

The Iron Industry at Horsted Keynes Bryan Hale

"Full of iron mines, it is in sundry places, where for the making and fining whereof there be furnaces on every side, and a huge deal of wood is yearly spent, to which purpose, divers brookes in many places are brought to run in one chanell, and sundry medowes turned into pooles and water, that they might bee of sufficient power too drive hammer mills, which beating upon the iron, resound all over the places adjoyning."

'Camden's Britannia.'

This is the scene, which would have greeted visitors to the now peaceful area at Horsted Keynes millpond, in the 16/17th centuries.

The bay or dam, was thrown up to create a pond, utilising the water from a small stream, which ran down from Ashdown Forest via Twyford, and Broadhurst Lake (called 'The New Pond' in 1764)

I am unsure at present, of the exact date that the furnace was constructed at the mill, but bonds were given by Barrington and Morley in 1554, so we may assume that it was around this period.

The blast furnace was introduced to England near the end of the 15th century, and cannon were first recorded as being cast at Buxted in 1543 by Ralph Hogge, assisted by Peter Baude, a French founder. In 1544 when war with France seemed likely, Letters of Denization were imposed, and all aliens were required to sign, or leave the country. Records show that around forty Frenchmen were named as ironworkers, many at Wealden furnaces. Some probably left, while others stayed on in their adopted country, perhaps anglicising their names for political expediency?

A Kerrine Jordan, occupation 'Hammerman' was married in Horsted church in 1630, but no names of obviously French origin have come to light yet, to my knowledge. **The Denization Lists, 1544.**

The Lord of the Manor of Broadhurst owned the land, on which the furnace stood, and various leases and wills exist relating to it. In 1636/7 Sir Richard Michelborne granted a lease of 21 years to William Streate, of lands surrounding it, but retained the right of entry to 'cut & cord coal, (charcoal) of digging sawpits & taking 'myne', (iron ore). The furnace was evidently still blowing in the 1650's, perhaps making guns and shot, besides everyday household items, but it seems to have ceased working around 1664/5. In 1750 it is named in the Land Tax Returns as, 'Old Forge Land' in occupation of John Heckman (or Hackman)

Richard Michelborne died in 1656, and the estate passed into the hands of the Lightmaker family, the mill and furnace at this time, being run by Walter and John Cripps. In his remarkable Journal, the then rector of Horsted, Giles Moore records. 20 Feb 1656. "Paid John Tully founder, for an iron pot of 8 gallons & upwards, also an iron pot of 4 gallons, an iron kettle of 3 gallons, and an iron mortar. Total cost of all these items was £1 & 8 shillings. (£1.40p) in today's money!

Other names given by Moore are, 'Old Father Mills, the founder', and Simmond the forgerman. Moore also records in Nov 1657, "pay'd to J. Crips for a plate (Fireback) cast for my Kitchin Chymney weighing one hundred and 3 Qters, marked G.m.S. I say Pay'd in money discounted for Tithes (Besides 2shillings & sixpence giv'n the founder for casting) Pay'd 13 shillings.



Again in 1657, he bought of Stephen Marden Potter, a pot of 7 gallons, costing 12 shillings, another of 2 gallons for 4 shillings, and an iron skillet holding 3 pints for 2 shillings. 18 shillings in all.

The pothangers to suspend all these from were purchased from William Young Blacksmith, for 2 shillings & sixpence. **The Journal of Giles Moore 1656-1678. Ruth Bird. Sussex Record Society. 1971.**



The actual site of the furnace was somewhere near the existing pond dam, at the northern end of the bay. Straker mentions that there were "fragments of moulds for large cooking pots, near the site." when he wrote of it in the 1920's. He also mentions that the miller of that time, Mr R. Chalmers, believed that he had discovered part of the furnace base. Later alterations in the vicinity would appear to have obliterated this; although I recently

discovered a complete burnt brick, covered in a vitrified glassy substance there. I believe this to be from the interior of the furnace chimney. I also found many fragments of glassy, waste slag of various colours, probably unearthed for the first time in over three hundred years. The lanes surrounding the mill are largely made up from this waste. The raw material used for smelting was probably clay ironstone, dug from pits around the parish.

Many of these now form small, brackish ponds in the surrounding area, and the industry lives on in names such as, Myening Pit Wood, Pett, Pitt and Furnace Fields. Indicative map names are Great Cinders, Cinder Banks, Cinder Field, Cinder Hill, and many Kiln Fields, K. Close etc. **Wealden Iron. Ernest Straker, London: Bell & Sons Ltd. 1931.**

The furnace usually had a base and hearth area of sandstone blocks, and the upper part consisted of a chimney of around fifteen to twenty feet high. The ore, or 'mine', was thrown in via the chimney top, (often by means of a bridge) and alternated with layers of charcoal. The whole was then set alight and brought to smelting point over a number of days, using huge water powered bellows, constructed of timber and ox hides. John Ray, tutor to the son of Walter Burrell, Ironmaster of Cuckfield, described the "flames rushing forth from the chimney, with such violence, and to so great a height, that they are seen about the country at ten miles distance".

The molten metal was drawn off at intervals during the process, and directed via channels into a mould floor of loam, clay, or sand. The molten iron could then be cast into fire backs etc, as mentioned by Giles Moore, or into 'sows' for further re-working, at a forge.

The Jodrell Lab's undertook an analysis of charcoal from this site, early in the 20thc, and it was shown that a good proportion of the fuel used in the Stuart period, was birch and beech.

Interestingly, alder was also used, and the little shaw, or wood running from the site to Waterbury Castle is still named, Alderly Platt. A deliberately planted fuel source perhaps?

When the furnace finally finished its working life, perhaps around 1670, men must have been left looking for alternative employment. Although diversification was a way of life for country people, and they could, and did, turn their hands to all kinds of practical work, life at Horsted must have been poorer for many. There is little evidence that any of them turned to allied, metal based trades such as Blacksmiths, as we know the names of smiths, already working at that time, from James Alchim in 1619, through to Henry Plaw (or Play) in 1674.

The Blacksmiths at Horsted Keynes.

"Most famous of all, was the village blacksmith, whose work has been praised in song & verse. The object of legends, superstitions & customs, he is hailed in many lands as the symbol of English country life." **Norman Wymer. English Country Crafts. Batsford. 1946.**

That smiths have played a principal part in the evolution of society is undoubted. Without them, trade and barter, in every conceivable form of tool and implement necessary for life, particularly agriculture, would not have started. In today's mechanised, industrialised world, it's easy to forget that these men, who evolved into working in every conceivable kind of metal related trade, were at the heart of every village community. Besides blacksmiths and farriers, there were gun & locksmiths, toolmakers, clockmakers, and workers in precious metals. Think of a village early in our history, and then make a list of all the necessities, that were made of metal. The list would be considerable, from spades, axes, & billhooks, to nails, hinges, door latches, and barrel hoops.

The present Forge building on the green at Horsted, probably erected on waste of the manor, and conveniently sited at the crossroads, or hub of village life, is thought to date from around 1820.

There were smiths working long before this date, although whether on this site or not is hard to tell.

The Tithe Map of 1839 shows a building here, and it is named as 'Smithy,' on the OS map of 1874.

James Alchim was working as a smith in 1619, which is the earliest name found to date, followed by John Weller in 1628. From that time, we know nearly all the smiths, right up to the 1980's, including many older names which were once common in the village, such as Brigden, Murrell, Wheeler, Warnett, Myhill, (? Mighall) and Newnham.

Giles Moore recorded many transactions with farriers and blacksmiths, including paying, 'Old Hackman' who appears to have been a farrier and general horse doctor, the sum of 4 shillings and twopence, for various treatments to his horse, such as 'drenching,' 'bleeding,' and dressing its feet.

He also paid George, Old Hackman's son, 'at his shop,' which implies a smithy, money for shoeing, bridle mending, and a pair of hinges, amongst other items.

Nearer to our time, an advertisement in Kelly's Directory for 1882 reads. 'Verrall. Lewis, general smith, ironmonger & agricultural implement agent & Albion Works; & stores & attendance at Newick & Chailey Market, Chailey.' I am led to believe that the Albion Works comprised of, the Forge, the Wheelwrights shop, (now the British Legion) and the Old Workshop in Chapel Lane, now converted to a small house, but originally belonging to the Tester family of Salisbury Cottages.

The role, which the old workshop played, is uncertain. It had its own well and a small, detached, brick structure with a hearth, now demolished, which may have been utilised for bridle or saddle making/mending, or other small repair work. Alternatively it may have been a strake-tyre chimney,

(Short sections of metal called 'strakes,' were used to bind the fellies, or rim sections of a wheel together, before single iron tyres came into use.) Further research is necessary, to determine its exact function, at the time it was built. Until its conversion, a well-known village inhabitant, Mr Francis Sims used the building, as a cycle & shoe repair workshop for many years.

I was given a small iron plate recently, which was found at Jeffries Farm. It is stamped, Lewis Verrall, Horsted Keynes, and may be a wagon plate from a Sussex wagon. Verrall is thought to have built, or at least owned, Salisbury Cottages in Chapel Lane, and unusually, they are divided lengthways, unlike most semis. The house facing the recreation ground contains a staircase at either end, and one of these led to the upper storey of the house next door. Tradition

has it, that they were sleeping quarters, used by apprentices or workmen employed by Lewis Verrall.

Village wheelwrights, who worked alongside the smith, are named in directories as: Thomas Martin in 1828; George Ellis in 1845; Ebenezer Pannett 1862-70, and Josiah Smith 1878-1913, who may have worked with or for, Verrall. Josiah's name vanishes from 1913, and from that time only Charles Smith is mentioned, as a saddler (part time). Fred William Smith possibly a son, is named in 1922 as 'motor garage prop.' One supposes that the horseless carriage was by then, sounding the death knell of a long and time-honoured tradition. All that remains of all this activity, stretching back over many centuries is the name of Wheelwrights Cottage, immediately behind the British Legion, and the old iron wheel plate, which still rests against the Forge wall. The little iron-bending machine, which stood in the garden of Blacksmith's Cottage for as long as anyone can remember, has disappeared recently. Yet another part of the parish's history has vanished, along with so many other artefacts and buildings. **Kelly's & Pigot's Directories. 1828-1922.**

Smiths were obviously appreciated in Horsted in earlier times, for a report in the Mid Sussex Times, of a concert held in the National Schoolroom in February 1881, states that it ended with a 'rendition

of The Village Blacksmith, sung by Mr Larter.' Additionally, from the 'Middy' of the same year, an advert reads: Andrew Newnham, Shoeing & General Smith, Horsted Keynes. Iron fencing & gutters, galvanised roofing. Tools, nails, Builders ironwork. Agricultural implements. Another report from 1891 mentions one, George Boys, blacksmith of Horsted Keynes, approached Elias Thomsett of Lindfield in the Anchor Inn at Scaynes Hill, knocked him down three times, and threatened to black his eyes! No reason for the attack was given, but he was fined 5 shillings with 15 shillings costs.

In 1900, a Walter Mason of Horsted Keynes was apparently causing 'an obstruction of the highway' for leaving his horse and cart, tied to a telegraph pole at the Blacksmiths for 38 minutes. The exact time was noted by P.C. Charman who gave evidence that 'several drivers' had experienced difficulty in getting past. Surely Horsted's first recorded traffic jam! Mr Mason told the court that 'he had taken longer at his breakfast than he had intended.' Fined ten shillings.

In May of that year the Relief of Mafekin was celebrated by, 'the worthy sons of St Clements' who roused the village by packing their anvils with gunpowder, and firing them on the Green, in the early evening. This was an old custom announcing the end of a war, dating back to the times of the Armada. I seem to recall this old tradition being upheld in the early 1950's, during one of the village May Fairs, also at Lindfield, (although I cannot recall what that celebration was for).

Worked sporadically throughout the post war years, the last smith, John Hoare-Ward, produced many fine, decorative wrought iron items there, until he finally put out the fire for the last time in the early 1980's, and the little building was converted into a house, and Museum of Native American crafts and artefacts.

Bryan Hale. February 2001.