



NEWSLETTER 54 AUTUMN 2011

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LETTER FROM THE CHAIRMAN

Dear Friends

It was a shame that a few more of you weren't able to venture into Surrey for a very enjoyable AGM in July. It was very interesting to visit the Rural Life Centre in Tilford and to witness the firing of their recently reconstructed half-size replica of a Wealden blast furnace. Our congratulations go to Gerald Baker, a WIRG member, who supervised this. Chris Shephard, director of the Centre, gave us a short talk emphasising the valuable work of the volunteers. Who needs the Big Society? as we are all aware of the many volunteers who have given their time up in so many ways without prompting from the government!

The AGM then followed with the usual adoption of the annual report and accounts plus the formal election of the committee and officers. I am sure that we would welcome more of you on the committee if you feel that you would like to help run WIRG. I must emphasise that common sense is often more useful than a detailed knowledge of the Iron Industry although this of course is also welcome! I am very grateful to all the help and support that everyone on the committee gives.

A lively discussion followed concerning the generous legacy left to WIRG by Phyl Pettitt and the necessary raising of the annual subscriptions. The legacy is, of course, for special projects that WIRG would not be able to otherwise undertake. We have some ideas but would welcome further suggestions. A small working party has been formed to consider ideas which we will then put to the committee.

The subscription needs to be increased as the present level does not cover the day-to-day running of the Group especially with the postal increases which seem to be an annual occurrence. We are all aware of the present difficult economic climate but a small increase is unavoidable. We are looking into the question of sending newsletters etc to some members electronically but this is certainly work in progress.

After much consideration of the points raised at the AGM and the administrative difficulties the committee has decided to drop the idea of life membership. We have also decided to keep the student subscription as it is at present. Vivienne Blandford, our hard working treasurer, will be sending out renewal forms with the new rates, plus banker's order forms, earlier than usual so that everything can be put in hand well before the 2012 date. You will also find a small item from her later on in this newsletter.

The new programme of forays has now been distributed and most interesting it looks! I do hope that more of you will be able to take part in these enjoyable, with a purpose, excursions into the countryside. We are also considering a programme of excavations – more of this in the next few months.

I am hard at work writing up the dig at Huggetts Farm, High Hurstwood, with the help, of course, of Dot Meades – it was this excavation that first involved me with WIRG back in the 1980s and I would like any thoughts and photographs that any of you who helped might have tucked away somewhere. I just wish that I had tackled this a few year's ago but hindsight is a wonderful thing!

Henry Cleere and others are giving a presentation on the excavations and research at Bardown at the Winter meeting in the usual venue at Nutley on Saturday 4th February and I look forward to meeting many of you for what promises to be a very interesting afternoon to cheer up that gloomy time after Christmas.

Best wishes for a very happy Christmas and all the best for 2012.

Shiela Broomfield

WIRG NEWSLETTER BY EMAIL
Would you prefer to receive your bi-annual Newsletter with coloured illustrations, and save WIRG the cost of postage?
Let the secretary know your preference.

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NEW SUBSCRIPTION RATES FROM 2012

As has been mentioned in the Chairman's letter we will have to raise the subscriptions as from the 1st June 2012. For the last couple of years it has become apparent that the subscription income is not enough to cover our membership expenses over the course of a year. Therefore we have decided that we must raise our subscriptions to cover the shortfall. From next year the rates will be as follows:

Individual	£9.00
Retired	£8.00
Family	£12.00
Institutions	£10.00
Students	£3.00

It would be appreciated if, where possible, payments are paid by standing order and a form will be sent out, in good time, to enable the change in subscription rates to be made for those who already pay their subscriptions through their bank account and for those who may wish to change from paying by cheque. For the members who have renewed their subscription at another time later during the year we will ask for a renewal payment to be made on the 1st of June. We will also include a Gift Aid form for those who are UK tax payers and have not signed up to this means of reclaiming a small but significant amount of money from HMRC.

Vivienne Blandford
Hon. Treasurer

WIRG AT THE RURAL LIFE CENTRE Summer Meeting & AGM 2011

The Summer meeting and AGM of WIRG took place on 23 July 2011 at the Rural Life Centre, Tilford, about three miles south of Farnham, Surrey.

This venue was chosen - well west of our normal locations and close to the known westerly extent of the Wealden blast furnaces of Coombe, Inholmes and Fernhurst - for its most recent attraction; a half linear scale Wealden blast furnace and tilt hammer but constructed using modern materials and techniques.

Built by volunteers over a period of three years, and with assistance and drawings based on excavated furnaces supplied by WIRG member, the late Reg Houghton, the brick built furnace stands some 15 feet high, is square in section and reinforced with heavy timber ties. The tapping arch and blowing arch occupy two adjacent walls (i.e. at right angles to one another) and in a concession to modern materials, the lintels are made of concrete. The 'Founder's Eye' a pipe piercing the wall of the tapping arch into the furnace stack allows the founder to observe the progress of the smelt. Such is the detail of the construction that two heavy iron hooks are located either side of the tapping arch which in a full sized operating furnace would have supported a cross beam to carry lifting tackle to remove the large iron sow



The half scale Wealden blast furnace

once cast and cooled. Such detail was always one of Reg's strengths.

The furnace has a pair of working bellows driven by an overshot water wheel about 6 ft. in diameter operated by a closed circuit of water pumped from a sump below the wheel. Two sets of three cams on the shaft driven by the wheel lift the base board of each bellow in turn to compress the air. Whilst the clack valves to admit the air to the bellows as they rise are located, conventionally, at the cam end, the nozzle of each pair of bellows passes into a common chamber housing a non-return valve at the tip of each nozzle. The compressed air exits the chamber via a single hole some 50mm in diameter and approximately 750mm distant from the single tuyere in the blowing arch. Despite no positive connection between this chamber and the tuyere, when the bellows were demonstrated in action with a wood fire in the furnace, a considerable flow of air entered the furnace as each pair of bellows was compressed and out puffed flames from the burning wood which had been placed within the stack for the demonstration. While this effect would be less pronounced when the stack was full of ore and charcoal, it showed not only the effectiveness of the bellows but also that the common chamber shared by them did little to even-out the air flow and was more



The bellows operated from below by cams

likely a convenient way of housing the non-return valves to make them available for maintenance and also a means of arresting any sparks that could be sucked back into the bellows should a non-return valve fail in the open position.

The action of the bellows differs from furnaces visited by WIRG in Belgium at Liège and Fourneau St Michel near St Hubert and in illustrations by Diderot (1760) as here the top board of the bellows is pressed down by the rotating cam to expel the air and is returned to its top position by means of counterweights once the cam has passed.

The simpler construction used on the reproduction furnace may well have been adopted in the Weald as it allows the wheel shaft to be located below the bellows instead of above enabling the wheel to be driven by a lower head of water and also significantly reducing the complexity of construction.

Also, in a concession to demonstrate a water driven forge hammer near to the furnace, the shaft of the water wheel continues beyond the line of the furnace to drive a half-scale belly helve hammer, lifted in turn by each of four cams. Normally the forge would be located some distance from the furnace with its own waterwheel, occasionally fed from the same



The half scale belly helve hammer

pond as the furnace, but more often by a separate pond.

The stack of the furnace is lined with firebrick but constructed with a square cross section for ease of build rather than the more usual circular section.

The furnace was demonstrated to members of WIRG by Gerald Baker who had been the leading person in building the replica and raising funds for the project.

So far, only a wood fire has been lit in the furnace to demonstrate its action but there is talk of attempting a smelt using charcoal produced from an abundance of timber cleared from a nearby bird reserve as it is restored to the rare habitat of lowland heath. Ore would have to be sourced from outside the area as the local ironstone was only good for building.

Several members of WIRG doubt the feasibility of successfully smelting in a half-scale furnace as the

volume will be reduced by a factor of eight. But in view of the persistence of the furnace gang in completing the project in just three years – anything seems possible. For a video of the furnace in operation for the WIRG visit see www.youtube.com/watch?v=EQVgTi_y40U-Tube. This is also available on WIRG's own website.

Other Exhibits

On arrival, the meeting was addressed by Chris Shepherd, Director and the only full time employee of the Centre.

He said that the site was originally established in 1973 by a husband and wife team who started collecting farming implements. It was originally called the Old Kiln Museum as the grounds included the site of a former hop kiln, an important industry in the locality.

Today, the museum has some 40,000 items ranging from complete buildings dismantled and relocated on the site, to individual tools. The period of the collection starts in 1750 and continues to 1960, by which time farming machinery generally became too large to be accommodated on the 10 acre site.

There are over 30 buildings including a village hall, a minuscule chapel and the obligatory school room. Also present is a cricket pavilion, a post-war prefab from the 1950s, a back-yard laundry, granary, gypsy caravan, shepherds' hut and wagon shed. A working wood yard with plank saw, a reconstructed Roman pottery kiln and a charcoal burning kettle complete the working exhibits. A steam roller is also in a dismantled state undergoing complete renovation.

A 2-foot narrow gauge railway with industrial rolling stock runs around the perimeter of the site. This normally operates on a Sunday in steam or diesel.

The Rural Life Centre presently has 64 video clips posted on You-Tube. Visit www.rural-life.org.uk and click on Video tour for the first and the thumbnails of the others.

The Rural Life Centre is open March to October 10 am to 5 pm Wednesday to Sunday and Bank Holidays. In winter, Wednesday and Sunday 11 am to 4 pm. Entrance fee £8. Visits by large groups and school parties outside these times by arrangement.

Reeds Road, Tilford, Farnham, Surrey GU10 2DL Tel 01252 795571 e-mail info@rural-life.org.uk
www.rural-life.org.uk

Tim Smith

WIRG COMMITTEE 2011-12

Chairman: Shiela Broomfield
Vice Chairman: Tim Smith
Hon. Secretary: David Brown
Hon. Treasurer: Vivienne Blandford

Brian Herbert Jonathan Prus
Judie English Tony Singleton
Simon Stevens

FORAYS TO THE DUDWELL VALLEY April 2011

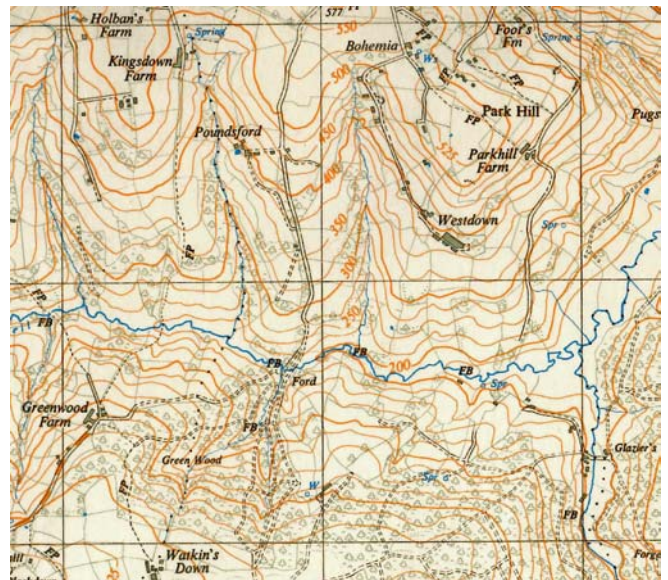
In the 1970s, the newly-formed Wealden Iron Research Group embarked on a study of an area of the central High Weald, recording as many sites as could be discovered there. The results were published in the *Sussex Archaeological Collections* in 1979 and reprinted as an appendix in Cleere & Crossley's *Iron Industry of the Weald*. The study area covered 182km² and 246 bloomery sites were noted there. The Field Group has commenced a project to extend the original study area which will entail exploring in detail an area of 70km² immediately to the east of the original area, extending from the Dudwell Valley east of Heathfield, in the south, to Wadhurst in the north. The search area is defined from west to east by the Ordnance Survey grid lines 60 and 65, and from south to north by 20 to 34.

This foray started at Glazier's Forge and explored three tributary streams running into the Dudwell: two from the south, to the north east of Little Poundsford Farm, and one to the north, flowing south from Bohemia Farm. This is remote country, far from any public road. Here, the River Dudwell has exposed the oldest rocks to outcrop in the Weald. These are the Purbeck Beds of the late Jurassic era, and the succession of strata was particularly noticeable in the deep ghyll south of Bohemia Farm, where repeated layers of shale, shelly limestone and massive sandstone were encountered for about 1km. A very small number of nodules of iron ore were found, which had probably broken loose from one or more thin bands within the strata, but no evidence was found of iron-working, suggesting that the occurrence of ore was considered of insufficient quantity to be worth exploiting.

The most easterly of the tributaries we explored, which flows out of Dallington Forest, amounts to little more than a small gully at times. Three pieces of bloomery slag were found along its course suggesting that a site might lie in the adjacent part of the forest (which we did not, on this occasion, have permission to enter). Nothing was found in the second of the two north-flowing tributaries, which commenced near to the remains of the abandoned farmstead of Scotsham. Our later observations of the massive sandstone outcropping in the ghyll across the valley accounted for the substantial foundations of the farmhouse which were still evident on the commanding site that overlooks what must be one of the loveliest locations for a foray that there is.

In the wood to the west of the Bohemia Farm ghyll there is much evidence of excavation. This may have been for sandstone, there being many blocks scattered among the workings. Some, however, may be for limestone, the Ashburnham estate having carried out extensive lime extraction and burning in this area in the early 19th century. Coppice stools of ash and alder which, by their girth, are probably of considerable age are also to be seen in this wood.

JSH



The Darwell valley (TQ 6321 bottom left)

October 2011

Just three WIRG members, Roger Houghton, Brian Herbert and David Brown assembled for the latest in a series of searches for ironworking sites in the Dudwell valley. Having parked the cars we quickly found the beginning of a deep gully which was the source of the stream we were to follow on the north side of the valley. Brian decided on another route and, as we couldn't see him, Roger and I walked slowly down the gill to allow him to catch up. About half way down we met a man mowing the second of two fields with a push garden mower. "Good exercise," he puffed as we admired the cross-cropped turf.

The geology in the gill was particularly interesting: the lowest and oldest strata of rocks in the Weald. All around was the evidence of where the limestone had been quarried in small pits, and with one very large hole in Stonehole Wood. No bloomery sites and no Brian.

At the bottom of the stream we found Brian who had got ahead of us at some point and had already eaten his lunch. We had a quick bite and set off across the Dudwell and into Green Wood on the south side of the valley. Part way up the stream divided and Brian decided he'd go one way while we went the other. We never saw Brian again, but it had been nice to get 20 minutes with him. Still no bloomery sites, but a number of charcoal platforms which were duly noted. We then moved to the west side of the wood to where I had been shown a possible bloomery site by a local resident when I had been there obtaining permission from landowners for the foray. We found the site with a considerable heap of slag, just above the limestone, but it wasn't clear where the ore had come from. It was starting to get dark by this time so we made our way back to the cars to find a note from Brian who had left an hour before. We clearly weren't up to Brian's pace!

David Brown

WIRG SMELTING GROUP REPORT

Following the success of the Historical Metallurgy Society's conference at West Dean, Sussex (see Autumn 2010 Newsletter), where we produced a small bloom, it was necessary to turn our attention to rebuilding the furnace at Pippingford. After some 36 smelts in the same furnace, but with many repairs and modifications, the furnace has finally disintegrated, with a large hole above the tapping arch where any filling just falls out because it will not



Beyond repair!

bond to the existing, well-fired material.

We have already collected many bags of suitable material for a new furnace, 80% fine sand and 20% clay, naturally well mixed and from an empty pond at Pippingford. To move the necessary $\frac{3}{4}$ ton of material half a mile uphill, and then down again, we called upon the good services of the owners of Pippingford, the Morriss family, who have a large dumper truck, unfortunately double booked to help move equipment for filming in the area but close to where the material was dug. Needless to say, the film company was paying considerably more for the dumper's services!

After a short delay we commandeered the dumper, even with several actors with rifles standing around, but no driver. Here we were fortunate in having Victor Kellett with us, an ex-farmer with no

experience of driving dumpers, but willing to try. After lifting all the 56-lb sacks of material into the dumper he managed to drive it without mishap, despite the absence of a handbrake, getting fairly close to the site as he did not wish to get bogged-down and having to explain this to the filming company. Although we had planned to start building the furnace before Christmas the weather was against us, as it has been ever since.

The new design of furnace is based on the one discovered in Little Furnace Wood, near Mayfield by Valerie Herbert and Dennis Beeney, during a Field Group excavation. It was later fully excavated; an



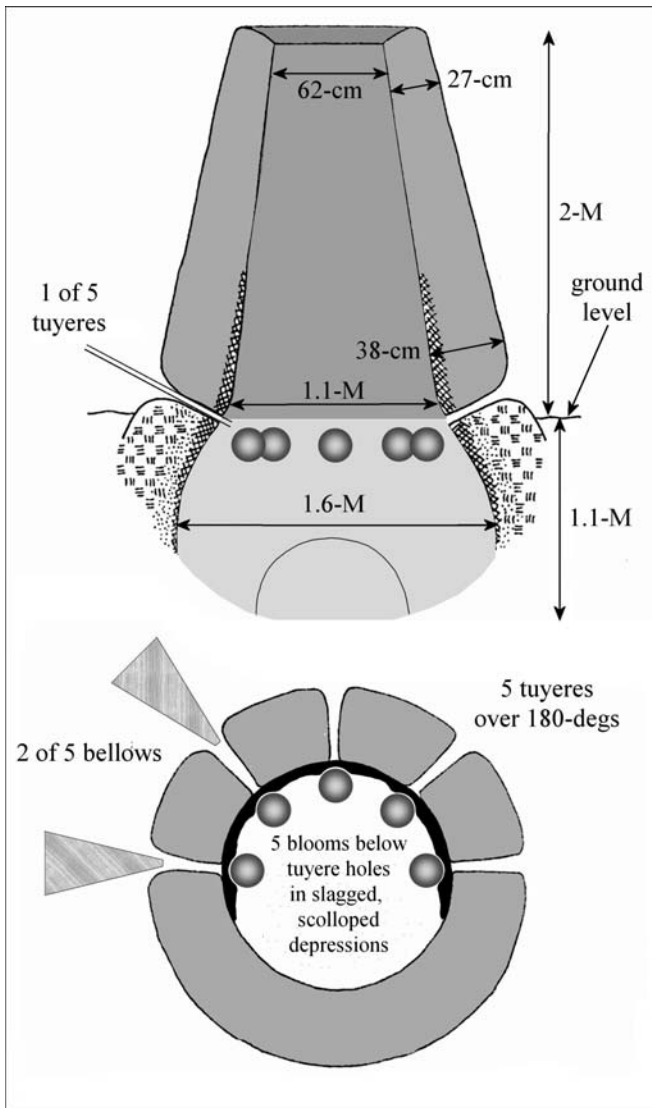
Artist's reconstruction of a Romano-British bloomery furnace at Little Furnace Wood, Mayfield (R. Houghton)

artist's impression is shown below.

Roughly, similar furnaces have been excavated at Laxton, Northamptonshire, in recent years (see diagram overleaf). They may be simply described as a large hemispherical void dug into a bank, with a cutting to gain access, being surmounted by a shaft type furnace, although, being above ground furnace this only survived as debris.

With evidence for five tuyeres, or perhaps blowing holes, towards the bottom of the shaft, and importantly at ground level, it was practical for bellows to have been used adjacent to the furnace. Just below each blowing hole, and at the top of the dome, "scaloped" depressions showed in the slag-covered surface, suggesting that five blooms had formed here; this is exactly where blooms might be expected to form but making it very difficult to access them unless the front of the dome was demolished. Interestingly, the front of the dome of the Sussex furnace was found to be in the process of being re-bricked-up with air-dried bricks, presumably ready for the next smelt.

WIRG's final design is almost complete and is somewhat smaller than those considered above to fit in with the site limitation with regards to keeping the rain and frost at bay. To allow for modifications that will undoubtedly be thought-up, the design allows for the tuyere and thermocouple positions and to be easily changed whilst a scheme for viewing ports is being considered.



The Laxton bloomery furnace (adapted from a diagram by Peter Crew)

Another operating procedure?

Although it may seem obvious that a furnace with five tuyere holes should all operate simultaneously, this is probably not the case because the burden around the tuyeres will get extremely hot and the reduction gas conditions changed drastically. So why not operate the tuyeres one at a time so that in 5-days, say, the dome can be opened-up and the 5-blooms removed. It might be possible to have a spy-hole at the top of the dome to inspect the blooms progress. This scheme does not take into account how the burden is restrained from falling into the dome!

There is still the problem of how to operate this type of furnace with its much larger volume, especially to what use the hemispherical void should be put! With the Laxton furnaces the bellows and tuyeres were place at the bottom of the shaft, much like a normal Roman shaft furnace (although evidence for tuyeres could not be discovered in the Mayfield furnace, possibly because it/they had weathered away). This leaves the question of why bother with a void and to what use it could have been

put, for example: -

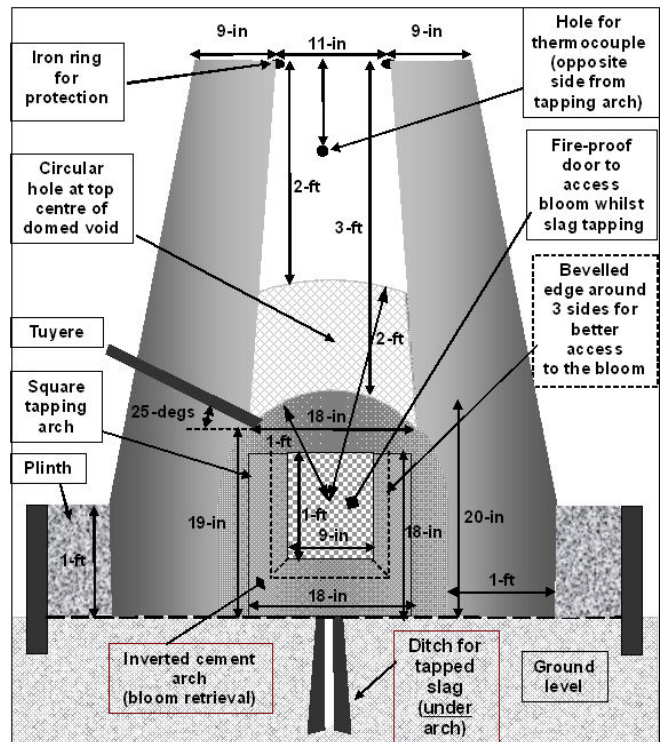
1. The void may have been used for tapping the slag into.
2. There seems little point in filling the void with charcoal, just to be burnt, because it is unlikely to get hot enough to smelt ore, especially as the ore will have already been smelted in the shaft; the bellows being higher up.

Could the void be a forging hearth, with the excess heat rising through the furnace? This might speed-up attaining a suitable forging temperature but the forge would still require bellows when in operation.

Brian Herbert

WIRG'S NEW EXPERIMENTAL FURNACE

The new furnace that WIRG has built is slightly smaller than the Roman bloomery furnace discovered near Mayfield and it has not been built into a bank because the site used on Ashdown Forest is inadequately steep. The design was first drawn to scale so that it could be described mathematically, thus allowing its volume to be calculated. One important modification has been to reinforce the tapping arch, thereby eliminating weaknesses which caused many complicated repairs, ultimately resulting in the previous furnace's failure.



The design for the new experimental bloomery

The above diagram shows a vertical section down the furnace (apart from the tapping arch), with a 2 ft. inside diameter hemispherical dome (4 ft. outside) surmounted by a tapering shaft. Only the domed part

remained at the Little Furnace Wood site, with level ground at the dome's top but with the hillside rising for several more feet. A few incomplete pieces of shaft were discovered around the area during the excavation, so much of the shaft reconstruction is conjectural. The front of the dome had been partially built-up using air dried bricks, whether this was because of a structural failure or to access the bloom is not known.

The bottom of the tapering shaft is 18 in. diameter tapering to 11 in. and is 3 ft. high, slightly larger than the previous furnace; it was thought that tapering the inside of the shaft might reduce the burden jamming on its way down bearing in mind that it expands as it heats up. The shaft wall thickness was reduced with height to reduce material weight, bearing in mind that the burden is less hot towards the top and heat losses less.

With the dome being built at ground level on the WIRG site it means that the bellows must be coupled by a flexible plastic pipe to the tuyere; this is no problem as the Romans could have constructed leather pipes. At the moment only one tuyere will be used so that comparisons may be made with the previous furnace; further tuyere holes can be made with minimal effort using a hollow, home-made drill bit.

Unsurprisingly, it required a small group of dedicated smelters (turned furnace builders) to construct the 2-ton furnace and required 9 visits over 5 months to complete; the actual techniques used will be recorded in the 2012 Spring Newsletter.



The new furnace at Pippingford

First smelt in the new furnace

The first smelt in the new furnace produced a 4-lb (1.8-kg) bloom from 15kg of roasted ore and 15kg of charcoal; this was minimally forged to remove the rough pieces. Sharpthorne ore was used and an

electric blower instead of bellows.

Once lit, some moisture was seen to be escaping from the furnace wall, probably due to its thickness and was the likely cause of the rather lower furnace temperature, despite increasing the blowing rate from the usual 4 litres/second used for the previous furnace to 6l/second.

To stop the charge from falling into the dome, green-wood logs were appropriately placed up to 6-in below the tuyere. Although this seems to have allowed the bloom to form just below the tuyere, as usual, the jet of hot gas from the tuyere did burn the green-wood which may also have accounted for the furnace running cooler than usual as the water boiled off.

A second smelt, using the same procedure might improve our understanding of why the Romano-British used a dome structure below the shaft.

Brian Herbert

WIRG BULLETINS 2ND SERIES ON-LINE

As part of an on-going project to digitise the group's publications, Volumes 1 - 10 are now available in pdf format on the Group's website.

Other volumes will follow.

www.wealdeniron.org.uk/bull2.htm

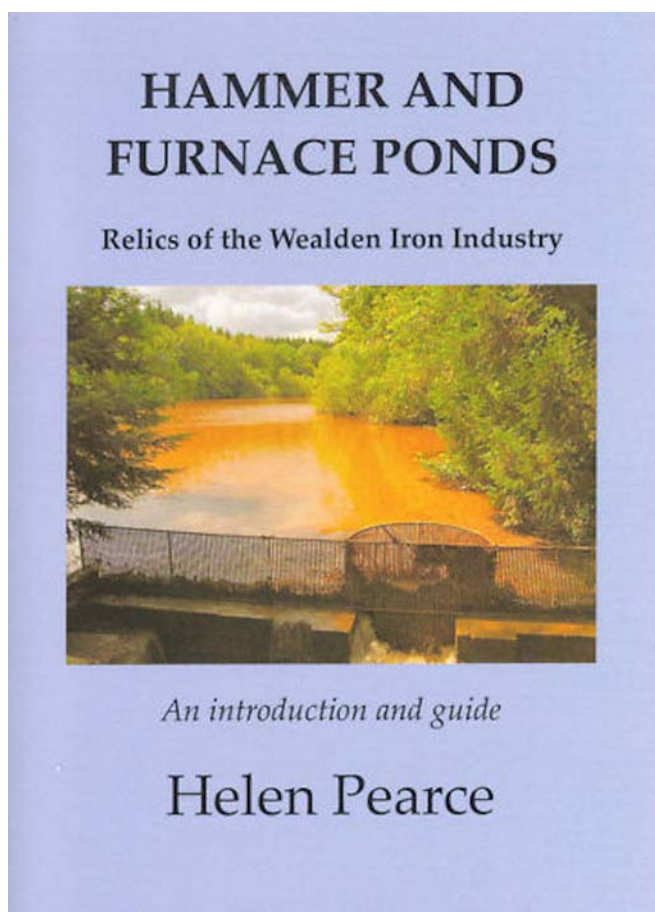
RECENT PUBLICATIONS

Brown, Ruth Rhynas, April 2011, 'Pieces of the Weald in Oman,' *ICOMAM Magazine* [International Committee of Museums and Collections of Arms and Military History], 6, 49-54. Available at: www.klm-mra.be/icomam/icomam/magazine/index.html

It has been said that if you want to find the products of a successful manufacturing area, look where they have been sold. Such seems to be the case in the Sultanate of Oman. In this short, but well illustrated article Ruth Brown examines a number of iron cannon which have a Wealden provenance and which, through a variety of circumstances, have found their way to the Persian Gulf. The earliest, which were probably cast by the Brownes of Brenchley, may date from the 1640s when the East India Company signed a treaty with the Sultan. This gave the Company mercantile rights and, in return, made available English cannon to the Omanis, who were engaged in a struggle to wrest control of Muscat from the Portuguese. Oman was, in the ensuing years, to build up an impressive navy, enabling them to extend their domain to Zanzibar and other Portuguese colonies around the Indian Ocean. It is likely that several guns may have come into their possession through the capture of merchant vessels; guns changed hands often under such circumstances. Also merchants

themselves often sold guns to the parties in conflicts, as they still do today. Some would have found their way onto coastal fortifications, and those in Oman were noted by an English naval officer in 1717. A number of the Wealden guns can be identified as for export by the proof mark, a crowned letter P, near the touch hole. Oman continued to acquire Wealden ordnance in these different ways in the 18th century, and the sources of several guns can be identified by the cast letters on their trunnions. Examples include products of the furnaces at Robertsbridge and Ashburnham. One from the latter, with a proof date of 1790, may be the most recent, although the date of casting and the date of proof may not be same, Ashburnham having probably ceased gun-founding by that year.

JSH



Pearce, Helen, 2011, *Hammer and Furnace Ponds* (Lewes, Pomegranate Press); ISBN 978-1-907242-15-1; 96 pages; 15 col. illus., 26 bw illus.; index; £8.99.

This attractive little book, presaged by the appearance of its complementary website (see Spring 2011 Newsletter), is a handy guide to sites of post-medieval ironworking that are publicly accessible in so far as they can be seen from roads and paths, although their former working areas may be private.

A thorough, but succinct introduction gives the reader the background necessary to understand the processes involved and an outline of the history of the iron industry, and leads to the main body of the

book, which is a gazetteer of sites listed alphabetically by county. For each site, details are given of access and, where known, a short history of the works. The book is well illustrated, not only with pictures of many of the ponds, some in colour, but also of other products of the Wealden iron industry. There is also a handy list of museums where there are displays or artefacts related to the industry, and a page of societies with linked interests. The book is concluded with a bibliography, a useful glossary and an index

Small and slim enough to be slipped into a pocket or handbag, and modestly priced, this user-friendly guide is ideal to be kept in the car for reference whenever one is out and about in the Wealden countryside.

JSH

NEW CLASSIS BRITANNICA SITE IDENTIFIED

Members of the Hastings Area Archaeological Research Group (HAARG) have been excavating a site near Boreham Bridge, Ninfield, which WIRG members visited twenty years ago. Quantities of Roman pottery and building materials have been unearthed, and of special significance are a substantial number of fragments of stamped tiles of the Classis Britannica –the British Fleet. The role of the Fleet in the iron industry has been shown by their presence at the sites at Beauport Park, Bardown and Little Farningham Farm, Cranbrook, as well as at other, non-iron sites such as at Dover, Richborough and Lympne. Lynn and Kevin Cornwell report that a number of the stamps on the CLBR tiles are different to those found on other sites. It is likely that this site may have been a port onto the tidal inlet that is now Pevensey Levels, but excavations this year are beginning to reveal evidence of iron working as well. Work there will continue.

JSH



HAARG excavations near Ninfield

CORRECTION - BULLETIN 31 (2011)

The Grid Reference in the title of the article on Witley Park Furnace (page 23) is incorrect. It should be SU 9275 3740.

A MEMORIAL FIREBACK FROM WITHYHAM and a mystery waiting to be solved

Beneath the choir stalls in Withyham church lies the grave of Richard Graye, rector of the parish, who died in 1582/3. His tomb is covered with an iron memorial plate bearing an embossed inscription. Apart from a few inches of one end, it was last seen in the 1960s when the stalls were constructed and, as far as is known, no photograph was taken of it when that opportunity arose.

In volume 23 of the *Sussex Archaeological Collections* (1871, pp.320-1), F. Arnold wrote that a fireback bearing the same inscription had been seen at the ruined former palace of the Bishops of Winchester at Wolvesey in that city. No measurements were given but, in a comment following the note, the editor of the *Collections*, the Rev. Edward Turner, of Maresfield, recalled seeing a similar plate with the same inscription at a shop in Sompting some 50 years previously (i.e. in the 1820s). The Rev. Charles Sutton, in his *Historical Notes of Withyham...*, of 1902, noted the Sompting fireback (presumably from Turner's comment) but had clearly seen the Wolvesey plate as he was able to give its measurements - 3 feet by 2 ft. 6 inches. Nearly 20 years later the then rector of Withyham, H. W. Layng received a letter from a Mrs Featherstonehaugh, who had seen the plate in a shop in "Shoreham or Lancing," as Layng recalled eight years later, and wondered whether the rector would like to have it for his church. Layng replied that, as they already had one "embedded in the floor of the chancel," he would decline her offer.

In 1929 Miss Emily Wilde, Curator of Winchester Museum, perhaps fearing for its condition in the open air, wrote to the Bishop of Winchester seeking his consent to take the Wolvesey plate into its care. The Bishop agreed and, within a short time, the plate was reported to have been transferred.

The re-use of a memorial inscription on a fireback is better known from the case of Anne Forster. Her epitaph, cast onto the iron slab that covers her grave in the chancel of Crowhurst church, near Lingfield, in Surrey, was copied on at least eight firebacks made in the years immediately following her decease in 1591/2. Two of them have been mistakenly displayed in other churches, at East Grinstead and Ardingly, and one is in a public house, The Six Bells, at Billingshurst. The Sussex Archaeological Society holds four in its collection but the whereabouts of the last, and largest, is not known to the author at present.

In September 2010 the present rector of Withyham received word that a fireback referring to Richard Graye had been passed erroneously to the church at Northiam from a source in Lancing. Realising that the indistinct inscription actually spelled "Wythiam," they had realised where it belonged. Measuring 847mm wide by 840mm high, it duly arrived at Withyham where it remains. There seems no doubt that this fireback is the one



The Withyham Fireback

mentioned by Edward Turner in 1871, which was offered to Withyham in 1921. As can be seen on the photograph, the lettering is decidedly Roman in style, albeit *sans serif*. Although the original graveslab is no longer visible, a nearly contemporary graveslab that had been removed from Withyham church is now in Anne of Cleves House, in Lewes. It is from the grave of Robert Baker, who died in 1585, and the style of lettering is very similar. Baker was the ironmaster of Hamsell furnace and was also the executor of Richard Graye's estate, so it seems very probable that Baker's ironworks were the source of both his and Graye's plates.

Why, then, was another fireback bearing Graye's epitaph in Winchester? The answer may lie in the fact that a later rector of Withyham, Brian Duppa (incumbent from 1626-38), became Bishop of Winchester (from 1660-62) and may have taken the plate when he left the parish.

And what of the Winchester fireback? It has disappeared from the collection of Winchester Museums; does any one know its whereabouts?

JSH

FIELD GROUP

Forthcoming Forays (note change*)

- December 3rd - Dudwell Valley study area
- January 14th - Brede High Wood*
- February 11th - Darwell Forest
- March 10th Crowborough Warren survey
- April 14th - Dudwell Valley study area
- May 19th - Review and planning get-together at Foresters' Arms, Fairwarp

If you are not already on the Field Group mailing list and would like to be, please contact David Brown (contact details on back page)

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Contributions for next year's Bulletin should reach David Crossley by 31st March 2012 (for contact details see next column)

TEBBUTT RESEARCH FUND

Grants are available towards research into any aspect of the Wealden Iron Industry or subjects pertaining to it. Applicants may be individuals or groups, and the application can include any associated expenses, such as travelling and photocopying. The applicant should write a letter giving details of themselves together with relevant information concerning the research envisaged.

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EDITOR'S NOTE

Thank you for your contributions and please keep them coming. Newsletters are published in March and November each year. Items for publication, normally not exceeding 500 words, should be received by 14 February and 14 October, respectively, for inclusion in the forthcoming issue. Please send by email preferably, by CD or hard copy; I can work with most PC formats. Line drawings and photographs are welcome (colour or monochrome; the newsletter is printed in monochrome but is published later on the internet in colour). Please send them separately, not embedded in the text. Digital images need to be at least as big as their expected published size (column width 86mm), ideally at 300 dpi or more.

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