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WEALDEN IRON RESEARCH GROUP
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Set by Denis Ashurst

<u>Hon. Secretary</u>	<u>Hon. Editor</u>
Mrs. S. Swift	David Crossley
Hamfield Cottages	Division of Continuing Education
Withyham	The University
E. Sussex TN7 4BH	Sheffield S10 2TN

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CHARLES FREDERICK TEBBUTT

1900 - 1985

Fred Tebbutt moved to Sussex in 1966 following his retirement from active involvement in his family firm in his native St. Neots, Huntingdonshire. He joined WIRG at its formation and became its Chairman in 1971; an office he retained until 1979 when he became the Group's first President.

Fred brought to WIRG a wide interest in all historical matters and a long experience of amateur archaeology, gained in fifty years of fieldwork and excavation, though he was at pains to dispel any mystique about archaeology. He knew experts in a wide range of disciplines, many since they had been students, and was able to call upon their expertise to the benefit of WIRG.

He came to know intimately the landscape and history of Ashdown Forest where he had made his home. In the grounds of his house, he made available the site and resources for Roger Adams to establish his experimental bloomery.

For many years he kept the records of the Group's fieldwork. He and Margaret, his wife, took the lead in compiling the exhaustive lists of sites for the gazetteer of the WIRG book and spent many hours revisiting certain sites to check particular details.

Fred Tebbutt directed several WIRG excavations and set a standard which has given the Group a sure guide for the future. By his insistence on recording and publishing all discoveries, he has ensured that the Wealden iron industry is one of the best documented areas of study in the South East. It was appropriate that he should accept, on behalf of the Group, the BBC's Chronicle Award for the Best Amateur Project in Archaeology, at a ceremony at the British Museum in 1982.

The loss of Fred Tebbutt will be felt by all who knew him. His precepts and the remembrance of his kindly support will remain with us.

D.M.M./J.S.H.

FIELD NOTES

COMPILED BY J.S.HODGKINSON

A Bloomery at Horsted Keynes - March 1985

The Field Group visited Cinder Hill Farm, by kind permission of Mr.Rory Clarke.

After visiting the site of Horsted Keynes blast furnace, where the considerable quantity of slag was noted, the Slade valley, which runs down from Broadhurst Manor towards the village, was visited. A small bloomery was noted at TQ/386297 and the slag heap was trenched, though nothing was found to date the site. Slag was found in two distinct layers.

In the adjacent valley to the west, behind 'Tanyard', a concentration of bloomery slag was found in a field at TQ/379305.

Roffey Medieval Bloomery - Easter 1985

Road construction by West Sussex County Council across a section of this site attracted the interest of the Horsham Museum Society and the University of London's Field Archaeology Unit, who invited WIRG to co-operate in a short rescue excavation. Two areas of interest were identified: at TQ/207334 where evidence of two domestic hearths resulted in the excavation of the foundations of a late medieval hall house (1); and at TQ/210335 where the foundations of a small building were associated with the base of a bloomhearth. At the latter site there was an abundance of pottery from the fourteenth and fifteenth centuries. A fuller report on the ironworking site will be forthcoming.

Fernhurst Furnace - April 1985

The principal interest in this site lies in the considerable remains in the stream on the north side of the site; in the eighteenth-century arched stone overflow on the south side; and in the immense slag heaps.

In a careful survey done by the Haslemere Archaeological Group in 1976, attention had been drawn to the distinction between the remains which existed of the ironworks and those of the nineteenth-century water-supply filter beds. A considerable course of stone blocks from the earlier period had been overlain or re-inforced by brickwork, including a circular structure approximately 2.5m in diameter, which probably dated from the water works there.

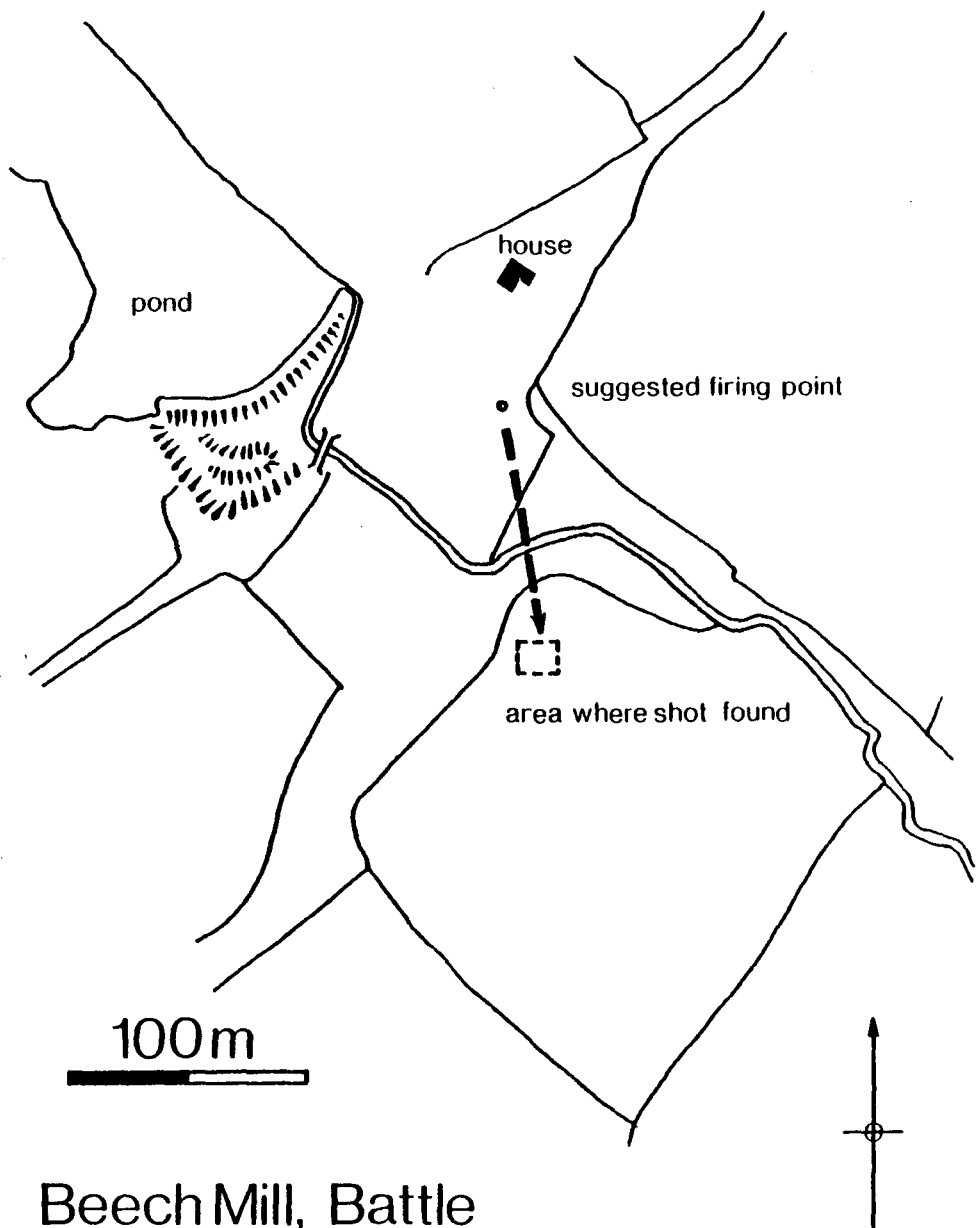
Movements in the banks of the stream had covered some structures on the north side, where it was considered the furnace may have been situated, but erosion had uncovered several wooden pieces in the south bank, one of which was three-sided in section, in the form of a trough, approximately 25mm x 15mm. There was also further evidence of a brick floor noted by earlier observers.

The stone spillway on the south side of the site is suffering from weathering of the sandstone blocks and erosion by the scouring action of storm water when its purpose as an overflow is called into action. The scouring at the base of the spillway, however, has revealed several wooden piles which had clearly been driven into the valley floor to 'key' the material from which the bay was constructed. Only an area of about two square metres was exposed but in that space five piles were seen. This is important evidence of possible construction methods used for pond bays.

On the same occasion, Verdley Wood furnace was visited and members of the Field Group were presented with a rare opportunity to view a site unimpeded by woodland, the area having been recently coppiced. Again, there was an impressive quantity of slag.

A Proof Bank at Beech Mill Furnace, Battle - September 1985

The Field Group were invited to examine an area of Beech Mill Farm following the discovery of a large number of cannon balls by the owner, Mr.R.Loder.



No further examples were found, but Mr.Loder has kindly supplied information about his finds, for the record. We are most grateful to him.

The area concerned is shown on the map, (Page 5). Over 100 cannon balls have been found at a depth of 60-90cm. Although the majority are of 3lb, examples have been recovered of 2, 4, 5 and 6lb. From the position of the cannon balls when they were found, Mr.Loder has suggested a possible point of firing over a range of about 100m. The reported close concentration of the cannon balls unearthed suggests some sort of static mounting for the cannon being tested.

Proof banks have been reported at a number of sites but none has been confirmed by exvavation until now. Straker noted that shot was made at Beech prior to 1664 (2).

It is hoped that a further visit will be made to Beech Hill.

A Bloomery at Bramshott, Hampshire

A concentration of bloomery tap slag has been reported by Mrs.H.Poland, on the Downland Estate near Bramshott. We have been asked not to disclose the grid reference at present but the site lies about 100m south of the edge of Ludshott Common. A few sherds of late-12th and early-13th century pottery have been found amongst the slag. Also found were a sherd each from the 16th and 17th centuries. Parts of two furnace bottoms have been seen at the site, which is in a field on the Lower Greensand, but no obvious source of ore was apparent. We are grateful to Mr.G.F.C.Mellstrom for permission to inspect the site.

References

- (1) Gardiner, M. & Holgate, R. 'Two Medieval Excavations in West Sussex' Sussex Archaeological Society Newsletter 46 (August 1985), 445.
- (2) Straker, E. Wealden Iron (1931), 325.

THE 1574 LISTS OF IRONWORKS IN THE WEALD:
A RE-EXAMINATION

EDMUND TEESDALE

The documents often referred to as 'the 1574 lists' constitute the most extensive and important collection of evidence available as to the size of the Wealden iron industry in the last quarter of the sixteenth century, and as to the ownership, management and location of individual furnaces and forges at that time. The lists consist of a number of documents, all to be found in the State Papers Domestic of Elizabeth I, with the exception of one document of three folios to be found among the Stow manuscripts in the British Library. Several of the documents are, apart from the spelling, so similar in content as to leave no doubt that they are no more than copies. Others reveal significant differences, differences as to personal ownership or management, and the number of works or sites attributed to each individual. These documents have, from time to time, received comment by writers on the Wealden iron industry, but none of the studies made, although helpful in many ways, has been entirely without some confusion or imprecision. The present paper is a fresh attempt to describe, analyse, compare and evaluate the documents, firstly with the object of providing a clearer and more comprehensive guide to the lists than has hitherto existed; and, secondly, of reaching some conclusion as to which of the documents contains the most reliable evidence about the owners or managers and the extent of the works they held.

The documents to be discussed have been set out in Table 1 showing, in each case, the reference number, the relevant folio or page numbers, the document's date (where known), its nature, and any other significant information or comment relating to it.

Each document, or part thereof where helpful, has been given a letter of the alphabet for ease of reference.

The idea of compiling a list of ironworks in the Weald in 1574 may be attributed to Christopher Baker, an Admiralty employee who wished to bring to official attention the extent of the industry's growth. This, he alleged, was resulting in excessive consumption of timber which threatened supplies for naval shipbuilding and other purposes. Our merchant shipping, Baker claimed, was also being put at risk by vessels armed with guns produced and sold from Wealden ironworks. Ralph Hogge, the Queen's gunstonemaker, who held an exclusive licence to export guns, also added his voice to these complaints, describing the dangers of continuing uncontrolled export of ordnance abroad. The Privy Council appears to have been genuinely and seriously alarmed, taking - for those days - rapid and determined action. An official was sent at once to visit all the ironworks identified in the information supplied by Baker. The purpose of this journey was not only to draw up a comprehensive and accurate list of all works in operation, but more importantly to compel those directly responsible for these undertakings to sign bonds in £2000, irrespective of whether they worked a furnace or a forge, not to cast guns except under special licence. A list, therefore, of responsible ironmasters, whether owners or tenants, with a description of the works they controlled, was the objective to be achieved.

The first list in order of appearance in the State Papers Domestic is the piece numbered 20 in volume 95 and comprising folios 48, 49 & 50. (A & B in Table 1). It is not signed and carries no date, although given a tentative date of February 1574 in the Calendar. It is headed 'The Declaration of Christop. Baker

touching Iron Furnasses', starts with a brief reference to the consumption of timber in the three counties, and continues with a list of five furnaces devoted solely to producing ordnance and shot, and the names of half a dozen persons said to be the sellers and receivers of the output. The list of 'the names of the Iron Workes and furnaces and the places where they are planted' starts towards the end of folio 48 with the works situated in Kent. The list continues on folio 49 with the works in Sussex and Surrey. An examination however, of the next folio, 50, strongly suggests that it should be regarded as a distinct list, originating perhaps from a different source and amalgamated with A to form a composite list copied in the same handwriting from two originally separate documents. Thus the second part of piece 95/20 has been designated B in the Table. But before studying further the distinctiveness of B, it is necessary first to look at the next paper in volume 95 of the State Papers, piece 21 (folio 51).

At first glance this may appear to be a copy, in a different handwriting and with different spelling and presentation, of list A. There are, however, a number of important points. It is dated 'The XV daie of phebruarye 1573'. It does not start with the declaration of Christopher Baker, but is headed by almost the same words that immediately precede the list of works in A, that is to say, 'The names of the owners of the Ironworks and furnasses and the Places where they are Planted'. Most importantly, and in contrast to any of the other 'similar' lists, this one is, in fact, signed by Christopher Baker. I refer to this list as C. C follows the same order of 'owners' as A, but apart from other discrepancies, dealt with below, it stops with the final name and works in Surrey, that is to say, exactly as at the end of folio 49 in list A. The document then continues with the words 'divers

forges and furnaces...', repeated four times, but without being more specific than giving the name of a parish or parishes, and a few personal names, in each case.

All this seems to suggest that C was the first list of ironworks to be compiled, accompanying, or arriving shortly after, the Declaration itself. Whether Baker compiled this list or had it drawn up by others, he recognised that it was incomplete and needed to be supplemented by similar details for further areas, mainly in east Sussex. Hence the formulation, probably by a different person, of list B.

To return now to list B, this starts with the reference to 'divers forges and furnaces' in Burwash, Battle and other parishes, exactly in the way list C finishes. It then gives a series of eight names without any works attached to them, before embarking on a list of 32 persons with their associated works. (One name is given twice). A further argument for thinking that A and B were originally compiled by different people is the different approach used. B is more concerned than A with giving the names of those actually exercising management responsibility for the works. List A contains 56 separate entries, some names appearing more than once; List B has 33.

About 35% of the names in A do not appear again in subsequent lists, apart of course from those lists which are merely copies. Every one of the persons listed in B was summoned to appear before the Privy Council to sign the bond. The compiler of list A was concerned more with ownership of the land; that of list B with the management of the works.

This difference of approach to compiling the lists does not

mean that list B contains entirely new and additional works not found in A. There is some overlap and duplication; for example, in list A 'The L. of Buckhurst one forge and one Furnace in Parrock in the handes of George Bullen' ; in B, 'Geo. Bullen a forge called Parforge' ; and again, in list A 'The L. Montague one forge in Franyt in the hands of John Porter' ; in list B 'John Porter a forge in Bayham' ; and so on.

Let us now go back again to list C. Is it possible to establish some sort of relationship between C and A ? The order in which the names appear of the persons to whom the ironworks are attributed is identical in the two lists, but in the details of their works are to be found significant discrepancies. Altogether, apart from differences of spelling, there are 15 such discrepancies. They consist, in the main, of the addition, or omission, on one list or the other, of a furnace or forge against the individual's name. For example, under A 'the Lord Aburgavenny and the Earls of Derby and Surrey' are down for two forges in Worth Forest, but under C they are credited with a furnace as well. Thomas Maye has a forge in Etchingham in list A, but under C it is a furnace. List A gives John Barham two forges in Frant; C makes it one forge only. Which, in these cases, is the correct version? If, as has been suggested earlier, C was the first list to be drawn up and A copied from it, then these divergences could be explained in more than one way. Fifteen discrepancies are rather too many to be attributed to mere error in copying, but some of them may be thus accounted for. Others may be due to deliberate amendment in the light of new information at the time of copying. This combination of explanations has much to commend it, as we shall see particularly when we move on to consider the next group of lists.

No less than three other versions of lists A and B have survived. They are identical, or almost identical, save only for the spelling. They are listed in Table 1 as H, J, & K. None of these documents bears any date. Perhaps the first to be mentioned is in volume 96 of the State Papers Domestic, identified as pages 199 to 205 therein and covering folios 111 to 114. The Calendar attributes it to May 1574. Then in volume 117, piece 39, we find another copy, dated uncertainly in the Calendar as October(?) 1577. This is the version to which is attached a list of 'the names of all landing places, ports and creeks in England and Wales' and was reproduced by D. and G. Mathew in the English Historical Review Vol.48 (1933) and by Straker in Sussex Notes and Queries Vol.2 (1938). The final copy to be mentioned is to be found in the Stow Manuscripts in the British Library, piece 570, folios 103 to 105. Each one of these documents begins with the declaration of Christopher Baker. Each contains both list A and B.

But whereas list B itself begins on a new page or folio, the "B" part of lists H, J and K runs on without a break from the "A" part, thus re-inforcing the view that they are later versions, or copies, of lists A and B. As stated above, apart from the spelling, H, J and K are identical to A and B, save for five entries where they agree exactly with C and not with A. In fact, the precise wording used in C in each of these cases has been reproduced, indicating that the scribe who drew up the first of these three copy lists deliberately rejected, in these five cases, the version in A in favour of the version in C. In the other entries where there is a significant disagreement between A and C, lists H, J and K support A and not C, and subsequent lists tend to show that the details to be found in A in these cases are more accurate than the corresponding versions in C. One other feature

needs to be mentioned: in one single entry only lists J and K show a variation from H. List H, and indeed list A, give Lord Buckhurst one forge in Fletching in the hands of Mr.Relfe. C makes it 2 forges, one in the hands of Mr.Leeche, and the other in 'Ashefelde' in Mr.Relfe's hands. J and K find yet another forge, in the hands of Mr.Leeche, at Sheffield (which is near Fletching), as well as the Ashefelde forge. It appears that the A and H versions are nearest to being correct: Lord Buckhurst held a forge in Sheffield near Fletching, but managed by Mr.Leeche not Mr.Relfe. The mistakes however establish that of the two lists J and K, one was copied from the other.

Lists H, J and K were, then, copies of A and B. Or to be more precise, one or two of these lists were directly copied from A and B by some person or persons - the lists of works as distinct from Baker's declaration are in each case in the same handwriting throughout - who had access to C and was sufficiently well-informed to be able to alter the detail in A, in five cases, in favour of that in C.

There is no evidence as to when or why these copies were required. But it would not be surprising, in the light of the elaborate controls envisaged at that time over the Wealden ironworks, that extra copies should have been found necessary. What however is surprising is that no copies were made, or have survived, of the more accurate lists which were drawn up subsequent to those we have been discussing so far.

It is reasonable to assume that lists A and B, and of course list C as well, were prepared prior to the departure of the

messenger to the Weald to warn the owners to attend Court to sign their bonds. This was the principal duty the messenger was required to discharge. The speed with which he carried it out renders it unlikely that time would have been available to explore ownership, tenancy or partnership details in respect of every different undertaking; or to establish correctly the precise name or location. Nevertheless a list dated 16 March 1574 - five days after the last ironmaster was given his warning - appears in volume 95 of the State Papers Domestic at piece 61. It comprises folios 128 to 130 and is headed 'The names of all those as were warned to appere before the Quenes Ma'ties most honorable privie counsell at the Courte by Robert Pedley one of the messengers of her Ma'ties chamber'. The very next folio, 131, is the pair to this list, written in apparently the same handwriting and described as 'The names of the ffurnesses and forges in the counties of Surrey, Sussex and Kent & in whose occupation they are'. Thus we have here two authoritative-looking documents, apparently drawn up within a few days of the messenger's return and containing the latest information available from his extensive survey of the industry.

The first list, which I have called D, records the names of 56 persons. Against each is given the place and county of his - or in one case her - abode, and the date on which the messenger's warning was issued. To the left of the names appears a + to indicate that the individual had signed his bond or in the case of the lady that the bond had been signed by a representative. Two peers, Lord Montague and Lord Buckhurst, and three knights, Sir Thomas Gresham, Sir Alexander Culpeper and Sir Richard Baker, received their warnings in London. The dates on which the other ironmasters were warned, extending from 17 February to 11 March,

would seem to indicate that they were summoned on the day the messenger stopped in their particular locality.

E, the second of this pair of lists of March 1574, looks to have been written or copied by the same hand as D and records the 56 names in exactly the same order as in D. Against each name is written the furnace or forge, with its name or location, for which the person named was held responsible, whether as owner, tenant etc. Before each name is a numeral indicating the number of undertakings in the occupation of that person, as for instance: '1 the Lorde of Buckhurst a forge at Shefilde' or '3 Arthure Middleton a furnes called huggens furnes A forge at littell Buxted and A furnes at Maynards gate in Retherfilde'. 86 works have been recorded in this way, although in fact 44 furnaces and 47 forges are separately enumerated, the discrepancy between the totals being due to the fact that in five cases, John Stace, Ralph Hogge, Sir Richard Baker, Nicholas Ffowle and John Baker, the scribe appears, for some reason, to have reckoned a furnace and forge as a single undertaking. This may simply be an error.

This list, E, was probably drawn up during the messenger's journey or shortly after his return. It represented the most up-to-date information available on the ironworks. But before comparing it with A & B, it would be advisable first to note what next took place, leading to a further list which can perhaps claim to be the most accurate and useful of all.

The purpose of all this activity, it must be emphasised again, was to bring all those directly exercising responsibility for ironworks in the Weald to execute a written obligation not to cast or sell any ordnance thereafter without special licence. In

the end, however, out of the 56 persons who received a warning to attend the Privy Council for this purpose, only 44 signed bonds (or had bonds signed on their behalf) which have survived. The number is arrived at in this way. As part of piece 95/61 there is a document carrying the date 16 March but no number, and having the following heading on the left side: '73 all Milles and furnaces who doth on & occupie them'. On the right side is another heading: 'The names of those that appered and are bound but not named in this Book by the Messenger'. Next appears a list of four names: 'William Webb, Thomas Dick, Thomas Gratwick, and John Gardener for Isabell Asheburneham'. Gardener was the alias for an alien called Lambard or Lambert who occupied Lady Braye's forge at Cranley. He signed a bond in that capacity on 28 February; and later on 6 March he signed two further bonds for John Asheburneham and for Isabell Asheburneham.

The latter's name had not previously been recorded in any list, and it is not clear why the Ashburnham ironworks were dealt with in this way. Three of the four persons named at the top of this document were signing as lessees or proxies (the other two, apart from Gardener, are William Webb who signed for Richard Wicks noted in D to be lame 'in his legges and ffeete' and Thomas Gratwick who was farming Richard March's forge in Dunsfold). The fourth name, that of Thomas Dick, appeared in list A, but had been omitted. These alterations would account for two extra bonds, i.e. for Isabell Asheburneham and Thomas Dick.

The document we are considering (to which I have given the letter F) then continues: 'The names of (those) that were warned by the messenger but not bound nor appered'. There follows a list of 13 names of persons who were, for one reason or another,

exempted from being summoned to the Court and executing a bond. The list starts with two peers and three knights. They may have been given special treatment because of their titles, and some of the remaining eight individuals may have been gentry, but the list is not easily explained. Four of the list were gunfounders. Despite being excused five of them did in fact enter into the required obligation; Sir Thomas Gresham did so in connection with his licence to export 100 culverins to Denmark. The other four were Sir Richard Baker, John Stace, Christopher Dorell and Thomas Gratwick in place of Richard March. Apart from those who were officially exempt, there were six other persons from list D who did not in the end sign a bond or whose bonds have not survived. Two are likely to have been excused: John Collyns of Burwash, 'an old man of LXXX yeres and not able to travell'; and Simon Colman who was 'very sick'. Thus 42 ironmasters, out of the total of 56 from lists D & E who were warned, signed bonds, making with the two additional names referred to above 44 bonds in all. These 44 bonds were signed, on eleven different dates between 22 February and 4 April, 1574, all but five having been signed by 10 March. They are to be found in S.P.D. volume 95, pieces 22 to 60, 62 and 74 to 77.

A little further on in the same volume is a document, 95/79, which perhaps represents the greatest effort made so far to record accurately the details of the ironworks for which bonds were being signed. The occupiers' names are listed in the order in which they executed their bonds, and against each name is the date on which the individual signed his bond. This list I refer to by the letter G. It contains 45 names, and it was almost certainly compiled day by day as bonds were signed. If, as seems likely, the signatories were asked to provide further details or explanations of their

undertakings, then this would indeed make the list the most authoritative so far attempted. It should be noted that the name of Sir Richard Baker who signed a bond on 10 March does not appear, but that of Sir Alexander Culpeper does, as do those of Thomas Smythe, Henry Bowyer and John Porter, four persons who according to lists D and G almost certainly signed bonds that have not survived. Absent from the list is Sir Thomas Gresham who signed rather later than the others and in different circumstances; and there is no separate entry for Isabell Asheburnham for whom John Gardener signed a bond.

Piece 79 covers folios 175 to 178, the last being blank except for the date of 4 April 1574. At the top of the first folio are two names, the first of which, Nicholas...., is only partially legible, the second being Gilbert Carson. Possibly they were officials responsible for taking down the details. Next come the names, headed by 'Ralf Hog', of the seven gunfounders referred to in Hogge's petition to the Privy Council. They are followed by three more names, possibly of those suspected of having recently started to cast guns, or of intending to do so. The names of Smyth of Petworthe and Duffeld of Grynsted are bracketed together against 'a new furnes in (Shillinglee) park'; and the third name is 'My L. Montague in Haslemere, a new furnes'. There then follow the words - 'These be sent for and all such as be owners or farmers and occupiers of ircn milles in Kent, Surrey and Sussex'. The list then begins, starting with the date of 22 February and the first name that of William Walpole occupying the furnace and forge of Mrs. Blackwell in Petworth.

The document is compiled in at least three different hands, possibly four, strengthening the view that it was written at

intervals as the ironmasters arrived, signed their bonds, and gave their information. The virtual certainty that E, together with and modified by G, supply the best available data on the extent of the iron industry in the Weald at that time seems to justify the details being set out in tabular form (Table 2).

It will be seen at a glance that G is a different type of list from those drawn up previously. In the first place considerably more information is recorded about management of works. For example, where previously Mrs. Blackwell's undertakings were described briefly as a furnace and forge in Northchappell, we now have 'Willm. Walpole having the occupying of a furnes and a forge in the parishe of Petworthe in the county of Sussex belonging to one Margaret Blacwell of ? London late wife of Willm. Blacwell town clerck of ye said parishe by the graunt of ye said Margaret during pleasure having married one of her daughters'. And again, Thomas Stollyon was hitherto listed as having - subject to variations in spelling - a furnace called Waldern, priory furnace, Brightling forge and Warbletyne forge. List G still records him as having an interest in two furnaces and two forges, but it is said that he 'farmeth one half of a forge and furnace in Burrishe and Warldron of Sir John Pelham knight, more half a furnace in the parish of Warbleton of Sir Richard Baker knight and forge of Mr. John Parker'. List G is more concerned to establish the parish in which the works are located rather than the name by which they are known. Distinctions are drawn between the ownership and tenancy where this had not previously been done. There is more information as to partnership interests.

The next point to note is that no entries are made or information recorded for those who were excused from signing

bonds - list F - and did not in fact sign. This gives weight to the view that the details contained in G were obtained on the occasion of the signing of the bonds and can therefore be regarded as more up-to-date and more accurate than anything obtained previously. It also seems fair to comment that the responsible occupiers, having responded with remarkable speed to the summons to attend the Privy Council, would have been unlikely then to have resorted to concealing or distorting the true facts regarding their works.

This, however, remains the principal defect in list G: it contains no details for the works occupied or owned by a number of persons who were excused from signing bonds - Sir Richard Baker, John Blacket, Lord Buckhurst, Simon Colman, John Collyns, Richard Grene, Sir Thomas Gresham, Ralph Hogge, Sir Henry Sidney, Michael Weston and Davy Willard. Lord Montague was also excused and therefore omitted from the list, but he is mentioned in the introduction where he is credited with a new furnace in Haslemere. These omissions are not as serious as might appear. In the case of seven of these twelve persons previous lists reveal no disagreement as to the extent of their ironworks; and even in the remaining five cases the divergences are not all that significant, e.g., did Ralph Hogge have both a forge and a furnace called Marshalls or only a furnace? Did Davy Willard, in addition to two forges near Tunbridge, have one furnace or two? There is rather more confusion as to the holdings of, for instance, Lord Montague and Sir Richard Baker.

Leaving aside these omissions, however, list G on the whole accords reasonably well with other principal lists - A & B (compiled before the messenger's survey) and E (compiled during or

after his journey). As already stated, G is more detailed, more informative, and more authoritative. It appears on the face of it to conflict with list E to a substantial degree only in the following cases: John Ashburnham, Henry Bowyer, John Caulfield (or Erfield or Everffield), Roger Gratwick, Thomas Smythe, John Stollion and Richard Wykes. But these divergences do not seem to weaken the conclusion that of all the 1574 lists G is the one which should command the most attention.

TABLE 1

	REFERENCE NUMBER	DATE
A	S.P.D. 12/95/20 folios 48 & 49	Feb. (?) 1574 (Calendar)
B	as above folio 50	"
C	S.P.D. 12/95/21 folio 51	"The XV daie of phebruarye 1573"
D	S.P.D. 12/95/61 folios 128-130	16 March 1574 (Calendar)

TITLE OR DESCRIPTION	REMARKS
A list headed - 'The names of the Iron Workes and ffurnaces and the places where they are planted'.	Follows after the Declaration of Christopher Baker
A list starting - 'Divers forges and furnaces in Burwashe etc.' followed by the names of 8 persons and then a list of persons and works together.	With a few exceptions the names are supplementary to those in A, but there is some overlap as regards Works.
A list headed - 'The names of the owners of the ironworks and ffurnasses and the places where they are planted'.	Almost but not entirely identical with A, but divergent in spelling.
A list headed - 'The names of all those as were warned to appere before the Quene's Ma'ties honorable privie Counsell at the Court by Robert Pedley, one of the messengers of her Ma'ties chamber'.	A + against the name in the left-hand margin seems to indicate that the person named had appeared and signed his bond.

	(Ref. No).	(Date)	(Title)	(Remarks)
E	as above folios 131-132		A list headed - 'The names of the furnasses and forges in the counties of Surrey, Sussex and Kent and in whose occupacon they are'.	Apparently in the same handwriting as D and forming a pair with it.
F	No piece or folio number, follows immediately after E above.		Two lists, first - 'those that appered and are bound but not named in this book by the messenger' and - 'The names of those that were warned by the messenger but not bound or appered'.	
G	S.P.D. 12/95/79 folios 175-178	4 April 1574 (Calendar)	Starts with 10 names and continues with a list of persons in ownership or occupation of ironworks, the names being placed against dates ranging from 22 Feb. to 10 March.	The 10 names are of gunfounders or suspected gunfounders. They were to be sent for, together with those in the list following.
H	S.P.D. 12/96/199 205, folios 111-114	May 1574 (Calendar)	A copy of lists A and B, including Baker's Declaration.	
J	S.P.D. 12/117/39 folios 91-94	October (?) 1577 (Calendar)	A copy of lists A and B, including Baker's Declaration.	The lists are followed by a list of all the landing places, ports and creeks in England and Wales.
K	STOW Mss.570 folios 103-105	No Date	A copy of lists A and B, including Baker's Declaration.	K appears to have been copied from J or vice versa.

TABLE 2

D	E
The LORDE MONTAGUE	I a furnes called POPHALL
The LORD of BUCKHURST	I a forge at SHEFILDE
Sir Thomas GRESHAM	I a furnace in MAYFILDE
John LAMBARD alias GARDNR at CRANLEY	I a forge in CRANLEY
Richard MARCHE of FFARNHAM	I a forge in DONSFOLDE
Mrs.BLACKWELL of NORTHCHAPPELL	2 a furnes and a forge in NORTHCHAPPELL

G	A or B
in HASLEMERE a new furnace	one forge in FRANYT in the hands of John PORTER one forge and one furnace in HASELMORE or thereabouts als a furnace called POPHALL
	One forge in FFLEECHING in the hands of Mr.Relfe
	a furnace in MAYFEILD
partener of a forge with John Duffield in the parish of CRANLEY	the L.BRAYE one forge in CRANLEYE in the hands of GARDENER
Thomas GRATWICK farmer to Rychard MARCHE gent for a forge in DONSFOLD	a forge in DUNSFOLDE
Will. WALPOLE having the occupying of a furnes and a forge in the parishe of PETWORTHE....belonging to one Margaret BLACWELL of London late wife of Willm. BLACWELL town clerk of ye said pishe by the graunt of ye said Margaret during pleasure having married one of her daughters.	the late Erle of NORTHUMBERLAND one forge and one furnace in PETWORTH great parke in the hands of Mrs.BLACKWELL

(D)
Thomas SMYTHE of PETWORTH

(E)
2 a duble furnes
nere NORTHCHAPPELL

Roger GRATWICK of HORSEHAM

2 ii forges in the fforest
of St.LEONARDS

Nynion CHALENR of CUCKFILDE

2 a furnes at BLACKFOLDE and
a forge at GASTON'S Bridge

John CAUFFILDE of CRUCKEFORD
(ERFIELD, EVERFFIELD)

2 a furnes and a forge in
CRUCKEFORD

Henry BOWER of TYNLEY

3 a duble furnace at NEWBRIDGE
and a forge at TINSLEY

(G)

(A or B)

a furnace in SHILINGLEE parck in one forge and one furnace in
ye parish of CHERFORD; a furnace; SHILLINGLEE als a double
als he occupys under his father furnace nere NORTHECHAPPELL
a forge in HALFIELD wch works
belong to Mr Willm.BOYER of
Hampshire.He hath also in CHERFORD
a forge a biulding in his owne
ground wch as yet hath not
wroughte

for a fornace in ye parish of
IFIELD two forges in ye forest
of St. Leonards wch two forges
belong to the Earl of DERBY

The Quene's Matie one forge in
St.Leonards in the hands of
Roger GRATWICK.
One forge in IFIELD als two
forges in the fforrest of
St.Leonards.

farmeth the one halfe of a forge
and a furnisse of Rich. COVERT
being in COCKFELD thother half
being his owne,more farmeth of
Mr.Francis CHALLYNOR gent. one
forge in ARDINGLY

A. a forge in ARDINGLYE. one
forge and one furnace in SLAUFAM
B. a furnace in BLACKFEILD and a
forge at GASLONES(?) Bridge

farmeth the L.s of ABURGAVENNY
and SURREY ptes of two forges
and one furnace in MOOREFORREST

a furnes and a forge
in CRUCKFORD

a forge in TINSLEY a furnace in
STRUDGATE Parck beside MOORE
FORREST als a forge and furnace
in ASHEDOWNE

The Quene's Matie one forge and
one furnace in ASHEDOWNE in the
hands of Henrie BOWYER one forge
at TINSLEY als a double furnace
at NEWBRIDGE a furnace in
MOOREFORESTE

(D)	30	(E)	(G)	31	(A or B)
Robert WHITFILDE of WORTH		I a forge at WORTH	? in Sussex a forge		one forge in ROWFRANNT als a forge at WATHE
John BLACKET of HODLY		I a furnes at HOOLEY			Mr.MICHAEL one furnace in HOADLEYE
John DUFFILDE of GRINSTED		2 a furnes and a forge in the pishe of GRINSTED	a forge & furnace in East GRINSTEDE and ptener of a forge and furnace with Tho. SMITH of PETWORTHE in SHILLINGLEE in ye parish of CHERFORD and also ptener of a forge in the parish of CRANLEY		PAYNE & DUFFIELD one forge one furnace in GRINSTEED
John THORPE of HEDGECOURTE		2 a furnes and a forge at HEDGCORTE	farmer of a forge and fornace about COPTHORNE and LINGFIELD belonging to ye Lady GAGE and after to Mr.John GAGE her son		A. John GAGE one forge and one furnace about COPTHORNE & LINGFIELD in the hands of THORPE B. A furnce and a forge in HEDGCOULT
Robert REYNOLD of GRYNSTED		2 a ffurnes called MYLLEPLACE and a forge BRAMBLETYNNE	one furnace in MILPLACE farmeth to MILLS for ye furnace and to one Mr. ? for ye forge		one furnace in MILPLACE als a forge in BRAMBLETON
George BULLYN of HARTFILD		I a forge called PARFORGE	occupyeth one forge in PARROCK in the pishe of HARTFELD being my Lord of BUCKHURST		The Lorde of BUCKHURST one forge and one furnace in PARROCK in the hands of GEO. BULLEN
John STACE of ASHEHIRST		I a furnes and a forge in ASHEHURST	hath one forge and one furnace in ASSENHURST		Thomas...one forge and one furnace in ASHEHERST
Raphe HOGGE of MARSFILDE		I a furnes and a forge called MARSHALLS			One furnace called MARSHALL

(Table 2 Contd.)

(D)	(E)
Anthony MORLEY of ISFILDE	2 a furnes called HOSTED KEYNES and a forge at FFRESHEFILDE
Nicholas POPE of BUXTED	I a furnes at HENDALL
Alexander FFARMOR of RETHERFILDE	I a furness called HAMSELL
Arthur MIDDLETON of ROTHERFELDE	3 a furnes called HUGGENS furnes, a forge at littell BUXTED and a furnes at MAYNARDS GATE in RETHERFILDE
John PALOR of ROTHERFELDE	I a forge called HOWBORNE forge
Robert HODSHON of FFRAMFILDE	I a furnes called POUNLEY
John FFAUKENR of WALDERN	2 a furnes and a forge in MARSFILDE
John FFRENCH of CHIDINGLYE	I a forge at CHIDINGLYE

(Table 2 Contd.)

(G)	(A or B)
owner of one forge in FRESHEFELDE and farmer to a furnisse in HORSTED	one forge and one furnace in FFRESHEFEILD and HORSESTEED
occupieth of his owne one furnace in the (? parish of) BUXTED	a furnes at HENDALL
farmeth one furnace called HAMESELL furnace in the pishe of RETHERFELD beinge Mr. Richard WALLER of LYE	a furnace in
one furnace in RETHERFELD one other furnace lying in MAFIELD One forge lying in MAFIELD BUCKSTED & RETHERFIELD	one furnace in RETHERFEILD als a furnace called HUGGENS furnace, a forge at Little BUCKSTEED
farmeth one forge lying in BUCKSTED of one John WELLS	a forge called HOWBORNE forge
als SANDERS one furnace in FRANCKFIELD	a furnace called POWLEY
farmer to one forge and a furnace of ye Lady GAGE's during life and after Mr. John GAGE her son situate in MARFIELE	a furnace and a forge in MARSFEILD
yeoman, of his owne one forge in CHITTINGLEY and farmeth pte of a forge and furnace beside COPTHORNE, in HEDGCORTE of John GAGE gent.	a forge at CHIDDINGLEYE

(D)	(E)
Thomas STOLYON of HEFILDE	4 a furnes called WALDERN, PRIORY furnes, BRITLINGE forge and WARBLETYNE forge
Thomas ISTED of MAYFILDE	I a forge at MAYFILDE
Willm. RELFE of CRAULE	I a furnes at HEFILDE
Thomas ELLYS of MAYFILDE	I a forge called BIBLEHAM forge
George MAY of BURYSHE	I a forge called BUDGELL in BURRISHE pishe
Thomas GLIDE of BURYSHE	I a furnes called DAROLDE and ITCHEINGHAM forge

(G)	(A or B)
farmeth the one half of a forge and furnace being in the pishe of BURRISHE & WALDON of Sir John PELHAM kt., more half a furnise in the pishe WARBELTON of Syr Rich. BAKER kt. and a forge of Mr. John PARKER	a furnace called WALDREN furnace, PRIORIE furnace, BARTLINGE forge and WARBLETON forge
occupyeth of his owne one forge in MAYFELD	a forge in MAYFEILD
occupieth of his owne one furnace called HERFEILD in the pishe of HETHFELDE	a furnace at HEFEILD
farmeth one forge of Sir John PELHAM lying in MAYFELD called BIBLEHAM forge	a forge called BICKLEHAM forge
occupieth one forge in SALEHURSTE called BUGGSHELL forge of one Robt. WELCHE being..?	a forge called BUDGWELL in BURRISHE pishe
Formerly one forge and a furnisse, the forge being in ECHEINGHAM and the furnisse in MONDFELD of Sir Robert TERWITT KT. more the said Thomas occupieth one furnesse of my L. DACRES beinge in the pishe of HERSTMONNSER called CLIPPERHAM furnisse	a furnace called DARFOLDE and ICHEIGNHAM forge

(D)	(E)
John COLLYNS of BURYSHE being an old man of LXXX yeres of age and not able to travell	I a forge called the NETHER (?) forge
Simon COLMAN of BRIGHTLING but he is very sick and not able to travell	I a furnes called BATTSFORDE furnes
Thomas COLLYNS of BRIGHTLING	I a furnes called STOKENS furnes
Richard WICKS of BATTELL	2 a furness called NETHERFILDE furnes and a forge in MUNSFILDE
John BAKER of BATTELL	I a furnace and a forge in WITHIAM
John PORTER of BATTELL	I a forge in BAYHAM
Thomas HAYE of HASTINGS	I a furnace called NETHERFILDE furnes
Bartholomewe JEFFERY of BUCKHOLDE	2 a furnes and a forge called BUCKHOLDE
John RELFE of CROWHURST, but he is very sick with the....?	I a forge at CROWHURST
Richard GRENE of WINCHELSEY	I a forge at MAYFILDE
Thomas MAYE of TYCEHURST	I a furnes called ECHINGHAM

(G)	(A or B)
	a furnace called BATSFORDES furnace
occupleth of his owne one furnace in BRIGHTLING	a furnace called STOKENDE furnace
one forge two furnasses thone in BATTAILL thother in WHATHINGTON	a furnace called NETHERFIELD and forge MUNFEILD
one furnase in MAYFELD	a furnace and a forge in WITHIEHAM
a forge in FRANT and LAMBREST	a forge in BAYHAM
a furnase within ye parish of BATTAIL	a furnace called NETHERFEILD furnace
of BEKSELL hath one forge and one furnesse in BUCKOLDE	a furnace and a forge called BUCKOLDE
farmeth one forge lyinge in the pishe of CROWHURST of Sir John PELHAM knight	a forge at CROWHURST
	a forge at MAYEFEILD
of WINCHELSEY hath one furnasse in ECHINGHAM	a forge in ECHINGHAM

(D)	(E)
Nycholas FFWLE of MAYFILDE	I a furnes and a forge in WADEHURST
Robert WOODY of FRARNT	I a forge called BENEHALL forge in FFARNT
John CARPENTER of FFARNT	I a forge called BRINKLAW in FFARNT
John ASHPONHAM of ASHEPONHAM	4 a furnes called PANYNG RECHE, ASHPONHAM FURNACE, A FORGE IN ASHEPONHAM, a forge in PENHURST
Davy WILLARD of TONBRIDGE	4 two furnesses and two forges nere TONBRIDGE
Sir Henry SIDNEY Lord President of the Marches OF Wales	2 a furnace and a forge at ROBERTSBRIDGE
Steven COLLYNS of LAMBREST	I a forge in LAMBREST
Michael WESTON of LYE WESTON	I a furnes at COWDEN I a forge in CANSERNE
Sir Alexander CULPEPER knight lying at my Lord Montague's house <u>(Table 2 Contd.)</u>	I a furnes called BEDBURY furnes in CRANBROOK pishe

(G)	(A or B)
one furnace and a forge in in WADEHURST	one forge and one furnace in WADEHERSTE
farmeth a forge called BEAME HALE forge in the pish of FFRANTE of Mr Richard LECHE	a forge called BENEHALL in FFRANT
farmeth a forge of Sir Thos. GRESHAM called BROKELAW forge in FFRANTE	
John GARDENER occupieth two forges and a furnace of Mr ASHEBURNEHAMEs the two forges in the pishe of ASHEBURNEHAME and the furnace in PENHURST	A. two forges one furnace in ASHBORNEHAM or thereabouts B. (as in E)
	two forges and one furnace in TONBRIDGE
	one forge and one furnace in ROBERTSBRIDGE
occupyeth one forge in LAMBERHURST of his owne	one forge in LAMBERHERSTE
	a furnace at COWDEN a forge in CANSERNE
hath one furnace in GOWDERST	one furnace in GAWDERSTE als BADBERIE furnace in CRANBROOKE pishe

(D)	(E)
Sir Richard BAKER knight being at his house in COLMAN's Strete in LONDON	I a furnes and a forge in DALLENDINE pishe
Christopher DORRELL of NYDGATE	3 a furnes and a forge in IWOOD and also a forge in FFARNT
Mr ELRINGTON of HARLSTON	I a forge in SHERE
Thomas DICK	

(Table 2 Contd.)

(G)	(A or B)
	one forge and one furnace in CRANBROOK and HAWHURSTE two forges and two furnaces in HEATHFEILD and WARBLETON
hath one forge and one furnace in IWOODE	one forge one furnace in ENWOOD als a forge in FRANT
one forge in SHERE of his own	one forge in SHEERE
of his own one forge called DORNDAL and one furnace called CHINGLEY wch he farmeth of Mr DARRELL	a forge in DORNEDALE

STANDFORD FURNACE, BRAMSHOTT, HAMPSHIRE
A CASE OF MISTAKEN IDENTITY

J.S.HODGKINSON

Straker associates this site with the Hooke family (1), but Cleere & Crossley express less certainty in separating records of this site from those of Pophole, in the same parish (2).

The site (SU/819344) is close to the village of Passfield and, although in Bramshott parish, lies in the Manor of Ludshott. Standford, the name it was given by Straker, is in the adjoining parish and there were mills there which should not be confused with this site. Pophole Forge and Furnace lies in Bramshott Manor.

The Passfield site is referred to in the Court Roll of the Manor of Ludshott (3) of April 16th. 1588 or 1589 as:

"...molend 'vocat' le Ham' Henrici Champion gen',"

and the site is described as lying on the stream (the River Wey) that flowed from Cooper's Bridge (on the border of Ludshott and Bramshott Manors) to the lands of the Bishop of Winchester in the Manor and Parish of Headley. Ludshott Manor was in the lordship of Robert Knight, gent.

The connection between Henry C(h)ampion and the forge in Ludshott Manor confirms these as the works involved in the dispute between Champion and Thomas Bettesworth of Trotton over a defective weighing beam. Bettesworth was supplying Champion with sows (4). A further dispute, in 1592, between Champion, and Edmond and Peter Fysher/Fish was settled when Champion agreed to take steps to prevent the forge pond from overflowing and endangering the corn mill of Thomas Heynes, downstream. Champion

had leased the land for the forge from Edmond Fysher in 1590, for 16 years, although this date is slightly at odds with the manor roll. Successive leases granted by the Fysher family had given rise to competition for the water (5).

In 1603, the Hammer appears in a dispute about rent (6) and it is mentioned again in October 1609 when its freehold tenancy was sold by Peter Fysher. Although the entry in the Manor Roll does not mention to whom it was sold, it is likely that it was to the Hooke family as Fysher had sold a wood known as Gentills Copse to them in 1597.

In 1642, the Ludshott Court Rolls recorded the death of Henry Hooke, said to be holding of the Manor two cottages, a blacksmith's shop called the Hammer, one lake (the millpond ?), three acres and Gentills Copse. The properties passed to his son John. In 1667 and 1668 John Hooke is recorded as supplying round shot to the Board of Ordnance (7). In 1684 John Hooke conveyed Gentills Copse and the Hammer Mills with two messuages to Henry Streater (3).

The Forge would thus seem to have had an operating life from 1589 until 1684.

Streater set up a paper mill on the site of the Hammer as early as 1690, when the Quarter Sessions granted a permit for rags to be collected for paper making (8). The Bramshott Paper Mill was in operation until 1924.

Two problems remain. Firstly the name, Standford, is inappropriate. The early name seems to have been "Bramshott

Hammer" though this should not be confused with the Bramshott (Corn) Mill, which lies further upstream. Secondly, what is not explained by the records above is the presence of glassy slag in the stream banks; evidence which has led to this site being inaccurately described as a furnace rather than a forge, despite forge slag having been noted at the site as well.

REFERENCES

I am most grateful to Mr. L.C.Giles of the Bramshott and Liphook Preservation Society for much of the information upon which this article is based, and for his helpful suggestions.

1. Straker, E. Wealden Iron (1931), 450.
2. Cleere, H.F. & Crossley, D.W. The Iron Industry of The Weald (1985), 357-8.
3. Court Rolls of the Manor of Ludshott, in the Library of The Queen's College, Oxford. Copies are in Hampshire Record Office.
4. Cleere, H.F. & Crossley, D.W., op.cit. 154, from Public Record Office REQ2/165/34
5. PRO REQ2/186/6. I am grateful to David Crossley for details of these references.
6. ibid. REQ1/21
7. ex.inf. Mr. Adrian Caruana, Chatham Historic Dockyard Ordnance Trust.
8. Hampshire Record Office, Winchester.

RICHARD AND JOAN ISTED, IRONMASTERS

BRIAN G. AWTY

Richard Isted died during the winter of 1541-2 and the Westminster Denization roll of 1544 shows his widow to have been the employer of five Frenchmen in a Sussex ironworks. The four Subsidy rolls for Hastings rape covering the years 1549 to 1552 (1) show that Joan Isted was still employing several Frenchmen - a founder Giles Laurence, a miner or filler John Maryan, a finer Robert Blank, and four other Frenchmen who were hired for one year only, who in 1549 included a second finer, Peter Borayne. The roll of 1550 places the works in the borough of Bivelham and confirmation of this seems to be supplied by the fact that in their wills both Joan and her former husband, Richard, describe themselves as being of Mayfield parish. Though it was rated to the rape of Hastings, Bivelham was part of Mayfield parish.

The Bivelham area contained three forges; that of Bivelham itself; Moate Mill forge, which lay higher up the Rother; and between them Hawksden, on a tributary of the Rother running down from the site of Mayfield furnace. It appears from Budgen's map (1724) that though Bivelham Farm lay in Hawksborough hundred, Bivelham forge and Bivelham Forge Farm were actually in Shoyswell hundred and this seems to agree with the evidence of the Subsidy rolls too (2).

The Subsidy rolls show two ironworks in Bivelham borough; the one at which Joan Isted continued as employer, and another carried on by Anthony Pelham from 1549 to 1551, but which by 1552 had been taken over by Thomas Morley. Lower showed that Hawksden belonged to Thomas Morley of Glynde. The Isted forge must consequently have been the one near Moate Mill (3).

The probability that one of these two forges was operating twenty years earlier is indicated by the inclusion in the Lay

Subsidy roll of 1524 for Bivelham borough of an alien with the strange name of John Merteyley. I infer that he was a hammerman and that his name was an anglicisation of the French marteleur. In 1525 Joan's husband, Richard Isted, paid tax on land held in the same borough,(4) but at this time there is nothing to link him positively with the forge. However, the furnace that Joan Isted was clearly operating around 1550 was very probably in existence before her husband's death.

Richard Isted made his will in December 1541 and it was proved in the following February (5). In it he bequeathed to his wife "woode bothe stonding, lying and groying, the whiche I have bought, cole (i.e. charcoal) and myne". In addition he left woods and farm in Mayfield and Heathfield to his son Richard. He also left lands and a tenement in Framfield, lately bought of William Dalynghton.

Isted's growing importance in the iron trade is probably reflected in the fierce enmity that obtained between him and William Nysell of Mayfield, who was under-tenant of Newbridge ironworks in 1539. Isted and his associate, John Mone, called Nysell "a person of noo good fame and name". They accused him of wishing to murder Isted and to bring Mone to Mayfield "there to be bounden to a post in the myddest of the same towne". Nysell had assembled adherents to destroy the Archbishop of Canterbury's park called the Plashett, between Ringmer and Little Horsted, and intended to "destroy other noblemen's parks in those parts", according to Isted and Mone (6).

When Joan Isted made her will in August 1557, four of her six daughters were married to ironmasters; Agnes to John Porter of Lamberhurst, Eleanor to Nicholas Fowle of Wadhurst, Elizabeth to John Baker of Withyham, and Alice to John Barham of Frant. The son mentioned in Joan's will is not Richard, who must therefore

have died young, but Thomas, who can only have been the child she was carrying at the time her husband made his will. Thomas was still too young to be granted administration of his mother's will in 1558, (7) but in the 1574 lists he is shown as owning his own forge and he still retained it in 1590. (8)

It is from the alliances with Baker and Fowle that we have confirmation that the Isted forge was indeed that at Moate Mill, for the family pedigrees assert respectively that the Isted family was "of Moate house" and "of the Moate".(9) But the location of the furnace at which Joan Isted's founder and filler were employed around 1550 is rather less clear. There seem to be two possibilities. That the Isteds had their own furnace at Bungehurst, about 1500m from their forge. This furnace lay on the stream that separates Mayfield and Heathfield parishes, and the same stream may have separated the boroughs of Bivelham and Tottingworth. Alternatively, Joan Isted could have been in partnership with her son-in-law, John Baker, at Old Mill furnace, about 800m from the Isted forge. Old Mill furnace must have been on, or close to, the boundary between the rapes of Hastings and Pevensey and between the boroughs of Iserhurst and Bivelham. It has no known links with any forge at this period (the nearest forge apart from Moate Mill was Woolbridge, higher up the Rother, but its connections at this period are not known), so a partnership with Joan Isted might have been attractive.

Due to the survival of archive material the ironworks we know most about are the ones such as Robertsbridge and Worth, started or carried on by important land-owners, but it seems possible that these were quite untypical of the early sixteenth century Wealden forge. More typical may have been the starting of modest enterprises by immigrant ironworkers themselves, the involvement of landowners coming about gradually, first as

suppliers of wood on increasingly favourable terms, and only when the rising price of fuel began to place it beyond the reach of the immigrants, assuming step by step the financial and managerial control of the ironworks themselves. Even at Newbridge on Crown lands the actual tenant of the first ironworks was an immigrant, Peter Roberts, whose rent was payable in the form of six tons of iron.(10)

The Isted concern could have started in this way, the forge of the 1520's being perhaps little more than a water-powered bloomery forge, drawing its charcoal from the woods of Richard Isted and others in the area. We can imagine Isted's increasing entrepreneurial involvement during the 1530's leading to a fully integrated ironworks having its own furnace at Bungehurst only a short distance from what was now a finery forge at Moate Mill. The availability of pig iron from Old Mill furnace during the 1540's would have opened the option of expanding the forge into a double-finery forge on the Robertsbridge pattern, for which the employment of two French finers in 1549 seems quite good evidence. The 1574 lists know of no Isted furnace, so possibly Joan Isted's death was followed by a period of retrenchment, during which Bungehurst was abandoned and pig iron was bought in from outside. But the young heir had powerful relatives to see that he survived as an ironmaster, and by 1590, when he would be about 48 years old, he had been able to remove himself to Hastings, quietly able to enjoy the modest profits of his forge and woodlands at a distance. The hammerman of Moate Mill forge, John Gayne, who is mentioned in the Mayfield parish register in 1616, was buried at Mayfield on 1 April 1620, so it appears that the forge may have continued until then.

NOTES

1. WIRG Bulletin 16 (1979), 4; Idem, 2nd series 4 (1984), 28-30.
 2. Idem, 2nd series 4 (1984), 24.
 3. Idem, 2nd series 4 (1984), 29-31: M.A.Lower, 'Historical and archaeological notices of the ironworks of the county of Sussex', Sussex Arch. Coll. 2 (1849), 214.
 4. J.Cornwall, ed., The Lay Subsidy rolls, 1524-5 (Lewes 1956), 148-9.
 5. PRO, PROB 11/29/2
 6. P.D.Mundy, ed., Abstracts of Star Chamber proceedings relating to the county of Sussex; Henry VII to Philip and Mary (Lewes 1913), 72-3.
 7. PRO, PROB 11/41/68
 8. C.S.Cattell, 'The 1574 lists of Wealden ironworks', Sussex Arch. Coll. 117 (1979), 170.
 9. Harleian Society Publications, 53 (1905), 101 (Baker), 115 (Fowle)
I am much indebted to Anne Dalton for helpful comments on two drafts of this paper; the suggestion that these pedigrees would prove the identity of the Isted forge was hers.
 10. H.F.Cleere and D.W.Crossley, The iron industry of the Weald (Leicester 1985), 112.
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ROWFANT SUPRA FORGE

J.S.HODGKINSON

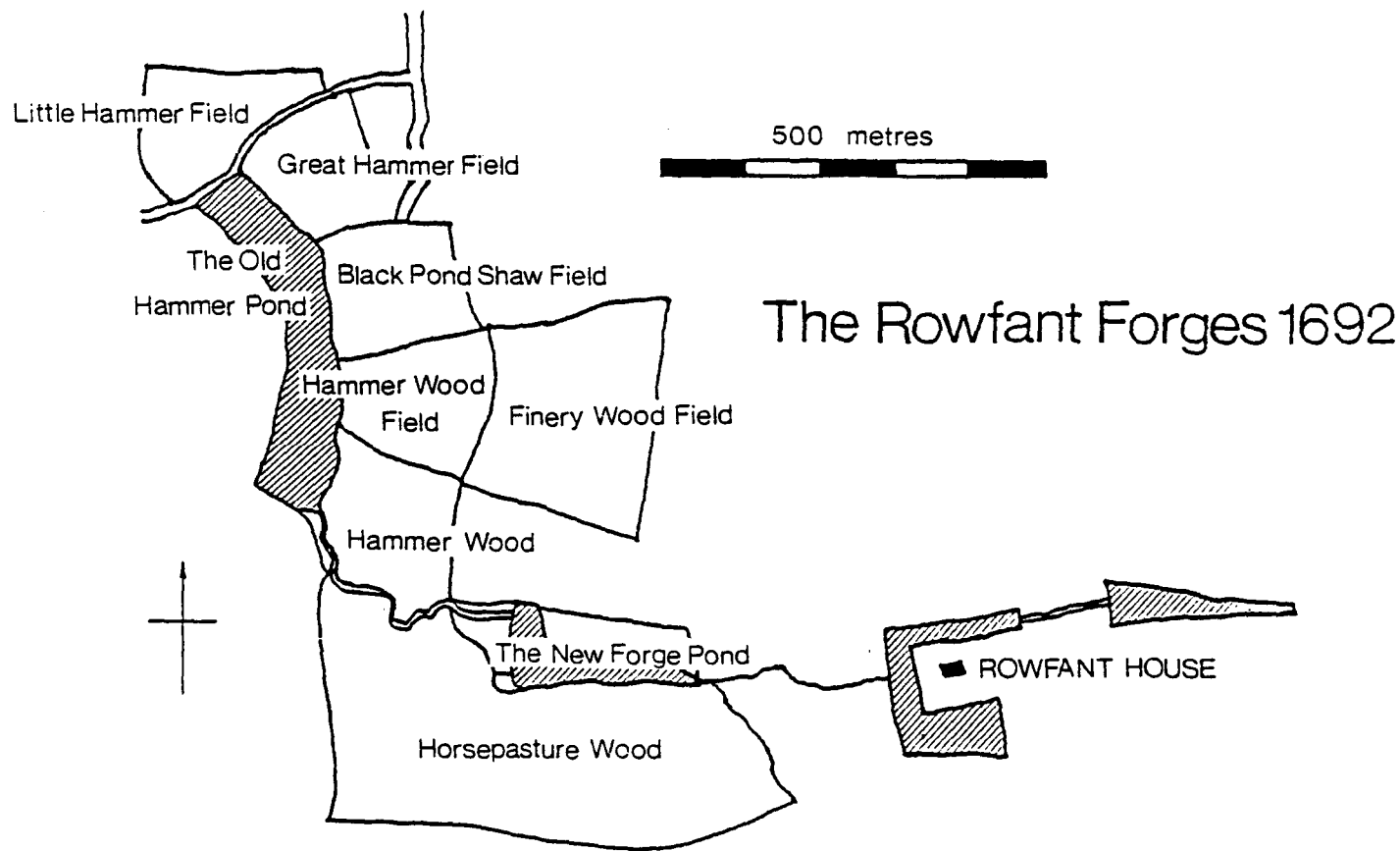
Straker (1931,467) and Cleere and Crossley (1985,353-4) have suggested that the location of this enigmatic site may be downstream from the pond (TQ/319372) north of Horsepasture Wood. Both refer to small, inconclusive finds of slag in the immediate vicinity. This location can now be confirmed on the evidence of a manuscript map of the Rowfant Estate, dated 1692, at present in private hands.

This map, the work of John Coffyn, was probably executed for Charles Goodwin who owned Rowfant at the time. On it, both forge ponds are named, together with parcels of land, the names of a number of which are derived from their proximity to the ironworks. The site of the earlier forge is shown by its pond, 'The Old Hammer Pond', while the later works are denoted by 'The New Forge Pond' upstream, hence the description 'Supra' in the lists of 1664 (Lower 1866,16). There is no indication of buildings at either site, save for an unidentified symbol downstream from the New Forge Pond.

The map is quite informative in other ways. Of the 276 acres of woodland, 169 acres are specifically described as coppice. Coppice wood, it is recorded on the map, is measured at 16.5 feet to the pole except in 45 acres where 18 feet to the pole is standard. Some field names indicate that a certain amount of woodland had been lost since the establishment of the original forge; for example, Black Pond Shaw Field presumably replaced a Black Pond Shaw, the name to which it has since reverted now that woodland has been re-established. The various tenants are mentioned, although the bounds of their tenancies are not clear. Their names are William Hockham, John Franke, John Dugdin and Francis Levitt. The list of 1664 states that Rowfant Forge was 'laid aside' and not in current use, while Rowfant Supra was ruined. It could be construed from this map that the opposite was the case. There is no indication of the furnace suggested c.1660 (Cleere and Crossley 1985,354).

REFERENCES

1. Straker, E. Wealden Iron (London, 1931).
2. Cleere, H.F. and Crossley, D.W. The Iron Industry of the Weald (Leicester, 1985).
3. Lower, M.A. Sussex Iron Works and Iron Masters Sussex Archaeological Collections; 18 (1866), 10-16.



THREE SITES IN THE TUDELEY AREA, NEAR TONBRIDGE, KENT

BRIAN HERBERT

RATS CASTLE FORGE. TQ/61234669. (STRAKER,p222)

This site was last visited in 1975 (WIRG Bulletin 15,p8); then, as on this latest visit, the visible evidence was not in favour of it being a conversion forge.

To begin with, there are no forge bottoms on the site. These are the only method of proving a conversion forge site, apart from a very precise documentary reference. Secondly, there is no sign of a bay. In fact it would be difficult to construct a bay on such flat terrain so close to the Medway. Thirdly, there is a conversion forge, Postern Forge, only 0.8km upstream from Rats Castle; this has a conventional bay.

Nevertheless, Rats Castle is definitely an iron-working site, for there is a great deal of bloomery-type slag, some pieces over 30cm square. It was probably a water-powered site because there appears to be a tail-race in a convenient position. There is also a "raised slaggy area" which is assumed to be the working area.

Because Rats Castle is so different from any other Wealden iron-working site, one can only speculate upon its use.

(1) It could be a water-powered bloomery-furnace site.

(2) It could be a pre-blast-furnace hammer forge. These "production forges" are known from books of a later period and should not be compared with the conversion forge of the blast-furnace period.

(3) It could be the site of the Tudeley Bloomery. Straker only assumed its position on the ground from the documentary evidence that it was on the Clare estate of Southfrith, near Tonbridge.

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TUDELEY, BLOOMERY. TQ/62054474. (STRAKER, p220).

The Tudeley bloomery-furnace site is situated beside a small stream which would be dry for most of the year. There is slag on both banks for about 50m, but no dating evidence has been found. It is, therefore, still assumed to be the documented bloomery operating during the 13th century on the Clare estate.

Upstream from where the "Tudeley Stream" enters another stream, two sources of iron-ore were located in the bank. The opposite bank, in both cases, had been dug out to make a plateau just above water level, showing perhaps where the ore had been dug out.

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DEVILS GILL BLOOMERY. TQ/61614404.

Another bloomery-furnace site (noted on the previous visit) was found about 900m upstream from Tudeley bloomery, situated some 12m up on the bank between the two adjoining streams.

If this was on the Clare estate in the 13th century, it has an equal claim to be the Tudeley bloomery.

TWO RADIO-CARBON DATES FOR MINEPITS AT SHARPTHORNE BRICKWORKS.
(TQ/375329).

GILES SWIFT

During the last three years extraction of clay for brick-making has, from time to time, revealed minepits in section in the quarry face. About 30 pits have been seen altogether. No pit has been seen in section from top to bottom as the quarry face is being excavated in three steps rather than one vertical face.

On average the pits are about 10-12m deep, 4m in diameter with vertical sides and so are not similar to other pits so far excavated at Petley Wood, Benzells Wood and Minepit Wood, as was originally suggested. (1)

Two C14 dates have been obtained for these pits:

1. Two lengths of roughly shaped timbers, approximately 150mm square by 1.75m long and 1m long respectively, were dug out of an exposed section of a pit about 2m below ground level. A C14 date of AD 1220 +/- 80 was recorded for the longer of the two pieces of wood.
2. A tree trunk, 45cm in diameter, was exposed in section in the fill of a pit at a depth of 10m. A C14 date for this was recorded as AD 1120 +/- 75.

These dates indicate that the pits were probably dug during the second half of the 12th century.

The two timbers recovered from the first pit had been roughly squared off, and the longer one had a mortice cut at either end. The shorter timber had been broken, but had a mortice at the sound end. It is possible that these timbers formed part of some sort of winding gear over the pit.

That the pits were dug consecutively, one after the other, can be shown by the apparent backfilling of each with the spoil

from the adjacent pit, this fill being the reverse of that found naturally; ie. yellow and brown weathered material normally present in the first two or three metres from the surface always occurred right at the bottom of the pits, whilst nearer the top of the pit the fill was of dark grey material, normally found only below a depth of six metres or so.

A maximum of six layers of ore could have been cut by each pit, to give a total depth of ore of 25-40cm, or about 4-5 cubic metres. This amount of ore far exceeds that which would have been extracted from pits such as those in Minepit Wood or Benzells Wood and is comparable with the amount of ore that Fuller, in his 18c. iron workings, expected to get from his minepits. (2).

About 3-5m of un-dug ground separates one pit from another, on average, with 15-20m in three places. Presumably the pit walls became unsafe if pits were less than 3m apart. Possibly 35%-40% of the ground has been dug, leaving the greater part of the ore undisturbed.

This fairly organised mining at Sharpthorne seems to indicate that a substantial bloomery could be close by, which is a little surprising as the Wealden iron industry was at a very low ebb in the 12-13 century. No evidence of ironworking could be found around the pits.

Thanks are due to Mr. Wickham, Works Manager for Messrs. Istock, for access to the brickworks; to the Sussex Archaeological Society for two Margary Research Fund grants to cover the cost of the C14 dates; to Bernard Worssam for his advice on matters geological; to Fred Tebbutt for his help and advice on numerous visits to the brickworks.

(1). G.Swift, 'Minepit Surveys', WIRG Bulletin, 2ser.2(1982), 15-21.

(2) E.Straker, Wealden Iron (1931), 105.

Two kilometres SSE of the Roman iron-working site on Great Cansiron Farm there is a string of quarry-pits near and on the southern part of Cansiron Lane between TQ/442373 and TQ/438363.

The pits are U-sectioned, up to 8-10m deep, and of various widths and lengths between 25m and 200m, and are surrounded with medieval ditch-bank-hedges. The ditches are all on the outside to prevent cattle getting into the pits.

It is therefore evident that these pits were in existence before the fields and hedges were established, and being too deep and steep-sided to be ploughed were fenced in as timber-producing "shaws" in exactly the same way as local ghylls were and still are fenced. The average age of hedges in the area is suggested as c. AD 1250 +/- 50; a species count in the hedge on the south side of Busht Shaw (one of the principal pits) suggests a date of c. AD 1150 +/- 50.

There are other very similar pits in the area that are either un-fenced or fenced without any ditch and bank, but nearly all of these can be positively identified from old estate maps as post-medieval quarries, claypits or marl pits.

It is therefore suggested that the Cansiron Lane pits with medieval ditch-bank-hedges must be Roman minepits since no-one else made large holes in the ground before the pits were enclosed in the 12th-13th century.
