

Inside an Early Flannel ‘Manufactory’

John Evans, Curator.

FRIDAY, APRIL 12, 1811.

<p>MACHINERY, WOOL, &c. TO be SOLD by AUCTION, By JOHN STANLEY, On the premises in NEWTOWN, in the county of Montgomery, on Tuesday and Wednesday, the 23d and 24th days of April, 1811: All the MACHINERY, together with the STOCK in TRADE, belonging to Mr. THOMAS HALL, who is declining the flannel manufactory: consisting of one single carding engine in complete repair, one water willow, one hand ditto, three thirty-spindle jacks, five eighty-spindle jennies, six sixty-spindle jennies, a warping mill, twenty looms with spring lathes, several hundred yards of new blanketing in lots, a quantity of wool in lots, about one hundred and fifty gallons of genuine Galipoli oil in lots, four hundred weight of alum, three ditto of logwood, a number of slays and shuttles, with wool and yarn haskers, and various other articles too numerous to mention. The purchaser of any lot or lots to the amount of £20, may be accommodated with three months credit (if required) on approved security. The Auctioneer begs leave to recommend the above machinery as well worth the attention of flannel manufacturers, the proprietor having spared no expence in selecting and keeping them in complete repair; and the same may be seen at work any day prior to the sale, on application to Mr. THOMAS HALL, of Newtown, aforesaid. The sale to begin each day at ten o'clock, and the whole will be sold without reserve.—The machinery will be sold on the first day.</p>	<p style="text-align: center;">BRIDGNORTH. TO be SOLD by AUCTION, BY WILLIAM WYLEY, At the Crown Inn and Royal Hotel, Bridgnorth, in the county of Salop, on Wednesday the 17th day of April 1811, at five o'clock in the afternoon, subject to such conditions as shall be then and there produced: A FREEHOLD MESSAGE, Tenement, or Dwelling House, eligibly situated in the High Street, in BRIDGNORTH aforesaid, with a PEW in the church of St. Mary Magdalen belonging thereto, now in the occupation of Mr. NICHOLLS, attorney, of whom further particulars may be had. ESTATE, in MUCH-WENLOCK. TO be SOLD by AUCTION, BY WILLIAM WYLEY, At the Raven Inn, in Much Wenlock, in the county of Salop, on Tuesday the 16th of April, 1811, between the hours of four and six o'clock in the afternoon, in the under-mentioned, or such other lots as shall be agreed upon at the of sale, and subject to such conditions as shall be then produced: The following very desirable FREEHOLD ESTATE, situate in and near the town of MUCH-WENLOCK aforesaid, now in the occupation of Richard Davies, viz.— Lot 1. All that piece of rich Meadow Land, situate in the town of Much Wenlock aforesaid, called Granitestone Meadow, or Wool's Yard, containing 1A. 0R. 32R. or thereabouts.</p>	<p style="text-align: center;">SHROPSHIRE WELLINGTON. TO be SOLD by BY WILLIAM W At the Pheasant Inn, Wellin of Salop, on Monday, the 22d at four o'clock in the afternoon conditions as will be produced. The LEASE of a MOIETY TITHES of the PARISH:— SUAGE, called the TAN BA aforesaid; and about 5 acres of LAND, lying near the town of the parish. The Tithes consist of corn, 1 and underwood, (except the lay and Watling-street, and the W and also a small part of the c which distinct modus are paid Wellington parish consists townships, viz. Wellington, Walton, Wappeshall, Leegom ton, Kestev, Lawley, and pa Preston, containing together acres, chiefly of very fertile, dow Land. The moiety of the tithes, bu are held under the Prebend the lives of Edward Pemberton the said county, Esq. aged Charlton, of Great Wytheford, Esq. aged 44 years, and Sam Charlton, (son of William C</p>
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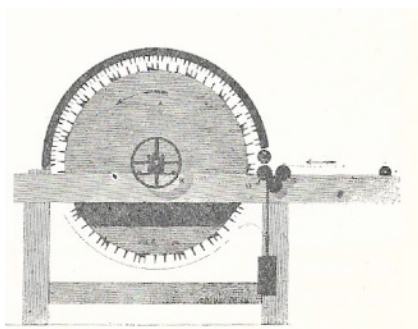
A 'For Sale' notice in an early 19th century newspaper provides a glimpse of how Newtown's flannel industry was organised just at the time when the town was developing as an important manufacturing centre.

This advertisement, for the sale of the machinery and stock in trade of Thomas Hall, flannel manufacturer of Newtown, appeared in the Shrewsbury Chronicle in April 1811. We learn from the advertisement that Thomas was "declining the flannel manufactory", a rather unusual term by modern standards. It indicates that he was not continuing in the business of flannel manufacture for some reason. 'Manufactory' is an archaic form of the word 'factory'. Another notice in the same edition of the newspaper similarly advertised the auction of *All those very valuable and extensive MANUFACTORIES and MILLS, known by the name of the*

*CRAIGFRYN MANUFACTORIES, upon the river Severn*¹, and a lease of 1833 used the same term to describe the Milford fulling mill². We're not sure where Thomas operated his business from but, perhaps, it was from the Craigfryn and because of its sale, he was unable to renew his lease on the space that he was renting there.

But let's take a closer look at what he was selling, for the advertisement helps us to understand how the flannel industry in Newtown was changing at this early stage of its development as a manufacturing centre.

Twenty years earlier, in 1790, there was little indication of Newtown's future growth. A Trade Directory of that year listed one flannel manufacturer and two weavers in the town³. Yet by the beginning of the 1820s, there were 53 manufacturers actively producing flannel. By then, according to another directory, *The trade of Newtown consists of the manufacture of flannels of which great quantities are made*⁴. A major cause of the transformation was the spread of mechanisation to many parts of the industry, resulting in the conversion of a manual, cottage based, activity into a factory enterprise. The advertisement provides us with a fascinating glimpse into an early industrial factory where at least some of the machinery was now powered by water and where sufficient space also existed for the large hand-cranked 'engines' that were being used for preparing the raw wool and yarn for the weavers. Thus, Thomas was operating a business where probably all stages of manufacture existed under one roof: in other words, a factory.



Cross-section through a willower

Thomas owned a variety of machines to process the raw wool into yarn, ready for the weavers to convert into cloth. The water wheel of the unnamed mill where his business was based powered the 'willey' or 'willower' (in Welsh, the 'Diafol', or 'Devil') and his carding engine. The former was used to prepare the raw wool for carding to help disentangle the fibres. Wool was fed into a large rotating wooden drum with its internal surfaces inlaid with 2 inch iron spikes. The person who fed in the wool was known in Newtown as 'the devil boy'. As if to emphasise the transitional state of the industry in

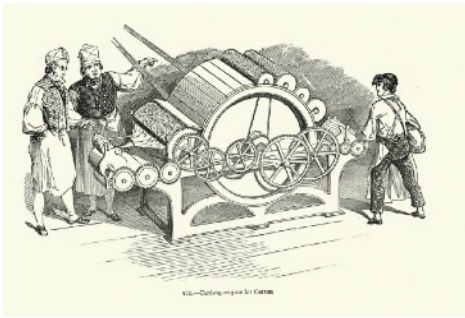
¹ *Shrewsbury Chronicle*, Friday, 12 April 1811

² *Assignment of the remainder of a term of 500 years of a dwelling house and lands called Milford House . . .* November 23, 1833, NLW

³ *The Universal Directory*, London, 1791

⁴ Pigot's Trade Compendium, 1822, p.727

1809, Thomas possessed two willowing engines - one manually operated and the other water powered.



A powered carding engine

Another 'engine boy' fed the willowed wool into the carding engine. The advertisement does not make it clear whether the single engine owned by Thomas was water-powered, but it is most likely to have been, as by the end of the eighteenth century water driven carding machinery was in widespread use in Montgomeryshire⁵.

Thomas had two kinds of machines for the spinning of his wool - a 'jack', also known as a 'billy', and a 'Jenny'. The jack was the first stage in the spinning process. This machine, operated by a 'jack man', or 'slubber', put a slight twist into the carded wool to create a 'roving' ready for the spinners to spin on the eleven spinning jennies owned by Thomas. Once again, the transitional nature of the industry in 1811 may be being revealed here. The thirty-spindle jacks and sixty-spindle jennies, may be referring to earlier and older hand-cranked machines, whilst the eighty -spindle Jenny is more likely to have been powered by water. However they were powered, Thomas's 11 spinning jennies could produce an impressive 760 spindles of woollen yarn at any one time.



A Yarn creel

The yarn needed to be prepared for weaving by creating the warp. These were the longitudinal threads of yarn which would be attached to the weaving loom in order for the weft to be woven across it. Each length of yarn would be about 20-25 yards long and the traditional way that this was prepared was simply to use pegs inserted into a frame hung on the wall. Each thread then being looped between the pegs, before being tied into hanks to be transferred to the loom. Given the number of weaving looms in the manufactory, it is likely that warping walls were being used by Thomas's workers, but he had clearly invested in more efficient technology in the shape of a warping mill. The warping mill consisted of a revolving wooden framed warping drum and a reel and yarn rack, or creel, of bobbins, from which the yarn was wound on to the mill. This took up far less space in what was, no doubt, quite cramped accommodation. According to Jenkins, warping mills had been in widespread use in Scotland since the end of the seventeenth century, but had only slowly been adopted in Wales and, according to the Hand Loom Weavers Report⁶, the simpler 'Warping Wall' was

⁵ Jenkins, J. G. *The Welsh Woollen Industry*, Cardiff, 1969, p.33

⁶ Royal Commissioners, *Handloom Weaver's Report*, Vol 4, p.595, London 1840



The Flying Shuttle in its shuttle box, ready to be thrown across the warp, using the pull strings

the standard method of preparing the yarn for the loom in Newtown.

Once the yarn was warped it was 'chained off' in a crochet-style method to be spread on to the warp beam of the loom. The advertisement tells us that Thomas owned 20 weaving looms. These were handlooms, but again of the more efficient sort, each having "spring lathes", or as we would understand it, 'Flying Shuttles'. The Flying Shuttle had been developed by John Kay back in 1733 and greatly speeded up the process of sending the shuttle with the weft yarn back and forth across the warp using a spring-loaded picker. It would seem that at least in Thomas's manufactory, flying shuttle looms, were supplanting the slower and less efficient manually thrown shuttles. Again the twenty looms operated by Thomas indicates an impressively sized business. It is interesting to note that there are "several hundred yards of new blanketing" included in the sale. If all 20 of his weaving looms were being worked it meant that potentially Thomas's weavers could be producing as much as 2,000 yards of flannel at any one time.

There are smaller items for sale in Thomas's mill - spare parts for the looms, such as shuttles and sleys along with a quantities of raw wool, wicker baskets for storing the wool and bobbins of yarn.

One surprising item included in the sale is a large quantity of 'Gallipoli oil'. As the name suggests, the oil, in the shape of sour olive oil, was sourced from the Mediterranean area, particularly from the Gallipoli Peninsular. Although wool is naturally greasy additional Gallipoli oil was used to make it easier to disentangle the woollen fibres in the willowing process. The oil might also have been used for lubricating the machinery as well as fuelling the oil lamps to provide light in the factory. With so much oil being stored, it is easy to see why fires were so prevalent in Newtown's flannel mills.



An overshot water wheel - a common feature in 19th century Newtown

Since we know that at least some of Thomas's engines required water power, it is safe to assume that his woven flannel was fulled in the same premises. This 'finishing' stage of the flannel making process required the cloth to be pounded by large water-driven fulling stocks in troughs of water mixed with urine and fuller's earth. For this stage, Thomas was relying on the equipment of the fuller, which explains why there is no reference in the advertisement of the sale of such items related to this. It may be, however, that he had to produce the fuel for heating the fulling mixture himself, which probably explains the reference to the 3 cwt of logwood. However, interestingly, there is also the inclusion of

4 cwt of alum which was used as a 'mordant' in the dying process. The alum was added to boiling water in order to help the dye to bind to the fabric fibres making the colours more vibrant and long-lasting and helping the cloth's colours to survive the pounding it would receive in the fulling mill. So, it seems likely that Thomas was also employing a dyer in addition to his willowers, carders, slubbers, jack men, spinners and weavers. In other words, Thomas may have been employing upwards of 40-45 men, women and children in his manufactory - a sizeable enterprise.

What happened to Thomas? Like so many of our ancestors who lived before the first census in 1841, creating a full biography of their life can be challenging. Thomas Hall wove his way in and out of recorded history, offering only glimpses of his life. It is likely that he was born around 1779, although no record of his birth has been located, the son of Thomas and Elizabeth Hall of Newtown⁷. He was still living there in August 1800 when he married Margaret Savage at Llanwnnog. He was able to sign his name, although his wife could only indicate with her mark. The marriage was witnessed by Christopher Brees Hall⁸, an elder brother of the groom's, and the grandly name Athelustan Savage⁹, presumably a relation of the bride. The parish register of Newtown records the baptism of a daughter, Mary, to the couple on September 4 1803¹⁰. By 1806, Thomas appears in a list of the names of the inhabitants of Newtown¹¹, but there are no further details beyond the fact that there was a total of seven in the family at that time. Nothing more is known about Thomas until his name appears in the notice of sale of 1811. We've already suggested that the description of Thomas as "declining the flannel manufactory" may be a reference to his inability to renew the lease on the property, but it may also be a polite way of telling us that he was in financial difficulties. In 1811, Thomas was in his early thirties and had probably been less than ten years as wool master and, yet, here he was selling off all the tools of his trade. Confirmation is provided four years later when he was declared a bankrupt¹². The bankruptcy may

⁷ PR St Mary's mixed, p.75 - their marriage by licence, January 24 1772

⁸ PR St Mary's mixed, p. 78 - baptised 27 March 1774

⁹ PR Llanwnnog banns, 17 August 1800, p.135

¹⁰ PR St Mary's mixed, Mary born August 13, baptised September 4 1803, p.154

¹¹ *A True List of the Names & Number of all the Families Residing in the Parish of Newtown . . .*
Reproduced in *The Newtown & Welshpool Express*, October 13, 1874. Newtown Textile Museum

¹² Royal Cornwall Gazette Saturday 12 August 1815

have been a messy affair. In the autumn of 1815, a Commission of Bankruptcy was formed to settle his financial matters when a dispute arose over ownership of a fulling mill and dwelling houses Thomas had owned in the parish of Manafon¹³. After that, Thomas disappears until his burial was recorded in Newtown in early 1832¹⁴.

It is ironic that Thomas seems to have left a mark on history because of his failure in business. Yet this one record provides a tantalising glimpse of the reality of life in Newtown's flannel trade at the moment when manual labour was giving way to increased mechanisation.

¹³ Shrewsbury Chronicle 13 October 1815

¹⁴ PR St Mary's burials (1813-36), p.149 - Thomas Halls buried January 19 1832 aged 53.