

Napton brickworks

The Napton brickworks and quarry site provide interest for the industrial historian, the geologist and the naturalist. For geologists, the site has been identified and listed by the Warwickshire Geological Conservation Group (WGCG) with the exposure of important geological formations and large sandstone blocks known as 'doggers'. The site has been an important source of fossils in the past. This overgrown site is now protected. Also on the hillside lie the Napton fish pools.



The windmill, of course, is a familiar feature of the area, standing high above Napton Hill.



There was a time when it was possible to photograph both the Oxford Canal and the windmill, but growth of trees and bushes over the years has made this view impossible



For the industrial historian, however, it is the brickworks that provide the attraction for research.

The story of the brickworks in the latter part of the nineteenth century and early 20th century is well recorded, particularly in view of the 1903 article in the 'The English Clayworker' which gives a detailed account of the works. This formed the basis of the section on the brickworks in the publication 'Round about Napton', and also provided important material for the Napton History Project's research. Both these are included as appendices.

The starting date for the works is usually given as 1878, for it was in that year Thomas Mason and Charles Watson established a brick & tile manufacturing business close to the canal at Napton. Newspaper evidence suggests, however, that brick manufacturing was well established in the area prior to this. One important source suggesting this is the Warwick Advertiser of 19th May 1827 where Geo Watson is handling the sale of the Effects of Walter Watson, of Lower Shuckburgh, bankrupt. Included in the lots are:

'The STOCK-IN-TRADE consists of about Thirty-five Thousand Bricks, Five Hundred Coping Ditto, Six Hundred Sougning Ditto, Six Hundred Pillar Ditto, Twenty-four Thousand Sougning Ditto, Twenty-four Thousand Plain Tiles, Four Hundred Ridge Tiles, Five Hundred Hip Tiles, Ninety Thousand Draining Tiles'

(I must admit I had not come across the term 'sougning bricks' and had to turn to an extract from 'A General View of the Agriculture of the County of Warwick with Observation on the Means of its Improvement' (1815) to explain their meaning

"Draining is, without doubt, the first step towards improvement of all wet land. It has been practised with much success in this county for several years, but more particularly so since Mr. Elkington, a farmer in this district, introduced his method of draining boggy lands. Much draining has been done in this county with what are called sougning bricks, that is two bricks on the flat sides of which are semi-circular cavities. These bricks when placed one on top of the other, in the bottom of the drain, form a circular space for the water to pass along.")

Also listed within the Lots of FREEHOLD ESTATES was:

'LOT III All the MESSUAGE or TENEMENT, with the Brick-kilns, Hovels, Sheds, Brick-yard, and also a CLOSE of excellent PASTURELAND thereto belonging, and the Right of Fishery in the Oxford Canal, and being in the Parish of Napton-upon-the-hill, in the County of Warwick, bounded on one side by the said Canal, and on the other side by the said Turnpike Road leading from Daventry to Southam, late also in the Occupation of the said Walter Watson, or his Under-tenants. The Clay in this Lot is very superior, and being by the side of the Canal, there is great facility in transporting the Bricks.'

With Geo. Watson handling the sale of effects for Walter Watson, I quickly realized that Watson was a very common family name in the area, and there may be someone who has completed family research which sorts them all out. It remains something of an on-going project for me!

Mason and Watson continued in business together until 1896, and there are a number of pieces of evidence that suggest that tiles and agricultural drainage pipes made up an important element in the product range. For example, an advert in the Nuneaton Advertiser

of 6th. December 1884 offered Mason and Watson Red Agricultural Drain Pipes – best quality, all sizes – to Landowners, Farmers and Builders, delivered on the Oxford, Warwick or Grand Junction Canal. The title for the 1903 article in 'The British Clayworker' concentrates on tiles - 'TILE-MAKING NEAR RUGBY: MESSRS. WATSON NELSON LIMITED, NAPTON-ON-THE-HILL'.

In 1896 the partnership ended (by mutual consent) and the business continued as Charles Watson Brick and Tile Makers. He suffered a serious fire at the brickworks on 25th. October 1899 (with the destruction of a new portable engine, considerable machinery, shedding and plant) and this may have been a factor in his desire for business partners. In 1902 Watson linked up with the Nelson company of cement-making fame to form Watson, Nelson: Brick and Tile Manufacturers. The company adopted the windmill as their trademark, an appropriate choice in view of the landmark location of Napton windmill above the quarry.



Bricks carrying the windmill trademark are highly prized by brick collectors, and there are also examples of bricks from an earlier period carrying the MASON & WATSON / NAPTON name and then just the WATSON/NAPTON. The positioning of the Watson name suggests that moulds were simply adjusted to block out the Mason name.



On one visit to Napton I noticed that a lady had lined her front flower bed with tiles carrying the windmill trademark. She kindly agreed to me taking a couple of photographs, slightly bemused by my enthusiasm for what she regarded as very mundane items!



The two appendices are important sources of information, particularly on the state of the brickworks in 1903, soon after the Watson Nelson link-up.

Photographic evidence is available of the twentieth century experience of the brickworks, and readers are referred to the windows on Warwickshire website.

www.windowsonwarwickshire.org.uk.

Several references are made to the steam engine on site and John Willock has kindly supplied the details of the non-condensing horizontal single cylinder engine. It was recorded in 1975 by the late George Watkins and is featured in his 'Stationary Steam Engines of Great Britain: The National Photographic Collection' Volume 6, The South Midlands, Plate 137, (SER1486). General Editor: AP Woolrich. Landmark Publishing.

Watkins gives the following details:

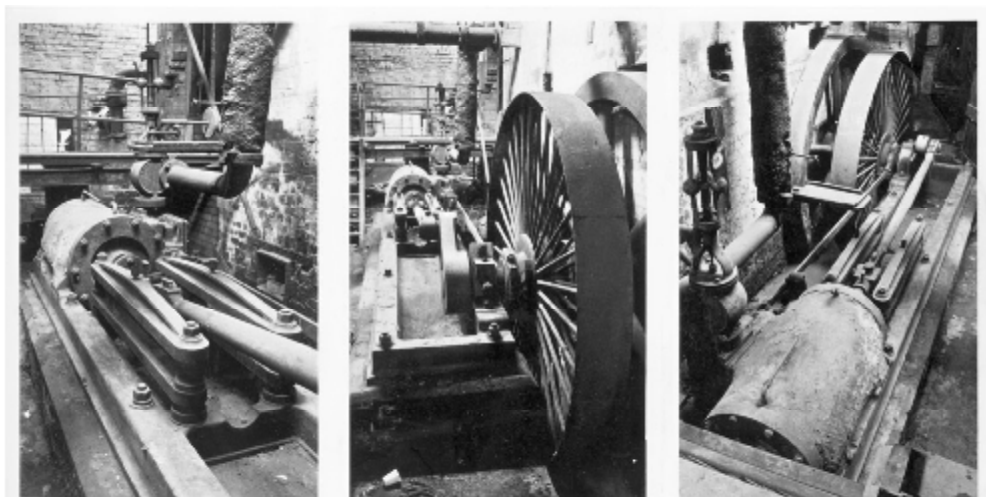
Maker: J. Wilkes, Pelsall Foundry, Near Walsall c. 1885?

Cylinder Dimensions: 21" x 2ft. 9" stroke - Slide valve.

Up to 120 hp. RPM: 75 PSI: 80, supplied by Two Lancashire boilers.

The bed of the engine was 15 feet long x 3 feet wide.

Watkins suggested at the time he wrote the above that preservation was to be undertaken by the "Dudley Group", but no confirmation has been possible that it was indeed saved and restored. R.L. (Dick) Blenkinsop photographed the engine and Derek Billings has supplied these for this article.



The brickworks were sold to Allied Brick and Tile Works Ltd. in 1934, and were closed in the 1970s.



The buildings were allowed to deteriorate or were demolished, and only the office block on Brickyard Road, dated 1904 remained standing. Some of the former brickworks site was occupied by a number of commercial firms in the ensuing years, with repeated plans submitted for some form of redevelopment. The most recent of these has housing as its primary component.

The site itself took on the appearance of something of a neglected wasteland, and even the office building suffered the fate of other remnants of the works



The demise of the office building:



The 1904 office building finally disappeared and now there is little evidence on the ground of this once vibrant brickworks, with a planned visit in May 2020 thwarted by fenced off access points. The canal, of course, remains largely unchanged and a trip by boat or on foot along this stretch of the canal continues to be an attractive option. As the canal eases its way around Napton Hill very few walkers and boaters will be aware that this was once a busy canal wharf distributing Warwickshire-made bricks far and wide.



The canal at Napton – locks, bridges, pub and World War 2 pillbox – some of the attractions of a stroll along the towpath.



Appendix 1: From 'Round About Napton'



General View of the Claypits

THE BRICKWORKS AND QUARRY

A very good account of the brickworks was published in the "British Clayworker" in 1903. The company was owned at that time by Messrs. Watson Nelson Ltd. and the article indicated the economic advantages of the works being located on the Oxford canal, this gave direct access to the Thames and the Birmingham and Warwick canal system to the west the Grand Union canal to the east.

The clay was said to be 120 feet deep, the top layer consisting of a stiff-plastic yellow/brown clay which burns a brilliant red colour, the next a kind of ironstone marl also burning red and used mainly for the "Windmill" brand tiles, below this a blue shale making very strong metallic bricks equal in strength to many "blue bricks". There are many who feel the clay layer breaks out in their garden.

Albert Eaden who has been bellringing at St. Lawrence church for 60 years worked at the brickyard for many years and recalled the following. . .

The clay was dug in the 1920's with claypicks barrowed to the edge of the quarry face and tipped down a chute to the endless chain and trolleys that conveyed it to the works. There were over a hundred men employed making 6,000,000 tiles a year, on the six presses the operators earned 2/6d. (12½p) per 1,000, the surfacer producing the smooth finish 1/7d. (8p) and the lad taking tiles from the machine 11d. per 1,000 (about 200 for 1p).

Bill Wilson was the boatman when canal boats were used to take the bricks and tiles to the railway at Griffins siding carrying six tons (6,700 tiles) and taking five hours for the return journey, he was usually up at 5 a.m. with the boats ready for a 6 a.m. start.

The works used some 90 tons of coal a week which was brought by canal in three boats, before the first world war, three men were paid 6/0d. for emptying a 30 ton load.

TILE MAKING NEAR RUGBY

MESSRS. WATSON NELSON LIMITED. NAPTON-ON-THE-HILL

Some twelve miles from Rugby, and rather less from Leamington, is the village of Napton-on-the-Hill, in which is situated the brick and tile works of Messrs. Watson Nelson Limited. It has the great advantage of being immediately on the banks of the Oxford Canal, and is in direct communication with the Thames, and the Warwick and Birmingham and Grand Junction canals. The nearest station is Napton and Stockton on the L. and N. W. Railway; this is two miles distant from the works and at present goods have to be transhipped from barges or carted to the station. In the case of tiles, this is simplified by specially made crates, with holding capacity of 1,000 each, which are filled and loaded into barges, and lifted direct into trucks with a steam crane.

The situation strikes one as being particularly adapted to brick and tile making, and the works have been laid out with due regard to position. The clay is at one extreme end of the works, and the canal at the other, so that the manufacture is a steady progression from the getting of the clay to the place of embarkation of the finished article. The ground itself covers some forty acres of freehold land, with 100ft. depth of clay. The top layer consists of a stiff-plastic yellowish/brown clay, which burns a very brilliant red colour; and the next layer below is a kind of ironstone marl, which also burns very red, and is chiefly used for making the firm's speciality — the Windmill brand roofing tile and fittings. Below this layer is a blue shale, which makes a very strong metallic brick and resists a crushing strain equal to blue ware, if Messrs. Kirkaldy and Sons tests may be taken as correct. We are informed that up to the present the bottom of the clay has not been reached, although it has been proved at a depth of 120ft.

In very wet or showery weather some of the clay is given a preliminary drying in a shed, to assist the grinding of that which is fresh got from bank. The tile clay is hauled by an endless chain into the machine shed, and there passed through a 9ft. grid pan. It is then elevated and screened, and has a due proportion of water administered. It is next sent into a conveyor, and is weathered for some fourteen days. After that it is passed through a pair of steel-faced finishing rolls, pugged, and conveyed into a mixer, from

whence it is fed into an "Edge" bat machine. These bats are put by for a week, and then the final operation is done by two presses by Edge, and two by Messrs. Gosling and Gatensbury, of Hanley, which make the nibs and holes in one operation. The "Edge" presses are fairly well known to our readers, but those of Messrs. Gosling and Gatensbury are perhaps not so well known, the firm being comparatively a new one. We are informed, however, that these machines are doing excellent service.

There are three sheds for drying tiles, two holding 350,000 and another 500,000. Around these sheds is a most excellent arrangement of pipe gutters for carrying off the rain water.

Messrs. Watson Nelson, with commendable enterprise, determined to utilise every form of improved drying, and they are now experimenting with a five-track dryer which is worked entirely by exhaust steam driven by a Blackman fan.

From the drying sheds the tiles are taken direct to the kiln. We witnessed the drawing of one of these kilns of tiles when burnt, and they were a very brilliant red from top to bottom, with a metallic ring which told its own tale of weather-resisting properties.

For brickmaking, the clay, after being ground and elevated, is screened, and water added whilst it is in the mixer. It is then passed through a pair of rolls, and thence into a Wilkes's peg of a capacity of 16,000 per day. Some difficulty, however, was found with the clay until a Cammis die was tried, since which, to use a well-known phrase, they "have used no other". The machinery is driven by a 8-horse power engine by Ernest Wilkes, Pelsall Foundry, and a Lancashire boiler by the Isca Foundry, of Newport; also a Cornish boiler by J. and G. Joicey.

The brick drying sheds, some 150ft. by 40ft. are floored with $\frac{1}{4}$ in. plates and heated entirely by exhaust steam. Another floor is laid in cement, and is of the same size. The brick kiln is a continuous one by Sercombe, containing fourteen chambers with a stack 105ft. high, each chamber holding about 10,000. The cost of burning is roughly 4 cwt. per thousand, and Messrs. Watson Nelson have no reason to be dissatisfied with the quality of the bricks.

The yard is very compact and complete. The principal director is Mr. Chas. Watson, who has built up the business from its inception. He is ably assisted by his son. Mr. Charles Watson himself is Napton born, and, like many other clayworkers, was led to take up the business through his connection with the building industry. His father and himself possessed a considerable building connection, especially in church work, and they built and restored many country churches under the direction of such famous architects as Sir Gilbert Scott, Mr. Ewan Christian, etc.

Mr. Chas. Watson commenced brickmaking in 1878, starting the Napton yard in a very small way, and with the usual crop of difficulties always confronting him, three or four kinds of machinery were tried and thrown



Mr. Charles Watson

out, and Mr. Watson found, as have many others in the trade, that experience was an excellent school, but with very high fees. Two years ago Mr. Watson, in connection with Messrs. Charles Nelson and Co., of Stockton, the well-known lime and cement firm, converted his business into a limited company, of which he is the managing director, and Messrs. G. B. and C. E. Blyth, of the firm C. Nelson and Co. are directors. His eldest son, Mr. C. H. Watson, is works manager. With this

combination the firm is likely to have a still wider reputation for the excellence of its productions. At the present time, whilst making a speciality of roofing tiles and fittings, and finials, they also manufacture common bricks, together with a few facings, and a large quantity of agricultural pipes. About the first brick contract Mr. Watson undertook was for the L. and N. W. Railway and one of the last has been to supply bricks to the Great Central Railway to the extent of 15,000,000.

The fluted tile is a patent of Mr. C. Watson's, and is quite unique in its way, as a roof may be covered with these tiles at a slating pitch. On one so laid in our presence we witnessed a severe test, which proved their capacity to withstand the most driving rain. These and the plain tiles are being specified largely by architects. Indeed the demand exceeds the supply, but with the enterprise already heeded to the firm are making preparations to still further increase their output. We reproduce a few views of the works which will give our readers some idea of their extent.

Appendix 2: From 'The Napton History Project'

THE BRICKWORKS

One of the biggest employers in Napton in the late 18,early 1900's was the brickyard which opened in 1879 when Mr Chas Watson began brickmaking.It became Mason and Watson in 1895 and by 1903 was owned by Messrs. Watson Nelson Ltd.

The location of the yard was ideal for transportation purposes.Being sited adjacent to the Oxford Canal meant direct access to the Thames and and the Birmingham and Warwick canal system to the west and the Grand Union to the east.

The making of the bricks was a steady progression from one end of the site to the other.Beginning with the quarrying of the clay at one end of the site and ending with the transportation of the finished article, via the canal, at the other.

The clay is said to be 120 feet deep and is found in three distinct layers.The top layer is a yellow/brown clay which burns a brilliant red colour,the next is an ironstone marl which also burns red and was used mainly for the 'Windmill' brand roofing tiles and fittings.The last layer is a blue shale used for very strong metallic bricks which are equal in strength to blue bricks.

Mr Albert Eadon,who worked at the brickyard for many years recalls...

"In the twenties the clay was dug out manually with claypicks,wheeled in barrows to the edge of the quarry face and tipped down a chute to the endless chain and trolleys that conveyed it to the works.There were over a hundred men employed making 6,000,000 tiles a year on the six presses.The operators earned 2/6d (12½p) per thousand tiles,the surfacer producing the smooth finish 1/7d (8p) and the lad taking the tiles from the machine 11d (less than 5p)."

The following extract is taken from an article printed in 'The British Clayworker' in November 1903...

"In wet or showery weather some clay would be given a preliminary drying in a shed to assist grinding from where it is hauled to the machine shed and passed through a nine foot grid pan.It is then elevated and screened and has a due proportion of water administered.From here it is sent into a conveyor,where it is weathered for fourteen days.

After that it is passed through a pair of steel faced finishing rolls, pugged and conveyed into a mixer, from whence it is fed into an Edge bat machine. These bats are put by for a week and then the final operation is done by two presses by Edge and two by Gosling and Gatenbury which make the nibs and holes in one operation. There are three sheds for drying tiles, two holding 350,000 and another holding 500,000. From the drying sheds the tiles are taken direct to the kiln. The brick kiln is a continuous one by Sercombe with fourteen chambers, 105 feet high, each chamber holding about 10,000 bricks."

Mr Sam Gill worked at the brickyard and remembers the method of stacking and firing the kiln...

"At the brickworks they had kilns that were fired with coal. As the boats brought the coal it was all manhandled. They would stand out in rows outside these kilns, which were big buildings. You walked inside with your barrow all stacked up, then you sealed it all. Then, all these people, the firemen, fired the kiln getting it hotter and hotter. You had spy holes in the top, you looked down and when the colour was right you knew that the temperature was right and you went on for so many days. Then they opened where they'd bricked up the entrance and you went in to bring out the bricks to be taken to the canal or loaded onto lorries. It was a long process, now you've got recordings of heat and everything, electrical furnaces, but then it was all visual. Cherry red, white, they were experienced in the colours."

In 1938, when Mr Baird came to manage the brickworks, it was a flourishing business, owned by Allied Bricks who also owned another twelve or thirteen brickyards around the country. Before the war the old tunnel kilns were used, as previously described, but during the war the site was requisitioned by the Government and a factory making aircraft components stood on the site till 1943 or 1944. G.E.C. then took it over till the end of the war when Allied Bricks returned.

Mr Baird, with the help of Rugby M.P. Bill Brown, were able to reclaim workers from the army. After the war, with the new machinery, only fifty men were employed at the yard.

A canteen was also provided for the use of the employees. In the early 1900's the children of the village were able to earn pocket money of about 6d (2½p) a week by taking the workers their lunches to the brickyards every day.

Mr Gill remembers...

"At the brickyard dinners were brought to some people. The food would be put in a basin, there'd be a handkerchief to put it in and on the top there'd be a saucer and the pudding would be put in that with a bit of custard. It would be all tied up with a knot, a fork and spoon put through and the children would bring them their dinners."

The oldest ex-brickworker living in Napton is Mr Bill Young and he worked under eight managers over the years, from Mr Charles Watson to Mr Baird. The last manager at the brickyard was Mr Gwyther. Bill remembers the brickyard as quite a safe place to work although he does remember one or two incidents...

"Oh, there were a few lost fingers on the pressers.

My relation and another chap both lost half a finger on the 6 by 3 press.

I remember seeing there was a big wagon, with two trailers behind it, loaded up with bricks going over the bridge. One pushed the other and over they went. Yes, the steam was flying up, my last job was there, and I expected them to be killed but they came out white as snow, white as a sheet."

In 1957 the kiln, which was a tunnel kiln of Dutch design, fired by heavy oil and the longest brick kiln in Europe, was built. The hottest point of the kiln reached a temperature of 1090°C and it was never allowed to go out. Bricks in the late fifties were fetching £30 per thousand.

Another former employee of the brickworks is Esmy Dowling. He tells us about his work there...

"To get the clay out of the quarry down to the bottom level they used a lift designed, I think, by a man called Sudlow, I think from the baking family in the village. I was the last person to use it. How it operated was a full wagon going down brought an empty one up onto the level of the quarry itself and then there were tracks laid to

where the men were working. Some people had the clay tipped to them and others finished off down the bottom. The clay was all mixed up so they'd got, you know there wasn't a bad batch or a particularly good batch, it was all mixed up and you got an even texture of the clay. One day when we were broken down, where the lift ran up and down, in the clay I found a lump of wood, crystallised wood which I gave to Mr Birdall and he took it to the Oxford Museum and it was one of the first two trees which ever grew in this country. It's still there as far as I know.

The average wagons a day before you got bonus was 112 and after that you got bonus which was going some I can tell you. The stone was all drilled by hand till I left there. What it meant was one man holding a drill and another wielding a hammer up and down. The first time I ever held the drill I could hear the hammer whistle as it went past my ears and then you knew you'd got to hold it still or else. Then, when you'd got a hole started, you'd tip water in and a bag at the bottom of the drill and while he was going back with the hammer you'd give it a quarter turn 'cos the drill had got shoulders, that was to cut a hole. Then when you'd got to the required depth they'd put gelignite in and a detonator and fuse and blow it up. Then you'd got to clean every bit up after they'd blown it because if you got a little chip of the stone in it would ruin your tiles so you'd got to scrape it all up, load it onto flat bed trucks and then tipped into the tip. Every so many feet you'd get various, well, it started with soil, then you'd get a little bit of clay which was yellow clay, pipe clay which wasn't very good, then a bit of ironstone and rubbish, sand. The depth of the face onto the blue clay was ninety feet. The blue clay was not used while I was there because of the lime in it. It would have blew the bricks or the tiles would have gone all shapes.

They used to cook eggs on the shovels at the brickyard, one man managed to eat twenty one one day.

They had a ton of cement come there and one man with a wheelbarrow moved the cement in two runs, twelve cwt on the first barrow and eight on the second which wasn't bad going."

The brickyard closed in depriving Napton of yet another source of employment.

Photographs to accompany Napton Brickworks article

1. Napton Quarry
2. Napton Fish Pools
3. Napton Windmill 1
4. Napton Windmill 2
5. Napton Windmill and canal
6. Watson Napton brick
7. Windmill Napton brick
8. Napton tile1
9. Napton tile2
10. Napton brickworks
11. Napton lost tracks
12. Napton quarry wasteland
13. Napton 1904 office1
14. Napton 1904 office2
15. Napton 1904 office3
16. Napton 1904 office4
17. Napton canal barge1
18. Napton canal barge 2
19. Napton canal view 1
20. Napton bridge 114
21. Napton bridge 113
22. Napton canal view 2
23. Napton The Folly
24. Napton lock and pillbox
25. Napton windmill and canal