The Iron Industry at Horsted Keynes.

"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 place.' Camden's Brittania'.
This would have been the scene that anyone visiting the now peaceful area around Horsted mill, would have come across in the 16th/17th centuries.
I am unsure at present of the exact date, when the furnace started here, but bonds were given by Barrington and Anthony Morley in 1554, so it was possibly around this time.
The blast furnace, was introduced into England near the end of the 15th century, and was initially operated in part, by Frenchmen. In 1544 when Letters of Denization were imposed, around forty Frenchmen were named as ironworkers, many of them working in Wealden furnaces.
A Kerrine Jordan, listed as 'Hammerman', married in Horsted church in 1630. Jordan, may have been an anglicised Jourdain, from Norman French? **The Denization Lists, 1544.**

The Lord of the Manor of Broadhurst owned the furnace and adjoining lands, and various leases and wills exist relating to it. For example a lease of 1637/8 shows Sir Richard Michelborne, granting a lease of 21 years to William Streate, for lands surrounding the furnace, whilst retaining rights of entry 'to cut and cord wood, and the taking of mine'.
The furnace was evidently still in operation in the 1650's, making guns, and shot besides household implements. After Michelbornes death in 1656, it passed into ownership of the Lightmaker family, and mention is made of it still working in 1664.
In 1658, the rector of Horsted Keynes, Giles Moore recorded in his remarkable journal, of the purchase from Edward Cripps, 'at the Furnace,' of a fireback weighing 100&3/4 pounds, with the Michelborne arms on it for his parlour, together with another for the kitchen. These are but two of many entries relating to items such as cooking pots, which he ordered from the furnace at various times. **The Journal of Giles Moore 1656-1678. Ruth Bird. Sussex Record Society1971.** Vol 68

The furnace site was somewhere near the present dam at the millpond, at the northern end of the pond bay. Here a stream used to run, from the lake, (called The New Pond, in 1764,) higher up the valley on the track to Broadhurst, which I believe, powered the furnace, but it is now submerged beneath the pond waters. (Which seems to have been created later, by flooding the field it ran through)? I have an old photo taken around 1910, which clearly shows the area to be a meadow.
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 at the time, Mr R Chalmers, believed he had discovered part of the furnace base, although this has long disappeared. I recently discovered a burnt brick, partly encased in molten slag, from the immediate area, which was part of the interior of the furnace chimney. I also unearthed many pieces of beautiful, veined furnace slag of various colours, probably uncovered for the first time in over 300 years.
Wealden Iron. Ernest Straker, London: G Bell & Sons Ltd. 1931.

The raw material used for smelting, was clay ironstone in the form of nodules, dug from pits around the parish. Many of these, now form small ponds in the local woods, and are preserved in place names such as Myening Pit Wood, and Pett, Pitt, & Furnace fields. Indicative map names are Cinder Banks, Great and Little Cinders, Cinder Hill, and Kiln Field.
The furnace usually had a base and hearth of sandstone, with the upper part comprising of a chimney around 15-20 feet high. The ore (or mine) and charcoal was thrown, in alternate layers via the top of the chimney, and brought to smelting point using huge, water powered bellows.
A contemporary source 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 allowed to run from an aperture, at the base of the furnace, into a loam or sand floor, in which channels were formed. The resulting bar of iron being called a 'sow'.

Fuel for the furnace was usually birch, beech, oak, ash, alder, or hornbeam. Interestingly, the small wooded Shaw, running from the furnace site, to Waterbury Castle, is called Alderly Platt, and I have often wondered if this, and others nearby, were originally deliberate plantings to provide charcoal for fuel?
An analysis of charcoal from this site, mentioned by Straker, citing L.A. Boodle of' 'The Jodrell Lab's', (date not given, but early in the 20thc) showed that a good proportion of the timber used during the Stuart period, was birch and beech.
At its cessation, the furnace must have left many men, looking for other employment. Although diversification was a way of life, and countrymen often could and did, turn their hands to many practical jobs, some may have adapted their metallurgical skills to allied trades such as smithing
Directions: From the Green at Horsted, down Burn Hill to the Church. Follow the lane to the left of the church gate to the School. Opposite the school gate, walk down the sunken lane to the Mill & Mill house. Follow the lane around till you come to the path, (1st right) The millpond is visible now. The path runs along the foot of the pond bay, and the furnace area was at the end of this, near the small dam/waterfall. Map ref'.

The Blacksmiths at Horsted Keynes.
'Most famous of all, was the village blacksmith, whose work has been praised in song and 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.

Blacksmiths played a principal part in the evolution of society. Without them, bartering and trade in every conceivable form of tool, and implement necessary for life and work, would not have started. In today's world of mechanisation and factories, its easy to forget that these men who evolved into specialised branches of metalworking, such as toolmakers, gunsmiths, locksmiths, clockmakers, and precious metal workers were at the heart of early village life. The old Blacksmiths forge, conveniently sited at the crossroads in the village centre, is shown on the Tithe Map of 1839, and is named as 'Smithy' on the 25" OS map of 1874, but I believe activities relating to smithing, were probably being undertaken on the site long before this.

In 1619, James Alchim is named as a blacksmith in the village, and in 1662, Giles Moore notes that he paid Old Hackman, (who appears to have been a farrier & general horse doctor, 4 shillings & twopence for various treatments to his horse including, 'drenching', and dressing its feet. He also paid G Hackman, son of Old Hackman, 'at his shop', various sums of money, for shoeing, bridle mending and a pair of hinges. The 'shop' mentioned, would seem to imply a blacksmith's shop somewhere in the village, but whether this means the site where the smithy stands at present, is difficult to state with certainty.
It's interesting to speculate that some of the furnace workers, may have drifted into smithing, but the scant name references of furnace workers/foundrymen stated by Moore, do not appear as blacksmiths of the time, (such as William Young,) who was already in business in the village.

The Albion Iron Works.
A Kelley's Directory advertisement for 1882 reads. **'Verrall. Lewis, general smith, ironmonger & agricultural implement agent & Albion Works; & stores & attendance at Newick & Chailey Market, Chailey'.** This apparently enterprising concern appears to have been owned in whole or part, by Lewis Verrall, and consisted of three sites. **1**. The forge. **2.** The wheelwrights shop, now the British Legion, and **3,** The Old Workshop in Chapel Lane, which is now a small, two-storied house. The forge and wheelwrights are self explanatory, but the role of the Old Workshop is something of a mystery at present. It possessed a well, and a small separate brick structure, with a hearth, which was thought to be employed in heating something, possibly to do with saddle or bridle making/mending, or a strake-tyre chimney. Future research may shed some light on it.
I was given a small cast iron plate recently, which has stamped on it, Lewis Verrall Horsted Keynes, which was thought to have been from an old Sussex wagon at Jeffries Farm.
Verrall is believed to have built Salisbury Cottages, the pair of semi-detached cottages next to the Old Workshop. Unlike most semi's, they are divided lengthways, and the house facing the

Recreation, ground, long the family home of the late Ron Tester, contains two staircases, one of which led to the upper floor of the house next door. It was thought that these rooms were used to house apprentices, or workmen employed by Lewis Verrall.
Village wheelwrights named in directories were George Ellis 1845, Ebenezer Pannett 1862-70, and Josiah Smith 1878-1913, who possibly worked with Lewis Verrall, as, and when, his services, were needed. 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', motor vehicles by then sounding the death knell of a long tradition. All that remains in Horsted Keynes is the name, Wheelwrights Cottage, in Chapel Lane, immediately behind the Legion, and the large, circular wheel plate leaning against the smithy wall. The old iron bending machine, which stood in the garden near the smithy door has disappeared recently, which is a great shame. It stood there for as long as anyone can remember, and is another small part of village history, consigned to the scrapheap.
Directories. Kelley's 1845-1922.

Smiths were obviously appreciated in Horsted in earlier years, for a report in the Mid Sussex Times, of a concert, held in the National schoolroom in February 1881, states that it concluded with a rendition of 'The Village Blacksmith', sung by a Mr Larter.
In addition, from the 'Middy' an advert of the same year reads **Andrew Newnham, Shoeing & General Smith, Horsted Keynes.** Iron fencing & gutters, galvanised roofing. Tools, nails, Builders ironwork, Agricultural implements.
Another report dated 1891, states that George Boys, blacksmith of Horsted Keynes, approached one, Elias Thomsett of Lindfield in the Anchor Inn, Scaynes Hill, knocked him down three times, and threatened to black his eyes! Fined 5 shillings & 15 shillings costs. No reason for the attack was given.
In 1900, Walter Mason of Horsted Keynes was causing an 'obstruction of the highway', for leaving his horse & cart tied to a telegraph pole at the Blacksmiths, for 38 minutes'. Seen by P.C Charman who gave evidence that 'several drivers had experienced difficulty in getting past'. In defence Mr Mason said that he had apparently 'taken longer at breakfast than he intended'. Fined 10s! (50p)

In May of that year, the Relief of Mafekin was celebrated in part 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. I seem to remember this old tradition being upheld, in the early 1950's, during one of the village May Fairs.

The names of most of the 'worthy sons of St Clements', from around 1600 onwards, are documented, and form a fairly continuous line, until the forge's fire was finally quenched.

Bryan Hale. February 2001.