



History of Th'Owd Mill

Th'owd Mill I'th Thrutch has had lots of names in the past; it has been known as Healey Deane Mill, Healey Mill, Old Mill and Th'Owd Mill I'th Thrutch.

Whatever name you use it has been around for a very long time, firstly as a corn mill for the hamlet of Healey, and since 1676 as a **fulling mill**.



King Charles II

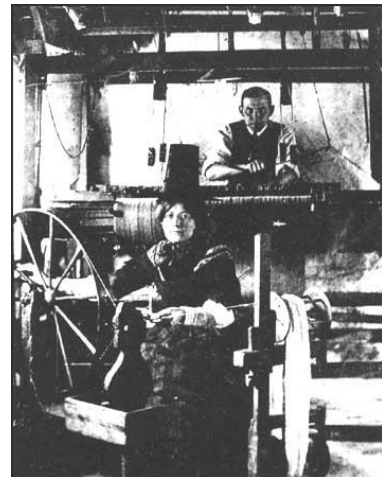
In the late 17th Century Charles II was on the throne. The Bubonic Plague, also known as the Black Death, of 1665 and the Great Fire of London of 1666 had just happened and some 68,000 people had died in London. It was also a time when Anti-Catholic feeling was widespread; as shown by the Test Act of 1673, which banned Roman Catholics from both the House of Lords and the House of Commons.

Compared to today, the lives of the ordinary working man, woman and child were very different in the 17th Century. Children did not get any homework since there were no schools. As a result the majority of the population could not read and write. It was however compulsory to go to church, and this was most people's education.

The Domestic System

Rochdale was not an industrial centre in the same way as it is today, and people worked mainly on the land. They also supplemented their income through 'cottage industries', such as weaving and spinning wool, linen, and fustian (which is a mixture of wool and linen). This was known as the Domestic System since it could be done in the home.

The Domestic System was a family affair; the children carded the raw material with stiff wire brushes which straightened the fibres before they could be spun, the mother spun the thread, whilst the father wove the cloth. It was then picked up by a travelling merchant called a clothier or "chapman". They came through the villages with their pack horse trains and took the cloth pieces to be finished or sold at 'Piece Halls' like the one in Halifax, which was built in 1779.



Photograph of weaver and spinner in Wales

It is also interesting to note that at this time the cloth was not made from cotton. For although the term 'cotton' was used in England from the 15th to the 17th Century, it was used to describe a certain type of weave, not a fibre or a fabric.

During this time 'cotton' was a woollen fabric with a raised nap: 'The explanation of the word cotton may lie in the fact that it had also the sense of nap or down, and the process of raising the nap of woollen cloths was called 'cottoning' or 'frizzing' [frizes] ... at the end of the 16th Century Manchester was 'eminent for its woollen cloth or Manchester cottons' (Montgomery, Florence: Textiles in America 1650-1870).



Fulling

The **fulling** process 'finished' the cloth. Fulling was vital to the production of cloth, as it converted a relatively loosely woven fabric into a close-knit one. This was done by it being soaked in a concoction of water, stale urine, soapwort, and a clay called Fullers Earth, and was then pounded by foot (rather like treading grapes).

Fulling helped to remove the wool grease called 'lanolin' from the raw cloth. This process was known as 'walking' or 'waulking' the cloth, and is probably the origin of the common local surname 'Walker'.



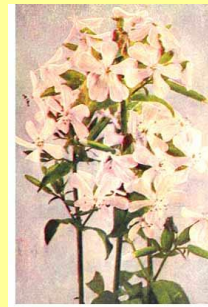
Walking the cloth

What is Fullers Earth?

It is a naturally occurring sedimentary clay composed mainly of alumina, silica, iron oxides, lime, magnesia and water. Today it is mainly used as Cat litter and in garages where mechanics use it to soak up oil spills. It can however, be used on the skin as a whitener and to help get rid of acne!



Soapwort has been used in the past as a soap substitute and to produce a head on beer. Textile restorers use Saponaria that has been boiled in lime-free water to clean and revitalise old, fragile fabrics, and it may also be used as a gentle wash for damaged hair and sensitive skin.



Soapwort is still cultivated for washing woollens in the Middle East. In the Swiss Alps, sheep used to be washed with it before they were shorn.



Water-powered fulling stocks

The Machinery used at Healey Dell

Later, fulling mills developed by using water-powered fulling stocks. These are heavy wooden hammers driven by water wheels that raised and fell on the cloth bundled into large troughs below. By using the power from the river and a giant water wheel the heavy oak hammers pounded and softened the cloth, and were shaped so that each time the cloth was pounded it rotated a little to ensure a uniform action and to prevent damage. These achieved the same result as 'walking', but with much less work. Without these the industry would not have grown.

Fulling mills were sometimes called "Walk Mills" to reflect the former method of carrying out the process. There is in area called Walk Mill in Cliviger, near Burnley, and a working 18th century Fulling Stock can be seen at Helmsore, Rossendale.



Sulphur Stoves

Integral to the finishing process was the bleaching of the cloth. This was done in four large stone sulphur stoves which protruded from the hillside; each one was almost 2 meters wide and 3 meters high and had vaulted roofs. In these stove houses sulphur dioxide fumes bleached the woollen cloth.

Sulphur dioxide, however, is a poison, and would have most certainly affected the workers

and the surrounding environment. Sulphur dioxide contributes to acid rain, damages vegetation, and may cause coughs, asthma, bronchitis, and eye irritation. Prolonged exposure, which the workers in the Industrial Revolution would have had, could have lead to heart and breathing problems.

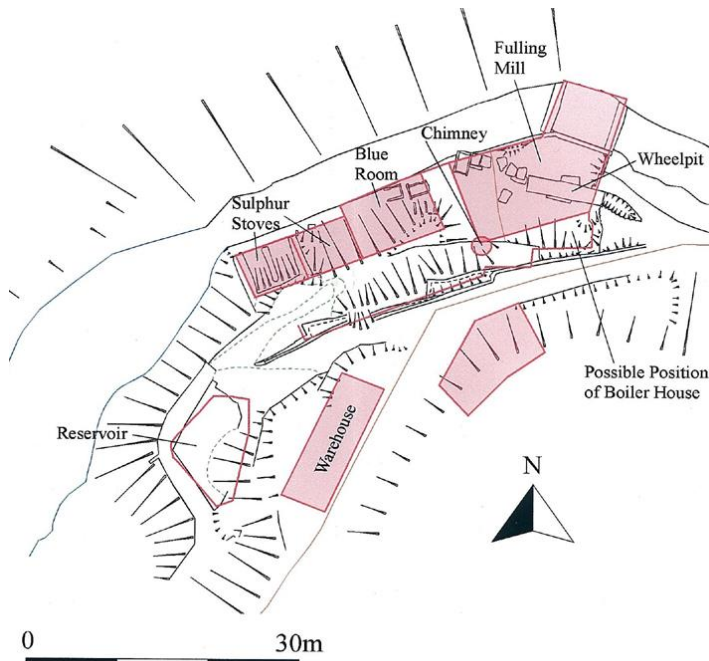
The waterwheel was close to 10 meters in diameter and 1.5 metres in width and sat in a wheel pit that can still be seen, measuring 1.5 meters wide and 9 meters long. By 1863 steam power had been installed and there was a boiler house and chimney, but by 1865 the engine only provided 2 horse power of energy; by 1880 it was up to 9 horse power so that the main driving force of the Mill was the water wheel, which provided 20 horse power.

In the other main component of the mill, which evidence suggests raised two to three storeys in height, the upper floors were used for fulling whilst the lower was a 'blue room'. Three stone vats can be seen here today, but during the 19th Century they would have been used in order to make 'whites whiter than white'; by dyeing them a slight blue! A trick of the light meant that cloth dyed lightly blue appeared extremely white. A mixture of sulphur (a very smelly yellow crystal), caustic soda (it is used in the home to unblock drains) ash, china clay (the white clay used for making china), pitch (this is like tar), silica (this is mineral which is found in sand) and arsenic (a very poisonous metallic element) was fired, sealed, cooled, crushed, washed and boiled- a process which took almost 2 weeks. Laundry blue and optical whiteners are still used today, but are now incorporated into detergent products. Presumably the arsenic is now removed!

Cloth was 'taken to the fulling mill higher up the stream and treated in... driving stocks by another water wheel. Then sulphur stoves and bleaching. Then carted to tenterfields above Heald [farm, or Healey Cottage], brought over by passageway and finished and packed into house behind Healey Hall.' (Maxim cited in Manchester University I: 31).



Healey Dell Today



At Healey Dell, there is now little left of Th'owd Mill I'th Thrutch. Two stone arches that spread across the river can still be seen. These supported the external walls of a two storey 'perching room' which came at a right angle from the rest of the mill on the bank of the river. The stone troughs that held the water wheel and cloth after 'walking' can also be found. By the beginning of the 20th Century Th'owd Mill I'th Thrutch had fallen into disrepair and was abandoned as the cotton industry in the North of England began its long decline.

Sources:

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Arrowsmith P; Healey Dell An Archaeological Survey Manchester University Archaeology Unit 2006

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