

## **Iron Mad Jack aka John Wilkinson!!**

Members of the Denbigh and District Probus Club and their guests enjoyed another wonderful lunch at the Oriel Hotel, St Asaph at their meeting on 8th April. The speaker after lunch was Brian Gresty from Llay, Wrexham.

Brian, who was originally from Chester, worked as a salesman for NCR for about 15 years then established his own successful business in the early 70's. He eventually sold his business on to colleagues, sold his house and with his wife they followed their dream of travelling around the USA in a 34ft motorhome. They eventually settled down in their own house on Fort Clark in the vast Sonora desert of SW Texas, 17 miles from the Mexican border, where they lived very happily for six months each winter until 2013.

From 2010, Brian was employed during the summer months by Wrexham Museum as the Guide at the historic Bersham Ironworks, telling its visitors all about his hero "IRON MAD JACK" (aka John Wilkinson) "The King of the Ironmasters". Brian's interest in John Wilkinson, the leading Ironmaster, entrepreneur, and inventor of his day who also expanded the use of steam power, grew following a talk he heard at the Clwyd Archaeological Group many years ago in Bodelwyddan. John Wilkinson was the first true industrialist and he drove forward the early industrial revolution.

His activities were significant and spanned 12 areas across the UK – Cumbria, Liverpool, Wrexham, Flintshire, Cheshire, Shropshire, Staffordshire, Birmingham, London, Anglesey, Cornwall, and Swansea. He also dealt in America, Prussia, Sweden, France, and the Netherlands. (He was an investor in the Paris water system, supplying 40 miles of pipes and engines to Paris Water.)

Iron Mad Jack (1728-1808) was born on the back of an old farm cart at Little Clifton Westmorland (Cumbria) the eldest of 6 children. He attended a Unitarian Academy where he learnt mathematics, science, and modern languages, for the engineering future his father Isaac planned for him. His father, who was a shepherd, became a pot founder then chief pot founder in 1740 aged 40, patenting a flat iron for ironing clothes. He had his own furnace in Lindale, Cumbria and he was using coke as well as charcoal for iron production. (His father also patented the casting of metal in dry sand and in metal boxes in 1758 which is still used.)

John was an Ironmonger apprentice from 1745 to 1750 in Liverpool and in 1753 Bersham Ironworks was taken over by his father and it was later run by John and his younger brother William.

John moved to Bersham in 1756 with first wife Ann Maudesley who sadly died in childbirth the same year. There is a memorial plaque designed by Thomas Farnolls Pritchard, for Ann in St Giles church, Wrexham erected by her husband. (She was from a wealthy family and her dowry paid for John's share in one of his companies) Ironically, their daughter Mary, married a curate, Theophilus Holbrook and in 1786, she also died in childbirth.

In 1763, when he was 35, John married again to a Mary Lee, who was a major shareholder at Bersham ironworks and her money helped him to buy out his partners.

His investments and achievements during his lifetime were numerous and significant. It was his idea with the architect Thomas Farnolls Pritchard, to build the 'Ironbridge' across the River Severn in Shropshire, wholly out of iron and he persuaded investors and the government to support it. He turned the building work on the bridge over to Abraham Darby III.

The Willey Ironworks in Broseley was established by John in 1757 with a 3-mile wooden railway to the River Severn with wagons pulled by horses. He converted it to iron rails with flanged wheels on the wagons as used today and on steep hills he used inclined planes – a descending empty wagon was connected to a full one by rope to help pull it up the hill.

He replaced water power with steam power to blow furnaces and drive machinery and in 1767 established an 88-acre integrated iron works at Bradley, Bilston which included blast furnaces, cupolas, rolling mills, forges, brickworks, pottery, gun boring, iron for nail making, chemical plant, glass works, canal wharfs, and homes for his workers (he also introduced pensions) and by 1778 was forging wrought iron. He ended up with 9 ironworks and by 1796 was producing 12.5% of Britain's pig iron.

His cannon boring machine was extremely important in saving lives as "You were more likely to be killed by your own canon exploding than French fire!" The invention of a hand tool with boring bar in Bersham, to make the hole down the centre of the cannon revolutionised the process. The bore cutting caused grooves that made the ball come out spinning enabling it to go faster and further – a range of 2 miles and it could penetrate 2 feet of solid oak at half a mile which gave Britain the most powerful and feared navy in the world. Wilkinson was

known as the father of the machine tool industry but is also the forgotten man in British history.

Matthew Boulton and James Watt designed and made maritime steam engines in 1775 but had issues with getting them to work properly. James Watt visited John Wilkinson in Bersham and he adapted his boring machine to bore pistons to help them produce their steam engines.

Wilkinson had interests in 9 Copper mines including Greenfields copper and brass company, Holywell, Stanley smelting company, St Helens, and Parys opencast mine in Anglesey which provided the copper ore for the copper bottoms and bolts for the Royal Navy ships. He also had interests in tin, lead, and arsenic mines. He improved lead smelting creating the "Brymbo Bottle" saving many men's lives from the poisonous fumes, the narrow long chimney drawing the fumes out of the smelter. He also invested in 7 canals and was the trustee of various roads and had ownership and interests in 5 banks.

John Wilkinson with Matthew Boulton produced and issued tons of copper 'coins' displaying John's own head instead of the monarch's due to the government not minting enough small denominations especially for the working man. (He profited by £103 per ton of coins he had made.) The names of the ironworks were stamped around the edge of the coins. Tokens were redeemable at his banks and often called Willeys after his Willey Ironworks. These coins fuelled the economy of North Wales.

He launched the world's first iron barge, built on the banks of the River Severn which was 70 feet long and 8 feet wide in 1787 (4000 people turned out to see it sink – and it floated!!)

He had 6 homes including Brymbo Hall (a mansion designed by Inigo Jones) which cost £14,000 in 1792. He bought the estate as he was aware of the good deposits of coal that were there. (The hall was demolished in 1973 for mining.) He made huge improvements to farming practices, developed over 2000 acres of farms in his lifetime which included land reclaiming 500 acres from the sea and converting 150 acres of heathland to agriculture. He utilised burnt limestone to put on the land and improve the soils. He also had a steam powered threshing machine in 1798.

In later life he was the High Sheriff of Denbighshire (1799), travelled extensively but died on 14 July 1808 in Bradley, Staffordshire due to his diabetes. He was buried in an ordinary coffin but then his will was found and he was exhumed and put into an iron coffin he had made and there was a slow and solemn journey on

a gun carriage for many hot summer days towards his retirement home in Castlehead, Cumbria. Unfortunately, the gun carriage was left on the sand and the tide came in until a grave was dug through the stone at his house and he was buried there. The new owner of the house 20 years on, did not want him there and he was dug up again and buried outside church grounds as a dissenter. Eventually he was dug up again and buried near his second wife. A massive obelisk to mark his grave still stands in the village of Lindale-in-Cartmel in Cumbria.

There is a big mystery about what happened to all of his money as despite stories about a mistress Mary Ann Lewis, a maid at his estate in Brymbo Hall, giving birth to his only children, a boy and two girls, when he was in his seventies, he was said to have no direct descendants. He left a very large estate in his will (more than £130,000 - equivalent to £10,790,000 in 2021 and although it is said he intended to make his three children the principal heirs, with executors to manage the estate for them, his nephew Thomas Jones contested the will in the Court of Chancery. Apparently, by 1828, the estate had largely been dissipated by lawsuits and poor management.

The next Denbigh and District Probus Club meeting will be on Monday 13<sup>th</sup> May when Chanel Jones will give a talk titled "We've got you framed. Following that, the meeting on Monday 3<sup>rd</sup> June will welcome Helen Papworth talking about H.M. Stanley the Scramble for Africa.

New members are always warmly welcomed.

For further information have a look at the club web site [denbighprobus.com](http://denbighprobus.com) or contact the Membership Officer Andrew Faulkner for more details prior to an introductory visit to a Probus meeting.

[Afaulkner@btinternet.com](mailto:Afaulkner@btinternet.com) 07542 022 391