

The Opening of the Colliery Tramway between Stanley and Chaddesden

This report into the formal opening of the Derby Kilburn Colliery Company's tramway appeared in the Derby Evening Telegraph for Wednesday 21 November 1894. A similar report appeared in the weekly Derby Mercury for 28 November 1894. Tuesday 20 November 1894 is the date normally given for the opening of the tramway but that was a ceremonial opening for invited guests. It is unlikely that such a sophisticated system would work perfectly on the first day and probable that test running took place in the weeks before. From mid-October 1894, the Colliery Company's advertisements in both Derby newspapers included the note "At the End of the Month the Company's Private Railway and the Wharf at the top of Chaddesden Hill, One Mile from the Market Place, will be opened for the Sale of Coal."

THE DERBY KILBURN COLLIERY COMPANY An Enterprising Move

The Derby Kilburn Colliery Company Limited have given evidence of remarkable enterprise which, while involving a very considerable outlay of capital, bids fair to be attended with satisfactory results. A tramway, three miles long, has been laid down, whereby the mouth of the pit at Stanley is in direct communication with the Borough of Derby, and instead of consumers having to pay for haulage they will now be able to have the commodity delivered direct to their doors at pit-mouth prices. An undertaking of this character was naturally a difficult one to carry out, and its successful completion was made the occasion of a little pardonable jubilation on the part of the promoters.

By invitation of the company, a few Derby gentlemen made a visit of inspection on Tuesday morning, and under the guidance of Mr S.R. Cox (the chairman) and Mr W.H. Sankey (the managing director and resident engineer) a most interesting time was spent. The party included Sir Thomas Roe M.P., Mr J.P. Doherty (the ex-mayor of Derby), Dr William Iliffe, Mr John Shaw, Mr A.S. Howitz, Mr J.A. Barrs, Mr C.H. Coulson, Mr J.B. Coulson, Mr P. Smallman, Mr Edwin Canner, Mr J.H. Pragnell (representing Messrs Cradock and Co.), and Mr Robert Holmes (Chaddesden), and journeying by train to West Hallam they were there met by brakes, supplied by Mr R.J. Dedman of Spondon. By this means the ground was covered pleasantly and expeditiously.

The object of the company, it may be well to explain, was to purchase the old Stanley Kilburn Colliery, six miles from Derby, to take leases of and develop a tract of Kilburn coal in the parishes of Stanley and Morley, to construct a private tramway extending from their coalfield to the outskirts of the town of Derby for the purpose of conveying their coal as cheaply as possible to the town for the supply of the inhabitants of the borough and surrounding country. All this has since been carried out. Leases have been taken of an area estimated to produce three millions of tons of coal, and in order to carry out their objects the company have purchased about 45 acres of freehold land, of which about 21 acres are situated near the road opposite the Nottingham-road Cemetery. On this land is the Derby terminus of the tramway, and here the company have constructed and opened a wharf for the sale of their coal. A pair of very massive and powerful pumping engines of the type known as compound condensing, with the necessary pumps, boilers, &c, have been erected at the old Stanley Kilburn pits. These are worked by the steam supplied by one Lancashire boiler, and raise water in one column to the surface from the depth of 70 yards, the pump being 20 inches in diameter. It is thought the engines are capable of working four such lifts, and at present only one lift, working about ten hours per day, is required. It is evident a little increase of water would not cause much inconvenience. No coal is now raised at the old pits, which have been reduced to the status of a pumping station, where all the water met with in the mines is raised to the surface. A new colliery has been opened at the roadside about three-quarters of a mile nearer to Derby, and from this point the tramway starts running in a north-westerly direction for a distance of 960 yards to a point in a field on the south side of the Great Northern Railway between West Hallam and the tunnel near Morley. Here have been erected the engines of about 100 horse power required for working the traffic on the tramways, and from here starts what appears to be the main line of the tramway, 5,380 yards in length, in a perfectly straight line to the Derby terminus above named. There are four lines of rails from end to end on which the loaded wagons travel, and two on which the empty wagons return to the pit for the purpose of being reloaded.

Confused wording! The tramway was laid as a double track with loaded wagons travelling on one track and empty wagons returning on the other.

The weight of rails on the lines exceeds 400 tons. The rails are 22 inches apart, and between them runs for the whole length a steel cable or wire rope, known as the endless rope, no doubt from the fact that the two ends are spliced together, and so neatly is this done that it is almost impossible to find the place where the joint is. The two ropes, one for each tramway, are coiled around two drums in the engine-house, and as soon as the engines are started the drums revolve and set the ropes in motion. By means of clutch gear, however, it is possible to work either rope without the other. The coal is drawn up out of the pit in wagons, which pass over a weighing machine, so that the weight of coal in each may be registered. They pass on a few yards to a point where the endless rope appears from beneath a stage or platform, which covers, we were told, one large and several smaller wheels, which guide the rope into the required position. The wagons are then attached one by one at intervals of about 40 yards to the moving rope by an ingenious contrivance, known as a rope clip. Thus they follow one after another until they reach their destination, and an attendant by moving a lever on the clip releases them in turn from the rope and brings them to a standstill at the Derby terminus. When emptied of their contents the wagons are attached to the returning rope (which again appears from beneath a stage) and start on their homeward journey on the other line of rails.

Men are stationed at intervals along the tramways and by means of electric signals can instantly signal to the man in charge to stop the engines, if necessary. The weight of rope on the main line is about 25 tons, and the order was secured by Mr J.H. Pragnell, of Derby, for the well known firm of steel wire rope makers, George Cradock and Co., Wakefield. Some idea of the manufacture of this rope may be gained from the following figures:- 453,600 yards (or 257 miles) of wire had to be drawn out of cold rods of steel to the highest quality. It was then wound on bobbins and spun into 64,800 yards of strand, which was then laid or twisted on a best hemp rope centre, forming an entire steel wire rope 10,800 yards long and one inch in diameter, without splice in either strands or rope. The rope was sent on a drum to the colliery, drawn out on the tramway (which is the longest worked by one length of rope) and spliced successfully without any accident.

The works having been practically completed, a large and influential company assembled at the colliery on Tuesday last by invitation of the directors to witness the opening of the tramway for traffic. After inspecting the pumping machinery and the surface arrangements at the new colliery a short walk brought us to the engine-house. The engines having been started, one rope was set in motion by the movement of a lever by Mr Samuel R. Cox, the chairman of the board of directors, in the unavoidable absence of Mrs Cox, and the second rope by Mrs Sankey, wife of Mr Wm.H. Sankey, the managing director and engineer to the company.

A few wagons of coal, which had previously been attached to the ropes were immediately set in motion, and proceeded on their journey at the slow but sure speed of about three miles an hour. After watching the process of clipping and unclipping for some time, and examining the engineering arrangements, the guests made a move for their carriages and drove by the circuitous road through Chaddesden to the Derby terminus, where they arrived at about the same time as the first wagon of coal.

Although the intention to open the line had not been advertised or made known, it was pretty evident the fact had leaked out in some way, as a goodly array of carts had assembled to await the first arrival, and it was understood that one enterprising individual had been waiting there for some hours in order to secure the first turn, and to carry off the first load of coal from the new wharf into the town. The wagons were now arriving in a rapid succession, and others could be seen steadily approaching the terminus, while as soon as they could be unloaded the wagons were clipped on the returning rope, and no doubt in due time would arrive at the colliery. A new road is in course of construction by the company through their freehold land for the purpose of gaining direct access to the Nottingham-road, at a point near the Derby Brewery Company's brewery, and this road will apparently at the same time have the effect of developing the rest of the land, which would afford most favourable sites for manufactories of almost any kind, owing to a cheap and abundant supply of coal, for which the colliery company would make special arrangements. Before finally quitting the subject of the tramway, we may add that, so far as we are aware, it far exceeds in length the longest line hitherto in existence in England, and worked on the same system of haulage; and we can only express the hope that the spirited directors and shareholders will reap good dividends on the capital invested.

The lines are carried under two public roads, are spanned by five occupation road bridges, and are carried by two bridges of considerable length over streams. The most striking feature, however, of the whole work is undoubtedly the viaduct, 282 yards long, carrying the main line over a deep valley in the parish of Chaddesden at an elevation at the deepest point of 20 feet. This is constructed of cast iron columns (supplied by the Phoenix Foundry Co. Derby) and wrought iron lattice girders, upon the top of which are bolted longitudinal planks of pitch pine, which in turn support the cross planks forming the flooring upon which the rails are laid.

An adjournment was then made to the St.James' Hotel, where lunch was served, and the guests were joined by the Mayor of Derby (Mr Geo. Bottomley J.P.), Mr C. Clement Bowring J.P., Mr John Bailey J.P., Mr Wm Cox J.P. (Brailsford), Mr H.M. Hobson and Mr W.J. Piper. Mr S.R. Cox, as chairman of the company, presided and Mr Sankey occupied the vice-chair. The toast of "The Queen" having been honoured, the chairman proposed "The Health of the Mayor of Derby", whom he was glad to welcome. His worship, in responding, wished the company every success and expressed the hope that the tramway would be advantageous alike to the proprietors and the inhabitants of Derby generally. Sir Thomas Roe M.P. then proposed "Success to the Derby Kilburn Colliery Company Limited" and said Kilburn coal was well known all over the world. He was glad to hear that it had not all been burnt, but that this company had at their command something like three million tons yet unworked, so that the present generation, at all events, would not fear their coal supply running short. By getting direct communication between the pit mouth and the consumer, it must necessarily follow that prices would be substantially reduced. The company had been fortunate enough to secure land on easy terms, and everything augured well for a satisfactory issue. The toast having been cordially drunk, the chairman acknowledged the compliment in suitable terms. Mr Bailey then proposed "The Health of the Chairman" and Mr Smallman submitted the toast of "The Vice-chairman". Mr Sankey's reply made an interesting statement on the subject of the undertaking. Other toasts were also drunk, the proceedings being characterised with much cordiality.

A detailed account of the formation of the Derby Kilburn Colliery Company and the construction of the tramway by Peter Cholerton can be found in Derbyshire Miscellany (The Local History Bulletin of the Derbyshire Archaeological Society) volume 15, part 3, pages 82-88 -- www.derbyshireas.org.uk/DM15-03.pdf

The tramway seems to have fallen into disuse during the First World War. The rails were lifted in 1917 and sent to Europe for military use. The map below shows the route of the tramway, and its main features, superimposed upon the later estate roads. Very little remains to show that Chaddesden was once the site of the longest cable-operated railway in the UK.

