

WEST LONDON RAILWAY.

Board of Trade,
(Railway Department),
Whitehall, 29th July 1871.

SIR,

IN compliance with the instructions contained in your minute of the 17th inst., I have the honour to report, for the information of the Board of Trade, the result of my inquiry into the circumstances attending the accident which occurred on the 13th inst. to a passenger train belonging to the London and North-western Railway Company near the Kensington Station on the West London Railway.

Up to the date of my inquiry, four passengers had complained of being injured, but none of the injuries are, it is hoped, of a serious character.

The departure of trains from Kensington Station southward to West Brompton, &c. is regulated by a signalman stationed in a cabin about 100 yards south of the south end of the platform, which cabin is built against the north face of the west pier of an overbridge, its front being flush with the west face of the pier, and the view southward being consequently somewhat restricted. The cabin is provided with a properly constructed locking frame of 40 levers, and contains also block telegraph instruments, communicating with the cabins north and south of it, speaking instruments, and bells. It has no distant or starting signals on its northern side, the signals being all placed against the north wall of the overbridge against which the cabin is built. There are four lines of rails through the station, viz., two through lines and two platform lines, these four lines merging into two close to the signal cabin; there is also another line from a dock joining the line to West Brompton a few yards south of the junction with the platform line.

Seventy yards south of the signal cabin a double line leading to a coal yard, used only for minerals and goods, leaves the passenger line, and runs to the east of and parallel to it. The points of this junction worked from the cabin are facing points for trains from Kensington to the South.

The line is worked upon a species of block telegraph system to this extent, that no two *through* trains are allowed to be at the same time between the cabins at the north and south ends of the station, and that no trains are allowed to leave the platform for West Brompton unless the line between the south cabin and the cabin beyond it is clear; but the signalman at the south cabin is at liberty to give "line clear" to the north cabin for a through train going into the coal yard, and at the same time to allow a train to leave the platform for West Brompton, although these two trains would run on the same line of rails for a distance of more than 100 yards; and the means relied on for preventing collision are the semaphore signals at the bridge, some distance south of the fouling point of the through and platform lines, and, in lieu of a distant signal for the through line, a man with a flag on constant duty on the platform, whose duty it is to warn and stop through-trains if the semaphore signal is against them.

On the 13th inst., a signalman named Cook, of 8½ years' service as such, of which 3 years had been passed in his present post, came on duty at 6 a.m. in the south signal cabin, to remain till 6 p.m. It is a very busy place, and Cook informed me that after 7.25 a.m. trains pass in each direction every two or three minutes, except at two o'clock, when there is an interval of from 5 to 10 minutes. At 1.54 p.m. he lowered his signal for a London, Brighton, and South Coast train to start for West Brompton, the London and North-western train due out at 1.51 p.m. being late. Before the Brighton train had cleared the section, the London and North-western had arrived, and whistled for the signal. This he lowered at about 1.56 on receiving "line clear" from Lillie Bridge (the

next telegraph station), and this train passed his cabin shortly after. About a minute before it did so he had received "train on line" from the north cabin for a Great Western goods train which was in the habit of following the London and North-western train, and he pegged over his needle to "train on line" for the Great Western train, in conformity with the practice before alluded to, though he had his signal lowered for the London and North-western train, and the two trains would run for more than 100 yards on the same line of rails. The London and North-western train, which consisted of tank engine, 2nd class break carriage, without guard, 4 composite carriages and 2nd class break carriage with guard, the break carriages and two adjoining composites being coupled together with Fay's continuous breaks, passed Cook's cabin at its usual speed, at this point, of about 12 miles an hour; and he states that on the rear break passing him, he restored the signal to danger, and without looking to see if the train had got clear of the facing points at the coal yard junction, he pulled them over, ready to let the Great Western goods train, which he saw approaching the north cabin, into the coal yard. He immediately felt something was wrong, but wisely judged it better to leave the points open for the coal yard rather than attempt to restore them right for the passenger line. Immediately that the engine had passed the facing points, the driver felt the couplings between him and the front break give way. The engine kept the rails, and was stopped in a short distance, without having sustained any injury. The guard, as soon as his break carriage had passed the signal cabin, saw the carriages in front of him jumping about and turning over. He got his break half applied and stopped almost immediately. The state of the train was then found to be as follows:—the first carriage was 100 yards south of the facing points, lying on its right side on the passenger line, its head stock pulled out, and its axles bent; the 2nd carriage was also 100 yards south of the facing points, on the coal line, leaning over to the left at an angle of 45°, supported by the couplings between it and the 3rd carriage, only slightly damaged; the 4 remaining vehicles, coupled together, were all on their wheels on the coal line, uninjured. The injured passengers were in the 1st carriage.

The immediate cause of this accident was the admitted mistake of the signalman Cook in moving the facing points before he had made sure that the train had cleared them, and thus splitting the train. A mistake of this kind might be prevented from recurring by putting a locking bar in front of the facing points, so as to make it impossible for the points to be moved until a train has cleared them.

But, while assigning the immediate cause of the accident to Cook's mistake, I think this mistake must to a certain extent be attributed to a faulty mode of working the block telegraph system, as the fact of pegging the needle to "train on line" for a through train to go to the coal yard, while a signal for a passenger train to run on the same line of rails for more than 100 yards is lowered, must induce a habit of unnecessary hurry in preparing for the through train, which habit has at last ended, as might have been almost anticipated, in the present accident. The absence of a distant signal on the through line, and the dependence on a man to act as such, seems also a clumsy arrangement.

The superintendent of the line informs me that it would too much delay the traffic were the through lines between the north and south boxes to be blocked while the signals were lowered for trains to leave the platforms, and vice-versa. This may possibly be the case, but it seems to me the difficulty might be met, and a proper block system of working maintained, by

placing an intermediate block station for through traffic midway between the north and south cabins, the signals of which could then act as distant signals for those cabins. The points of the crossings in the centre of the station could be concentrated in the new cabin, and the same man who now acts as a distant signal could become the signalman.

It is further desirable that stop signals, working with the same levers as the semaphore signals, should be placed at the actual fouling points of the platform and dock lines with the main line.

It also appears to me not right to allow a signahnan, in a position such as that occupied by Cook, to remain on duty for 12 hours at a spell, with no time to get his meals, except such as he can snatch during very short

intervals between the passage of trains. He informed me that it is entirely of his own free will that his hours are what they are, for that about four years since he had the offer of working only eight hours a day at 24s. a week, or 12 hours at 27s. One cannot be surprised at the man's choice of the larger salary; but I think that in cases such as this men ought not to be allowed a choice, but ought to be restricted to working only such a number of hours as experience has shown to be proper under the circumstances.

I am, &c.

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

C. S. HUTCHINSON,
Lieut.-Col. R.E.

Copies of the above report were sent to the West London and the London and North-Western Railway companies on the 18th August.