

History and Development of the Aerial Ropeway

Colin Varrall

One of the four main collieries established in the Kent Coalfield during the early part of the 20th century was the East Kent Colliery, later becoming Tilmanstone Colliery. This colliery went into receivership prior to being taken over by a new manager and eventual owner, Mr. Richard Tilden Smith. He was responsible for further developing the colliery, made possible by creating a close-knit community spirit among the colliery's work force. As a result, plans were eventually put forward by Mr. Tilden Smith for a permanent mining village to be built close to the colliery and with the construction of 230 houses for the miners and their families. The Elvington Town Scheme was completed in 1927.



Richard Tilden Smith

Richard Tilden Smith was born on 14th of October 1865, the son of a well-known Sussex banker. He played cricket for the Surrey Club and won many golf trophies. Before reaching the age of 21 years old, he took a prominent part in opening up the Maitland Coalfield, New South Wales, Australia.

Mr. Tilden Smith had made the decision and arrangements for the purchase of the mining rights for the East Kent Colliery from the ground landlords, in accordance with a decision arrived at by the Railway and Canal Commission Court.

He was understood to have been a strong advocate of the creation of a Coal Board and the compulsorily amalgamation of all

the collieries in the country, very similar to what would later become the National Coal Board. He had attempted to induce the Government to adopt this idea when he visited the House of Commons.

Tilden Smith was responsible for building Adelaide House, that still remains today, adjacent to London Bridge and bordering the river

Thames. The imposing Grade II English Heritage listed office building was constructed in 1925 and became the first steel-frame building and tallest commercial building in London. It was recognised as the first skyscraper in the City of London. The site Tilden Smith obtained had originally been the Adelaide Hotel and Adelaide Buildings. During the excavations for the new building, a Gothic arch from the first stone London Bridge was discovered, which had been built in 1176/1209.

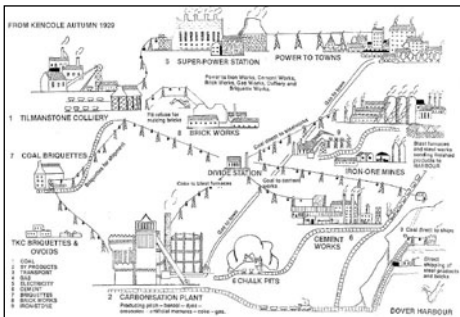
As the colliery developed it was Mr. Tilden Smith who realised that further expansion was necessary, having the vision of an Industrial Eden in East Kent. With the possibility of mining coal at a deeper level beneath the colliery and the opening of a new shaft, it was hoped the workforce could be increased from 1,200 men to 5,000 men. Mr. Tilden Smith had set himself two main factors - raw materials and transport. Concentrating on coal production would ensure that the share of benefits would increase automatically, and he got one hundred percent of support

from the colliery workers. He had already secured controlling interests in the Folkestone Gas Company, Deal Gas Company, and the East Kent Gas Company. Further industries were planned, which would require and use coal to generate power. Expanding local industry would need electricity, cement, gas, coke, and briquettes, with the likelihood of selling these products more cheaply across other regions of Britain, as well as to other countries around the world.

In readiness, Mr. Tilden Smith began building a briquette plant at the colliery, which developed the Tilmanstone (Kent) Colliery Limited "New Coal" from its Lockwood's Clean Coal Process Plant. Mr. Tilden Smith believed the cost of transporting coal from the colliery to Dover Harbour was too expensive and time-consuming and, as a result, had the idea of an aerial ropeway to provide a faster and more direct route to export Kent coal from Dover Harbour. However, there was strong opposition from prominent coal transport railway companies and issues were found with the initial plans as part of the first application for the ropeway. This initial application to the Railway and Canal Commission was made in December 1926, with plans being opposed by the Southern

Railway. As a result, a court hearing began, costing £20,000 in legal fees, to justify and secure the rights of a ropeway being built. The ropeway was proposed by Tilden Smith as he felt the local railways were gradually increasing their rates for transporting the coal out of Tilmanstone Colliery. It was noticed that the Southern Railway was charging 5s. 9d. per ton to transport the coal a distance of 10 miles from the colliery to Dover, as opposed to 8s. 6d. being charged for the carriage of coal to from the colliery to London, a much greater distance. Tilden Smith claimed he had often seen insufficient coal wagons being provided for the movement of coal stocks, this he blamed for the slow production of coal, which reduced any potential profits being made. Eventually, plans were granted for an aerial ropeway to be built, conveying coal from Tilmanstone Colliery to Dover Harbour over a distance of seven and a half miles, with approval of the Railway & Canal Commission. In February 1927, an estimate of £30,000 to construct the ropeway was revised to £61,195. A 5,000 tons capacity reinforced concrete coal bunker was constructed in April 1928, which would discharge 750 tons of coal per hour into the holds of coal ships moored alongside the Eastern Arm at Dover Harbour. Dover Harbour agreed to contribute £97,000 towards the overall amount of £250,000 it had cost to the complete the entire system of the ropeway.

The first of the two sections of the ropeway were officially opened on 12th of October 1929, with the second section of the ropeway finally being opened several months later on 14th of February 1930, but in the absence of Tilden Smith. His untimely death occurred during a meeting he attended at the House of Commons on 18th of December 1929. Tilden Smith had



Plan of the proposed route of the ropeway with other industries

met with members of Parliament to discuss the Coal Bill, the first suggestion of a proposition for the establishment of a National Coal organisation. It was not until 1947, that the National Coal Board was actually founded.

During its short working life of around 10 years, the ropeway had been capable of carrying 120 tons (imperial) per hour, in large metal buckets that were suspended from the four-inch metal cable. Coal was transported in each of the 566 buckets, each having the capacity to carry 4.25cwts. of coal. The buckets were spaced along the cable 46 yards apart and travelled at a speed of 130 yards per minute. Where the ropeway crossed main roads and the Southern Railway line, large steel gantries were constructed, some originally having netting, and then later timber platforms, positioned below the level of the guide wheels which carried the ropes, to prevent any damage being caused to vehicles if there was a spillage of coal below.

The ropeway was being used during the early stages of the Second World War, but the whole mechanism soon came to a halt when a military gun emplacement was placed into the two tunnels where the ropeway exited the cliffs in line with the

Eastern Arm at Dover. The ropeway did not return to use after the war. Most of the structures were left standing, but remained derelict until the mid-1950s, when the order was given for the ropeway to be dismantled. It is believed parts of the mechanism were demolished, while other sections may have been shipped to India, where they were possibly rebuilt and reused. It has been claimed that the ropeway regularly had faults and suffered from a lot of mechanical issues.

Very little of the ropeway still exists today, other than the walls and floor sections of the 'divide' station, the concrete floor section of the 'angle' station near Langdon Bay and one of the last original stanchion bases, which is situated on the edge of the cliff at Langdon Bay. The 'divide' station had been built with the intention of it being at the centre of a large network of ropeways that would transport coal and other materials to and from other planned industries. These would have seen the construction of a carbonisation plant, power station, gas and cement works, and facilities for the pulverisation of coal and coke. The original proposal was for the ropeway to pass over the edge of the cliff, but engineers instead decided on excavating a tunnel that made a 90° turn facing out from the cliffs above Dover Harbour, in line with the Eastern Arm. At the end of the harbour arm was a 25,000 tons capacity coal staithe.

In March 2019, the Elvington and Eythorne Heritage Group were fortunate in purchasing the original volumes of court proceedings books, which were produced following the first application made by Tilden Smith for the construction of the aerial ropeway. These documents helped with the production of a book that was published in 2020, written about the history and development of the ropeway.



Opening of the 'divide' station 12th October 1929