# Wealden Iron Research Group

NEWSLETTER Number One

November 1980

Editor: Mrs. M. Tebbutt, The Pheasantry, Wych Cross, Forest Row, Sussex. Secretary: Mrs. S. Swift, Hamfields, Withyham, Hartfield, Sussex.

## Introduction

During the past few years the publications of numerous societies have contained editorial lamentations regarding the effects of inflation. Unfortunately WIRG is not immune to this trend and, inspite of the increased subscription (now £2.50), it has become impossible to meet the costs of producing two Bulletins each year. Your Committee have, therefore, decided to publish one annual Bulletin, of different format but still containing all the material of which it is desirable to have a permanent record. This will normally be available at the time of the AGM.

To fill the gap, and provide members with more up-to-date information during the year, a Newsletter, of which this is the first, will be produced at about the time of the Winter Meeting. It is hoped to include details of Field Group activities, including interim reports of field work which will eventually be fully published in the Bulletin. The Newsletter is not intended to be a permanent record, and articles for publication should still be sent to the Editor of the Bulletin (D.W. Crossley, Dept. of Economic History, Sheffield University, Sheffield 10). However, the Editor or Secretary of the Newsletter will be pleased to receive reports of any relevant activities by members - have you visited any interesting sites, museums, or exhibitions? Have you found any bloomery sites? Have you any suggestions for the summer excursion and AGM? Please let us know.

## Letter from the Chairman

Dear Members.

"It's an ill wind that blows nobody any good" - this old saying is as true as ever. Escalating costs may have prompted the introduction of our Newsletter, but this will result in WIRG members being better informed about current activities than in the past. Our thanks are due to Margaret Tebbutt for agreeing to edit the Newsletter and to Sue Swift for taking on the extra secretarial work which this new venture will involve.

I hope that members who came to our Annual General Meeting will forgive me if I take this opportunity to repeat the news of some of our activities during the past year, and to add a few post-AGM items of news.

Let me begin with a brief description of our activities on 7th July. Firstly, an interesting foray to Warren furnace, where there are plenty of remains still to be seen, and members busied themselves tracing a culvert and speculating about the whereabouts of furnace and wheelpits - all helped along by the able commentary provided by Jeremy Hodgkinson. After this, we were caught up in an imaginative reconstruction of what is in all likelihood the site of a deserted mediaeval village, with a nearby bloomery site. Plenty to think about there, as we traced the hollow

way, field boundaries and possible house platforms. Then a Short AGM, a nice tea, and more chat followed by a most interesting talk on the history of Warren furnace by Jeremy Hodgkinson. If you were unable to come this year, do try to make it next year - I am sure you will enjoy it.

One of the fascinations of the Wealden iron industry is that it can be studied from so many different points of view. Information gained by the traditional and very valid documentary approach has been added to by archaeological excavation, and by experiments designed to test our theories.

Interesting work has been going on this year in tracing families of ironworkers; in careful sifting of documentary evidence; in collating the results of fieldwork; and in describing various excavations. It is perhaps invidious to pick out any of these for special mention, for each is valuable. However, I should mention an important 'first', and that is the discovery of our first Saxon ironworking sites, one at Buriton and one on Ashdown Forest (see Bulletin No. 17, page 15). The lack of evidence of Saxon ironworking in the Weald has long puzzled us. How odd that these two sites should be found within such a short time, and so far distant from each other! However, as with so much excavation, the partial solution of one problem has presented us with another. Within and around the furnace of the Ashdown Forest bloomery were many burnt flints. We are assured by the experts that flint has no place in the chemical process of ironsmelting. However, flint explodes when subjected to sharp heat, and it has been suggested that this would have prevented an untapped furnace from becoming clogged with slag. Roger Adams has been testing this idea in a recent bloomery experiment.

The proposed WIRG book is now truly under way. All the water-powered sites have been visited and described. A few special ones have been surveyed in detail. David Crossley is adding his documentary evidence to our field reports. The bloomeries in our given area have been plotted, although reports of these continue to come in from other areas for inclusion in the gazeteer.

There have been two major disappointments. Efforts to persuade the authorities to undertake the consolidation of Pippingford furnace and open this to the public have so far come to nought because of the economic situation. Unintentional vandalism by a local Water Board has led to the virtual destruction of a water-powered site, without the opportunity for WIRG members to record any evidence that may have been visible. We have been assured that such a thing will not happen again, but this is a warning to us all to watch carefully any earth moving or demolition work for archaeological evidence. WIRG officers and members of the committee will be grateful for information, and even more so for help in watching and recording such sites.

On a more cheerful note, WIRG members have continued to arrange exhibitions and to give talks about Wealden Iron. There are now permanent exhibitions at Haxted Mill and at Anne of Cleves museum, Lewes. The latter is a new and magnificent arrangement of major finds such as the cannon from Pippingford, and the boring bar from Stream Furnace mounted so as to show how the boring process would have worked. Several WIRG members now speak on Wealden iron, and audiences have ranged from 70 to 80 for large public lectures to perhaps a dozen people belonging to a small local society.

Work planned for this winter includes both fieldwork and excavation. Details may be obtained from officers and members of the committee and field group. More helpers are always welcome, and we should like to hear from societies, fieldgroups and other enthusiasts who would be interested in researching Wealden iron in other areas.

I hope to see you at our Winter General Meeting. In the meantime, the committee and I would like to wish all WIRG members a very happy Christmas and a good New Year.

Yours sincerely,

Dot Meades

## Field Group Activities

This year the Field Group is continuing to excavate at Huggetts Farm, High Hurstwood, where there is a mediaeval dwelling site associated with nearby iron workings. Meetings are on the fourth Sunday in each month commencing at 10 am.

The Field Group will also be going on forays. During a foray we walk along streams or through fields, looking for bloomery slag or other signs of an iron-working site. We meet at 11 am and usually carry a packed lunch which es consumed at a convenient spot on our travels. It is proposed that the forays this winter will be along the line of the proposed Maresfield/Uckfield Bypass.

Two forays have already taken place on 1st and 15th November. These, at Heath-field and Chiddingly, were to look for signs of a second furnace near the site of one already known, following a documentary lead. No furnace was found on either occasion, but a couple of bloomery sites were noted.

New members of the Field Group are always very welcome and if you would like details of our activities, excavations or forays/field walking, please get in touch with the secretary. SMS

# Westfield Forge (TQ814172)

At the end of September Fred Tebbutt received a telephone call from Mr. J.A. Page reporting that the Southern Water Authority, during work on the river banks at the site of Westfield forge, had levelled the part of the bay lying east of the present stream. Alan Scott promptly visited the site and found the bay completely destroyed apart from the small section to the west of the stream, and its constituent materials spread along the bank. This material yielded forge cinder, pieces of clay pipe, iron nails and risers, roof tiles, some blast furnace slag, and much charcoal and black soil. In the stream were many forge bottoms. Some substantial dressed stones were exposed along the line of the downstream side of the bay, and an iron "sow" 3.4 m long was lying nearby.

Written protest was made to the Water Authority who have expressed their regret. It is hoped that a detailed account of the site will appear in a future Bulletin and that the sow will be placed in a local museum. MT

#### Pipeline News

Since the report in Bulletin 17 (p 15) of the discovery of a bloomery site on Ashdown Forest we now have the most interesting and important news that the archaeomagnetic dating places it in the ninth century AD. So now we really have our first Wealden Saxon iron working site. We still await the result of the radio-carbon dating from Harwell and metallurgical slag tests by Aston University.

Chance having given us this very special "goody" it seemed unlikely that much more of interest would turn up, and this has indeed been the case. Since then four and a half miles have been walked following the line to Three Wards on the Forest and thence through Old Lodge estate to cross the main road, on the Forest again, between Gills Lap and Kings Standing. From here the pipe goes direct to the new /underground

underground reservoir being built at Blackhills, Greenwood Gate. A new line starts from here towards Crowborough, passing just east of Kings Standing Farm and reaching the main road a mile south west of Crowborough. The only thing of interest in all this walking was near Kings Standing Farm (at TQ 476205) where, in an area in the vicinity of known bloomeries, a hearth adjacent to a probable collapsed turf but was revealed. The hearth was certainly not associated with iron smelting, but perhaps with a forging process. Unfortunately no dateable artifacts were found in spite of careful excavation. The crossing of the line of the London-Lewes Roman road, quite close to the reservoir, was completely negative of any signs to indicate its presence. Perhaps the American tanks in the last war were to blame.

The next part of the line, through Crowborough golf course, will be watched with interest. CFT & MT

## Experimental Bloomery Furnaces

Four bloomery experiments have been tried at The Pheasantry so far this year. The first was in a  $12\frac{1}{2}$  inch diameter tapping furnace with chalk added to the charge.

The second, also in a  $12\frac{1}{2}$  inch furnace, was blown hard and used a high charcoal to ore ratio. This produced about 1 lb of cast iron.

The third try was a  $17\frac{1}{2}$  inch diameter non-tapping type with a bowl in the base and flints were added to the charge. No large slag block was produced and I think this type requires several tuyeres.

The fourth trial was an 11 inch tapping furnace with the tuyere inclined up at 20°; only a few ounces of iron ware made. Experiments are continuing. RJA

## fron-working site at Bassetts Manor, Hartfield

An iron-working site which Straker does not seem to have appreciated is near Bassetts Manor in Hartfield, Sussex, where a blast-furnace has been found, about one mile downstream from Cansiron forge. Water power for driving the bellows was obtained from a leat instead of the usual bay holding back a pond. No documents have been found concerning this new site, which is being called Bassetts Furnace, despite some elementary documentary research. A full report will be in the next Bulletin.

#### Exhibitions

A rather interesting exhibition was organized in conjunction with Hammerwood Church, which is celebrating its 100th anniversary this year. Two forges operated in the area, Bower and Cansiron, in conjunction with Scarletts and Cowden Upper Blast Furnaces. The exhibition was made up of Wealden Iron photographs and the model Wealden forge made by Mr. Smith of Burwash Weald, borrowed from Anne of Cleves Museum, Lewes. This set the exhibition off particularly well with the clanging of the tilt hammer resounding around the church. The model was operated via a coin mechanism, with the intention of donating the money to the restoration of the Church clock, but Mr. K.M. Bembow, the organiser, insisted that the money went to WIRG, for which we are most grateful.

As usual the automatic slide show with commentary at Haxted Mill Museum has been watched by some 2000 to 3000 people, in spite of some mechanical problems at the beginning of the season. The problem has been overcome by not using 120 minute cassette tapes, which have proved to be very unreliable. A major redesign is being undertaken for next year, so that instead of turning the cassette tape over every four shows, the new design will automatically return the tape to the start after each 10 minute show. This will release Mr. Woodrow, the curator, from the cassette-turning-over chore.

/Thie

This year WIRG was invited by Mr. Ian Dean, the curator of the Chalk Pits Museum at Amberley, to set up a permanent exhibition there. Unfortunately, due to delays in getting the exhibits together, the showcase promised to us was used for other purposes. Nevertheless, room was found in the pay kiosk for a small display during the main holiday season. Next year we hope to have the exhibition set up permanently inside the museum. Help with this project was given by Stella Bellem and David Combes. BH

#### Ebernoe Furnace

The autumn 1980 Newsletter of the Sussex Trust for Nature Conservation carries an account of the purchase by the Trust of Ebernoe Common. Said to be one of the finest woodlands of its type in Southern England, the Common also includes supplementary habitats of open scrub, ponds and pasture. One of these ponds is in fact that serving Ebernoe Furnace (SU 976277) and is of about four acres, still in water with a marshy area at its head. The site of the working area of the furnace, downstream of the bay, is also now swampy.

Straker (Wealden Iron, page 423) notes that little is known historically of the furnace but that it is mentioned in Norden's Surveyors Dialogue as among those that "devoured many famous woods".

Ebernoe Common is to be an open reserve, and can easily be approached from Ebernoe Church. MT

# Smythford Mediaeval Bloomery, Worth TQ 359389

Excavations at this site, which some members will have seen at the 1980 ACM, have been suspended until the spring, while further advice is sought and archaeomagnetic tests are conducted. Pottery evidence has already suggested a 13/14 century date.

Recent work has revealed the possibility of a third hearth, close to the two already excavated. There is also an unexcavated site about 100 m upstream. JSH

#### WIRG Publications for sale

The following publications are available from: Mr. B.K. Herbert, 1 Sterling Way, East Grinstead, Sussex, RH19 3HG. Prices quoted include postage.

A Gun-Casting Furnace at Scarletts, Cowden, Kent. By: D.W. Crossley. £0.90

An Abandoned Mediaeval Industrial Site at Parrock, Hartfield. By: C.F. Tebbutt. £0.35

A 16th Century Wealden Blast Furnace. A Report on Excavations at Parningridge.

A 16th Century Wealden Blast Furnace. A Report on Excavations at Panningridge, Sussex 1964-1970. By: D.W. Crossley. £0.75

The Excavation of a Late 16th/Early 17th Century Gun-Casting Furnace at Maynard's Gate, Crowborough, Sussex 1975-1976. By: O. Bedwin. £0.75

The Romano-British Industrial Site at Bardown, Wadhurst. By: H. Cleere. £0.90

The Excavation of Three Roman Bloomery Furnaces at Hartfield, Sussex. By: C.F. Tebbutt £1.15

Bulletin of the Wealden Iron Research Group. Vols. 1 to 7 £0.75 each Vols. 8 to 17 £0.90 each.