

Nicholas Wood (1795 – 1865)

Nicholas Wood was born at Ryton, a small village on the banks of the River Tyne. He was the son of Nicholas and Ann Wood and he was born on the 24th April 1795. His father was the mining engineer at Crawcrook Colliery close to Ryton, and it was he who would influence his son to follow in his footsteps.

Nicholas junior attended the village school in Crawcrook and by 1811 he had started work as an apprentice colliery viewer (manager) at Killingworth colliery some miles to the east of his birthplace. It was here that he became a close associate and friend of the colliery enginewright George Stephenson. Early in their careers both became interested in a revolutionary safety lamp for miners. Wood followed up Stephenson's work and made drawings of the lamp which eventually was referred to as the "Geordie Lamp" made under supervision by Stephenson. Stephenson who by 1815 had also become interested in the development of the locomotive "Blucher" at Killingworth encouraged Wood to take an active part in the development of the locomotive. Nicholas Wood designed a system of actuating valves and eccentrics for the locomotive and by 1818 he was carrying out experiments on the laminated springs and lubrication of the locomotive's working parts as well as measuring. There is no question that Wood played a significant role in determining the best type of early locomotive while experimentation was going on. In 1814 he described a single cylinder machine with a flywheel at Wylam colliery as being very troublesome.

His friendship with Stephenson was strong and he accompanied him when Stephenson was negotiating with Edward Pease over the Stockton and Darlington railway in 1823. Thus the pattern of friendship continued throughout their lives and it was strong enough for Stephenson to send his son Robert as an apprentice with Nicholas Wood where he flourished and developed into one of the great engineers of all time.

Wood's study of locomotives in his early life led him to write an important treatise in the design of locomotives and railways in general in 1825. The book, "A Practical Treatise on Rail-roads and Interior Communications", analysed the different methods of motive power in current practice at the time enable him to be offered posts as a consultant before committees of the Houses of Parliament and was instrumental in advising a number of Railway Bills. In 1829 he was a judge at the famous Rainhill Trials when Stephenson's Rocket won the competition at the Liverpool and Manchester Railway.

By 1832 he was involved in the construction of a number of railways and became a Director of the Newcastle and Berwick Railway. He still kept up his interests in collieries and following an unfortunate and serious accident at St. Hilda's Colliery South Shields when fifty miners were killed he was asked to contribute to a report looking into the safety in mines. This led him to be one of the main instigators in the formation of the Institute of Mining in the north-east of England, later to become the North of England Institute of Mining and

Mechanical Engineers which brought together a number of prominent and famous people including the Stephensons and William Armstrong.

Nicholas Wood the Coal Owner

In 1844 he became a partner in the Hetton Coal Company who owned a number of collieries in the Hetton area. He moved to Hetton and became manager of the local coal mine. He lived in Hetton Hall, a large house in the centre of the expanding village. Additionally he soon became the owner or part owner of a number of other collieries. In many of the colliery villages of which he became associated he was responsible for attempting to improve the social conditions of the miners and their families. He promoted the building of schools for the children of the miners and continually stressed the importance of education, training and hard work.

He was soon regarded throughout the north east as the chief authority on colliery engineering and regularly stressed the importance of safety in the coal mines. Following the introduction of the Mines Inspection Act of 1850 he was appointed President of the newly formed North of England Institute of Mining Engineers at Newcastle and within a short time he was canvassing for the introduction of a college which he believed would improve the technical education and knowledge of mining techniques. Unfortunately it would be after his death in 1865 before this college was established. In 1857 he published an important work regarding the safety in mines and this was influential in improving a number of safety practices in the mines themselves.

In 1858 he was elected a member of the North of England Institute of Mining and Mechanical Engineers and soon became President of that organisation. In 1864 he was awarded the honour of becoming a member of the Royal Society. Following Wood's campaign to try and persuade the University of Durham to establish a College of Science in Newcastle in 1853 right up to his death he believed the region needed this facility. Finally in 1871 his efforts reached fruition when the College of Physical Science was established in the city and from this beginning the University of Newcastle can be traced. Alas he was never able to see the results of his endeavours, however five years after his death the Wood Memorial hall was erected to his memory in the Institute of Mining and Mechanical Engineers in Neville Hall. This organisation continues in existence to this day. He died at the age of 70, six years after his pupil Robert Stephenson died who had gone on to make a significant contribution to the development of railways throughout the world. When Robert died in 1859 a sum of £2000 was left to the Mining Institute to form the basis of a permanent fund for engineering scholarship a token for his thanks to Nicholas Wood.

Nicholas Wood was married in 1827 and he had four sons and three daughters. He died while attending a medical examination in London following some months of poor health. He

had lived in Hetton Hall for a number of years as well as in a house very close to St. Nicholas' church. He was buried in Hetton churchyard where his grave can still be seen today albeit not being in particularly good order. His four sons all made name for themselves in the coal industry. Lindsay Wood, the youngest son followed his father as chairman of the Hetton Coal Company collieries after his father's death. He later was made a baronet and for most of his latter years lived with his family in the Hermitage, a large house on the outskirts of Chester-le-Street. Within Neville Hall there is a monumental statue of Nicholas Wood presiding over the library an iconic influence for the future of the organisation.



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