

CENTRAL LONDON RAILWAY TRAFFIC STAFF

PART 6:

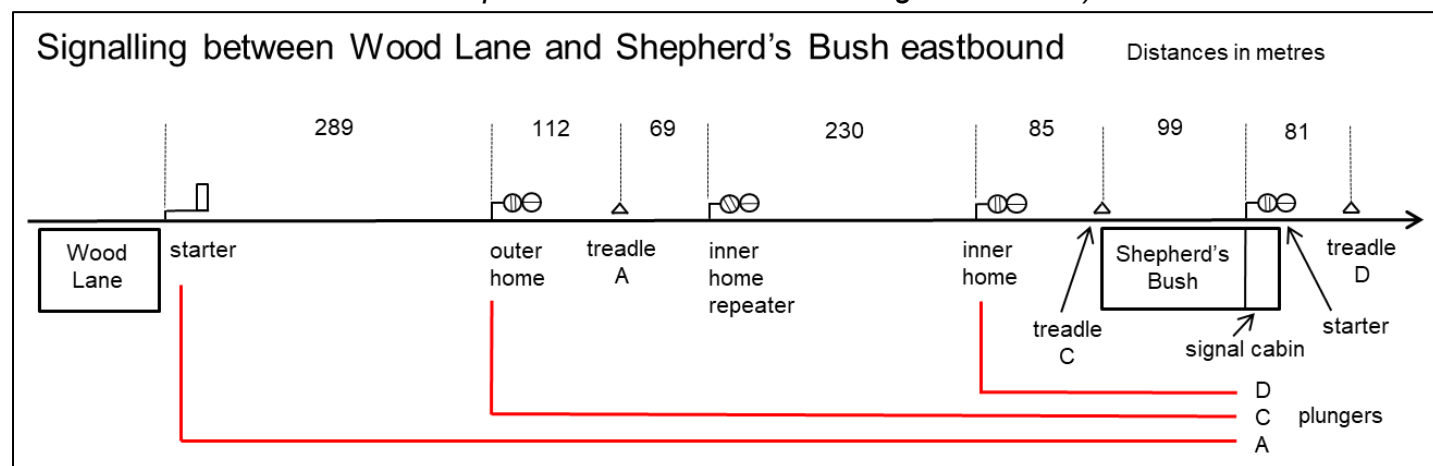
SIGNALMEN, TELEGRAPHISTS AND SHUNTERS

by David Millard, TfL Archives volunteer

BACKGROUND

The July 2022 issue looked staff register entries relating to train staff on the Central London Railway between 1900 and 1913. This (final) article covers signalmen, telegraphists, and shunters over the same period. As with lift, station and train operation, signalling was highly labour intensive. Signals and points were manually operated, and the signalman had to be able to see each train's number in order to control and record its arrival and departure. There was therefore a signal box at every station, and two at Notting Hill Gate, Chancery Lane, and Post Office, where the platforms were above one another. In order to make sense of some of the staff register entries, it is helpful to understand the procedure for signalling a train on the 'lock and block' system, with Spagnoletti's electric interlocking.

The diagram below is from Wood Lane to Shepherd's Bush eastbound and is based on information in the Railway Inspectorate report into a collision in 1913. (*Further details of the signalling are available in Piers Connor's article in the September 2020 issue of Underground News*).



In order to signal one train from Wood Lane to beyond Shepherds Bush, the Shepherd's Bush signalman had to:

1. Enable the Wood Lane signalman to clear his starting signal, by pressing plunger A to unlock the controlling signal lever.
2. Signal the train past his outer and inner home signals, returning them to danger when the train had passed treadles A and C, respectively.
3. Ask the signalman at Holland Park to unlock his starting signal, returning it to danger when the train had cleared treadle D.

Signalmen requested and provided authority to each other by sending coded bell signals, which were also used to communicate train arrival and departure. There were indicators associated with each section which showed 'line clear', 'train on line' and 'train arrived', from which the signalman could deduce the approximate position of the train.

In 1900, each station had a home signal and a starting signal. In order to increase the throughput of trains, an additional home signal was later added. The table below shows that, in addition to receiving block bell signals, the Shepherd's Bush signalman had to complete 15 actions for each train, 3 of which were associated with the inner home signal.

The graph (*Overleaf*) shows that the workload in 1900 was relatively modest. Thereafter, a series of changes gave rise to significant increases:

1. The conversion from locomotive haulage to multiple unit operation – this meant that the maximum service frequency was no longer limited by the need to uncouple and couple locomotives at terminal stations.
2. The resulting increase in service could have revealed the need for a second home signal (itself representing a 25% increase in signaller actions per train).

3. The opening of a loop at the west end, with a station at Wood Lane, avoided congestion at Shepherds Bush. (According to the Railway Times of 5 December 1908, it enabled the operation of a 2-minute service all day, with a 3-minute service in the later part of the evening).

In addition, the workload figures are for trains in one direction only: trains were usually signalled in both directions from one signal box, except at Notting Hill Gate, Chancery Lane and Post Office.

Actions by Shepherd's Bush signalman to signal one train

Wood Lane	Train location	Shepherds Bush
	Wood Lane eastbound pfm.	
Send 'is line clear and lock off?' bell code		1 Send 'line clear and lock off' bell code
		2 Press plunger A to release Wood Lane starter
When 'lock off' indication seen, clear starting signal		3 Clear outer home signal
	Train departs	
Send 'train on line' bell code		4 Return 'train on line' bell code
		5 When train clears treadle A, return outer home signal to danger
		6 Send 'train arrived' bell code and note acknowledgement
Acknowledge 'train arrived' bell code		7 Clear inner home signal
		8 When train clears treadle C return inner home signal to danger
		9 Press plunger C to release outer home signal
	Shepherds Bush eastbound pfm.	
		10 Send 'is line clear and lock off?' bell code to Holland Park
		11 When 'line clear and lock off' bell code received and 'lock off' indication seen, clear starting signal
	Train departs	
		12 Send 'Train on Line' bell code to Holland Park and note acknowledgement
		13 When train clears treadle D, return starting signal to danger.
		14 Press plunger D to release inner home signal
		15 Receive and acknowledge 'train arrived' bell code, and note 'lock off' indication from Holland Park (for starter)

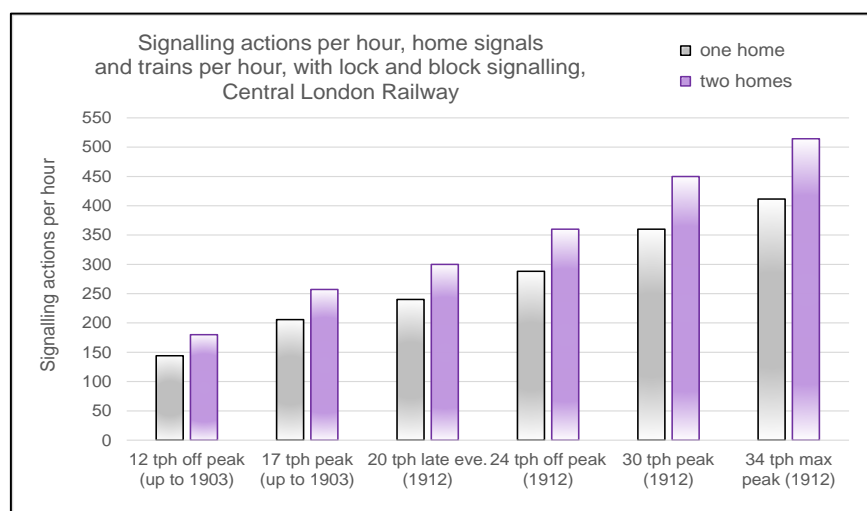
Peak workload over the first 13 years of operation ranged from:

204 actions per hour (12 actions per train, 17 trains per hour, one direction) for a signalman at Post Office, one home signal, 1900;

900 actions per hour (15 actions per train, 30 trains per hour, two directions) for a signalman at Marble Arch, two home signals, 1912.

In terms of an average number of seconds between actions, the activity level increased from an action every 18 seconds to one every 4 seconds. An early turn of duty (07.00 – 15.00) in 1912, with a two-hour peak, would involve 6,120 actions. Little wonder that the Railway Inspector investigating the Shepherd's Bush collision, having noted that automatic signalling with track circuits was due in a month's time, concluded: "lock and block' working does not afford the security necessary for this kind of traffic". The Railway Inspector may have had a sense of foreboding about the use, on a high frequency tube railway, of a signalling system used on lower frequency main line railways: in an otherwise very positive report prior to the opening of the railway in 1900, he said of the signalling: "This system, if properly used, should ensure the existence of an adequate interval of space between succeeding trains".

What the Inspector may have had in mind was the procedure for dealing for situations where the treadle release did not work or the levers had become locked, either by not carrying out the actions in the required order, or through equipment failure. This involved breaking a paper seal and pressing a release spring which would



allow the signal to be cleared, potentially into an occupied section. This was known to be a risk and was governed by strict procedures. In practice, however, obtaining a release was not uncommon, and sometimes resulted in two trains occupying the same section. Speeds were generally low (up to 20 mph), and the train was often able to pull up in time. Approaching Shepherd's Bush eastbound, visibility was poor due to track curvature, reducing the driver's ability to stop short of an obstruction.

Given the labour-intensive process for keeping the trains moving, it was inevitable that actions were sometimes overlooked, or carried out in the wrong order. Perhaps in recognition of this, telegraphists were provided to record train times at signal boxes which controlled traffic in both directions, and assistant signalmen were provided at Bank and Shepherd's Bush.

Signalmen generally worked round the clock in 8-hour shifts, in contrast to station staff, who covered the traffic day in two shifts, broadly 05.00 – 15.00 and 15.00 – 01.00. At many locations, it was the signalman who remained on duty overnight and undertook a range of tasks, including closing and opening the station.

STATION OPERATION AND LAST TRAINS

Staff trains were operated before the first, and after the last passenger train in order to provide transport to staff on extreme turns of duty. Any delays to morning staff trains could impact train and station operations. The entries below indicate the range of tasks undertaken by the signalman at night.

1. Cautioned for not having the lights switched on Down Platform at Bank on Sunday morning. A passenger fell on Permanent Way and £1.1.0 compensation was paid [equivalent to £275 in 2021] (Signalman Thomas Woodley, Bank, 10 Aug 1902, page 37).
2. Cautioned by Mr Ravening for not sending an opening signal to Museum (Signalman Arthur Burleigh, Chancery Lane, 25 Jan 1903, page 15).
3. Failed to report finding a strange man on the floor of signal box, warned that he was responsible for the Safety of the Station when on night duty (Signalman Godfrey Humphrey, Notting Hill Gate, 19 Feb 1903, page 126).
4. Omitted to Telephone Booking Hall that the last train was in section (Signalman Arthur King, British Museum, 17 Apr 1903, page 137).
5. Reprimanded for not opening Station until after the Staff train (Signalman Ernest Law, Tottenham Court Road, 12 Oct 1903, page 41).
6. Omitted to open top station entrance gate at Queens Road several of the staff thus prevented from travelling by staff train. Reprimanded (Signalman Walter Gosling, Queens Road, 13 July 1905, page 220).
7. Permitted to resign for allowing undesirable people including females to enter the station "Holland Park" during the hours the station should have been closed. On Sunday night 4 March 1906 £15.16.2. [equivalent to £2,000 in 2021] was missing from the "Booking office" and not traced (Signalman Albert Mumford, Holland Park, 09 Mar 1906, page 231).
8. Severely reprimanded for not thoroughly examining the Station premises at Tottenham Court Road when on night duty and seeing that the Booking Office doors were not locked (Signalman Alexander Medlock, Tottenham Court Road, 18 Jul 1906, page 136).
9. Reprimanded for not seeing that the Platform Arc lamps at Lancaster Gate were not switched on until 5.17am (Signalman George Bryant, Lancaster Gate, 10 Dec 1906, page 218).
10. Severely reprimanded for giving the Station keys to a Booking Clerk to let himself out of the Station after the Staff Train had gone and allowing him to lock the gate and throw the keys into the Booking Hall (Signalman Charles Eckett, Queens Road, 29 May 1907, page 223).
11. While acting as Signalman at Notting Hill Gate failed to close the canvas doors after seeing the Staff off the Station 4 Nov 1908. Severely reprimanded and given to understand that if he figured in any more trouble he would not be kept in the Service (Conductor Arthur Whitehead, 10 Nov 1908, page 285).
12. Severely reprimanded for delaying the opening of Notting Hill Gate Station through taking the wrong key up stairs with him. Several members of the Staff missed the Staff Train (Signalman George Ward, Notting Hill Gate, 10 Nov 1908, page 209).
13. Falling asleep while on night duty at Notting Hill Gate Station causing delay to Staff Train and the opening of Station. Severely reprimanded and suspended from 18 to 28 December 1908, (Signalman George Ward, Notting Hill Gate, 17 Dec 1908, page 209).
14. Severely reprimanded for giving the key of Fan House Door to Attendant who closed the door on the Up Road before the current had been cut off causing a short which resulted in a length of rail being removed costing from £4-5. Leggett paid £1 towards the cost and was warned for the future [2021 prices were 125 times higher than in 1911]. (Signalman Joseph Leggett, Wood Lane, 16 Dec 1911, page 192).

SIGNAL OPERATIONS HOUSEKEEPING

Signalmen undertook testing and cleaning overnight, and switched signal lights off between first and last trains.

1. Severely reprimanded and suspended one day for delaying (night) Staff train 14 mins through making test of his points etc. before traffic was over and some fault in the detector attached to No.8 points prevented him returning them to the normal position (Signalman Philip Burgin, British Museum, 03 Sep 1906, page 240).
2. Cautioned for carelessly testing the Lighting fuse in the Down Switch Board at Notting Hill Gate causing it to blow (Signalman Henry Allum, Notting Hill Gate, 07 Mar 1907 page 214).
3. Reprimanded for failing to switch on light for Up Outer Home Signal Lancaster Gate for first Up train and failing to record the occurrence in the Train Register Book (Signalman George Bryant, Lancaster Gate, 30 Mar 1907, page, 218).
4. Severely reprimanded for failing to switch on Signal Lights (Outer and Inner Home) for Staff Train (Signalman Alexander McKenzie, Notting Hill Gate, 23 May 1911, page 116).
5. Cautioned for carelessness in leaving the end of the fuse out controlling Oxford Circus Outer Home signal after cleaning the Switchboard (Signalman William Jones, Oxford Circus, 06 Dec 1911, page 39).

SIGNALMAN'S ACTIONS AND SIGNALLING ERRORS

A very rough estimate has been derived of the total number of signalman's actions at all locations over the life of the 'lock and block' signalling system. 13 years of operations x 365 days of operations per year x 20 hours of operations per day x 20 trains per hour average x 24 inter-station sections (12 x 2 directions) x 15 signalling actions per inter-station section = 680 million actions over 13 years.

The total number of recorded errors is probably a few hundred (allowing for the fact that Staff Register No.3 does not include every member of staff). The overall scale is that for each recorded error, there were about a million actions. However, signalmen's errors were relatively infrequent.

CAUSING A DELAY

1. For causing a block in advance section and delaying No.18 down train 18/5/03. one minute, removed from a double to a single road box (Signalman James McCabe, Bond Street, 22 May 1903, page 158).
2. Cautioned for being slow in pulling off his O.H. [outer home] Signal causing a delay of 10 seconds to No 23 train (Signalman Joseph Leggett, Marble Arch, 29 Apr 1904, page 192).
3. Severely reprimanded for clipping driver "Dawson", who had reported to an Inspector that his train had been dispatched from Bank $\frac{3}{4}$ of a min late & also that the I.H. [inner home] signal was shewing part green & white light (Signalman Frederick Newnham, Bank, 15 Mar 1906, page 215).
4. Delayed No 6 down train at Bank 1 min at 6.4 am through leaving Down Box to go to Up Box to get his breakfast which had been cooked. Severely reprimanded & suspended four days (Signalman Stanley Ellingham, Post Office, 26 Jun 1906, page 83).
5. Severely cautioned for delaying No 18 train at Chancery Lane 3 mins through omitting to give the 'Train arrived' Signal for the previous train and pulling for an imaginary. This was the first occasion on which Hone had been in charge of a Signal Box (Conductor George Hone, Chancery Lane, 27 Jun 1908, page 111).
6. Severely reprimanded for delaying Staff Train at British Museum waiting Line Clear. Sat reading until it was time to open the Station (Signalman Albert Baker, Chancery Lane, 24 Jul 1908, page 58).
7. Dismissed in consequence of his general unsuitability. A train stood at Chancery Lane Down Outer Home Signal for 13 $\frac{1}{4}$ mins without advising the Station Master, and was unable to give a satisfactory explanation of what he did (Signalman Walter Woodman, Chancery Lane, 23 Jun 1910, page 241).
8. Severely reprimanded for delaying No.20x train 1 min at Oxford Circus Up Starting Signal 11.47 pm. Thought train was ahead of time but was looking at wrong schedule (Signalman William Jones, Oxford Circus, 18 Feb 1911, page 39).

RESPONSE TO INCIDENTS

1. Cautioned for causing 2 $\frac{1}{2}$ minutes delay to train on Down Road at Post Office when the bell signals had failed (Relief Signalman Edward Hiscox, 09 May 1901, page 224).
2. Severely reprimanded for shunting a disabled Train from the siding to Down Line and working it from Marble Arch to Depôt when trains were running at 3 minutes intervals causing serious delays to the working on September 11. 1901 (Signalman Edward Hiscox, Marble Arch, 12 Sep 1901, page 224).

3. A glass was broken in D.O.H. [down outer home] signal at Holland Park. 11.20 am on date; instead of switching light off, allowed a white light to be shown instead of a green one, put right for the future (Signalman Arthur King, Holland Park, 31 Dec 1901, page 137).
4. On occasion of B.S. [back stroke] locking failure on Feby 1 switched out his O.H. [outer home] lights in preference to breaking paper of starting lock box (see papers pad 1) (Signalman William Marden, Signalman Queens Road, 07 Feb 1905, page 266).
5. For not working Station to Station when the Green glass in the Up Outer Home Signal at Queens Road was broken and sending instructions to Notting Hill Gate for all Up Drivers to be warned and to accept a 'White Light' instead of a 'green' as an 'All right signal'. Severely reprimanded and suspended 1½ days (Signalman Charles Eckett, Queens Road 14 May 1906, page 223).
6. Cautioned for instead of replacing the green fuse in the Down Outer Home Signal which had blown by a new one, did so by means of the Down Inner Home fuse and then replaced it with the Starting fuse and eventually a spare one from his desk (Signalman (temporary) Albert Smith, Shepherd's Bush, 21 Oct 1906, page 228).
7. Severely reprimanded and suspended one day for not instituting Station to Station working when the catch rod of the Oxford Circus Down Inner Home Signal broke. The signal was kept lighted and showing green from 10.35 to 10.55. No instructions were sent to Tottenham Court Road to warn drivers (Signalman Ernest Hill, Oxford Circus, 27 Oct 1906, page 140).
8. In consequence of the fuse having blown it was not possible to get a Green light in the Up Inner Home Signal British Museum. Melton instead of testing the fuse and replacing it by a new one sent for the Electrician. The train stopped at the Inner Home Signal and the Driver called on with a White light as Melton had left his hand signal lamp upstairs. Severely reprimanded and told a thing of the kind in future would not be overlooked (Signalman Matthew Melton, British Museum, 27 Jan 1907, page 186).
9. Cautioned for not working "Station to Station" on the occasion of the failure of Lancaster Gate Down Outer and Inner Home Signal (Signalman Thomas Hoy, Lancaster Gate, 14 Nov 1907, page 135).
10. Severely reprimanded for causing an interval of 6½ min at Shepherd's Bush at 19.28 and disorganising the train service reversing No.6 train in Shepherd's Bush Down Platform when the preceding train was being back shunted at Wood Lane to Depot, and not considering that the following train had to run round Wood Lane (Signalman Ernest Hill, Shepherds Bush, 01 May 1909, page 140).
11. No.1 train was delayed through the absence of Signalman at Shepherd's Bush. Munns was blamed for not ascertaining the cause of not receiving the 'Opening Signal Box' Signal from Shepherd's Bush (Signalman Edward Munns, Wood Lane, 07 Sep 1912, page 105).

SENDING 'IS LINE CLEAR?' SIGNAL EARLY

The sending of the 'Is Line Clear?' signal to the signal box ahead was supposed to be done after receiving a 'Train On Line' signal from the signal box in rear, to be sure that the permission was actually going to be needed. On 9 September 1902, a train was detained at Post Office station with a broken drawbar, and then moved to the siding at British Museum. On this date, four signalmen were reprimanded for sending the 'Is Line Clear?' signal early, suggesting that the rule was widely ignored – given the management focus on avoiding delays, the signalmen probably wanted to prepare as much as possible for the next train.

MIS-PLUNGING

Pressing a plunger would release the lock on a signal in rear, provided that the relevant signal had been placed to danger and that the plunger was pressed for long enough to operate the electro-magnet that released the lock.

1. Cautioned by Station Master for using spring box to reset instrument after misplunging Tottenham Court Road Down Starter instead of instructing Tottenham Court Road to release his own lock (Oxford Circus) (Signalman Frederick Hemmings, Oxford Circus, 03 Apr 1905, page 229).
2. Plunged for O.H. [outer home] before replacing starting signal during 6½ min service cautioned by Mr Ravening (Signalman William Mantle, 27 Apr 1905, page 164).
3. Severely reprimanded for careless signalling (mis-plunging & hand slipping off lever). Told if he did not improve would not be permitted to work as Signalman (Conductor George Hone, 14 Jul 1908, page 111).
4. Chancery Lane Down Outer Home Lock failed for No.4x apparently due to a faulty plunge. Warned (Signalman George Spackman, Chancery Lane, 05 Oct 1911, page 258).

SIGNAL CLEARED IN ERROR

The signals at Bank between the platforms and the sidings could be cleared onto a train – in the time before track circuits and illuminated diagrams, it was the signalman's responsibility to be aware of the location of trains in the siding, even if they were out of sight. Fortunately, train speeds were low.

1. At about 3.21 pm on Saturday 23 February 1907, Humphreys pulled off Signal for train to leave Siding at Bank while the Down Platform was occupied by a train. The driver observing this stopped and no trouble was caused. There were discrepancies in the booked times and in this respect was given the benefit of the doubt but in view of his previous record was told that if he figured in any irregularities in the future would not be kept as a Signalman and probably not in the service (Assistant Signalman Godfrey Humphrey, Bank, 05 Mar 1907, page 126).

Signalman Edwin Withers (page 182) was on duty at Bank at the time and was given a warning for this incident.

2. Pulled off signal for No.8 train to enter No.1 siding at Bank while it was already occupied by No.18 train at 16.13 on Sunday 29 May 1910 and prematurely returned the Bank Up Inner Home Signal. No.13 train Tripped at 22.04¾ on Sunday 29 May 1910. Severely reprimanded and told that another irregularity of any kind could not be overlooked. Suspended three days to follow Annual Leave 31 May, 1,2,3 June 1910 (Signalman Frederick Newham, Bank, 30 May 1910, page 214).

SIGNAL NOT RETURNED TO DANGER IN ERROR

After the train had cleared the treadle, each signal had to be returned to danger to enable the signalman's plunge to lift the lock on the preceding signal.

1. Omitted to put back Up starting signal after passing of No 14 train causing an interval of 6 min. He was seen and told there was no excuse for this, suspended for 2 days and if he made a similar blunder again he would be taken out of the Signal Box altogether (Signalman Albert Mumford, Holland Park, 06 Jan 1904, page 231).
2. While acting as Signalman at Notting Hill Gate on 19 Oct 1908 caused an interval of 5 mins 14.27½ to 14.32½ pm through failing to put his Starting Signal to Danger after the passing of the previous train and not noticing his Starting Signal Lock was showing "On". Reprimanded and told his record was so unsatisfactory as a Signalman that he would not be allowed to work as such again but was given a trial as Conductor (Conductor George Hone, 23 Oct 1908, page 111).
3. Failed to return his Starter after train No 6 had passed 07.09¾ causing following train No.6x to be delayed 2 mins at the Down O.H. [outer home] Signal. Interval caused between trains Nos.6 & 6x leaving Chancery Lane 4¾ mins. Severely reprimanded (Signalman Sidney Saich, Chancery Lane, 08 Feb 1910, page 66).

SIGNAL RETURNED TO DANGER PREMATURELY

When a train had passed a signal and operated the treadle, it changed the block indicator from 'train on line coming' to 'train arrived'. This was the indication that the signal should be returned to danger. If this was done too early, plunging would:

1. Not release the lock on the preceding signal.
 2. If the driver saw the signal return to danger, cause a delay.
 3. When trainstops and tripcocks had been fitted, cause the operation of the front or middle trip (tripcocks were apparently not isolated when two units were coupled together).
1. Cautioned for inadvertently putting his Up Outer Home Signal to danger and telling his telegraphist to switch out the light which led the driver to think the light had failed and he reported accordingly. Bank (Assistant Signalman Godfrey Humphrey, Bank, 10 Oct 1904, page 126).
 2. Lock box opened to release O.H.[outer home] Signal owing to putting starting signal back before train had actuated treadle, whilst acting as signalman at Chancery Lane (Signalman William Griffiths, Chancery Lane, 30 Aug 1905, page 155).
 3. While acting as Signalman at Post Office put back his Up Starting Signal before train had operated the treadle and afterwards broke the wrong Spring box papers, causing delay to several trains (Signalman Arthur Turner, Post Office, 17 Jun 1908, page 281).
 4. Severely reprimanded for prematurely returning Bank Up Outer Home Signal, causing the Trip on intermediate car to be operated (Assistant Signalman Godfrey Humphrey, Bank, 04 Jan 1910, page 126).
 5. While acting as signalman at Chancery Lane returned the Inner Home Signal instead of the outer home stopping No.15 train, and without satisfying himself the exact error he had made returns the

Outer Home Signal to danger and trips No 15x train causing 3½ mins interval. Severely reprimanded and warned for the future (Signalman James Denny, Notting Hill Gate, 06 July 1911, page 286).

6. Severely reprimanded for carelessness in returning Wood Lane Starting Signal prematurely causing No.17 train to be tripped at the intermediate Control Car (Signalman William Harris, Wood Lane, 18 Nov 1911, page 131).

IRREGULAR SIGNALLING

The staff register incidents described as 'signalling irregularity' included the use of unofficial bell signals, as well as situations of high risk, for example, two trains in one section.

1. Resigned and left without notice rather than be reduced to a Platform Man for irregular signalling, two trains in section between Post Office and Chancery Lane (Signalman Henry Andrews, 26 Oct 1904, page 206).
2. Through disregarding instructions of the block system signal working, he caused two trains to be in one section at Marble Arch, he was told that under no conditions would he be allowed to act as a Signalman, he was offered a lift operators position and accepted it (Signalman Arthur Saunders, 08 Sep 1905, page 251).
3. Reprimanded for failing to ask acting signalman "Samson" Chancery Lane the meaning of irregular bell signals being received, thereby contributing to "Samsons" irregular working viz: releasing his starting lock before receiving permission (Signalman George Pearson, British Museum, 14 Mar 1906, page 172).
4. Post Office failed to take Bank Down Starting Lock Off and instead of Withers going through usual formalities with Post Office signalman gave irregular beats on Block Bell to him which he could not understand and a train was delayed at Bank 1½ minutes. He was severely reprimanded and told if he did not improve would not be kept as Signalman at the Bank station (Signalman Edwin Withers, Bank, 29 Mar 1907, page 182).
5. Summarily dismissed in consequence of irregular signalling resulting in two trains being in Section between Lancaster Gate and Marble Arch. His previous record was most unsatisfactory and it was thought that he had not admitted all he knew in this irregularity (Signalman Sidney Cullen, Lancaster Gate, 28 Jun 1910, page 55).

SUPERVISION

Signalmen supervised telegraphists, who recorded (to the nearest quarter minute) the passage of trains in the train register, and trainees who were 'learning the box'.

1. For getting his breakfast during heavy Traffic time (08.40) July 14/03 and allowing his Telegraphist to work the frame, was told that if this sort of thing occurred again he would be removed from the Signal Box altogether (Signalman Arthur Holman, Lancaster Gate, 16 Jul 1903, page 148).
2. For not supervising the entries of Telegraphist (Carpenter's) in train register book, and treating the matter with some apathy, was seen and severely reprimanded (Signalman James Whatling, Marble Arch, 09 Nov 1905, page 72).
3. Told to arrange for the Telegraphist to have his meals at other times than the busy hours of train service (Signalman James Whatling, Marble Arch, 13 Dec 1905, page 72).
4. Allowing the Telegraphist to be at the Signal Frame at Bond St Station at 10.25 while he was seated on the locker presumably eating. Severely reprimanded and reduced to Single Line Box pay 7d to 6¼d per hour. [Moved to Notting Hill Gate signal box the next day] (Signalman Arthur Burleigh, Bond Street, 07 Dec 1906, page 15).
5. Severely reprimanded for permitting the Telegraphist Stagg to manipulate the levers in Wood Lane Signal Box and send the bell signals for trains at 13.45 (Signalman Walter Gosling, Wood Lane, 28 Jul 1908, page 220).
6. Cautioned for not keeping proper observation on the working of Telegraphist Knight and noticing several irregularities in the booking of the Trains in Register (Signalman George Bryant, Signalman Lancaster Gate, 22 Feb 1909, page 218).
7. Cautioned for scrubbing lockers in Signal Box at Holland Park at 23.02 instead of supervising Relief man Underwood who was training in the Box (Signalman William Ballard, Notting Hill Gate, 03 Dec 1909, page 49).
8. Severely reprimanded for delaying No.3 train 1½ mins at Wood Lane 19.44¼ through setting the Road for train to go to Yard instead of on Main Line. Harris said he asked the Telegraphist (Patten)

for the number of the incoming train and he replied 21 which was incorrect. Told if he gave any further trouble he would be dealt with (Signalman William Harris, Wood Lane, 22 Dec 1910, page 131).

9. Cautioned for not observing that Signalman Garms who was training in Signal Box Bond Street had not returned the Starting Signal after the passing of No.13 train and delayed 13x train in consequence (Signalman Alfred White, Bond Street, 18 Feb 1911, page 165).

ADVANCE SIGNALS

Several entries indicate the existence of advance signals (after the station starting signal – Up means towards Bank station):

1. Shepherd's Bush Up advance.
2. Lancaster Gate Up advance.
3. Shepherds Bush Down advance.

These signals were under the control of the Signalman at the named location, and were presumably operated and released in the same way as a home signal. These would have enabled the signalman to clear the station starter without permission from the signal box in advance. It would also have increased the workload of the signalman.

4. Mis-plunged S [Shepherd's] Bush Up advance Signal, sealed key used (Signalman Albert Mumford, Holland Park, 10 Apr 1904, page 231).
5. Reprimanded for failing to give the 'Train Arrived Signal' to Shepherd's Bush for No.21 Train resulting in No.1 Train being delayed 1 minute at Shepherds Bush Advance Starting Signal (Signalman Edward Munns, Wood Lane, 23 Jun 1910, page 105).
6. Cautioned for failing to pull off Lancaster Gate Up Advance Signal causing a delay of 2 minutes to No.9x train 08.01 (Signalman William Griffiths, Lancaster Gate, 15 Nov 1912, page 155).

INCIDENTS – TO REPORT, OR NOT TO REPORT

1. Queens Road. Omitted to report the incident of signalman 'Bristow' receiving a shock on Sunday morning 3 April 1904 (Signalman Thomas Collins, Queens Road, 05 Apr 1904, page 201).
2. For not reporting his relief (signalman Bristow) for being 40 minutes late on duty, was seen and reprimanded (Signalman Joseph Leggett, Queens Road, 08 Apr 1904, page 192).
3. Reprimanded for not recording in train book the failure of Signalman 'Bryant' Lancaster Gate to release Marble Arch Down Starting Signal (Signalman Joseph Leggett, Marble Arch, 19 May 1905, page 192).
4. Reprimanded for not reporting failure of repeater in Oxford Circus U.O.H. [up outer home] Signal (Signalman Charles Hemmings, Oxford Circus, 16 Jul 1905, page 230).
5. Omitted to advise Shepherd's Bush that train No.3 was delayed at Lancaster Gate thro' a slight fire, caused an interval on up road in consequence (Signalman Arthur Holman, Lancaster Gate, 04 Mar 1906, page 148).
6. Denied being informed on Telephone by Signalman in Up Box Post Office that Inspector Woodley was on his way to visit him and also very insolent when challenged by the Inspector. Severely reprimanded and told to apologise to Inspector Woodley (Signalman George Ward, Post Office, 24 May 1907, page 209).
7. Irregular signalling occurred between Queens Road and Notting Hill Gate causing a delay of ½- min to No.9 train at the Down Outer Home Signal 18.58 28 April 1908. From the evidence it appeared that Holman failed to acknowledge the train arrived signal for the previous train until called up on the telephone by Signalman Cullen Notting Hill Gate and afterwards made suggestions to him not to report the incident. Severely reprimanded, finally warned and reduced to Lift Operator Signalman Arthur Holman, Queens Road, 30 Apr 1908, page 148.
8. At 08.18 on 10 June 1910, No.13 train stopped short at Notting Hill Gate with two cars left in the Down Tunnel. Allum duly recorded the incident in the Train Register Book but suggested to Station Master Higham that he should not report it as "his remarks could easily be rubbed out, and the Driver was a decent sort of fellow". Severely reprimanded and given to understand that if a report of any kind was made about him again he would be summarily dealt with (Signalman Henry Allum, Notting Hill Gate, 11 Jun 1910, page 214).
9. Severely reprimanded for advising signalman Whitehead Notting Hill Gate on Telephone that Inspector Woodley was returning from Holland Park to his station. At the time a female was in the Signal Box with Whitehead but Smith said he was not aware of this but sent word as is usually done

by Signalmen of the Inspector's whereabouts. Told practice must be stopped and warned for the future (Signalman Albert Smith, Holland Park, 25 Dec 1910, page 228).

It seems that the warning from his colleague was insufficient to prevent detection:

1. Dismissed for having a female in the Down Signal Box at Notting Hill Gate while on duty on Sunday 25 December 1910 (Signalman Arthur Whitehead, 30 Dec 1910, page 285).
2. Severely reprimanded and suspended six days for delaying No.13 train at Queens Road starting signal nearly a minute at 18.06 on 8 January 1911, failing to report the delay to the Station Master or record it in the Train Register Book and suggesting to Acting Guard Butcher 629 not to report the incident, who afterwards obliterated a remark and also altered times on his Journal. Both men were suspended January 12-17 inclusive and warned for the future (Signalman George Barnett, Queens Road, 12 Jan 1911, page 228).

CONSPIRACIES

1. Summarily dismissed for delaying a train in consequence of neglecting to put his starting signal to danger after the passing of a previous train, and for irregularly booking the failure of an Electric Lock at his own Station Queens Road, and inducing the Signalman at Notting Hill Gate to record the failure incorrectly, also allowing the Telegraphist to work the Signal frame after being previously cautioned (Signalman Hiscox, Queens Road, 11 Apr 1905, page 224).
2. Summarily dismissed for being induced by the Signalman in rear (Queens Road Station) to irregularly book the failure of an electric lock (Signalman John Watton, Notting Hill Gate, 18 Apr 1905, page 81).
3. DSM Lewis Post Office telephoned to him at Chancery Lane to sign the Train Register Book as if he had visited the station which he had not. Severely reprimanded and told the case would be remembered against him (Signalman Sidney Cullen, Chancery Lane, 08 Mar 1907, page 55).

Signalman Cullen conveyed the order to his colleagues William Griffiths and Alfred White, who similarly signed their Train Registers. Both were severely reprimanded. Deputy Station Master Walter Lewis was dismissed for being absent several times from the station on 3 pm to 1am duty on 08 March 1907, in a public house with liftman man William Rowe, who was also dismissed. The Inspector and Ticket Collector were also disciplined:

4. Failed to visit Post Office Station during late turn of duty. D.S.M. Lewis was absent from the Station several times drinking in a neighbouring public house with a Liftman who was off duty. Cautioned (Inspector Thomas Woodley, 08 Mar 1907, page 37).
5. Cautioned for not observing and calling attention to the irregular manner in which DSM Lewis was acting in absenting himself from the Station several times during late turn of duty (Ticket Collector Robert Shorthouse, 08 Mar 1907, page 210).

Post Office suddenly lost three signalmen, who were all dismissed for working on a frame with the electric locks improperly isolated:

1. Some wires were found cut for the improper use of the locks and instruments in the signal box at Post Office Station. Signalmen J. O'Brien 498, A. Turner 575 and Acting Signalman A. Neate 410 did duty in this Box; each denied cutting the wires but made admission that they were acquainted with irregularities and failed to report them. They were all dismissed and paid two weeks' wages in lieu of notice, 19 Nov 1908, pages 197, 244 and 281).

There was an earlier instance of simultaneous discipline involving all three signalmen at Chancery Lane.

2. Severely reprimanded and suspended for four days for sending and receiving silly messages on the Station to Station telephone (Signalmen Sidney Cullen, Albert Brooks and Walter Woodman, Chancery Lane, 18 Sep 1907, pages 55, 232, 241).

'CONDUCT UNBECOMING'

3. For gross ingratitude in refusing Station Masters rate of pay whilst relieving at Tottenham Court Road, he demanded the difference between that stipend and his relief work remuneration; was told he would go to Marble Arch Signal Box and remain there, and would not be again considered for promotion for some time (Relief Signalman Richard Broom, 27 Jan 1904, page 227).

The Cake Walk dance was originally a dance contest with a cake as the prize; it originated from mid-19th century slave plantations in America.

4. Reprimanded by Mr Ravening for permitting Signalman Humphreys & Telegraphist Nicholls to perform the "Cake Walk Dance" in the Signal Box at Bank (Signalman Francis Buckeridge, Bank, 25 Mar 1905, page 45).

5. Severely reprimanded and suspended one week for leaving the Signal Box at Queens Road and going down to the crossover for Lavatory purposes while on duty 12 noon Sunday 3 February 1907 (Signalman Charles Eckett, Queens Road, 04 Feb 1907, page 223).
6. Failed to pull off Down Starting Signal for No.5 Train at 07.24 Shepherd's Bush causing delay of 3 minutes. Hill gave various excuses as to the cause which, however, was due to him being seated on the locker changing his boots and he admitted dictating incorrect departure times to Telegraphist Boulton for the Up Trains. Severely reprimanded, suspended two days and told that if he gave trouble of any kind again he would not be seen but be given notice to leave the Service (Signalman Ernest Hill, Shepherd's Bush, 06 Oct 1909, page 140).

The Railway Gazette of 22 September 1911 (*Right*) gave rather more information than the staff register entry. It was notable that the assault was suspended in order to avoid delaying the train service.

Fight in a Tube Signal Box.—The story of a violent struggle in a London signal box was told at the Guildhall on Monday, when Ernest Hands, a signalman in the service of the Central London Railway Company, was summoned for assaulting W. G. Neal, a fellow signalman. During the recent strike the complainant remained loyal and kept to his work, but the defendant went out on strike, and that was the explanation of the trouble. During a dispute after the men had returned to work at the Post Office Station Hands rained blows on Neal's face, knocking him on to the instruments. On a train coming into the station defendant gave up the attack and assisted the complainant, whose face was bleeding, to work the train into the platform. When the train passed through, however, the defendant renewed the attack, and as the complainant left the box he followed him on to the platform and again punched him. The result of it was that complainant had a fractured nasal bone and severe bruises and cuts on the face. Result: £3 and 13s. 6d. costs or fourteen days.

1. Dismissed for fighting Signalman Neal on duty at Post Office Station 07.00 on 8 September 1911. Fined at Guildhall £3

and 13/6 costs (Signalman Ernest Hands, Post Office, 18 Sept 1911, page 179).

SHUNTERS

There were a few entries for shunters, mostly involving derailments and damage to trains.

2. Dismissed for pulling off his signal for a train to proceed to the Main Line at Depôt while the road was occupied by another train and acting in an insubordinate manner when enquiry was held in connection with the irregularity (Shunter Alfred Jaycock, 30 July 1906, page 45).
3. Two cars were derailed in Depôt in consequence of Yardmaster Boyner moving No.15 points to bring a train out of that road and failing to return them to the position in which he found them and Shunter Carter not examining the road before using it after being absent from it for 15 minutes. Severely reprimanded (Shunter George Carter, 08 Dec 1906, page 119).
4. Shunter William Grimes was 'Severely reprimanded for snow balling in Depôt at 4.40 am' on 28 April 1908.

The Times (25 April 2017) noted 'Snow in April is not so unusual, but in late April it is most uncommon. One incredible snowfall struck at this time in 1908, when a blizzard raged across southern England on April 25. Oxford recorded 18in (45cm), its heaviest snowfall of the 20th century.

Failed to notice an unusually long chain on No.79 Coal truck which fouled the Current Rail in Depot and caused a Short Circuit of a very heavy nature. Severely reprimanded and told if he was so careless again would not be kept as a Shunter (Shunter William Henry Arden, 06 Jan 1909, page 242).

5. Cautioned for carelessness in uncoupling trains at Depôt Sunday 10.30. Train Pipe Cock broken off by collapsible gate (Shunter William Grimes 09 Jan 1910, page 79).
6. Severely reprimanded for not examining the Road and Points before shunting trains at Depot. The West Road points had been altered and the Breakdown Truck derailed. Warned for the future (Shunters William Grimes and William Arden, 22 May 1911, pages 79 and 242).
7. While acting as Shunter, reversed the Road between the leading Motor Bogie and the trailing bogie of the same car causing the front Motor Car 234 and Car 16 to be derailed. Considerable damage was done to the Current Rail and two points badly bent. Bailey was told that such repeated carelessness could not be overlooked and he was given a fortnight's notice to leave the Service. 2 August 1912. Dismissed (Shunter Thomas Bailey, 19 Jul 1912, page 124).

TELEGRAPHISTS

Telegraphists worked in signal boxes, recording the times of trains; they also worked in the telephone exchange at Oxford Circus. The small number of incidents suggests a low level of recording.

1. Dismissed for working the Signal levers at Bond Street Station after being previously warned (Telegraphist Walter Fryer, 15 Dec 1906, page 218).
2. Cautioned for incorrectly booking trains at Bank. Missed a train when turning over a fresh page and did not notice it till spoken to by the Signaller (Telegraphist Albert Sutton, 08 Apr 1907, page 88).
3. Severely reprimanded for recording the times of trains at Bank in an incorrect and slovenly manner (Telegraphist Charles Squires, 21 Aug 1907, page 58).

Summarily dismissed for riding on Acting Fr [Front] Guard King's gangway and pressing the bell push, and so starting train No.4 at Tottenham Court Road. 18 Feb 1908 (Telegraphist Alfred Cook 20 Feb 1908, page 163).

4. Dismissed for wilfully booking incorrect times of trains during delay to traffic at Shepherd's Bush station on 26 May 1908 (Telegraphist William Wait, 28 May 1908, page 30).
5. Severely cautioned for recording incorrect departure times of Up Trains at Shepherd's Bush which were dictated to him by Signaller E. Hill 307 when No.5 Train was delayed at Shepherd's Bush Down Starting Signal 2 mins waiting for it to be lowered (Telegraphist Peter Boulton, 06 Oct 1909, page 152).

CONCLUDING REMARKS

This article concludes a look at the early operational years of a pioneering railway using Staff Register entries. These have inevitably focused on what went wrong, often described in terms of breaches of the rules; and all have had the wisdom of hindsight. The quality of service was sensitive to a single individual error, and most tasks were done manually. The entries have provided insights into how the equipment was used, and into management attitudes to various types of misconduct. There was clearly an active focus on following up individual delays to the train service: only a reliable service would repay the very substantial investment needed to build, equip and staff the railway. The Railway Inspector was impressed when he examined the railway prior to opening. In his letter of 28 June 1900, he concluded:

"The inspection occupied four days, and the few matters which appeared to me to require attention have all been dealt with by the Company, so that on the occasion of my last visit, everything was in perfect order except a few signal-lamp-repeaters in the signal boxes, and one or two coloured signal glasses in the tunnels, which required renewal.

The work throughout appeared to be of a very substantial character, and no money or effort has been spared to render the railway as complete as possible in every detail.

I can therefore recommend the Board of Trade to sanction the opening of the Central London Railway for passenger traffic".

As a pioneering railway, with its own power station at Wood Lane and a flat fare of 2d (0.83p), it experienced plenty of challenges in its first 13 years:

1. Scrapping its fleet of locomotives and converting to multiple unit operation, as a result of vibration problems.
2. Fitting train stops to signals, driver vigilance devices ('deadman') in cabs, and tripcocks to leading bogies, enabling the Assistant Motorman grade to be abolished.
3. Replacing the bridge rail and longitudinal track with conventional bull head rail and transverse sleepers, in order to improve the ride and renew a life expired asset.
4. Opening extensions to Wood Lane (coping with an International Exhibition and the Olympic Games traffic), and to Liverpool Street (with escalators).
5. Re-signalling the line with automatic signalling, based on recently invented a.c. track circuits, in order to improve safety, capacity and reliability, and reduce operating cost.

In conclusion, the staff registers and records of capital expenditure show a determination to ensure the railway was a success:

1. By focusing on staff performance,
2. By dealing effectively with equipment problems, even if that meant complete renewal of a recently installed asset,
3. Improve capacity, and
4. Extend the line to serve new markets at both ends.

The staff information in this article has been taken from Central London Railway Traffic Staff Register No.3 (reference LT 449 33), held by Transport for London Archives. The Archives Team can be contacted at **CorporateArchives@tfl.gov.uk** In addition, a limited selection of archives records is now available online at –

Complete Available Collection | TFL Corporate Archives Digital Collections (preservica.com)