attempted to give similar information to the Bath Control Office, but the telephone line went dead as he was doing so.

Larcombe said that as soon as he received the message from Banfield he called the stationmaster, and that the runaway came into sight almost immediately afterwards. All communication over the railway wires was severed when his box was wrecked, but a message was sent to the Control Office by Post Office telephone about 4 minutes later.

Conclusion.

20. Since the acceptance by Signalman Haines of the freight train from Radstock East box, in contravention of the Company's Block Regulations, and the return of the shunting engine to the up line, were the initial causes of this accident, it is necessary to consider the evidence on four points, namely, the misapprehension regarding the position of the block clearance point under which he said he was labouring, his motive in sending the shunting engine back to the up line, his omission to block back, and finally the conflicting statements as to the position in which the stationary wagons had been left.

21. Taking these in order, I cannot accept Haines' statement that he thought that the up starting signal was the clearance point, having regard not only to the fact that the distances from the signal box to the home and starting signals are clearly shown upon the cabin diagram, but also to the statement of Signalman Crouchen to the effect that when instructing Haines in the working of the box he gave him information on this point. If Haines was really under the impression that the clearance point was at the starting signal, his action in sending the shunting engine to push the stationary wagons beyond it reveals a remarkable confusion of thought. According to his statement, he had accepted the freight train in the belief that the wagons were beyond that signal, and then learnt from Shunter Ash that one or two of them were on the nearer side of it, or in others words that what he looked on as an overrun of 440 yards was reduced by some 10 or 15 yards only. He had, however, no hesitation in endeavouring to remedy this by admitting the shunting engine to the up line no more than 155 yards ahead of the home signal, although he knew the freight train to be approaching. I refer later to what appears to be a more likely motive.

With reference to Haines' earlier omission to send to Radstock East the "Blocking back inside home signal" bell code when the wagons were being placed upon the up line, the Company's regulations allow a train to be offered when the block instrument is at "Train on line" in such circumstances. Assuming for the moment that he believed the overrun to be clear when the freight train was offered to him, there would have been no reason for him to refuse it even if he had previously blocked back, and on such a basis his failure to do so has no bearing on the case, though I refer later to this matter also.

22. The fourth point is one which calls for examination in some detail. Though Haines and Ash said that the eight stationary wagons were close to the starting signal, there was no necessity for them to have been left so far to the north. Ash intended to send the shunting engine later on into the Braysdown Colliery sidings *by itself*, in order that it might *propel* loaded wagons on to the up line; for neither of these movements was it necessary to leave the eight wagons more than a few yards north of the siding points. Moreover, the outwards road in the colliery sidings is only about 90 yards long, so that even if Ash wished to leave room for the loaded wagons on the up line, as he stated, there was no reason at all for him to place the eight wagons close to the starting signal, at rather more than twice that distance from the colliery siding points. As the view of the up line obtainable from the signal box does not extend many yards beyond the starting signal, Haines' own statement that he sent the "Train running away" signal when he saw the engine and wagons disappear round the curve, and *before* Ash told him that they had gone away unattended, is also of significance in this connection. If the wagons were standing close to the signal when the engine was sent to push them ahead, he might have anticipated that they would pass almost, if not quite, out of his sight, and I think that it is reasonable to infer from his statement that the engine and wagons were already travelling at some speed when they passed the starting signal.

23. Having regard to the foregoing considerations, I prefer to accept the statements of the driver and fireman of the shunting engine, to the effect that the wagons were standing only a short distance north of the Braysdown Colliery siding points. If this was indeed the case, Haines' excuse that he acted under a misapprehension regarding the position of the block clearance point is invalidated, and his omission to send the blocking back signal and his disregard of regulations in accepting the freight train become the more serious. Also, bearing in mind that he had just received instructions from the Control Office to shunt the freight train in order that a passenger train might overtake it, I

think it more probable that he arranged for the shunting engine to return to the wagons in order to make room ahead of No. 6 crossover (through which the freight train required to set back to the down line) and to enable them also to be removed from the up line without delay, than that he did so from a meticulous desire to increase the available overrun by a few yards.

24. While I therefore regard Signalman Haines, who entered the service of the Company in 1923 and has been employed as porter-signalman or signalman for the past two years, as primarily to blame for the accident, his mistakes would have had no untoward consequences if the enginemen concerned had remained at their posts. The conduct of Driver (Passed Fireman) Brewer is particularly to be deplored. The whole of his service of 19 years has been on the Somerset and Dorset section, and he had acted as driver more than 100 times since he became qualified to do so in 1933. Though he cannot be criticised for supervising the work of a somewhat inexperienced fireman who had not worked with him previously, he was seriously at fault in allowing this to interfere with his observation of signals. After missing the Braysdown distant signal he ought to have taken the earliest opportunity to see the home signal, and with his knowledge of the road he should have been well aware that a glimpse of that signal is obtainable at a range of some 600 yards; had he seen it at that distance, while the train was on a rising gradient, he should have had no difficulty in stopping at it.

His abandonment of his engine, when it drew near to the shunting engine, was quite indefensible. It was daylight, neither engine was travelling fast, there was no great difference in their speeds, and as his own engine was running chimney first he was reasonably well protected against injury if a collision had actually taken place; his failure to secure the reversing handle when he put his engine into back gear, and his action in jumping from the footplate without even closing the regulator, both show that he entirely lost his head when confronted by an awkward situation.

Having regard to the youth of the fireman, Passed Cleaner Hiroms, who is 19 years of age only, and to his brief experience of main line working, I do not consider that his action in jumping from the footplate. on receiving Brewer's instructions to do so and at a time when a collision seemed to be imminent, is deserving of censure.

It is desirable to record that Brewer's statement that the reversing handle spun round into forward gear may be accepted. I had an opportunity of inspecting a similar engine during the course of the Inquiry, to ascertain whether this was likely to happen; the reversing screw has a triple thread, of coarse pitch, and I found that if the handle commenced to rotate when in the back gear position the weight of the motion caused it to continue to do so until the engine was in full forward gear.

25. With regard to the crew of the shunting engine, I am of opinion that a considerable share of responsibility for the accident must be borne by both Passed Fireman Rawlings and Fireman Parker. The former has 22 years' service with the Company, and had been qualified as a driver for over four years; the latter has 16 years' service and had been graded as a fireman for four months. I find it difficult to believe that Rawlings knew that there was nobody in charge of the engine of the freight train, for he admitted that he had not seen Brewer and Hiroms on the ground when he left his own engine; his action in doing so, leaving the regulator wide open, without first making certain that Parker was aware of his intention and was prepared to take charge, is clearly open to very serious criticism.

Since their engine was running bunker first, Rawlings and Parker also would have been protected to some extent from the effects of a collision, if one had occurred, and while I appreciate their alarm when they observed the freight train apparently overtaking them, and only some 30-40 yards away, I cannot avoid the conclusion that, like Brewer, they lost their heads and abandoned their engine without thought of the consequences. While Rawlings is to be commended for taking charge of the freight train by boarding its engine, this action appears to have been in the nature of an afterthought, and it is to be regretted that he did not adopt the more prudent course of checking it by remaining on his own engine, and applying its brakes as soon as the engines were in contact, before changing from one footplate to the other; by so doing he could have nullified the effect of the mistakes made by Haines and by Brewer.

26. The other two signalmen concerned, Banfield at Wellow box and Larcombe at Midford, appear to have acted with promptitude as soon as they became aware of what was happening.

Remarks and Recommendation.

27. It was fortunate that this accident was unattended with personal injury, and providential that no collision on the single line between Midford and Bath resulted. Had the engine and wagons run away a little later the consequences might have been disastrous, for they passed Midford at 10.6½ a.m., as shown by the stoppage of the clock in the wrecked signal box there, and a passenger train was due to start from Bath in the opposite direction at 10.20 a.m.

The *morale* of enginemen is such that the contingency of an engine running away unattended, with the regulator open, is very remote; it is therefore not necessary to suggest that precautions should be taken against the recurrence of such an accident as that which is the subject of this Report. In this connection it may be remarked that the existence of the viaduct at Midford renders the protection of the single line by worked trap points there hardly practicable.

But in the not dissimilar event of vehicles running away on a single line, or, as in this instance, on a double line leading to a single line, a head-on collision may be averted if a warning of what has occurred reaches a point sufficiently far ahead of the runaways in time to enable a train travelling in the opposite direction to be kept out of their path. I therefore suggest that it should be impressed upon signalmen at boxes likely to be affected, on such sections of double line as well as on single lines, that if they cannot divert runaway vehicles at a facing connection or at trap points, they should pass on the "Train running away" signal *immediately* it is received, and before they take the prescribed action with detonators and hand signals, which may prove to be ineffectual; discrimination will, of course, be needed in deciding at which boxes such instructions are required, depending on gradients, etc. The Company might be asked to consider the desirability of issuing such instructions.

I have the honour to be,
Sir,
Your obedient Servant,
E. WOODHOUSE.
Lieut.-Colonel

The Secretary,
Ministry of Transport.

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