NORTH BRITISH RAILWAY.

Board of Trade, (Railway Department,) 1, Whitehall, London, S.W.

22nd December 1885.

SIR,

I have the honour to report, for the information of the Board of Trade, in compliance with the instructions contained in the Order of the 18th instant, the result of my inquiry into the causes of an accident which occurred on the 8th instant at Dalkeith station on the North British Railway.

In this case, as the 9.45 a.m. up train from Dalkeith to Edinburgh, consisting of tank-engine, third-class break, one third-class, two first-class, two composite, and one third-class carriages, and rear third-class break, was passing the facing-points of a cross-over road leading from the platform line to the up passenger line at Dalkeith station, the engine left the rails and ran for about 37 yards before being brought to a stand, after coming into collision with the retaining wall of the cutting at the side of the line. The leading third-class break and one pair of wheels of the next carriage were also off the rails.

No person was hurt.

In the permanent way, five chairs and four fish-plate bolts were broken, and a switch was bent, and had to be replaced.

There was no damage to the engine or carriages beyond a few scratches.

Description.

Dalkeith is the terminus of a short branch, half a mile long, which leaves the North British Hawick line at Eskbank, the service between Edinburgh and Dalkeith being, as a rule, a separate one from the main line service.

The line is double to the entrance to Dalkeith station, but there is only one platform line, a continuation of the down line, used both for arriving and departing trains, and connected with the up line by a cross-over road, presenting facing-points to up trains.

The signalling and other arrangements are of a very primitive character, and trains entering the station have to pass over three sets of facing-points.

There is only one signal, a down distant-signal; none of the points are fitted with the usual safety appliances, and there is no interlocking whatever. Most of the points are worked by levers close at hand, but three sets, one of which is the set at which the accident happened, are worked by three levers close to the signalman's hut, which is distant 59 yards from the points in question.

The point from which the train started is 199 yards from the points where the engine left the rails. At these points the line is on a 20-chain curve to the right looking towards Eskbank junction, towards which junction the line rises on a gradient of 1 in 280.

The points are weighted to lie in their normal position right for trains to run from the platform line to the up line, and the weighted lever at the hut is connected with the points by means of a rod.

Evidence.

James Mathison states: I have been about five years in the service, and four years a fireman. On the 8th December I was fireman with John Kirk. We were with engine No. 78, a tank-engine with leading bogie, and driving and trailing wheels coupled. We were working the local trains between Waverley station and Dalkeith. We came on duty at 9 a.m. at Dalkeith. We took the first train out to Edinburgh at 9.45 a.m., and started at right time by signal from the guard. I was on the right-hand side of the engine, which was running chimney first. I saw the signalman give us the flag signal from the side of the signal-cabin, but, as I was on the right side of the engine, I could not see what he was doing when we passed the signal-cabin. I was looking ahead along the line when approaching the facing-points leading to the up line, and I could not see anything amiss with them. I did not feel the engine strike anything, but just as we got on the points she gave a rock and left the rails. We were running at about four miles to six miles an hour at the time with steam on. My driver shut off steam. I applied the steam-break. When I looked round I saw that my driver had applied the Westinghouse break, which was fitted to three out of the eight vehicles on the train. The side of the engine struck the retaining wall at the side of the line. It was a very hard frost. I had taken two waggons of cattle out to Glen Esk junction at about 9.20, and had returned about 10 minutes later. There was nothing wrong with the points then. I have been working on this branch since the 21st October. I have never felt anything wrong with these points. My driver is off work ill, but he was not injured by the accident. The vehicle next the
engine was off the rails on one side, and the carriages behind had followed the down line. After the accident the points were lying for the down line, wedged open by the wheels,—at least I think so.

Charles Low Sorris states: I have been 14 years at the service, and about 13 years a guard. I have worked on the Dalkeith branch for 12 years. On the 8th December I was guard of the 9.45 a.m. up train from Dalkeith. It was made up as follows—a tank-engine, third-class break, one third-class, two first-class, two composite, one third-class, and third-class break. The front three and rear three vehicles were fitted with the Westinghouse brake, but the front three only were connected with the engine. We started at right time, and were running at under six miles an hour when reaching the facing-points. I felt a jolting motion, and on looking out saw that the engine had left the rails. I went to apply my break, but the train had come to a stand before I could get it on. Only the engine and leading vehicle were off the rails. All the others were on the line behind the facing-points. I am not quite certain about this, or whether more of the carriages had not passed the points. No one was hurt. I went and looked at the points afterwards, and they were all right. When the train was drawn clear they fell back close to the stock rail. The point rod was not broken.

John Darluy states: I have been two years in the service, and six months a porter at Dalkeith. I am a signal porter, relieving the regular man when he is not on duty. I came on duty at 7 a.m. on the 8th December. At 9.30 the engine took out two cattle waggons to the junction, and I held down the facing-point lever with my foot as it went out. At 9.30 it returned and came back to the front of the train. I was standing close to the signal-box. I saw the lever fall back after the engine had come through the points in a trailing direction, and had lifted the lever. When the train was ready to start the driver whistled for the road, gave a red and yellow flag signal, and the engine started. As it was passing my box, I was standing at the side, so that the driver could see me, and when he had passed I went to the lever and put my foot on it to keep it down. I did not see the engine leave the rails, and did not feel anything, or any pressure on my foot when the engine did leave the rails. I heard a noise. I went forward, and I found that the engine and leading carriage were off the rails; the first two wheels of the next carriage were also off the rails. The leading end of the third carriage was just over the points, with the wheels on the cross-over road, the points having fallen into the right position. I am quite sure about this. The signalman and surfacemen have to see that the points are right. The first signal porter tells them. I had looked at the points that morning, and they were all right. They had not been oiled that morning. There was nothing on the slide chair that I could see.

Archibald Pryde states: I am foreman surfaceman in charge of the Dalkeith branch. I walk it morning and night, and examine the points in the yard every day. On the 8th December I examined all the points at about 7.30 a.m. when going to my work. They were all in good order. They were not oiled until after the accident. It is the duty of one of my men to oil them every two days, or oftener if necessary. After the accident I went to the points almost immediately,—two minutes after, I should say. The points were lying close when I got to them, and there was nothing on the slide chair. The rods were right, and not bent. There was a blow about the middle of the blade on the right-hand side, but I did not see the mark on the end of the switch. There was a chair broken at the heel of the points. The engine had run astride of the points. It had struck the wing rail beyond the heel of the points, and had run off the rails. It was a very hard frost at the time. The points were true to gauge. The sleeper was lifted up a little on the left side. Five chairs were broken, and four fish-bolts were broken. The left-hand switch was bent and has been replaced.

Mr. Bell, assistant engineer to the line, was on the spot about an hour after the accident, and found a distinct mark of a blow on the end of the switch, otherwise he agrees with the evidence of Archibald Pryde.

Mr. Holmes, locomotive superintendent, states that the engine was in very good order in every respect.

Conclusion.

In this case it is quite clear from the evidence, and from the marks on the permanent way, that the engine ran astride of the switches, which it could not have done if the right-hand switch had been lying close against the stock rail.

The signal porter, who was at the hut 59 yards distant, states that he was, according to the rules, pressing down the weighted lever which works these points, so as to keep them properly closed when the engine was passing over them, but from the position in which he was standing he could not possibly tell whether they were properly closed or not. They may have been wedged half open by a pebble which afterwards fell out, or even by a hard frozen piece of earth, but there does not seem to have been anything wrong in the state of the permanent way, of the points themselves, or of the engine. What is quite certain is that the accident was due entirely to the absence of proper safety appliances at these points, which are worked in the worst possible manner, worse even than where a lever close at the side of the points is used, for in the latter case the pointman, if he obeyed the rules as to holding the lever when a train is passing, would be so near that he could not fail to see if a switch was not lying tight against the stock rail.

I would strongly recommend the Company to take warning from this slight accident, and to lose no time in re-arranging and re-signalling this station, which affords miserable accommodation to the public, and which is unsafe in its present condition.

I have, &c.,

F. A. MARINDIN,

Major.

The Assistant Secretary,

Railway Department, Board of Trade.

Printed copies of the above report were sent to the Company on the 7th January.