

EDINBURGH AND GLASGOW RAILWAY.

*Railway Department, Board of Trade,
Whitehall, April 29th, 1861.*

SIR,

I AM directed by the Lords of the Committee of Privy Council for Trade to transmit to you, in order that the same may be laid before the Directors of the Edinburgh and Glasgow Railway Company, for their careful consideration, the enclosed copy of the report made by Colonel Yolland, R.E., the officer appointed by My Lords to inquire into the circumstances which attended the collision that occurred, on the 8th inst., at the Queen Street Station, Glasgow.

I am, &c.

*The Secretary to the
Edinburgh and Glasgow
Railway Company.*

JAMES BOOTH.

*Railway Department, Board of Trade,
Whitehall, 24th April 1861.*

SIR,

I HAVE the honour to state, for the information of the Lords of the Committee of Privy Council for Trade, in obedience to your minute of the 11th instant, the result of my inquiry into the circumstances which attended the accident that occurred at the Queen Street Station, Glasgow, of the Edinburgh and Glasgow Railway, on the 8th April.

The Queen Street terminal station is approached through a tunnel of about a mile and a half in length, having two lines of railway through it, and close to the western end of the tunnel there is an over-bridge carrying Cathedral Street over the railway.

The line through the tunnel is on a very steep incline of about 1 in 42, falling towards Queen Street Station, and all trains proceeding to the station are preceded by two heavy incline break-waggons, with a breaksman in each, and these two men have the entire control of all trains descending the incline to the station. In a similar manner two incline break-waggons are attached to the rear of all up or departing trains, which are drawn up by means of a wire rope and a fixed engine.

A short distance from the western mouth of the tunnel the two main lines are expanded out into additional lines of railway, and immediately under the over-bridge carrying Cathedral Street over the railway, there are three lines of railway, one of which, the southernmost, is used for up or arriving trains; a second, the northernmost, for down or departing trains; and the intermediate line, leads to or from, two spare lines, situated between the arrival and departure platforms. Just under the over-bridge there are a pair of facing points, which serve to turn trains on to the up line, or to allow them to pass on to the down line. Originally this pair of facing points were weighted to stand open for a train to pass out on to the departure line, but the weight had been off for a long time prior to this accident. The corresponding pair of facing points, on the arrival line, are weighted to stand open for the arrival line, but must be held if a train is required to be passed on to the intermediate line.

About 4.35 P.M. as a train of 16 empty carriages was in the act of being pulled out of the intermediate road, on to the up or departure road, the goods station-master, Mr. Forest, who was standing at the mouth of the tunnel, observed the fourth carriage from the tail of the train make a jump at the points; he saw it spring off as it was passing over the points, and saw it spring on again to its own proper road, but he could not state exactly where it mounted the rail; he next observed the third carriage when it got to about the same place, get off the line, break away from the preceding carriage, and run towards the down or arrival line, and across the line of railway leading to the down or arrival line, and into the bal-

last; and the second carriage from the tail of the train took the same course. The last carriage got uncoupled, and ran back into the station. As soon as he saw the carriages get off the line, he sounded a whistle to the incoming train. As the third and second carriages ran foul of the arrival line, they were struck by the leading incline break-waggon in front of the 2.0 P.M. passenger train from Perth to Glasgow, consisting of 12 carriages, of which 9 were empty, and two engines at the tail of the train. The leading breaksman heard the whistle of the goods station-master before he emerged from the tunnel, and he at once applied his break and jumped off, and was unhurt; the second breaksman was thrown out, and had his collar-bone broken, and five of the passengers in the arriving train were slightly injured. It is well that the accident was not attended with more consequences, for I have not often seen a more dangerous site.

I am informed that it is uncertain whether the carriages mounted in the middle or at the tongue of the facing points; that no mark could be traced in the middle of the right point rail, but the tongue had received a blow and was marked; but no one was quite clear that it had been done at this time. It must be noticed that 12 carriages had passed safely through these facing points, towards the up or departure line; the 13th jumped off and jumped on again, while the 14th and 15th jumped off and broke away from the preceding part of the train. The facing points were neither held nor weighted to stand open to either line of railway; and when I mention that I found them, on the 13th instant, 1 inch wide of gauge at the tongue, and $\frac{3}{4}$ inch narrow of gauge, 5 feet 6 inch, from the tongue, in a 9-foot long point rail, with considerable lateral play for the rail at the right heel-chair; I have stated sufficient to account for the tongue of the switch being jerked outwards sufficiently far to allow of a wheel mounting it, and thus throwing a carriage off the line. No one could tell me how the points were found immediately after the accident. They were altogether out of repair when I inspected them, and the next (16 feet long) rail, on the right-hand side, had a wooden key out of the chair, and worked up and down in the heel-chair when a wheel passed over the other joint. I witnessed several trains pass to and fro over these points, and observed that as some carriages passed through these points, the right tongue of the switch was sometimes jerked outwards. The Inspector of permanent way considered that these points were in fair working order, and if he be permitted to do as he thinks proper, he will not apparently do anything to improve their condition. I should not omit to mention that the wheels of the carriages which got off the line were gauged after the accident occurred, and found to be correct. They were slightly damaged by the collision.

The Queen Street Station is insufficient for the large amount of traffic which arrives and departs from it; and, from its limited length, the mouth of the tunnel is continually choked up with the arrival and departure and shunting of goods and passenger trains. The placing facing points in the position in which I have described is most objectionable and dangerous; but to keep them there, and not have them in the most perfect order, must be considered as an act of gross negligence. It is useless to blame the gauger of the platelayers, when the Inspector maintains that they are in "fairish order."

The Edinburgh and Glasgow Railway insures its passengers in the Accidental Death Company, and the Railway Company only bear one third of the risk and expense for compensation for loss of life or inju-

ries to passengers. They have not, therefore, the same interest in keeping their line in proper order as if the whole loss had to be borne by the revenue of the company.

If a fatal accident were to occur to any passenger from the bad state of the facing points at this place, I think it would fare badly with some of the company's servants, in a criminal prosecution. The facing points should either be weighted or held by a

pointsman, or, what would be still better, be worked by levers from the telegraph box, by the telegraphman, who regulates the arrival and departure of trains through the tunnel.

I have, &c.

*The Secretary,
Board of Trade,
Whitehall.*

*W. YOLLAND,
Col. R.E.*

GLASGOW AND SOUTH-WESTERN RAILWAY.

Railway Department, Board of Trade,

SIR, *Whitehall, 11th June 1861.*

I AM directed by the Lords of the Committee of Privy Council for Trade to transmit to you, to be laid before the Directors of the Glasgow and South-Western Railway Company, the enclosed copy of the report made by Captain Tyler, R.E., the Officer appointed by my Lords to inquire into the circumstances which attended the accident that occurred to a passenger train near the Lochwinnoch Station on the 27th ultimo.

I have, &c.,

JAMES BOOTH.

*The Secretary of the
Glasgow and South-Western
Railway Company.*

High Elms Hampton Court, S.W.

SIR, *1st June 1861.*

IN compliance with the instructions contained in your minute of the 28th ultimo, I have the honour to report, for the information of the Lords of the Committee of Privy Council for Trade, the result of my inquiry into the circumstances which attended the accident, that occurred on the 27th ultimo, near the Lochwinnoch Station of the Glasgow and South-Western Railway.

On the day in question, the express passenger train leaving Ayr at 8.25 a.m., and due to arrive at Glasgow at 9.45, was thrown off the rails about a mile to the east of Lochwinnoch, and about fifteen miles from Glasgow.

It stopped at the Kilwinning Junction for three minutes, and left that station at 8.56, composed of an engine and tender, five carriages, and two break-vans. It passed Lochwinnoch without stopping in due course, and the driver was not aware of anything being wrong until he suddenly perceived that some of his carriages had left the line. He states that he was travelling more slowly than usual, and that he had made a practice of running cautiously over that part of the line since the 13th May, as the platelayers had been engaged in relaying it. He estimates his speed at twenty miles an hour, and is corroborated in this respect by his fireman, and by the guard of the train; but the manager and secretary of the Company, who were themselves riding in the train, consider that the speed was certainly not less than thirty miles an hour.

He shut off his steam and reversed his engine as soon as he perceived what had occurred, but the carriages behind him pulled his tender and engine successively off the rails, and the whole train came to a stand in the ballast within 100 yards of the spot at which the first vehicle appears to have left them. The coupling gave way between the engine and tender, and the engine went a few yards further, on that account, than the remainder of the train; but the other couplings were unbroken.

The passenger engine was of recent construction, with driving wheels 6' 6" in diameter, and the only damage it sustained was from the fracture of one, and the bending of the other, of the guard-irons in front of its leading wheels.

The passengers providentially escaped without injury.

The superintendent of the permanent way had reached Lochwinnoch at 9.15 by a parliamentary train which was running in front of the express, and had walked forward to see what his men were doing

east of that station, and to inspect the line. The express train appeared to pass him at a moderate speed, and, while it did so, he observed that about twenty platelayers were engaged in packing up the sleepers a short distance in front of him. He remarked to the fireman, Cameron, who was with him, that it was "a stupid thing of the men to stand there while the engine was so near them;" and he whistled to them, to tell them to get out of the way. He saw the van in the centre of the train give a "surge" soon after it passed these men, but could distinguish nothing further, in consequence of the dust which was immediately afterwards thrown up from the ballast.

After sending two men out with signal-flags, to block the line in both directions, he went to examine the permanent way. He found the sleepers much disturbed and cut up, a number of chairs broken, the rails bent, and out of their places, but the fish-plates still holding the rails for the first three lengths on the outside of the curve.

He noticed that a joint behind the spot where the carriages first left the rails was considerably lifted, to the extent, as he believes, of two inches; and he came to the conclusion, from the general appearance of the line, that the sleepers under the rail in front could not have been properly packed up after the lifting of this joint. That rail, and the two next before it, had been all bent outwards; and it was these three rails (on the outside of the curve) which appeared to have first given way.

This portion of the line had all been relayed, within the previous fortnight, with rails weighing 65 lbs. to the lineal yard. The rails were fished at the joints, and rested, in cast-iron chairs, on transverse sleepers three feet apart. The line was in process of being lifted when the accident occurred.

There seems to be no doubt that it was caused by the carelessness of the platelayers, in lifting the joint in question so short a time before the express train was due to pass, and in not allowing themselves time to pack up the sleepers in front of it before the approach of that train. The engine appears to have forced the rails partly out of their places and bent them, under these circumstances, as it passed over them, without leaving the line, and thus to have caused some of the vehicles behind it to be thrown off in the first instance. If the engine had not thus remained on the rails for a longer time than the carriages behind it, and if the check had not in this manner been brought to bear from the hinder portion of the train, the consequences would probably have been very serious.

The platelayers acknowledged that they had lifted the point in question after the parliamentary train passed them, some seven minutes, as it is stated, before the express train; and the "lift" was distinctly felt, as a species of ascent, by the fireman, who was partly on the engine and partly on the tender, and by the manager, who was in one of the carriages; and it was seen by the guard from his van. The guard was looking to the front at the time from the tail of the train, and he thus describes his perceptions:—"I saw the carriages take a lift, they then made a sort of tremble, and I saw very little after that."

I have, &c.

*The Secretary,
Railway Department,
Board of Trade.*

*H. W. TYLER,
Capt. R.E.*