



NEWSLETTER

Autumn 1991

Number 14

Chairman's Letter

Dear Fellow Members,

Every so often an occasion arises when WIRG is challenged to examine its purpose, and a very stimulating activity it should be. Just such an occasion was at the AGM in July when Richard Saville, fresh from the publication of his and David Crossley's edition of the Fuller Letters, drew attention to the largely untapped wealth of documentary sources available which illuminate the study of the Wealden iron industry. The Fuller papers are a particularly large body of accounts and correspondence, but lesser archives exist, such as the letters between Samuel Remnant and John Legas at the Guildhall library, or the early-eighteenth century accounts of Beech Furnace now revealed in the Huntington Library in California. Just to bring these texts to a wider audience, would, he argued, be a fulfilment of one of WIRG's stated aims, and he urged both the Group as a whole and its individual members to grasp the nettle and make these valuable primary sources more accessible to researchers.

Various changes in the committee once again demand words of recognition for work on behalf of the group. John Berners-Price has stepped down although I hope we shall continue to see him at forays from time to time, where his special surveying skills have been so useful. Sue Swift has given up the editorship of the newsletter which, with the introduction of a Spring issue, has kept members, particularly

those who for one reason or another are less active, in touch with what WIRG is up to. Finally, Daphne Tighe has stood down as auditor, after more years than I daresay she cares to remember. Before that she was the Group's Treasurer, and a stalwart of the of the Slaugham group in the early days when WIRG had a somewhat federal structure. My thanks for them all for the time and enthusiasm they have given to WIRG over the years.

It only remains for me to hope, as I do every year, that you will keep the committee in touch with any discoveries you make, or activities you feel others could be involved in, and wish you all an agreeable Christmas and an interesting New Year.

Jeremy Hodgkinson.

A G M - July 20th 1991

Excellent weather greeted a good turnout of members at the Memorial Hall, Ninfield, East Sussex. David Crossley had been billed as the speaker but was unable to attend and, instead, and no less welcome, Richard Saville took not only his place but also the subject of his talk - 'the Fuller letters; some outstanding problems.' Dr. Saville briefly surveyed the historical and economic setting of the Fuller's involvement in the iron trade, pointing to their considerable wealth which suggested a connection with iron going back further than the end of the seventeenth century. A link with the Browne family, who had a virtual monopoly of the ordnance trade at that time, was postulated. He went on to highlight the tenacity of the Wealden iron industry in its

declining years but questioned why, in spite of this doggedness, the Weald had failed to improve technologically. Was it a failure in investment and in entrepreneurial skills?

In the case of the Fullers, Dr. Saville argued, it may have been the unacceptability of their political views in the earlier years of the 18th century, which inhibited their ability to invest; but why did not large concerns like the Crowleys, who operated in the Weald, and had plenty of capital, expand in the same way as the Carron Company did in Scotland using the Bank of Scotland?



John Fuller, from the painting by Hubner.

Dr. Saville drew attention to the documentary evidence which exists but which has yet to be fully explored by researchers, and suggested that WIRG might apply some of its funds to obtaining copies or transcripts, and perhaps publishing some of them. A lively and lengthy discussion followed his talk.

The Annual General Meeting of the Group then followed and was briskly conducted by the President Dr. Henry Cleere. The Chairman, Jeremy Hodgkinson, reported on an active year, and the Treasurer, Reg Houghton, presented a healthy set of accounts. Elected to office were:

Chairman	Jeremy Hodgkinson
Vice Chairman	Dot Meades
Hon. Secretary	Shiela Broomfield
Hon. Treasurer	Reg Houghton
Hon. Editor	David Crossley

Elected to the Committee were:

Brian Herbert

Hugh Sawyer
Alan Stevens
Dorothy Hatswell
David Combes
Brian Awty

The meeting concluded with the presentation, by Margaret Tebbutt, of two grants from the Tebbutt Research Fund; to Peter Masters, the first recipient of a grant made by the fund, to further assist him in his research into Roman occupation at Kitchenham Farm, Ashburnham; and to Jeremy Hodgkinson, to help defray the expenses of research into the Wealden Iron Industry during the Seven Years War.

After an excellent buffet, which was described as less of a 'ploughman's lunch' and more of an 'ironmasters's lunch', members headed off to visit Ashburnham furnace, by kind permission of Mr. J. Wallace. A number of interesting finds were placed on display, including cannon balls and iron pigs found locally. The area was typically overgrown in July but those prepared to explore were rewarded with glimpses of the spillway and site(s?) of the furnace.

Ashburnham forge was then the subject of a visit. The last Wealden iron site to close, the wheelpit is well preserved in the Garden of the cottage called 'Ammerbrook', and members were able to examine the surviving timber work at close quarters.

To end the afternoon, Peter Masters showed members the site which he has been investigating at Kitchenham Farm, where several concentrations of pottery from the Roman period, together with iron slag, suggest an all-too-rare alternative to the industrial sites with which the Weald abounds.

Editorial

This is my first newsletter since Sue Swift retired from the post

after four years of devoted toil, and I am pleased to be the new editor, though somewhat daunted by the task. Sue had kindly left me some material for this newsletter, so I was not completely bereft, but for future issues I will need more contributions.

As a guide I would like articles of between 300 and 500 words, with illustrations, preferably line drawings or diagrams, though we may be able to use photographs provided they are very clear. Material for the newsletter should be informative, but informal - scholarly papers are properly placed in the Bulletin, but there is no reason why a 'spin off' from a paper should not make an excellent piece for the newsletter.

In addition to longer articles I intend to have regular features, such as 'Finings', in which we can raise queries, report ephemera and announce any odd requests or initiatives. Contributions can be in any form, though the back of an envelope is discouraged: my favourite would be ASCII text on a 3.5" disc. Those of you who use computers will have already deduced that I am a lazy fellow, but input from disc does have the advantage of reducing mistakes.

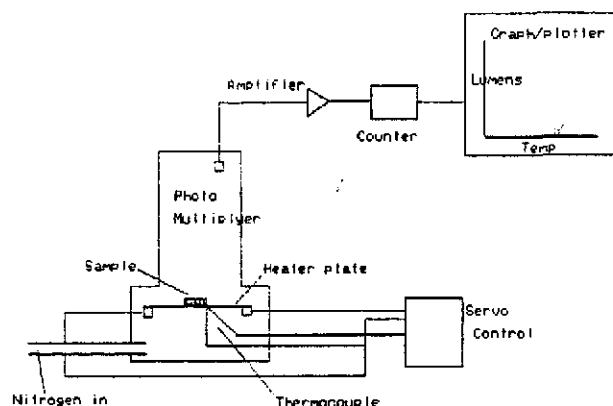
And, as important as contributions are, there is an even more significant element - the reader, and what that reader wants to read. So please, be in touch with me, tell me how the newsletter is going. I cannot produce what you want without knowing what you want. My address is: Granville Davies, 18 B, Chapman Way, Tunbridge Wells, TN2 3EF. Telephone numbers: work 0892.541629, home 089272.3587, fax 0892.515267

Dating Furnace Slag

At a recent field group meeting Harold Clyne raised the subject of dating furnace slag by

thermoluminescence. Here he outlines the process, and in later newsletters it is hoped to record the success, or otherwise, of his experiments.

Non-conducting ceramics, such as pottery, tiles, bricks and, hopefully, furnace slags can act as traps for free electrons. At firing all existing electrons are released from the material, and if it lies in the ground for long periods it acquires a fresh charge of free electrons, the energy coming from natural radiation in the surrounding soil, from cosmic rays, and from any traces of radioactive elements within the body of the material.



Thermoluminescence Measurement Apparatus

On later heating to several hundred degrees all this trapped energy is released in the form of a brief glow of light, the quantity of light being proportional to the number of electrons released, and therefore to the time since the pot was made and consequently to its archaeological age. The release of light is quite readily and precisely measured in a specialised apparatus (see diagram) and the time since the sample was originally fired should then be found from the formula: $\text{years} = (\text{released energy} / \text{annual dose})$.

Regrettably, the annual dose is much less easily measured since it comes from several sources and takes several forms. Radiations

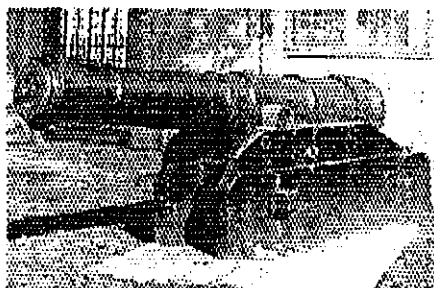
from radioactive elements in the soil and in the sample itself and also cosmic ray energy all have to be assessed firstly for their amount and then for how well the sample materials can capture them, the whole requiring a large number of measurements including several at the point where the sample lay in the soil. If all goes well and no other complexities (or perplexities) arise thermoluminescence can yield dates with accuracy as close as $\pm 5\%$, but non-homogeneous material can widen this figure, at worst, enough to make it meaningless.

However, in the hope that this will not be the case with Wealden furnace slag I intend to carry out a series of experimental measurements, and may well be able to report that we have another method for establishing furnace dates.

Minster Cannon

Since 1982 The Gatehouse Museum at Minster-in-Sheppey has had a cannon as its gate guardian. The piece was excavated from the Sheerness sea wall in 1979, and is believed to have been cast by the Harrison & Jewkes organisation at Robertsbridge in the mid 1700s, this assumption being made from a much corroded 'H' on the right trunnion.

The Maritime Museum has suggested, from measurements supplied, that it is a 12pdr,



which would have been cast after 1756. This is perhaps a little late for the Robertsbridge furnace? Does anyone know anything about this particular piece?

London-Lewes Roman Road

One of the afternoon visits for 1990 WIRG AGM was to have been the London-Lewes Roman Road at Cowden, north of the Sussex-Kent border; unfortunately very little evidence could be found. Although this Road is described in 'Roman Ways in the Weald' by I.D. Margary, there is no detailed description of the surface evidence. To rectify the omission, the author decided to organise a WIRG foray to the area during the 1990/91 season.

It was soon realised that tracing the Road would take longer than expected, with the main evidence found on low lying stretches of Road which were covered with bloomery furnace slag, quite often 1 to 2 feet below the surface. The beds of two deeply incised streams were covered with hard packed slag, whilst a third stream was a level crossing with a sandstone base, thus indicating that these crossings would have been made by fording.

As spades are not allowed on forays, the Roads was not sectioned; however, by probing, it appeared that there was very little surface cover to the Road where it would have been well drained.

At one point, near Waystrode Manor, the Roman Road must have 'crossed over' a hollow way, using a bridge. North of this point the Road passes between two large areas of iron ore which may well have been used at the Roman bloomery site at 'Far Blacklands', located upstream from Cansiron Forge, on the south bank.

The foray progressed less than a mile from the County boundary, and was re-walked the next weekend, adding more detail. A further foray has been organised for Saturday 11th April, 1992, to continue north towards Edenbridge.

Anyone who is interested in coming along please contact the author at 1 Stirling Way, East Grinstead. Brian Herbert

Extra meeting for WIRG members?

At the latest WIRG committee meeting it was proposed that an extra meeting, might be arranged for all WIRG members, taking the form of a "soiree"*. Although it would be an informal gathering, a theme for the meeting could be the results of the previous season's 'forays', however, in reality, any subject would be open for discussion. It is hoped that the meeting will broaden into small groups of people, in much the same way as the usual WIRG meetings.

As already implied, there would not be an invited speaker, nor would the Chairman be expected to talk all the time; it will be up to members to contribute to the continuity of the proceedings.

If you are interested in this type of get together, (or could suggest an added attraction), a committee member would like to hear from you. My phone number is East Grinstead [0342] 327032. The meeting would probably take place on a Saturday afternoon in April or May.

*My dictionary tells me that a 'soiree' is: 'An evening party, social or congregational meeting with tea etc'.....It seems that there is a distinct possibility that Dorothy Hatswell's scrumptious teas will be available, but I make no promises....
Brian Herbert.

Recent Publications

Sarah Barter Bailey, 'Information relating to the operation of the early cast-iron gun industry from a manuscript account book in the collection of the Royal

Armouries.' Journal of the Ordnance Society 3 (1991), 11-23.

This important article includes a transcript of an account of guns purchased by the Office of Ordnance between 1547 and 1553, the reign of Edward VI. Where the information in these accounts differs from that available in the list described by Awty (Sussex Arch. Colls. 127 [1989] 136-7) is in the detail which the Royal Armouries accounts yield.. For here are names of suppliers, quantities of ordnance, prices paid and methods of payment, and some details of transportation.

Two of the suppliers of ordnance in this period are well known: William Levett, the King's gunstonemaker, and Sir Richard Sackville who, as Chancellor of the Court of Augmentations, was responsible for receiving the profits from Worth furnace. The third, John Harvo, is a new name. Ms. Barter Bailey suggests he may be the immigrant John Harve, who, with his brother Remy, was at Wadhurst in 1549. As to his furnace, this is open to speculation although it is recorded that his guns were shipped out of Pevensey. Reference to a Cowden in the details of the transport of Levett's guns to Newhaven is interpreted as being Cowden Farm (TQ 565257) near Mayfield, implying that Levett was casting guns at a number of the furnaces in the area, such as Pounsley, Huggetts, Oldlands, Coushopeley and Mayfield.

Robert D. Smith, 'Early cast-iron Ordnance with particular reference to guns on the Isle of Man.' Journal of the Ordnance Society 3 (1991), 25-54.

This article collects together descriptions of several examples of cast-iron ordnance which appear to date from the sixteenth and early-seventeenth centuries. Ten examples are to be found at four locations on the Isle of Man. Using the evidence of an absence of a second reinforce (a ring

within the UK, prices in brackets are available only when publications are collected at meetings.

The Excavation of a Late 16th/Early 17th Century Gun Casting Furnace at Maynard's Gate. O.Bedwin. £0.90 [0.60]

The Fieldwalker's Guide and an Introduction to the Iron Industries of the Weald. B.K Herbert. £3.00 [2.50]

The History of Watermills, the Wealden Iron Industry, and Geology of the South-East. C.E.Woodrow, B.K.Herbert, & C.Smart. 3rd updated edition. £1.60 [1.30]

Bombards, Mons Meg and her Sisters.
A description of early wrought-iron cannon.
R.D.Smith & R.R.Brown. Royal Armouries Monograph No 1. £6.50 [6.00]



Rosehill, Brightling, John Fuller's mansion, from 'The Fuller Letters'

Parson Levett and English Cannon Founding. B.G.Awty. £1.20 [1.00]

A Cast-Iron Cannon of the 1540s. B.G.Awty £1.20 [1.00]

Identifying 18th Century Trunnion Marks on British Iron Guns: a discussion. R.R.Brown. £0.70 [0.50]

The Woolwich Proof Registers, 1780-1781. R.R.Brown. £0.70 [0.50]

Guns Carried on the East Indiamen. R.R.Brown. £0.70 [0.50]

The Fuller Letters; Guns Slaves and Finance.

(Ironmaster at the Heathfield Furnace in Sussex)
D.Crossley and R.Saville. £17.50 [15.00]

Old Series WIRG Bulletins. Volumes 1,9,11,13,14,15,16,17. each £0.80 [0.50].

OLD SERIES VOLUMES 2,3,4,5,6,7,8,10,12 ARE OUT OF PRINT AND WILL NOT BE REPUBLISHED.

New Series WIRG Bulletins.
Volumes 1 to 6 (1981-1986) £1.30 [1.00]
Volumes 7 to 11 (1987-1991) £1.80 [1.50]
note: Volumes 5 & 10 have an index

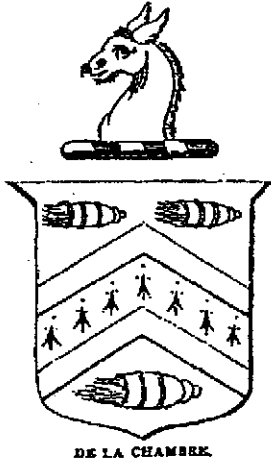
FININGS

The Secretary has received a letter from Arthur Dunn of 1287 Castlehill Crescent, Ottawa K2C 2B2, Ontario, Canada, who is researching the Lennard/ Leonard families, and is also interested in the Trip family of Amsterdam, who he says had dealings with the Wealden ironmasters in the 17th Century. If any members have any information on either family in connection with ironworking could they please write to the address above. Arthur Dunn also asks if anyone can obtain for him a photograph of the portrait of Richard Lennard, 13th Baron Dacre, which is in Glynde Place and was mentioned in an article in our last newsletter, number 13.

Colin Lavender, of 91, Brenton Road, Penn, Wolverhampton WV4 5NS, writes to introduce a newsletter he produces detailing his research into Lavendar and related families. He is a member of WIRG, and is happy to make his newsletter available to interested parties. There is no charge, but he does ask for an S.A.E of about 6"x 9".

From SUSSEX INDUSTRIAL ARCHAEOLOGY SOCIETY NEWSLETTER NO. 71
Don Cox, a mechanical engineer, has been appointed Recorder of Industrial Archaeology sites in

Sussex. His brief, which includes a wide range of industrial, commercial and public service sites from the mid-18th century to the mid-20th century, will be to record the location and basic details of visible remains. WIRG will be contributing information on sites from the final phase of the Wealden iron industry.



This is the armorial bearing of the De la Chambre family, who built Rodmill Place in about 1586. The three chamber pieces may simply be a play on the family name, but can anyone cast a little more light on this subject?
