

NEWSLETTER NO 42 AUTUMN 2005

Editor: Dot Meades, Brackenside, Normansland, Fairwarp, Uckfield, E Sussex, TN22 3BS. Tel: 01825 712367 Email: <u>meades@treeuk.com</u>

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ANNUAL GENERAL MEETING

Our annual general meeting was held at Westham, near Pevensey on 23rd July 2005. It was pleasing to see so many long-standing colleagues and supporters.

Dr Jonathan Coad spoke on "The architecture of Royal Dockyards and Ordnance Yards", a fascinating and very detailed résumé of the part played by the Chatham, Portsmouth and Plymouth, in supplying and fitting out the Royal Navy over many years. Further yards were established abroad in the 18th century at Malta, Antigua and Nova Scotia. We learnt how the facilities in England were gradually updated and replaced, brick buildings succeeded those made of wood, which were sometimes destroyed by fire. Labourers had to move huge quantities of spoil by hand when new docks were laid out. Slides illustrated the manifold activities that contributed to the work of the dockyards. Perhaps the most memorable of these was the last one - of a huge pyramid of cannon

balls, which dwarfed the men who had been detailed to clean and keep them in good condition, ready for action; one wondered how many had been cast in the Weald.

There followed the business part of the meeting. The main changes were that our Chairman Jeremy Hodgkinson resigned and Shiela Broomfield was elected in his place. Dot Meades also resigned, to allow Jeremy to take her place as Vice-Chairman. Dot remains on the committee and will continue to edit the newsletter for the time being. Other members were re-elected. We welcome Ashley Brown as treasurer.

The rest of the business went forward as expected, with an excellent lunch followed by an afternoon visit to Pevensey Castle. The Pevensey Gun attracted much discussion, led by Jeremy Hodgkinson. Dot Meades, who has a long association with the castle, was able to show its various features to those who wished for a tour. There were good explanatory displays in one of the towers, showing the development of the castle through the ages.

DMM

A NOTE FROM THE CHAIRMAN

Dear All

This time last year I had no idea that it would be me writing this! As many of you are aware Jeremy Hodgkinson decided to step down as chairman of WIRG after 24 years and, much to my amazement I was asked to take over from him. What a daunting task but one which I am taking very seriously and hope that I can, in some way, follow in his footsteps although I do not intend to stay for 24 years! This year's AGM was a much better day weatherwise than 2004 and many of us enjoyed meeting at Westham Village Hall for an interesting talk by Jonathon Coad on the Architecture of Royal Dockyards and Ordnance Yards. This was followed by the annual general meeting when I was elected as chairman, Jeremy as vice chairman and Ashley Brown as treasurer. Unfortunately no one took up the offer to join the committee - we really do need more people to help so that the committee can continue to reflect the needs of the membership. Please think about this and contact me for further details. It is very easy to be co-opted for this year committee meetings are held about three monthly at various committee member's houses and are always very interesting and informal.

At the end of the formal business of the AGM and in recognition of his long-standing contribution to WIRG as its chairman for so many years Jeremy was presented with a splendid hand-coloured print made by Reg Houghton, showing a blast furnace. At a subsequent committee meeting Jeremy was given a small album of photographs – if any of you have any action photographs of him over the years please let me have them. We have the technology to scan and print them here so any originals will be returned in pristine condition!



L-R Reg Houghton, who drew and hand-coloured the print, Jeremy Hodgkinson the outgoing Chairman and Brian Awty our President

More excavations at the site of Little Furnace Wood took place in October and are reported later in this

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newsletter. Full details of this and the Forays for this winter can be found on the WIRG website; a Foray List is also here on page 12. The field group is another way of meeting likeminded people with a great interest in the iron industry. Details of the winter meeting are included with this newsletter and I do urge you to attend – it will be good to put names to faces!

Best wishes for Christmas and the New Year

Shiela Broomfield

OUR CHAIRMAN HONOURED

As some members may not know Shiela personally, it seems an appropriate time to write something about her in the newsletter:

Shiela Broomfield, has recently been elected as a Fellow of the Society of Antiquaries, an honour that has been richly deserved for her services to archaeology.

She has been active in archaeology since joining the City of London Excavation Group (later the City of London Archaeological Society) in 1964. Since then, she has helped to excavate numerous sites in the City and the outskirts of London. At Wroxeter, she attended two courses in archaeology with notable archaeologists Graham Webster and Charles Daniels, which she describes as "a fantastic introduction to all aspects of archaeology".

Shiela met her husband Chris in 1966 in the arena of the Royal Albert Hall during the Prom Season. She soon introduced him to archaeology and that and music and have since been of major importance to both of them. After her marriage in 1968 she moved to Kent and her daughter Elizabeth was born in 1972. She remained in touch with LAS and in 1978 became secretary and treasurer of the London Archaeologist. Meanwhile, she had joined the Kent Archaeological Society and Tonbridge Historical Society, taking part in various excavations in Kent and East Sussex, including Garden Hill, an Iron Age hill fort. Shiela first encountered WIRG when she came to help in the excavation of a site at Huggetts Farm, High Hurstwood, where iron slag and medieval pottery had been found. When our supervisor moved to Canterbury in 1979, Shiela and I had perforce to take over the direction of the dig. She became a member of WIRG and was soon invited to join the committee, becoming its secretary until 2002, treasurer 2202-2005 and now chairman

Other notable appointments came from her involvement in setting up and running CBA SE, eventually becoming its chairman until 2002. She also joined the Council of Kent Archaeological Society, became its membership secretary and a member of its various committees; she represents KAS on the Standing Conference on London Archaeology and belongs to many other local and national archaeological organizations.

WIRG is fortunate to have found a new Chairman with such a wealth of practical and committee experience. Apart from all of this, she is a kind and well-balanced person, who loves her pride of cats (no ordinary moggies these) and who enjoys music, books, embroidery and travelling in Europe. She likes gardening too, although admitting to a preference for digging on archaeological sites!

DMM

FIELDWORK AND EXCAVATIONS

Excavations at Little Furnace Wood, Mayfield

Since the last report (Autumn 2004 Newsletter), the excavation of the smelting furnace has been completed. Exploratory trenches have been opened up in a number of locations across the site, the most significant of which has led to the discovery of an extensive ore-roasting hearth. These are not commonly discovered on iron-working sites, possibly because they may have been situated some distance from the smelting areas. Such is the case at Little Furnace Wood, where the hearth lies at least 50 metres away from the furnace that has been excavated. The hearth was formed in a shallow pit 4m long by 3m wide, which is one of the largest

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roasting pits recorded. In the bottom of the pit several charred logs remained. A sample from one of these logs has produced the second C14 date for the site -130AD - 260AD at 95% probability – which is roughly contemporary with the C14 date of the smelting furnace.



Ore-roasting pit showing remains of logs in surrounding heat-reddened clay at base of pit

The opportunity to scan the site with a magnetometer gave rise to several 'hotspots' which have been followed up by test pits. Because of the wooded nature of the site, it has not been possible to carry out a grid survey with the magnetometer. One of the hotspots lies just to the west of the furnace, and on-going excavation is beginning to suggest the remains of another smelting furnace.

In addition to excavation, the site is being thoroughly surveyed. A student from the University of Sussex has been taking cores, sampling for trace elements of iron ore contained in the smoke from the furnaces operating on the site.

During the summer the property changed hands and we are grateful to the new owners, Mr and Mrs O'Neil, for the interest they have taken and the support they have given.

JSH

A Possible Middle Iron Age bloomery

A date in the Middle Iron Age has been arrived at for charcoal recovered from a small trial excavation on a bloomery site carried out by the Field Group in Cullinghurst Wood, Hartfield in December 2004. A sample was sent to the University of Groningen in the Netherlands, and a calibrated date of 750BC – 350BC at 95% probability has been given by them. This suggests a possible date more than 200 years earlier than the earliest known ironworking sites in the Weald. Obviously, one cannot rely too much on a single C14 date, so further fieldwork will be carried out to see if corroborating evidence can be found.

Untypical slag found at the site was what prompted the need for carbon dating. All of the pieces found showed signs of having dripped downwards rather than flowing horizontally, the more typical type found in the Weald (see R)



Accumulated slag drips from Cullinghurst Wood

JSH

LETTERS

Margaret Willmott

Longstanding members may be interested to have news, albeit rather sad news, of Margaret Willmott:

Dear Mrs Meades

I am writing to you on behalf of my step-mother, Margaret Willmott. She is becoming rather frail, and her eyesight is very poor. Sadly this means that she has become unable to read the WIRG Newsletter. She was going to write to you herself suggesting that you stop sending the newsletter as she cannot read it, but writing the letter was too great a struggle. She is grateful for all the previous editions which you have sent, and feels guilty asking you to stop, but feels it may now be the best thing to do. She has happy memories of my father going out looking for furnaces and pits, and remembers how excited he was about finding a boring bar. The details of the iron are fading, but she has greater recall of the social side of WIRG and gathering for tea after a foray.

Whilst knowing next to nothing about Wealden iron, I feel that WIRG is almost part of my life, having seen and heard about it over many years. From looking at your last newsletter you are clearly going from strength to strength. We all wish you well in your ongoing research.

Yours sincerely Andrew Willmott

Margaret Willmott and her husband Philip were very much a part of the early activities of WIRG when Philip was our treasurer. This was an exciting time with the excavation of two blast furnaces and a boring house at Pippingford, followed by the timely discovery of the boring bar at Chiddingly which Andrew mentions. Philip's early death affected us all. We are very sorry to hear that Margaret is so unwell and I have sent her our best wishes

DMM

Prince Rupert's Patent Guns

Dear Dot

Thank you for an interesting Newsletter No 41. May I make a couple of small observations on the piece

by Jeremy Greenwood on Prince Rupert's Patent Guns.

First, I think that the date 1642 on page 4 could be a "typo"?

Second, Jeremy claims that this gun from the Stirling Castle and the others delivered by Thomas Westerne, Lord Ashley and Partners, John Baker and William Benge are the guns cast by the Brownes in 1677-8 "on spec". The problem with this suggestion is that there are certain differences in decoration between the Browne guns and those of Western, Ashley and Baker that need examination.

The buttons on Browne guns are of a distinctive pattern, as are Westerne's and Baker's are different again and larger than the Browne button. The gun from the Stirling castle has a Westerne type button. The Brownes cast their guns with as indented ring (reverse astragal) at the end of the second reinforce. The Stirling Castle gun does not have this. The gun does have Thomas Westerne's initials at the vent, as was his practice.

It is just possible that John Browne or his widow decided to cut the indented ring, rather than cast it in, when they turned the gun and that the gun came into the hands of Thomas Westerne before it had been turned and that he, Western, converted the button and at the same time cut his initials.

The final piece of decoration that I think makes it most unlikely that the Brownes cast this gun is the unfinished Cipher block on the second reinforce. This unfinished Cipher is that of James II, who came to the throne some eight years after John Browne had cast his guns "on spec". On some of these later Nealed and Turned guns it is possible to see the outline of the "JR" (see fig 11 in Sarah Barter Bailey's excellent Monograph).

May 1 suggest therefore that this gun, from the Stirling Castle, was in fact cast by Thomas Westerne in 1688-9 and that it was not politic to finish the cipher in the new reign to that of the old. There do not seem to have been any secrets left by the 1680s. Thomas Western was talking to the Venetians about Nealed and Turned guns in 1685 and John Baker had Hamsell Furnace back from the Browns set up for Nealed and Turned guns. Two

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other points come out of this that need airing. Firstly John Browne was producing his guns at Temple Mills on a tidal section of the river Lee in the 1670s and the raw material that he used was rough iron guns. He must therefore have been using an air furnace / foundry as he would not have had a continuous flow of water for his bellows. If we look back to when the family was producing guns of "Fine or Special Metal" from 1626, it would have needed to be an air furnace at that date so the expertise was there.

The second point is that Prince Rupert's Patent Guns were, I quote "truly bored". This can only really be achieved if the gun rather than the boring bar or drill is turned and we know that the Prince Rupert guns were turned. It would seem that Johann Maritz's invention of the horizontal boring mill in 1715 was preceded by some 45 years by Prince Rupert's invention.

Perhaps you could run this past Chairman Jeremy for his comments and maybe he can throw some light on the furnace where Lord Ashley and Partners produced their guns and take me to task for suggesting the early date for an air furnace.

Yours sincerely

Charles Trollope

JSH says he has nothing to add. Perhaps someone else might like to comment?

DMM

RECENT PUBLICATIONS

P. Craddock & J. Lang, 'Charles Dawson's castiron statuette: the authentification of iron antiquities and possible coal-smelting of iron in Roman Britain', *Historical Metallurgy*, 39, 1 (2005), 32-44.

In his seminal work, *Wealden Iron*, Ernest Straker illustrated an iron statuette allegedly found at the Beauport Park Roman ironworking site. The figure had been acquired by Charles Dawson, purportedly having been dug up in 1877. Dawson subsequently took the statuette to the British Museum and having claimed that it was of cast iron, it was displayed at a meeting of the Society of Antiquaries in 1893. In

fact, prior to the meeting Dawson had submitted it for analysis to Professor Roberts-Austen, who declared the at meeting. to Dawson' disappointment, that it was made of wrought iron. Several eminent members of the society added to Dawson's despair by expressing the belief that it was a modern copy. Further analysis showed that, in fact, it was cast iron, so Dawson included it in an exhibition of Sussex iron that he put on in Lewes. When Straker published his monograph thirty years later, he included it, together with Dawson's description, though not without a guarded comment on the ease with which fake objects could be passed off as genuine. All subsequent analyses, including that of the authors of this paper, have concurred with the view that the statuette, which is in Hastings Museum, is made of grey cast iron. The question as to whether it is Roman has lingered, with the prevailing view being that the Romans did not possess the technology to cast iron.

Of added interest is the existence of another iron statuette, which was also found at Beauport Park. but in 1976 by Alan Scott, who is a member of WIRG. This also appears to be made of grey cast iron: that is cast iron where the carbon content is predominantly in the form of graphite. Straker's cautiousness regarding the inevitable doubts that attend the discovery of such objects is pursued by the authors who go on to examine issues such as the possible determination of the age of such objects, and other metallurgical clues as to their authenticity. The possible radiocarbon dating of the carbon present in iron is considered, but this is complicated by the fact that the carbon in iron may not only derive from the fuel, but may also originate in the chemical composition of the iron itself, causing the date to range from one contemporary with the charcoal in the fuel to sometime in the Cretaceous period (in the case of the Weald)! Analysis of the corrosion properties can also give indications of the possible provenance of objects. These sort of tests applied to the two statuettes suggested that they both had been made from coke-smelted iron, making it very unlikely that they originated earlier than the beginning of the 19th century. However, cast iron is not entirely unknown in the archaeological record of Roman Britain. A site excavated in Cheshire in 1904 produced convincing

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evidence in the form of a small piece of cast iron together with slags with a chemical composition which matched that of the iron.

Inevitably, the association of one of the statuettes with Charles Dawson, whose principal claim to fame was the Piltdown forgery, leads to speculation as to the circumstances surrounding the statuette's provenance. The dark colouration of the figure and the presence of chromium in its analysis suggested to the authors the use of potassium dichromate, which Dawson used on the Piltdown fragments 'to harden the bone'. Whether Dawson was complicit in an attempt to deceive or whether he was duped will probably never be known. Whenever his name is mentioned in connection with some antiquity or other, a question mark hangs over its authenticity.

This paper is written for a metallurgical audience, but for a non-metallurgist, what could have been a dry read is informative and, at times, entertaining.

JSH

Peter King, 'The production and consumption of bar iron in early modern England and Wales', *Economic History Review*, LVIII, 1 (2005), 1-33. Appendices, charts and tables.

This paper condenses part of Dr King's thesis, The Iron Trade in England and Wales 1500-1815: the charcoal iron industry and its transition to coke (University of Wolverhampton 2003). Most studies of the iron industry have concentrated on pig iron production derived from compilations of numbers of blast furnaces. Important assessments have been made as far back as the 1950s, by Flinn, and more recently by Hammersley and Riden. Variations in furnace capacity and campaign length have meant that estimates of production cannot be based on simplistic formulae if a true assessment is to be arrived at. However, the main product of the iron industry was not pig iron but bar and rod iron made in forges. The Weald was somewhat of a special case in that its bar iron industry, which was its mainstay until the first part of the 17th century, was later eclipsed by ordnance production; a rarity elsewhere in the country.

Apart from in the Weald, bar iron was principally used for slitting into rods for nail making, and for smiths to manufacture locks, hinges and edged tools. It was made in forges using the finery process. Because of its importance as the main source of usable iron, bar iron is more useful as a measure of the size of the industry than pig iron. No national estimates of bar iron production have been attempted hitherto. Problems in arriving at such estimates lie in having reliable lists of forges and their outputs, which varied according to the number of finery hearths. Separate estimates for each forge are therefore necessary to reach a reliable total, and such estimates are difficult for the 16th and 17th centuries, making a reliance on averages inevitable. Also, figures for the Civil War period are difficult to assess.

Bar iron production in the Weald using the finery process began in the 1490s but remained as little as 1000 tons per year until the 1540s. From then on growth was rapid, reaching a peak in the 1590s of over 9000 tons a year (higher and later than estimated by Cleere & Crossley). This figure declined to about 7500 tons in the 1630s and to less than 3500 tons in the 1650s, some of it due to increasing imports of Swedish iron into London, the main market for Wealden bar iron. Penetration of the London market may also have been effected by West Midlands ironmasters in the same period. Production by bloomeries had continued in some parts of the country after the introduction of the finery forge, and new processes, such as potting and stamping, and puddling, began to be introduced in the second half of the 18th century, leading to a rapid growth from the 1780s. Both are discussed.

Calculations of pig iron consumption in forges can be made by working back from bar iron production. An element then needs to be added for cast iron production, which varied from furnace to furnace, but which, with the exception of the Weald, was a relatively small factor overall. Comparisons with figures arrived at by Riden in 1977 show the importance of having as full a picture of the number of units of production as possible; a problem that has dogged compilers of statistics about the state of the iron industry since Ashton in the 1920s.

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In the 15th century significant amounts of iron were imported from Spain, reaching a peak in the 1530s. From the 1560s to the 1630s England was largely self-sufficient in iron, until Baltic iron began to be imported. This grew considerably after the 1650s. After the 1730s imports from Russia also increased substantially. Bar iron was not exported in significant quantities until the late 18th century, but there was a growing trade in wrought iron goods, such as nails, much of which was shipped to colonies in North America and the Caribbean.

Domestic consumption of iron can be calculated by combining bar iron production and imports, less exports. In the 16th century consumption per head rose from 4¼ lbs. per year to 9 lbs., although it is not clear how this growth manifested itself. Thereafter it only grew to a little under 11 lbs. per year in the next hundred years, and to about 16 lbs by 1760.

Major growth in the iron industry in the early modern period reflected changes in technology. The first period of such growth, from 1540 to 1620, was stimulated by the introduction of the indirect process in place of bloomeries. The second period, identified as the Industrial Revolution, resulted from a series of developments which culminated in the new forging processes using coke.

This is a well-argued paper which deserves to take its place as the most recent in a long series of such studies over several decades. Its great strength lies in the graphic display of the statistics Dr King has compiled, accompanied by the appropriate tables of figures. Available separately on the internet (see below), the spreadsheets from which the charts are derived itemise the detailed data that the author has extracted from a wide range of primary sources. The sources themselves, and the methodology, are discussed in appendices. The Economic History Society's policy of using footnotes means that endless turning of pages is rendered unnecessary, and there is also a full bibliography.

For access to the data, go the following link: <u>http://www.ehs.org.uk/ehs/Datasets/Assets/EcHR58</u> <u>.1PKing.doc</u> JSH

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AN ASHBURNHAM FIREBACK

During a recent visit to Newbury museum, in Berkshire (as was), I was delighted to come upon the fireback illustrated here. The monogram 'AN' at the base shows it to have been a product of the furnace at Ashburnham, and in size and thickness it is similar to other 'Dutch' style firebacks from the same source, of which there are good examples at Church Farm, Penhurst, and in the author's possession. Two rare, surviving pattern boards for some of these reside in Anne of Cleves House Museum, in Lewes, and the Penhurst examples are recorded as being among the last castings made at the furnace before it closed in 1813.

Where the Newbury example is particularly interesting is in its subject matter and in the decoration at the top of the plate. Similar firebacks from Ashburnham have classical subjects: Hercules and the Hydra, Aeneas escaping from Troy, and Phoebus Apollo. On this example, the figure is more enigmatic. A hairless, naked man, holding what appears to be a short baton in his left hand; he is reminiscent of a relay runner. Perhaps he is an athlete; the ancient Greeks competed in races in the nude. Perhaps he is Pheidippides, supposedly carrying the good news of the Athenian victory at Marathon (although apparently Herodotus wrote that he was running to Sparta to get help). But why is he hairless? Alternatively, he could be Adam, but why the baton? The possibility that he is Adam is supported, to some extent, by the decoration at the top of the fireback, where two serpents are symmetrically arranged. The other comparable examples from this furnace all have entwined foliage above the typical double-frame setting for the subject. Most familiar on the tops of 'Dutch' style firebacks are a pair of fish, but serpents are not unknown.

The quality of the casting in this example at Newbury is particularly fine, with the anatomy of the figure very well delineated and the metal showing a consistency and care in casting which is rare in the production of firebacks.



JSH

IRON SMELTING AT THE WOOD FAIR

Regular visitors to the East Sussex Wood Fair, which is held at Bentley at the end of September, will be familiar with the archaeological reconstructions of ancient skills and practices by members of the East Sussex Archaeology & Museums Partnership (ESAMP). In addition to pottery making, corn milling and cloth weaving, they have demonstrated bronze casting. It was only natural, therefore, that they should want to try their hand at iron smelting.



Members of ESAMP visited the experimental smelting team's furnace at Pippingford, and the excavation at Little Furnace Wood to glean an understanding of the techniques they should use. With raw materials for building a furnace and the ore to smelt collected with the help of Brian Herbert, and lengthy discussions about the archaeology and practice of iron smelting with Jeremy Hodgkinson, ESAMP were ready to give smelting a try.

They based their furnace design on a scaled-down version of the furnace excavated near Mayfield, and bravely made their first attempt to make iron in front of a crowd of interested visitors to the Wood Fair. Although their success was modest – they did produce a small bloom – ESAMP are all 'fired up' to have another go, and have since visited the excavation site in force to see what a real furnace looks like at first hand.

JSH

NEWS FROM ELSEWHERE

THE HENRY CORT SCULPTURE PROJECT IN FAREHAM By Tim Smith

The Henry Cort Millennium Exhibition is themed on the historic trades of the market town of Fareham, Hampshire. Thirteen wrought iron sculptures line the pedestrianised shopping centre in West Street, set off by sympathetic street furniture and stone paving.

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Fareham, located on the west side of Portsmouth Harbour, had historic trades associated with puddled iron, ship chandelling and livestock.

At nearby Funtley ironworks, Henry Cort developed the technique of refining pig iron by 'puddling' in 1784, a process that lead to the production of cheap wrought iron, much needed for the Navy at Portsmouth. Indeed, it can be argued that its development was crucial to the defeat of Napoleon at Trafalgar in 1805.

Henry Cort was born in Lancaster in 1740. His links with Hampshire date from 1774, when his wife inherited business interests in the County, including Funtley ironworks, from her uncle, William Attwick. Attwick had a contract with Portsmouth Dockyard for the supply of mooring chains and other iron naval stores. The ironworks at Funtley had been in operation for almost 200 years by this time, having been initially the property of the Earl of Southampton.

Henry Cort made major improvements to the works, even considering changing the power source from a water wheel to a steam engine, although this did not prove practicable. He undertook experiments in an attempt to improve the quality of wrought iron, which in England was poor at this time, and to find a way of producing it cheaply. The processes, which he patented, were for rolling bar with grooved rolls in 1783 and for fining (or puddling) in 1784 using a coal fired reverbatory furnace, thus replacing the use of expensive charcoal. Soon the navy stipulated that all iron produced for their use had to meet Cort's standards, trials having proved it of superior quality to that available from other sources. Before Cort developed his processes, England imported massive quantities of wrought iron, mainly from Sweden and Russia. Within a decade of his patents, England became a major exporter of wrought iron.

With this in mind, artist blacksmiths across Europe were invited to submit designs for the sculptures, to be made using only the techniques, which would have been available to Henry Cort. 120 artists submitted drawings and 12 were chosen by a panel of 13 including Ms Amina Chatwin, the author of a book on the art of blacksmithing and Chris Topp, a blacksmith from Yorkshire.

The winning entries reflect styles from across Europe with blacksmiths from Russia, Poland, Finland, Germany and England participating.

The Henry Cort Millennium Exhibition is a permanent outside exhibition and is the largest of its type in Britain. It was part financed by a grant of £641000 from UK's Millennium Commission awarded to a partnership consisting of Fareham Borough Council, and the Southampton and Fareham Chamber of Commerce.



1 The Smith Tree of Life by Edward Fokin, Russia. The sculptures (one at each end of West Street) link two ideas: the ancient profession of the blacksmith with the tree, regarded by many people as a symbol of life and fertility. The stained glass in the crown of the tree is another reference to an ancient craft. A fence encircles these with panels illustrating people and items from Fareham market.

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2 The Horn of Plenty by Igor Andrukhin, Russia. The stones, spilling from the wrought iron shell represent fruit that you would buy from the market. 'The Plenty' symbolises the constant revival of nature and uses traditional iron making to create a contemporary sculpture.



3 Ship of Peace by Vladimir Sokhonevitch, Russia. This developed from an original sculpture made in 1990 devoted to John Lennon and his song 'Give Peace a Chance'.

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4 Still Moves by Chris Brammall, England shows how matter, things and ideas evolve and change through human creativity and ingenuity. A large piece of kirkstone grey green slate with veins of iron deposits forms the base, bursting from the ground, skyward. A series of iron tendrils emerge from this rock, initially twisting upwards they evolve into a series of regular shapes transformed by man into the links of a chain. The stone is inscribed with 'Nothing is lost, nothing is created, everything is transformed' (Antoine Laurent Lavoisier).



5 Anvil Man by Stephen Lunn, England. Stephen allows himself to make one 'fun' piece each year. Strictly, this sculpture used some techniques not available in Henry Cort's time.



6 Market Figurines by Ryszard Mazur, Poland. This, one of three figurines, beautifully reflects today's Fareham, and indeed any shopping street in Europe

WIRG CONTACT INFORMATION

Chairman: Shiela Broomfield, 8 Woodview Crescent, Hildenborough, Tonbridge, Kent, TN11 9HD Tel: 01732 838698 Email: s.broomfield@dial.pipex.com Vice Chairman: Jeremy Hodgkinson, 3 Saxon Road, Worth, Crawley, West Sussex, RH10 4UA Tel: 01293 886278 Email: JSHodgkinson@hodgers.com Secretary: Ann Callow, Glaziers Forge Farm, Dallington, Heathfield, East Sussex, TN21 90JJ Tel: 01435 882553 Email: ann@gfc.demon.co.uk Newsletter Editor: Dot Meades, Brackenside, 7 Normansland, Fairwarp, Uckfield, E Sussex, TN22 3BS Tel: 01825 712367 Email: meades@freeuk.com Publications from Brian Herbert, 1 Stirling Way, East Grinstead, West Sussex Tel:01342 327032 Email: brianherbert@btinternet.com

FORAY PROGRAMME 2005/6

Saturday 5 th November 2005	Trial trenching of two bloomeries in Hendall Wood, Maresfield	<u>Leaders</u> Brian Herbert
Saturday 3 rd December 2005	Fieldwalking near Queenstock Furnace, Buxted ; exploring further features of the valley	Brian Herbert/Dot Meades)
Saturday 7 th January 2006	Trial Trenching of a bloomery at Cullinghurst Wood, Blackham	Brian Herbert
Saturday 4 th February 2006	Fieldwalking north of Mayfield; exploring possible sites of medieval iron working	Brian Herbert
Saturday 4 th March 2006	Fieldwalking in Iping and Trotton ; searching for evidence of blast furnace activity (and possibly fieldwalking upstream of N Park furnace)	Jeremy Hodgkinson
Saturday 1 st April 2006	Fieldwalking near Mayfield ; either a continuation of the February foray, or a continuation of forays in the 2004-5 season	Brian Herbert
Saturday 6 th May 2006	Indoor 'foray' at Brackenside, Normansland, Fairwarp – discussion of the preceding season + members' contributions	Dot and Tony Meades

FROM THE EDITOR

Foraying has from the outset been an important part of WIRG activities. For those who have so far not been involved, it includes fieldwalking to locate new ironworks or check on known ones, and minor excavations. Forays take place once a month from October to April (with sometimes an 'indoor foray' in May, to meet socially and to discuss individual activities where appropriate). We usually meet at 11am, taking a packed lunch and finishing about mid-afternoon. (Some of us 'oldies' may finish after lunch). As you can see from the above programme, there is a spread of activities planned for this season. The foray group needs support and we all welcome new members. No prior knowledge is necessary and you do not have to attend every foray. To join the Field Group or obtain details of a particular foray, please contact Hugh Sawyer, Spindles, Hackwood Road, Basingstoke, RG21 3AF; tel: 01256 84 92; email: sawyerhja@aol.com.

Foraying is, of course, one of a number of WIRG approaches to our research .We have been fortunate enough to have three outstanding chairmen who have each brought with them their particular expertise: Joe Pettitt initially pointed us in the right direction, researching field and place names which for a long time underpinned our field-walking; Fred Tebbutt also took us into excavation and impressed upon us how important it was to publish our work; Jeremy Hodgkinson has embraced all of these and more; public speaking, historical research, running courses on Wealden iron, maintaining useful contacts, and so on. We thank them all and now we are pleased to welcome Shiela Broomfield, whose past experience and contributions speak for themselves.

However, WIRG is not just about Chairmen's activities. Other members make equally important contributions as you can see from our publications. Perhaps a unique feature of our Group is that there is no overt central direction; members quietly contribute whatever part of the work they have chosen to do. As a result, WIRG is an interesting, worthwhile and friendly organization. Please help us to maintain it. Join the foray group or assist in other activities if you can.

DMM