Board of Trade,
Railway Department,
Whitehall, 29th December 1870.

SIR,

I HAVE the honour to report, for the information of the Board of Trade, in obedience to your minute of the 7th instant, the result of my inquiry into the circumstances which attended the terrible collision that occurred on the 6th instant, at Brockley Whins station on the North-eastern Railway, between an express passenger train and a coal train, proceeding in opposite directions, by which four passengers and the guard of the passenger train were either instantaneously killed or died in the course of a few hours; and 57 other passengers, and the driver and fireman of the passenger train, were injured, very many of them most seriously. I enclose a list of those killed and injured, furnished to me by the railway company, with the nature of the injuries, as far as they are known.

Brockley Whins station is situated on what was originally the Brandling Junction Railway, opened for traffic in June 1839, but never inspected by an officer of the Railway Department, and in process of time it became the junction for trains from South Shields, Sunderland, and Washington, proceeding to Newcastle.

The station is objectionable, inasmuch as it is a one-sided one, the platform being at the south side of the up line from South Shields and Sunderland, which lines unite a very short distance to the east of the station house. The line from Washington has long ceased to be used for passenger traffic, having been superseded by a shorter route, but it joins the Brandling Junction line just to the west of the station platform. The up passenger traffic from South Shields and Sunderland stops alongside the platform, and travels along the up line to Newcastle, and the stopping trains respectively from South Shields and Sunderland appointed to call at Brockley Whins station are here united and go forward as one train. The up express trains pass but do not stop at Brockley Whins station.

The down passenger trains from Newcastle to South Shields and Sunderland form one train as far as Brockley Whins station, but here the train is divided, and the respective portions are taken on to those places.

There being no platform alongside of the down line, the down trains are turned across from the down to the up line, by a pair of facing points A, and a short cross over road A B, about 60 yards in length. These facing points on the down line A (in the diagram), are about 70 yards west of the west end of the platform, and the corresponding pair of facing points on the up line B are about 10 yards west of the west end of the platform.

Formerly these two pairs of facing points were both self-acting, and weighted to stand open, respectively for the down and up lines, so that nothing could cross from one line to the other, unless one or other of these points were held open for the cross-over road. But an engine having got off the rails on the up line, at or near the facing points, in consequence, it was supposed, of the self-acting points not being properly closed, it was determined about last February to alter their construction, and to work both pairs of points simultaneously, by a single lever, placed very close to the facing points on the down line, and between them and the pointsman's signal box. Close to this pair of facing points there is another pair, C, weighted to stand open for a siding or relief line leading to the Tyne Docks. The station is protected by up and down station and distant signals, worked from near the pointsman's signal box, but there is no connection or interlocking between the points and signals.

On the morning of the 6th instant a down coal train consisting of engine and tender and 12 waggons left Gateshead at 10h. 15m. for the Tyne Docks, and the driver informed me that as they were approaching Brockley Whins station about 10h. 40m., the signals were put at "all right" for him to proceed past the station without stopping; but on nearing the facing points A of the cross-over road, to which I have referred, he observed that they stood open, so that his train would be turned across to the up line, instead of being allowed to continue its proper route along the relief line; and as he knew that an up express passenger train was due, he sounded his whistle and reversed his engine, and did all in his power to stop, and whistled and shouted to the pointsman, who was standing at his post outside the signal box or cabin; but seeing that the points remained open, and that the train would be turned to the up line, he and the fireman jumped off just before the collision took place.

At the same time that the coal train was approaching Brockley Whins station from the west, the 10.30 a.m. up express train from Sunderland to Gateshead and Newcastle was nearing it from the east. This train consisted of a tank engine, break van, first-class, second-class, second-class, and two composite carriages, arranged in the order in which they are written. It is not appointed to stop anywhere between Sunderland and Gateshead, and in the ordinary course of things, would pass Brockley Whins station on the up line of rails. It is timed to run at an average rate of about 30 miles an hour. I did not see the driver of this train, as he was too ill to appear, but he had given evidence at the coroner's inquest, and stated that they left Sunderland at 10h. 30m., and found all the signals right for the train to proceed up to and past Brockley Whins station; that he observed that the facing points on the up line B were wrongly set, so that his train would meet the train on the down line; that he saw this when he was about 20 yards from the facing points and he reversed the engine at once, and sounded the whistle to attract the pointsman's attention; but the points were not altered, and the two trains came into violent collision somewhere about the middle of the cross-over road. The driver of the passenger train estimated the speed at which he was running at from 15 to 20 miles an hour. The driver of the coal train said he thought he was running about 12 miles an hour when he first saw that the signals were at "all right" for him to proceed, and from 6 to 8 miles an hour when the collision took place. The station master thinks it might have been running from 10 to 15 miles an hour; and, from the nature of the damage done to the rolling stock, I think it highly probable that the station master's estimate is correct, and that the passenger train was also proceeding nearly at its average rate of speed.

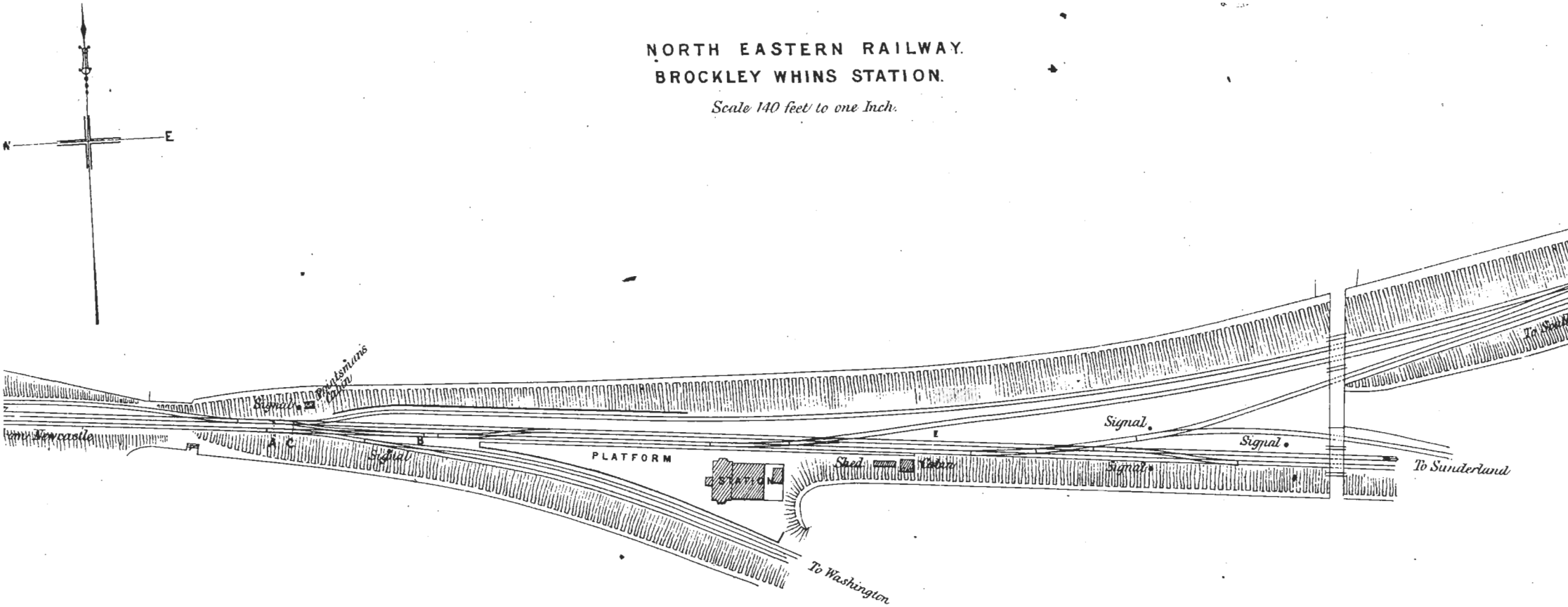
It further appears that a down passenger train from Newcastle to Sunderland reached the platform at 10h. 31m. and left at 10h. 34m. The pointsman was not brought before me, but he had stated at the coroner's inquest that he set the points right for this train to cross from the down line to the platform side on the up line at Brockley Whins station; and then, after crossing from the platform, he saw a down train coming, which he supposed was a goods train, and as the goods train had to stop he put up the signals to danger, to stop it, but when he found out that it was a coal train he took down the signals to allow the trains to pass. When it was too late he discovered that he had forgotten to reverse the points after the previous passenger train had gone, and the coal train had got on to the wrong line, and come into collision with the express train.

It further appears that the pointsman on duty was not the regular pointsman, who had been removed to some other station five or six weeks before the collision occurred. He is a platelayer, who had been temporarily appointed to do the duty, and had been engaged on similar duties in the mornings of alternate weeks

To accompany Colonel Yollands Report on the Collision which occurred on the 6th December 1870.

NORTH EASTERN RAILWAY.
BROCKLEY WHINS STATION.

Scale 140 feet to one Inch.



for nearly eleven years; and the inspector of permanent way who appointed him told me that he considered him to be a competent man, otherwise he would not have put him there.

The effect of the collision on the rolling stock was as follows: the tank engine drawing the express passenger train had the smoke box stove in; front ends of side frames broken, front buffer beam and buffers destroyed; tank damaged; weather board and covering of boiler very much damaged; safety guards broken off, and the stays to front buffer beams smashed.

The first-class carriage was destroyed; the passenger van was broken up; one of the composite carriages had its frame broken, and the body very much damaged; and the other and the second-class carriage had the bodies damaged.

The engine and tender of the coal train was running with the tender in front,—an objectionable practice, very commonly adopted,—and in consequence the tender was smashed to-pieces; fortunately the driver and fireman had both jumped off, or they would in all probability have been killed. The engine had the buffer beam at the fire-box end broken, two handrail pillars damaged, foot plate and foot step bent and broken, two splasher plates and fire-box doors bent and bulged, and the injector broken. One mineral waggon was damaged.

The estimated cost of the repair to the rolling stock is 925*l*.

It will be quite evident from what I have stated that the collision resulted from the neglect of the pointsman in having failed to close the points for the cross-over road as soon as the down passenger train for South Shields had crossed to the platform alongside of the up line at 10.31 a.m. It was, no doubt, an act of forgetfulness; and the verdict of the jury at the coroner's inquest set it down as an "error of judgment" on the part of the pointsman.

The jury also remarked upon "the impropriety "of the goods shunter being allowed to remain in the "pointsman's cabin, and so take his attention from "his duties, which are of so much importance."

This verdict and the subsequent remarks supply further confirmation, if any were needed, of the fact that coroner's inquests, as generally conducted, are singularly ill calculated to ascertain the real causes of railway accidents; but they are supposed to be sometimes serviceable, as in this instance, to the railway companies, in concealing the mismanagement of the company from the public.

With respect to the remarks of the jurors, I must observe that at the time this collision took place three goods trains were then due at Brockley Whins station, and it was the goods shunter's *duty* to be at the policeman's cabin, to tell him how those goods trains were to be disposed of when they arrived. And as regards the verdict, I should further state that the pointsman, Robert Hedley, has since been tried for manslaughter at the assizes at Durham, and, in my opinion, properly acquitted.

Nothing can more plainly exhibit the entire absence of responsibility that exists on the part of railway directors, their officers and servants, for the occurrence of preventible disastrous accidents, than what has taken place with reference to this very serious collision.

Because it appears to me that the company's management is wholly to blame for this accident.

It is now nearly 15 years since I first called attention to the danger which was involved in allowing facing points on railways to be inadvertently moved to the wrong position by the heedless act of a pointsman; and pointed out how, by connecting the points and signals by mechanical means, this class of accident might be altogether avoided; and it is more than fourteen years since my suggestion was acted upon, and means were actually devised for preventing them. For upward of 10 years the inspecting officers have mostly insisted upon those means being made use of at the junction of new lines or branches joining existing lines before they would consent to recommend that the opening of these new lines should be sanctioned by the Board of Trade. This has been done, in some cases, up to a recent date, in the face of most strenuous opposition on the part of important railway companies. You are aware that, as regards lines of railway already open for traffic, the Board of Trade and the inspecting officers have no authority to interfere. Now, if the facing points at Brockley Whins station had been interlocked with the signals for the down mineral and up express passenger trains, the pointsman would have been prevented from making the mistake which he did respecting the facing points, and neither the down nor the up station signals could have been lowered for these trains to proceed past the station, until the facing points A and B had been properly closed for the cross-over road, and opened for the down and up lines on which the respective trains were to travel past Brookley Whin station; and this frightful collision could not have taken place, unless the drivers had entirely disregarded and run past the danger signals.

I find that the attention of the North-Eastern Railway Company was drawn to the desirability of interlocking points and signals as early as 1863 by Captain Tyler, and again by Colonel Rich in 1865, when reporting upon railway accidents which had occurred on this line, but it was not until a very serious collision had taken place in May 1869, at a reconstructed station (Thirsk, 1862,) owing to the absence of interlocked points and signals, and a similar mistake on the part of a signalman, that serious attempts were apparently made to provide better for the safety of the public, by introducing them generally on this section of the line, although some frightful accidents had previously occurred on other lines of railway, owing to the same cause.

I understand that the necessity for, and additional security afforded by, interlocked points and signals is now fully admitted among some of the officers of the North-Eastern railway, and further that they are now actively engaged in this and possibly in some other sections into which the working of this important line is divided, in interlocking the points and signals. Mr. A. Harrison, the engineer of the northern division, handed me the accompanying return, marked M, showing the junctions in this division at which the points and signals are already interlocked; those which are now in progress, and those for which orders have been given but are not yet commenced; and at my request he has added the dates when the interlocking was done.

On examining this return, I find that many of the junctions which are now returned as having been completed were so done before the sanction of the Board of Trade was given for the opening of the new branch lines on which they are situated.

But there can be no doubt now, I think, that the company appear to be in earnest in this matter; and substantial progress is being made, as many of the lines were opened before the improvements I have alluded to were known, and many of these were never inspected by an officer of the Board of Trade. Mr. Cudworth, the engineer of the Darlington section, has also supplied me, at my request, with the information respecting facing points on that section, contained in return marked N. With respect to the remark at the end of this return, I need only say that experience has proved that the locking of points by padlocks is not efficient.

Another reason assigned for the interlocking of the points and signals at Brockley Whins station not having been done is that the company are engaged in constructing new lines in the district, which, when completed, will necessitate that this station should be revised and reconstructed, when interlocked points and signals will be introduced; and I have been furnished with a plan of the proposed revisal.

If this reason be held valid, it should also have held good against the alteration that took place last February in substituting simultaneous action by one

lever for the single self-acting points weighted to stand open for the running lines. If the self-acting points had then been put in proper order, had been carefully looked after and attended to, and only been held open for the cross-over road when required, this collision would probably not have occurred, and it would have been avoided, if it had not been a one-sided station, as there would then have been no necessity for these facing points.

I have, &c.
W. YOLLAND,
Colonel.

The Secretary,
Railway Deparment,
Board of Trade.

L.

LIST OF PASSENGERS killed and injured seriously in the Collision at Brockley Whins, 6th December 1870.

No.	Name.	Address.	Occupation.	Injuries.
1	Mr. F. Young	55, City Road, London	Comedian	Killed.
2	„ W. B. Ogaru	Deptford, Sunderland	Chemical Manufacturer	„
3	„ H. Y. Richardson	Do. do.	Paper Manufacturer	„
4	„ R. C. Turnbull	Sunderland	Clerk	„
5	Herbert Tapley	Newcastle	Guard	„
6	Mr. Shuttleworth	Lazenby and Company, London	Commercial Traveller	Leg broken and back injured.
7	Miss Julia Martell	"Caste" Company	Comedian	Severe injuries to head and face.
8	Mr. Jno. Reay	St. George's Square, Sunderland	Iron Founder	Wrist dislocated and ribs fractured.
9	„ Jas. Ryder	North Bridge Street, do.	Miller	Leg and groins injured.
10	„ J. Brough	Seaham	„	Ribs broken.
11	„ Britton	Stockton	Corn Merchant	Fractured thigh.
12	Mrs. Young	Hartford House, Northumberland	„	Shoulder dislocated.
13	Mr. Brewis	Sunderland	Solicitor's Clerk	Leg fractured.
14	G. Davidson	Park Lane, Gateshead	Foreman	Legs and hips injured.
15	Mr. T. Cooke	Newcastle	Discount Banker	Head, neck, and foot injured.
16	„ J. Armstrong	Sunderland	Timber Merchant	Shaken and forehead bruised severely.
17	„ G. Ryder	High Street, Sunderland	Flour Dealer	Concussion of brain.
18	W. Garnett	Gateshead	Engine Driver	Legs injured and shaken.
19	Miss Brough	Seaham	„	Head injured and several teeth knocked out.
20	Dr. Gibb	Newcastle	Surgeon	Leg and feet injured.
21	Mr. A. Kirkbride	North Bridge Street, Sunderland	Corn Merchant	Severely shaken.
22	„ H. Davison	Do. do.	„	„
23	„ J. S. Thompson	High Street, West or Hedworth Terrace, Sunderland.	Grocer	„ „
24	Mrs. Lortinga	Cousin Street, Sunderland	„	„
25	Mr. J. Wheatley	High Street, Sunderland	Flour Dealer	„
26	Capt. Crawford	53, Barton Street, Monkwearmouth, Sunderland.	Master Mariner	„
27	Mr. J. Humphreys	5, Lambton Street, do.	Butcher	Head and body injured.
28	„ T. Stabley	Lawrence Street, do.	„	Head injured.
29	„ A. Robertson	Walworth Street, do.	Foreman Slater	Face and body injured.
30	„ W. T. Parkinson	Lomas and Johnson, Leeds	Commercial Traveller	Hip injured and shaken.
31	„ T. Harrison	23, Murton Street, Sunderland	„	Severly shaken.
32	„ J. Young	Hartford House, Northumberland	Gentleman.	
33	Mrs. Corder	Sunderland	„	Knee injured.
34	Mr. Batey	Gray Road, Sunderland	Corn Merchant	Shaken
35	„ Miller	Cluxheugh Rock, Sunderland	Manager of Paper Works	„
36	Mrs. G. Scurfield	The Cedars, Sunderland	„	Bruised and shaken.
37	Mr. G. Taylor	Seaham Harbour	„	Head bruised and shaken.
38	„ J. W. Reed	„	Butcher	Head severly injured.
39	„ G. Morrell	„	„	Severely shaken.
40	„ R. Stothard	„	„	Injured slightly.
41	„ H. Feruch	„	„	Slightly shaken.
42	„ T. Forster	„	Grocer	Shaken severely.
43	„ J. H. Walton	„	Shoemaker	„
44	„ C. Kirkup	Down Terrace, Sunderland	Timber Merchant	Injured slightly.
45	„ Rugg	27, Ann Street, „		
46	„ Joseph	30, Bramwell Street „		
47	Mrs. Love	Johnson Street, „		
48	Mr. W. Brunfoot	4, Argyle Place, „	Managing Clerk for Messrs. Tyzack and Co.	
49	„ Warren	19, Holmside, „		
50	„ Johnson	Silkworth Row, „	Butcher.	
51	„ Small	Golden Lion, High Street, Sunderland.		
52	„ Richardson	8, Vine Place, Sunderland	Veterinary Surgeon.	
53	„ Jno. Cook	Wear Street, Monkwearmouth, Sunderland.	Butcher.	
54	„ T. Roberts	22, Bond Street, Leeds (40, Grainger Street, Newcastle).	Woollen Merchant	Head and leg bruised.
55	„ J. Wadham	19, Holmside, Sunderland	„	Nose broken, head and body bruised.
56	„ B. Batigan	Hull	Manufacturer of Potters Materials.	Severely shaken.
57	„ Cohn	Tavistock Place, Sunderland	Cement Manufacturer.	
58	„ D. Davison	Dover Terrace, „		
59	„ W. Bocomake	Salem Street, „	Miller.	
60	„ W. Stephenson	Hawthorn Street, Hylton Road, Sunderland.		Injury to spine.
61	„ B. White	18, Worcester Terrace, Sunderland		
62	„ J. Clarke	Walworth Street, Bishop Wearmouth, Sunderland.		
63	———	South Dock, „	Dutch Sailor	(Dr. Banning attending.)
64	„ E. A. Gibson	Sunderland	Chief Clerk	Severe shaking and chest bruised.

NORTH-EASTERN RAILWAY.

Northern Division.

Junctions fitted up with Locking Apparatus.

Name of Junction.	Name of Maker.	Date when applied.	Remarks.	Date when opened for traffic or when inspected.
NEWCASTLE AND BERWICK:				
Heaton	Janson, Darlington	July 1868		Opened in 1847.
Central Station yard	North-Eastern Railway Company	May 1868		do 1850.
NEWCASTLE AND DARLINGTON:				
Washington	Stevens and Son, London	August 1870		August 1849.
High level	" "	1st December 1868	Fixed into cabins by N.E.R. Company's man.	"
High Street	" "	October 1868	Wedges worked with Mr. Cabry's notions.	"
Rainton crossing	North-Eastern Railway Company	November 1869		1844.
Fence houses station	" "	April 1870		"
Pensher	" "	September 1869	Wedges worked with 2 levers	1853.
Shincliffe colliery	" "	November 1870		1844.
West Cornforth	" "	June 1868	Fartly locked	"
Pelaw Main	" "		Cabin and frame erected but not yet used.	August 1849.
BRANDLING:				
High Shields station	Stevens and Son, London	May 1870		Not inspected.
Colliery houses, South Shields	" "	"		
Tyne Dock (Harton Branch)	" "	1st January 1867		December 1866.
Tyne Dock crossing and junction to docks.	" "	March 1870		Colonel Yolland.
Brockley Whins Junction	" "	September 1867		
Cleadon Lane (Harton Branch)	" "	1st January 1867		Not inspected.
North Dock	North-Eastern Railway Company	November 1869	Wedges worked with weigh bar	
PENSHER:				
Hylton level crossing	" "	June 1870	Crossing gates worked from cabin.	1853.
AUCKLAND:				
Bishop Auckland	Janson, Darlington	May 1867		March 1857.
Dearness	North-Eastern Railway Company	August 1870		Not inspected.
HARTLEPOOL:				
Castle Eden junction	" "	August 1869		Not inspected.
CONSETT:				
Hownsgill junction (Consett)	Stevens and Son, London	2nd December 1867	Two double lever stands, working two distant and one siding siguals.	
Benfieldside	" "	" "		1867.
Blaydon with Consett branch	" "	" "	One safety switch lever detached from frame.	
Scotswood bridge, West junction	" "	" "	Temporary facing points *not* locked.	
TEAM VALLEY:				
Newton Hall	" "	1st December 1868	Connexion being made to additional shunts.	November 1868.
Greensfield	" "	" "		
WEST HARTLEPOOL:				
Norton, No. 1	" "	March 1870		1841.
" " 2	" "	"		
" " 3	" "	"		
Spennymoor	North-Eastern Railway Company	July 1869	Not interlocked, levers all in frames.	Not inspected.

NORTH-EASTERN RAILWAY.

Northern Division.

Junctions not yet fitted up with Locking Apparatus, but in progress.

Name of Junction.	Name of Maker.	Date when applied.	Remarks.	Date when opened for Traffic, or when inspected.
NEWCASTLE AND DARLINGTON:				
Sherburn junction	North-Eastern Railway Company		Locking frames ready; cabins being built.	
Belmont			In hand	1844.
NEWCASTLE AND CARLISLE:				
Blaydon station	" "		Do.	Not inspected.
Mickley, No. 1	" "		Do.	Do.
No. 2	" "		Do.	Do.
St. Nicholas junction to Citadel station.	" "		Do.	1850.
PENSHER:				
Penshter station and gates	" "		Do.	1853.
AUCKLAND:				
Reilly mill	" "		Locking frames ready; cabins being built	March 1857.
Hunwick colliery	" "			
DURHAM AND SUNDERLAND:				
Seaham with Hendon	" "		Do. do.	Not inspected.
HARTLEPOOL:				
Hartlepool station	" "		In hand.	—

The information in the fifth column of the two above tables is supplied at the Board of Trade.

JUNCTIONS proposed to be fitted up with LOCKING APPARATUS not yet commenced, but for which Orders have been given by the Directors to proceed as soon as possible.

Name of Line.	Position of Junction.	Date when opened for Traffic, or when inspected.
NEWCASTLE AND BERWICK.	Central station, postern, and high level bridge.	1850.
	Heaton junction, new north cabin.	1847.
	Benton quarry	1847.
	Argyle street, goods, Newcastle	—
	Red Barns, manure	1847.
	Tweedmouth and Kelso junction	1847.
	Berwick, North British do.	1848.
NEWCASTLE AND CARLISLE.	Central station, west end	—
	Forth goods junction, Newcastle	Not inspected.
	Elswick, Nos. 1 and 2	
	Benwell colliery, No. 2	
	Do. sidings, coal loading	
	Blaydon station, west end	
	Hexham do.	
	Petteral bridge	
NEWCASTLE AND DARLINGTON.	Hawks Bank, Gateshead	1844.
	Leamside junction	
	Thinford „	
	Usworth colliery junction	
	Adventure pit do.	
	Whitwell junction	
	Twisdale do.	
	Byers Green crossing	
	Ferryhill	
BRANDLING	Brockley Whins junction	Not inspected.
PENSHER BRANCH	Deptford junction, Pallion	March 1853.
	Fawcett street junction	
	Coxgreen	
PONTOP BRANCH	Boldon branch junction (P.)	Not inspected.
	Do. do. (P.)	
	Beamish junction	
	Stella Gill	
DURHAM AND SUNDERLAND BRANCH.	Hendon junction	Pensher branch, 1853.
	Ryhope	Not inspected.
	Murton	
	Broomside	
HARTLEPOOL BRANCH	Haswell	Do.
	Coach road junction, Hartlepool	
	Ballast road do. do.	
	Middleton Drops do.	—
WEST HARTLEPOOL BRANCH.	Stillington junction	Do.
	Chilton branch do.	

The information in the third column is supplied at the Board of Trade.

N.

NORTH-EASTERN RAILWAY.

DARLINGTON SECTION.

List of Facing Points locked by Signals on the Darlington Section.

Name of Junction.	To accommodate	Name of Junction.	To accommodate
Hob Hill junction	Ironstone mines.	Barnard Castle junction	With branch to Bishop Auckland.
Upleatham do.	Do.	Tees Valley do.	With Tees Valley Railway.
Eston station, East	Passenger station and blast furnaces.	Kirkby Stephen, East } now being	Eden Valley junction and station yard.
Do. West		Do. West } fitted up.	
Tees Tilery junction	Blast furnaces.	Tebay junction	With London and North-Western Railway.
Cargo Fleet do.	Cleveland Railway and blast furnaces.	Clifton do.	Do. do.
Guisbro' do. Middlesbro'	Guisbro' branch.	Eamont do.	Do. do.
Cleveland do. Gainsbro'	Cleveland do.	Redhill do.	With Penrith and Cockermouth Railway.
Ayton do.	Ayton do.	Simpasture do.	With Simpasture branch.
West Bridge, Middlesbro'	Passenger station.	Shildon do.	With short branches and sidings.
Dock junction do.	Branch to Old Town.	Tunnel do.	With tunnel junction branch, colliery, &c.
Newport	Blast furnaces.	Black Boy do.	With Black Boy Colliery branch, &c.
Thornaby Ironworks	Do.	Bishop Auckland, east junction	With Durham line.
Stockton, East	Passenger station.	Do. west do.	Do.
Do. West		St. Helen's junction	Tunnel branch with Auckland branch.
Bowesfield Lane	Two branches.	Spring Gardens junction	With Barnard Castle branch.
Hartburn curve	With North-Eastern main line.	Etherley	With station and sidings.
Yarm curve	Branch to North-Eastern.	Witton junction	With Wear Valley branch.
Yarm long siding	Siding.	North Bitchburn junction	With North Bitchburn colliery.
Urlay Nook	Do.	Thistlellat junction	With colliery and sidings.
Fighting Cocks	Blast furnaces.	Crook, East	With passenger station.
Do. siding	Siding.	Do. West	Do Stanley branch, &c.
Haughton Lane	Ironworks, depôts, &c.	West Durham junction	With West Durham Railway.
Albert Hill	Branch to North-Eastern main line blast furnaces, ironworks.	Tow Law do.	With Sunnyside branch.
Skerne embankment	Passenger station.	Do. west	With Tow Law Ironworks.
Hope Town, Barnard Castle junction.	Branch to Barnard Castle.	Blackfield junction	With Blackfield colliery.
Staff junction	Do. Shildon.	Burnhill do.	With Waskerley branch.
Merrybent junction	Merrybent Railway joins.	Consett do.	With Consett branch.
Forcett do.	Forcett Railway and beginning of double line.		

Besides the preceding 57 completely signalled junctions, there is a considerable number of facing points for sidings, chiefly in single lines, and in station yards, &c., some of which are partially signalled, and some not at all; but in all cases in which passenger trains go over them with any speed they are kept locked with padlocks, or some similar contrivance, and a man is in attendance.

(Signed) WM. CUDWORTH,
Engineer.

20th December 1870.

Printed copies of this report were sent to the company on the 11th February.