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WEALDEN IRON RESEARCH GROUP

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Provisional Identifications of Ironworkers among French Immigrants listed in the Denization Rolls of 1541 and 1544

Brian G. Awty

Since the identification of further ironworkers in the Denization rolls of the 1540s is likely to progress quite slowly, it seems appropriate to publish a list of identifications made so far.

The rolls in question are

A. The roll of April 1541 in the Chancery records (P.R.O., C 67. 72) which regularly records country of origin and length of residence in England, but only occasionally the age of the immigrant.

B. The roll of July 1544 in the Archives of the Dean and Chapter of Westminster (W.A.M. 12261), which, as will be seen, regularly records much more information, even including numbers of children English-born. The number of French immigrants in roll A was given by Page (Huguenot Society Publications vol.8, pp.xxiv and xxv) as 119 out of a total enrollment of 395, whilst their number in B, a much longer roll consisting of over 30 membranes, he calculated at around 1900. In the case of A slightly less than a fifth of the French enrollments appear to relate to ironworkers; in the case of B the proportion must be in the region of one in ten.

The Chancery roll of July 1544 (P.R.O., C 67. 73) merely reproduces the bulk of the names recorded in the Westminster roll, adding only the amounts paid for denization. As a source of additional information concerning the immigrants it is useless, except in so far as variant spellings occasionally provide a check on names in the Westminster roll.

All but three of the following so called ‘Lists’ which I have extracted from the two rolls are reproduced with the order of the names in their original order, but with further details arranged schematically. In the case of B, they do not however necessarily succeed each other in the order given here. As implied by their headings, Lists B10, 14 and 16 differ from the others in that they are made up lists, arranged chronologically by date of immigration. List B11 has also been much reduced, as explained in the notes.

List B2 (of Frenchmen employed by the Duke of Norfolk at Sheffield, Sussex) corrects my statement (Bulletin 13, p.17) that Remy Tyller and Remy Morell belonged in the Newbridge list. B2 also poses the problem of the place of occupation of the Duke’s six ironworkers in the made up list B10. Sheffield had previously been presumed to be their place of employment.

A

Roll of April 1541

	Name	Years of age	in England	Wife's Nationality
	List 1			
1)	Robert Valley		17	English
2)	Peter RUSSELL		22	English
3)	Peter de Lyle		30	English
4)	William Teale (Teoile)		40	English
5)	Peter Harby		20	English
	List 2			
6)	John ANGERFELD (Augerfeld)	50	20	English
7)	William MESANS		16	English
8)	David de MOONSELL	50	20	Alien
9)	John GODARD		18	Alien
10)	John Dure		14	Alien
	List 3			
11)	John VALION		17	Alien
12)	Francis Dolard		20	Alien
13)	Dennis LE BE		18	Alien
14)	John BYLLARD		17	Alien
15)	John Hatto (Hateo)		20	Alien
16)	Bartholomew D ——- (Dignice?)		18	Alien
17)	Overus RUSSELL		17	English
18)	Giletus (William) RUSSELL		22	English
19)	Adrian HANYSITE		18	English
20)	Jakes HANYSITE (Erik Hamsite)		24	Alien
21)	Peter RUSSELL		19	Alien
22)	James Parmenty (Paumerity)		27	English
	List 4			
23)	William Ellis		50	English
24)	John ELLIS		30	English
	List 5			
25)	Lawrence BLEWETO		12	Alien
26)	Jakes RACREFFO		16	English
27)	William HATTOWE		20	Alien
28)	Anthony HELYS		20	Alien
29)	John Bekebote		18	Alien
30)	Vincent DEWPROWNE		17	Alien
31)	John CARBONAT		23	Alien
32)	William Bennardus		28	English
	Isolated entries in this roll			
33)	John STIELE		50	English
34)	John BODYING		28	English
35)	John LABYE		14	

This document is particularly difficult to decipher near the join between the two skins of parchment of which it consists. The break occurred between entries 18 and 19, but the roll has been repaired with the order of the skins reversed, so that entry 19 now heads the roll and 18 concludes it. Immigrants identified with some certainty as ironworkers are indicated by capitals. Page's variant readings are given in round brackets.

B

Westminster Denization roll of July 1544

	Name	Province of birth	Place	Years of age	in England	Wife's Nationality
	List 1					
	Frenchmen to be made denyzens for Iron Workes by William Levett, clerks					
36)	Nicholas Gerarde (Jerard	Normandy	Newell	22	14	English
37)	Abre Russell	(Normandy	Newell	52	26	English
38)	John Pynyon (Pynion	Picardy	Awnell	40	24	English
39)	John Perago	(Picardy		53	30	Married
40)	Gilbert Averell	(Normandy	Bewcaut (Bewcant)	54	36	French)
41)	Anthony Morrys (Morys	Normandy	Bewbecke	20	30(sic)	English
42)	James Morrell	(Normandy	Bewell	60	19	Married
	Frenchmen to be made denyzens by John Baker					
43)	Mathew Beawshaw (Bewsawe	Normandy	Catilion	40	24	Married)
44)	Cardo Kydvilde (Kyrdebyll	Normandy	Newcastell	41	26	French)
45)	Peter Whight (Whyte	Normandy		40	23	English
46)	John Bottinge (Butting	France	Henno	36	25	English
47)	John Robynett colyar					
	Frenchmen to be made denyzens by Eystred Widow					
48)	John Shermun (Sherowe	Normandy	Pesuys	52	32	English
49)	Marian Deprey (Dupre	Normandy	Halautier (Halantier)	33	15	English
50)	William Ogyer					
51)	Peter Baynowe					
52)	William Freman					
	Frenchmen to be made denyzens by Nicholas Eversfield					
53)	George Moryow (Moreway	France	Bewsaut (Bewsant)	28	15	English)

54) Peter Vynten (Fynto Normandy Nevell 44 30 English
55) Peter Vyllan (Fellyn Normandy Bewbecke 35 25 Married
56) William Fremens
57) Roger Tankerye (Tancre Normandy Nevell 47 30 English
58) Quintin Pyller (Tyler Normandy Nevill 30 13 English

Frenchmen to be made denyzens by Richard Wakes
59) Peter Lambert
60) James Tamplier
61) Philip Toulett
62) Warnett Geratt
63) Nicholas Kynnery
64) John Vigott

In its original form this list consists of names only. The details within square brackets in the cases of the workers of Parson Levett, Joan Isted and Nicholas Evers-Field are supplied from entries extracted from List 11 below, and in the case of John Baker's workers from a third section of this exceedingly long roll. Between 43/4 and 45/6 occur 206 and 219 in the alternative version (see List 16 below). The variant place names between round brackets are Page's renderings, where quite legitimately, but often wrongly, two minims are read as 'n' instead of 'u'.

List 2

With my lorde of Norfolk

65) Peter Almande France 33 French, Michell
66) Nicholas Lawhen France 30 English
67) Jelett Mocomble France 50 French, Marian
68) John Carye France 30 English
69) John Myschewe France 30 French, Johan
(Mysthewe)
70) John Gavell France 30 French, Bonie
(Ganell)
71) Lewys Botery France 22 French, Mylsent
72) Peter Bulie France 25 French, Michall
73) Jelett Bertyne France 15 French, Marian
74) Morys Larbye France 20 French, Katheryn
75) Remy Tyller
76) Remy Morell
77) Mawdyn Lucas
78) John Bartyne

In the Kynges forge att Newbridge
79) Thomas Layne Picardy 34 20 Burgundian
80) Peter Fremyng Normandy 36 22 French
81) Nicholas Tyler Normandy 30 18 single

82)	James Lenarde	Picardy		26	19	single
83)	Charles Mottynge	Normandy		30	20	
In the forge at Parrockes						
84)	Nicholas Growte	Normandy		52	22	French
85)	John Lambert	Normandy		56	34	English
86)	Peter Denwall	Picardy		40	37	French
87)	John Turke	Picardy		60	38	French
88)	John Jonnett	France		31	19	French

List 3

In Sir Robert Tyrwights Iron Worke						
89)	Thomas Dewprown	Normandy	Benvisant		20	English
90)	John Carbonett	France	Ownell		30+	English
91)	Nicholas Bartyn	Normandy	Elbuseyt	40	23	
92)	Charles Poleyn	Normandy		29	12	
93)	John Margoo	Normandy			16	

List 4

In Master Pelhams Iron Worke						
94)	Isambert Bilet (Bylett)	Bewesyn (Bewevers)		45	30	French
95)	Simond Tyler	Normandy		40	20	French
96)	Nicholas Uddys (Oddes)	Bewasyn	Saucye (Stamye)	60	16	Frency
97)	John Vynton (Bynton)	Normandy		50	25 (29)	English
98)	Lewes Raunser	Normandy		25	10	
In Master Lunsfords Iron Worke						
99)	John Deford	Normandy		60	35	French
100)	Gilham Nuffyld	Normandy		30	14	
101)	Everode Pynyon	Bewuasyn	Aunell	50	34	French
In Master Wybarns Iron Worke						
102)	Gilham Bennett priest	Normandy		40	12	
103)	Gilham Holmes	Normandy		30	16	English
104)	Frauncys Tollett	Normandy		28	15	French
In Master Mays Iron Worke						
105)	William Harchaunt	Normandy		21	7	
106)	Jerman Tollett	Normandy		30	14	French
107)	Valentyne Deprowne	Normandy		16	15	
In John Barhams Iron Worke						
108)	Marian Lamberd	Bewasyn	Bewverse	50	28	French
109)	Gilham Soberis	Normandy		18	7	
110)	John Gardambas	Normandy		33	14	English

Numbers 94, 95, 96 and 97 have duplicate entries at an earlier point in the roll, with differing details in three cases, which are here given within brackets. I propose a different reading of the place of birth of 96, from that given by Page.

List 5

Sir William Sidney for six

111)	Jeffery Totayn	Normandy		8	English
112)	Laurence Graunte	Beauface	Canney	6	
113)	Peter Cac(t)hery	Beauface	Canwey	20	
114)	Gilham Velett	Normandy		7	
115)	John Marie alias Margotes	Beauface		11	
116)	Robert Lygon	Normandy		5	

List 6

With Sir William Barrentyne

117)	Anthony Burder	Normandy	Beaufote (recte Beausote)	20	
118)	Robert Tyler	Normandy	Boell	20	
119)	Anthony Tyler	Normandy	Newville	10	

List 6 consists of over a dozen names, of whom only the first three can be identified as ironworkers. Page omitted 119 from his list and recorded only Anthony Tyler's entry in the Chancery roll 0f 1544.

List 7

Servant to Sir William Sidney knight — collier

120)	Gillam Torshey (Tasshes	France		15)

Another duplicate entry.

List 8

121)	Cardo Boyle	Normandy	Newcastell	25	English
122)	Gwillam Brisboye	Normandy	Grisoldes	27	French
123)	John Langleys alias Margo	Normandy	Haucort	18	French
124)	Thomas Dogyn	Normandy	Compenfelde	20	French
125)	Philpott Mettell	Normandy	Beaufold (recte Beausolde)	30	
126)	Giles Gillett alias Ouforde	Normandy	Gile Fountenayes	37	English
127)	Robert bows	Beauface	Hownwell	29	French
128)	Jamys Cacherie alias de Mergeyes	Bewface	Canvey	20	French
129)	Joachim Clachoo (Clathoo?)	Normandy	Harbfilde	8	
130)	Adrian Dogyn	Normandy	Compenfeld	14	

The Robertsbridge forge book for 1546 (East Sussex Record Office, Accession 1745) proves this list to be employees of Sir William Sidney. In the case of 125 Page's list has Beauford as place of birth, presumably a printer's error.

List 9

131)	Jurdain Bullie	Normandy	Beaufote (recte Beausote)		26 Dutch, Johanne
132)	Barton Pullen	Normandy	Newvill	22	single
133)	Charles Pullen	Normandy	Newvyll	2	single
134)	Rowland Mocumble	Normandy	Newvill	44	English, Johanne
135)	Henry Meryall	Normandy	Collo	12	
136)	James Vernys	Normandy	Boell	22	English,Elizabeth
137)	Peter Gayne	Normandy	Rone	10	English, Agnes
138)	John Vernys	Normandy	Boell	4	single
139)	Nicholas Delyche		Depe	10	English,Margaret
140)	Martyn Tournewys	Beauvasse	Caynne	3	English
141)	Gyles Shamelett	Towren	Towre	10	single
142)	Gillam Rocketh	Normandy	Rawvill	15	English, Glyne

The Pevensey rape Subsidy roll for November 1543 (P.R.O., E179. 190/191) shows that 131, 132, 134 (Rowland Moonlye) and 137 worked for Sir William Barrentyne. The Vernys family were probably colliers, so his workers James Collyer and John Colyar were probably 136 and 138. The remaining immigrants cannot be proved to have been ironworkers, but the similar forms of entry indicate that this was all one list.

List 10

Workers of My Lorde of Norfolk: not listed consecutively in the roll

143)	Adrian Attour	Normandy Rone	irewurker	14	
144)	John Gumrie	France	fyner	10	English, Johanne
145)	Francis Lambert	France	moyner	8	English
146)	Maryan Predome	France	fynar	5	
147)	John Roberie (Roveray	Normandy		20	married)
148)	Reynolde Harrison				

In the case of 147 details of immigration come from elsewhere in the roll. As workers of the Duke of Norfolk 147 and 148 re merely recorded to be Frenchmen. 143 may be the same as 184.

List 11

149)	John de Vere	Normandy	Bewsaut (Bewsant)	57 (47)	21	English
150)	John Morrell	Normandy	Nevill	30	12	English
151)	William Provott	France	Borge	40	24	English
152)	Charles Motton	Picardy	Crofecure	30	22	English
153)	George Ravenell priest	Normandy	Nackfilde	70	30	
154)	Francis Turrell	Normandy	Nevill	33	15	English
155)	Nicholas Mighell priest	Normandy		60	40	
156)	John Ganard	France	Bewsaut (Bewsant)	40	25	Married
157)	William Dechyn	Normandy	Nevill	28	15	
158)	Woden Vasell	France	Varowe	44	36 (35)	English

159)	Peter Gaege	Normandy	Canny	25	16	
160)	Nicholas Michell priest	Normandy		52	30	
161)	Jermayn Mitell (Micell)	France		30	14	English
162)	Symon Rawe	Normandy	Bafronets	36	15	Married
163)	Richard Marian	France	Depe	42	41	English
164)	Giles Lawrence	Normandy	Croofelde	43	34	English
165)	Peter Cotting	Normandy	Bewsawe	66	52	Married
166)	Cues Glodde	Normandy	Newfeilde	38	23	Married

Most of the 32 immigrants listed at this point in the roll were ironworkers, and these include 14 whose details have been removed from here and used to supplement List B1. Definite ironworkers are 149, 150, 159, 161 and 164 and it must be at least strongly suspected that so are 154, 156, 157, 165 and 166. 162 is possibly an ironworker. 152 is possibly identical with 83, though the details vary somewhat.

List 12

167)	John Harve	Normandy	Rosie	18	Norman
168)	Remye Harve	Normandy	Rosie	18	
169)	John Roboye	Beawface	Owney	8	
170)	Isambarde Lame	Normandy	Newcastell	26	From Treport

List 13

171)	Onyan Russell	France	hamermaker (recte hammerman)	22	
172)	Philippe Bakaell	France	hammermaker (recte hammerman?)	12	
173)	Nicholas Richard	Normandy	collyer	35	
174)	John Lyonarde	France	fyner	30	
175)	Thomas Borde	Normandy	laborer	15	
176)	Robert Blancke	France	fyner	17	

List 14

Single entries identified as ironworkers

177)	Lambert Symar 'With my Ladye of Rutlande'		iron maker	50		English
178)	Robert Caron	Depe		40		
179)	John de Bellevelle	France (Bellenelle)	collyer	40		Married
180)	John Makecowmbull	France	Colyar	34		
181)	Anthony Myttzell	Normandy (Myttrell)	Nevyll	22	22	
182)	Mighell Bellatt	Normandy		40	20	
183)	Rowland Clarke	France		33	17	
184)	Adrian Hatto	Normandy			17	
185)	John Lavander	France		22	15	
186)	Jenyns (James) Tyler	France	myner		14	
187)	William Burdett	Normandy			14	
188)	Tarsell Crysson		collyer		7	
189)	Philippe Deffere	France	collyer		3	

184 may be a duplicate entry for 143.

List 15

Salt peter makers, servants to John Bowyer

190)	Richard Bennett	Normandy				
191)	John Dewvan	Normandy				
192)	Nicholas Gowghtier	Normandy				
193)	William Pynson	Normandy				

List 16

Possible ironworkers and persons connected with the trade

194)	Michael Lambert	Picardy			55	
195)	Piers Garvis	Normandy			45	
196)	Robert Turnyshe	Normandy		60	40	
197)	Nicholas Allarde	Picardy			40	
198)	John Pelsor	Ouchman		40	30	
199)	Gloude Fresarde	Picardy		33	28	English
200)	Robert Rowe	Normandy			27	
201)	John Snatchall	France			26	English
202)	John Ellyott	France			26	
203)	Vincent Euckett	Flanders			26	English
204)	Clement Russell	Rhone	Boelles		24	
205)	Jeffery Gaymebere	Normandy	Newcastell		22	Unmarried
206)	Nicholas Almonde	Normandy			20	
207)	Richard Labye	Normandy	labourer	40	20	
208)	Nicholas Heth	Normandy		23	20	
209)	William Bynnet	France	Roon		20	
210)	John Benne	France			20	English
211)	Peter Barton	Rhone	Royvele		20	
212)	Francis Gillett	Britanny	joyner		20	English
213)	Thomas Potter	Normandy	smith	36	18	English
214)	Reynolde Shoell	Picardy		24	17	
215)	John Androwe	Rone gunner with Peter Baude			17	
216)	Nicholas Douggen	Normandy	Congville	34	14	
217)	Francis Shivaller	France		18	13	
218)	Peter Deboye	France	smith	13		
219)	Cornelys Johnson	Hollond		36	12	
220)	Michaell Oyddes	Boveffyn (recte Bovessyn)		21	12	English
221)	Robert Pylas	Picardy	Bewface	36	12	Married
222)	Benett Nicoll	France	smith		11	
223)	Nicholas Beuser	Rone		13	10	
224)	Nicholas Collier	France			4	
225)	John Philpot (Fillpott	Britanny				English)

In the cases of 204, 211 and 223 Rhone and Rone are probably the diocese of Rouen. Details in square brackets for 225 are from Letters Patent of 1542.

List 17

226) Hugh Marchaunt
227) John Jouly (Jolys)
228) Nicholas Showen
229) John Weyo (Welleyn)

230) John Vylean (Vyall)
231) John Gottere (Guntier)
232) George Potte (r?) (Colyer?)
233) Aubrey Russell
234) James Walys (Manton)
235) John Paryse (Aparys)
236) Nowell Darby (Derby)
237) William Roys
238) Clement Colyer
239) John Sampson (Collyer)
240) Lawrence Poutsse
241) Nicholas Cotter
242) Marten Loye
243) John Howell
244) Myntan Rossell

The roll contains two very similar lists of 14 and 19 immigrants. Numbers 240 to 244 do not occur in the shorter list, but for the remainder the order of listing suggests the identifications given within square brackets. These workers are stated to have been miners and to have been recruited by William Pexwell (recte Pepwell), a Bristol merchant, under royal commission. In the shorter list a period of 40 years is alluded to, but in the longer list they are stated to "have contynued here in England by a gret space" and to have been born "in Croys and other cytyes and townes in Fraunce."

Hugh Marchant was the name of a finer at Robertsbridge forge. Numbers 231 and 241 have names similar to two colliers employed by Hugh Collins around 1550. It will also be noticed that three of these workers bear the name Collyer or a variant. Number 233 may be identical with 17 and possibly also 37.

The Weale Manuscripts[1] Jeremy S.Hodgkinson

Introduction

These manuscripts, entitled 'Prospectus of an intended work, in one Volume Quarto to be entitled An Historical Account of the Iron and Steel Manufactures and Trade' (etc.), are in two volumes in the Science Museum Library. They were the work of James Weale, junior, Private Secretary to the Rt. Hon. Lord Sheffield,[2] and consist of a collection of accounts of the state of the iron trade at the beginning of the nineteenth century, together with letters from manufacturers and economists, and many statistics concerning not only the industry in the British Isles but also overseas.

Amongst these statistics are two tables of interest to students of Wealden Iron, which are here reproduced.

The first table, useful as a comparison with the table of ironworks in 1717 to be found in the Fuller manuscripts,[3] is an extract of one listing forges throughout England and Wales. The second table was referred to frequently by Straker[4] as it provides a useful indication of the condition of the wealden iron industry in its final stage.

The Texts

1.

Copy of an original paper in the possession of Mr Rd. Reynolds

A list of Forges in England and Wales

With an account of the Quantity of Iron they have annually made, and do now make according to the best information we could, get. What forges are in Scotland we have not been capable of getting any information. (inter alia)

Surry & Kent		Have made tons	Do make tons
Tenchley[5]		50	50
Barden		40	40
Mr. Johnson's Mr. Gale's[6] Mr. Dibble's[7] Shingley[8]	No account of these except that their names appear in an old list		
Sussex			
Bivelham		40	40
Hawkesden		40	40
Brightlin (sic)		40	40
Burwash		40	40
Westfield		40	40
Marshfield[9]		60	60
Woodcock		40	40

The first column is the amount of the produce on an average of a few years previously to 1718. The second is the amount of their produce in 1736.

An account of several of the iron works in Sussex, and the state of them,
in the autumn of 1787.

Furnaces	Proprietors	Produce — Tons of Pig Iron
Ashburnham	Lord Ashburnham	Upon an average make 200 tons yearly
Heathfield	John Fuller Esq	May be computed at 100 tons yearly
Waldron	do.	Entirely down
Robertsbridge	Mr Bourne	These three works are yet standing
Bickley[10]	Miss Gotts	and possibly may work again in case
Lamberhurst	Mr. Harrison	of war
Hamsell	do.	
Darwell	Mr. Bourne	
Brede	Mr. Westrum	All these are entirely down
Warren	Raby & Co	
Gravety	do.	
Burnham[11]	Mr. Butler	

Forges	Proprietors	Produce — Tons of Bar Iron
Robertsbridge	Mr. Bourne	Makes yearly about 50 tons
Bibleham	Mr. Collins	..... 30 tons on an av.
Maresfield	Mr. Willis[12]	..... 30 tons do.
Burwash	John Fuller Esq	..... 30 tons do.
Hawkesden		
Brightling		Entirely down
Westfield		
Woodcock		Now a wiremill

There are some other places where works have been situated a long time since.

The quantity of Iron made at Ashburnham and Heathfield furnaces may appear very small. But two or three years are frequently required to collect stock sufficient for a blast of from 4 to 6 months; and therefore the annual average does not exceed what is here stated.

The forges are also in a very declining state, as they greatly depend upon a supply of old waste iron which is collected from London and elsewhere. The reason alleged for the decrease in the quantity of iron made in Sussex is that, hop poles being now much in demand, the proprietors of the coppices find it more profitable to convert their woods into that article rather than into cordwood for coaling.

June 3: 1788.

Notes and References

1. Science Museum Library, Archives Collection, James Weale, Account of the Iron and Steel Trade vol.11. I am grateful to the library for permission to publish the above extracts.
2. John Baker Holroyd, 1st Earl of Sheffield (1735-1821), President of the Board of Agriculture; of Sheffield Park, Sussex.
3. H. Blackman, 'Gunfounding at Heathfield in the 18th Century', Sussex Arch Colls 67 (1926), 52. Only three of the forges in the first Weale list are also in the Fuller list. They are Westfield (5O tons), Burwash (40 tons) and Bivelham (50 tons).
4. E. Straker, Wealden Iron (1931).
5. Tinsley Forge; bought by the Gale family in 1656. ibid., p.468.
6. Presumably Scarlets at Cowden; acquired by the Gales in 1703. ibid., p.225.
7. I have no information on either Mr Johnson or Mr Dibble.
8. Chingley Forge; see D. W. Crossley. The Bewl Valley Ironworks (Royal Arch. Inst. 1975), p.4,, note 10. The list referred to here and the one printed above appear to be the same but from a different source.
9. Maresfield Forge.
10. Beckley Furnace.
11. Straker op cit, p.219, suggests that this might be Barden. However he also refers (p.426) to a John Butler who ran Fernhurst Furnace in the late 18th century. Fernhurst is known to have continued producing guns during the American War of Independence.
12. Straker, ibid., p.402, ascribes the ownership of this furnace to Mr Collins who ran Bibleham, presumably making an error in transcription.

A Roman Coin from the Gt Cansiron Bloomery C. F. Tebbutt

During 1977, in spite of a scheduling order, a pond was dug in the south corner of the field which comprises the main part of the Gt. Cansiron Roman bloomery site at TQ 447 381. Among previous finds from the site was a dupondius of Vespasian (A.D.69-79).[1] Owing to acid soil conditions in the Weald the chances of finding coins to help the dating of sites are slight. It is therefore worth recording that in the course of mechanically digging the above pond a further Roman coin was found in good condition. Mr Simon

P. Garrett has kindly examined the coin and I summarise his report as under:

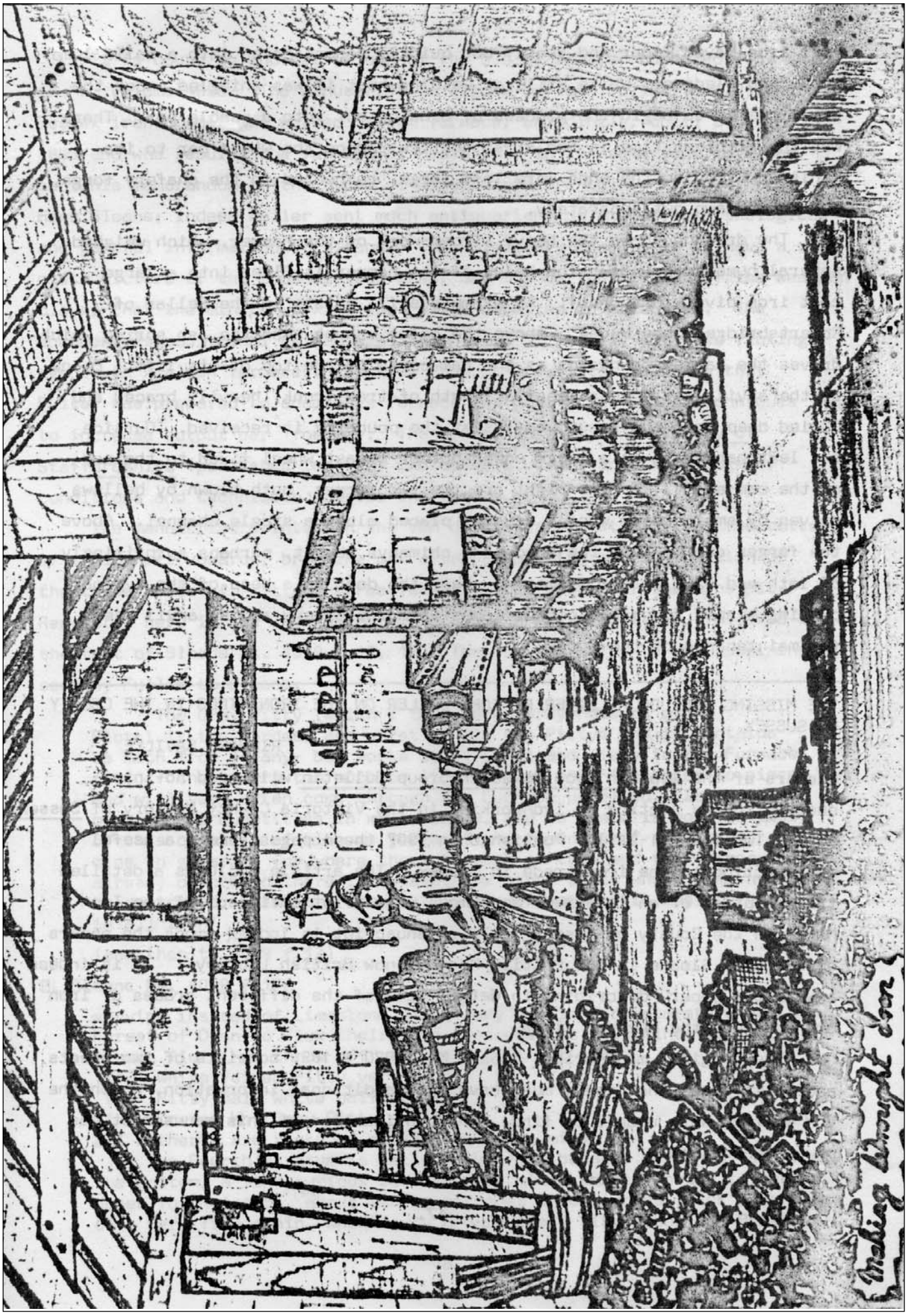
> 'Copper or bronze dupondius of Nerva Trajan A.D.98-117.
> The coin itself shows
> Obverse Bust of Trajan, wearing laurel wreath and head to right IMP. (ERATOR) CAES.(AR) NERVA TRAIAN AUG. (USTUS) GERM. (ANIA) P.M. (PONTIFAX MAXIMUS) (Leader of the armed forces, title of Caesar, Nerva Trajan, Senior Emperor, title of Germany, Chief Priest).
> Reverse Figure of Victoria, winged, walking left and holding shield on which are letters SPQR. In centre flanking Victoria are letters SC (Senato Consulto, by decree of the Senate).
> TR.(IBUNICIA) POT.(ESTAS) COS.(CONSUL) 1111. P.(ATER) P.(ATRIAE) (Holder of the Tribunician Power, Consul for the fourth time, father of the country).
> The reverse legend helps to date the coin fairly closely, as Trajan received Consulship for the fourth time on September 18th A.D.101 and for the fifth time on September 18th A.D.103.
> Therefore the coin must date between September A.D.1O1 and 103.
> Fairly good condition, some die damage on obverse letters PM and reverse letters COS. Judging by the wear, unlikely to have been in circulation for more than a few years.

A number of sherds of pottery found at the same time as the coin will be placed in Barbican House Museum, Lewes.

1. Sx Arch.Colls 110 (1972), 10-13.

A Reconstruction Drawing of a Finery Forge Roger J. Adams

The drawing shows the essential details of conversion forges for the manufacture of wrought iron before Henry Cort invented his puddling process, and is probably representative of a wealden forge. The sow or lump of cast iron to be converted (sometimes a scrap gun barrel) was levered through the opening in the outer wall into the top of the large charcoal fire of the finery forge. Here it was subjected to the fiercely oxidizing atmosphere and melted down in a series of drops. The carbon and much of the iron were burnt out in the process. A lump or bloom of iron formed in the slag bed of the specially-shaped cast-iron-lined hearth. The hearth was periodically fettled with a mixture of charcoal dust, fine slag and water. When the bloom was large enough, it was removed from the hearth on to the



cast iron paved floor and gently but quickly consolidated into a solid lump with hand sledges. While still at welding heat it was shingled under the power hammer to begin the process of drawing out into a usable bar. There was insufficient time in the first heat to reduce the whole bar to its finished size, so the ends were left large, re-heated in the chafery forge, and then drawn out separately.

The drawing shows the heavy timber-work of the hammer, which weighed several hundred pounds. The helve of the hammer is fixed into a large cast iron pivot (or hurst). An example still exists in the cellar of Robertsbridge Abbey House. Above the helve can be seen the ash spring which drives the hammer downwards as the cam comes to the top of its lift. Below is the anvil, set into a massive length of tree trunk, heavily braced and buried deep into the ground to resist the pounding it received. Outside the left-hand wall is a large undershot or breast wheel fixed to the end of the cam-shaft. To the right are the two forges, both blown by bellows driven by small water wheels usually placed along a single channel. Above the forges can be seen the hoods and chimneys, built, perhaps surprisingly, of lath and daub on oak frames. Near the door is a heap of the typical pudding-shaped forge-bed cinder lumps from the finery and an anvil used for maintenance of the tools.

The Missing Half of a Letter by John Fuller on the Iron Mines in the County of Sussex

Richard Saville

Readers of the Wealden Iron Research Group Bulletin will need no introduction to the section on ironworking in the Victoria County History of Sussex, Volume Two (pp.241-249). Published in 1907 these pages remain a useful introduction to the iron trade in Sussex. The article includes a detailed transcription of an (assumed) anonymous manuscript entitled ‘Of the Iron Mines in the County of Sussex’. This manuscript is lodged among the papers of Sir Hans Sloane in the British Museum (now British Library). It is indeed a valuable paper, describing in detail some of the different grades of iron ore found in the wealden clays.

The original manuscript, Sloane Ms. 4020 f.189, consists of two sheets, and it is clear that there must have been additional information, which the VCH editors were unable to find. The continuation of this manuscript has now come to light.

It is bound in another volume of the Sloane papers, numbered f.17 18 in Ms. Volume 4059. The manuscript is signed by John Fuller [d.1724], the Sussex ironfounder who worked Stream furnace, Chiddingly, until at least 1693 and who rebuilt the furnace at Heathfield in the same year. He had sent his memorandum on the types of Sussex iron ore to his kinsman Sir Hans Sloane; indeed Fuller sent much antiquarian, political, ornithological and general information to Sloane. This discovery enables us to have a complete picture of the type of iron ores, and the various levels of the wealden clays, that the miners working for Fuller expected to encounter. The document is additional evidence as to the use of locally-obtained fluxing agents in wealden furnaces. We know from other written evidence that Fuller was prepared to adapt his furnace and modify his blast techniques to increase output per founday. The reference to Plot's History of Staffordshire (published in 1675) indicates at least some knowledge of conditions and techniques outside the Weald.

The manuscript printed in the VCH describes the strata from the bottom of a mine-pit upwards, breaking off after completing the description of the three sorts of 'Pitty', three feet from the bottom of the mine-pit. Reprinted here is the last paragraph of Sloane Ms. 4020 f.189, followed by the text of Sloane Ms. 4059 f.17, 18. The numbers refer to ore specimens sent by Fuller to Sloane.

> 'The Gray Pitty (which I take to be Gray Measure of Mr Plott) is the hardest and worst of all the Pittys tho it contains as much Iron as any but works so very hot and fiery in the Furnace that if they carry too much of it will tear the Firestones to pieces, and will very often come through the Furnace unmelted. It is apt to be in great quantityes in most places, and as there is more or less of this quantity of mine we judge of the goodness of a vein of mine in generall for where there is much of this and the former sorts already described there is less of the other sorts which come now to be described, which are the best. However some of it must be used in all Iron'
> (and then to 4059 f.17)

BL Sloane Ms. 4059 f.17r

> serving instead of Limestone which they use in Worcestershire and the Forest of Dean to Flux their iron, because the best mines will not become fluid, or throw off any cynder without it.
> (21) White Veined Pitty very good.
> (3) Pitty Half white half Gray.
> (16) Course Hot Gray Pitty.
> all hitherto are reckoned among the Course mine.
>
> The Fourth stratum is called Five foot because it is so far from the Bottom, a fine curious soft Vein of mine, smooth enough to make Hones for Raisours, about two or att most three inches thick each stone of a very fine grain, when newly Broken looks like Iron just Broken.

It will not work without some courser mine to Flux it. This is one of the sorts of mine which they call veines in Generall, that being the name by which they express the best sorts of mine, and may possibly be what Dr Plott in his History of Staffordshire (Marginal note: cap 4 16) cabs white measure. We have nothing like what he calls mush, and there describes and commands, for the best sort of mine, nor any sweet Liquer among the stones, observed by any of our workmen that ever I heard of, which he mentions in the same place.

A sort of mine Lyes commonly among this called Pitty Clouts, which are very good and of the same colour, tho' not quite so fine, and seem by the workmen to be called so from their largeness and because they have usually some of the white veined Pitty amongst them.

f. 17_v

(5) Five foot
(17) Pitty Clouts

The fifth stratum is called seven foot, being two feet above the Last, and seven feet from the Bottom, this is like the former for Finess and Goodness, and differs from it only in thickness, it being seldom above an inch or Inch and 1/2 thick this is comprehended under
the Generall name of Veines, and the shuck that it is enclosed in is reckoned as good as the mine self, and we reckon any mine better for having the shuck upon it.

(18) (19) seven foot.

The Sixth stratum is nine foot Balls, Cabbalas, Hogsheds. The Lesser sort are called Balls, the second Balls as Big as Big as ones Head Hogsheads, the middle sort Cabbalas, they most of them lye nine feet from the Bottom, whence they have there name. They are very good and reckoned among the Veines.

(10) Balls
(4) Cabbalas a peice
(14) Hogshead a peice

f.18r

The seventh stratum is the eleven Foot or Grayes a thick hard Graystone fit for nothing but paving, or to make Lime, or Flux the metal. It seems to be designed by nature to cover the mine on the Top as the Bottom shuts it up below both which by their great thickness preserve it pure and unmixt from other stones, so that all the Iron mine is contained in the Compass of Eleven foot, and when you are down in the Pit standing upon the Bottom, you may measure all the stratums at their several distances. In most places they are very regular except where the mine is going out, and then first one stratum and then another is missing till you loose them all.

(15) a Peice of Grays or Eleven foot.

There is an Eight stratum called Thirteen foot balls next above the eleven foot which there are but very few of, tho' they appear in most Grounds they are as good mine as any, and are accompted amongst the Veines, but are so few in quantity that they scarcely deserve the name of another stratum.

(13) (Eleven — crossed out in MS)
Thirteen foot Balls

f. 18v

We have sometime a yellow and sometimes a white spur like that amongst the Lead ores but very rare and that is when the Stratums of the

Mine are Horsed (as the workmen call it) that is when the stratums run perpendicular, they being usually Horizon tall. This spar they call the Gum of the Horse, and when the stratum is thus Horsed it usually goes off.

I have often tryed the Goodness of mine by a Loadstone, the mine must be first Burnt and Powdered, and then the Ferringineous particles will follow the loadstone like steel Filings but not before it be burnt. But I cannot by this experiment make any judgement of its nature or Working, 'till it has passed thro' the Furnace.

This is the account I have so long promised you.

I am Honoured Sir yr most obedient and Humble servant

J. Fuller

Brambletye Forge, East Grinstead, revisited — C. F. and M. Tebbutt

This area has always seemed to be one which should be full of interest. The site has included a Domesday mill, a medieval and moated site, an 18th-century forge (TQ 417 353), a 17th-century mansion in ruins, and a later corn mill which has been demolished since Straker's time. The short account already published (WIRG Bulletin 6 (1973) 24) seemed at the time to be inadequate and we have since thought its conclusions likely to be wrong.

In June 1979 a further visit was arranged by kind permission of Mr Hale, the owner, and after a careful study on the ground a new and most interesting water system was plotted. This was the one that had served the late corn mill,

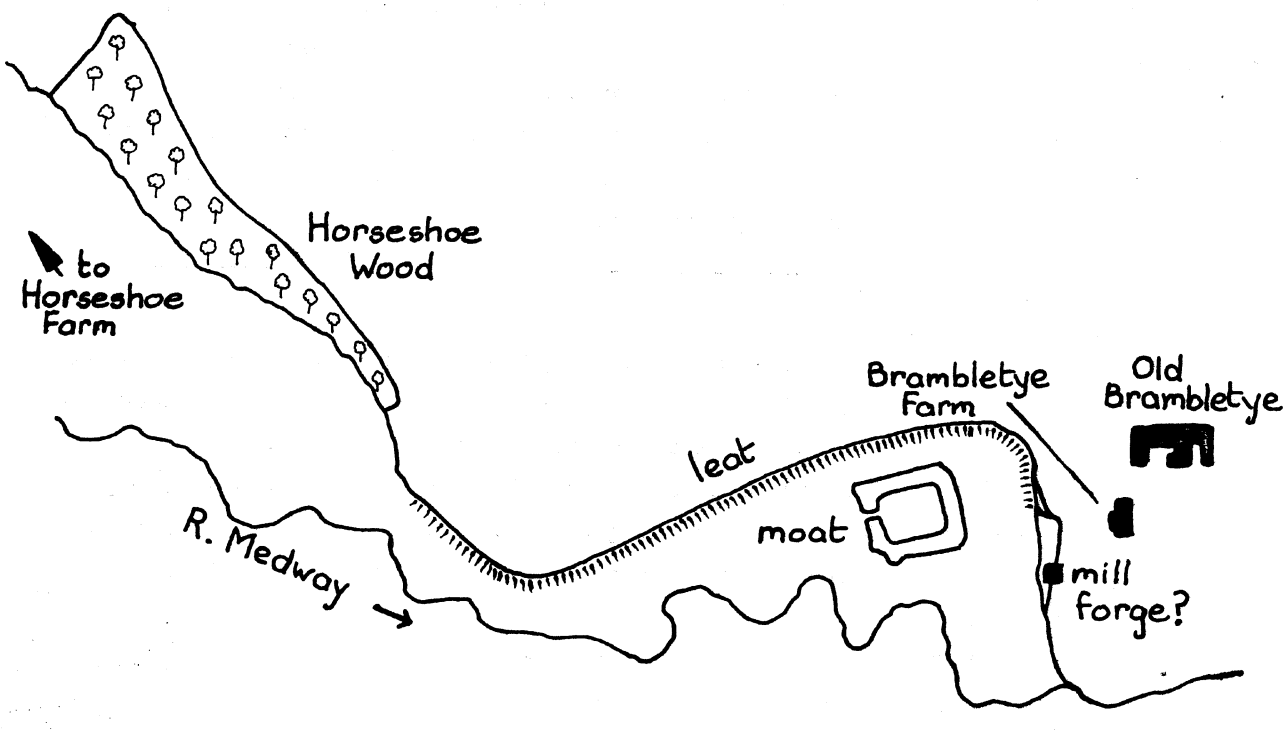


Fig. 1 Sketch plan of Brambletye area

but it seemed almost certain that it was the same as that for the forge. Water power was not obtained from the River Medway. For this to have been done would have required an immensely long bay, to span the wide flood plain, and would have resulted in the loss of a large acreage of valuable valley land. There is no sign of any such bay, and instead an ingenious plan was adopted. To the west of Brambletye a tributary stream joined the Medway, coming from the direction of Horseshoe Farm. Just before reaching the main river this stream was blocked probably by an overspill weir. From this point a leat was dug to convey the water from the tributary to the forge (and corn mill) site opposite the present Brambletye farm house (Fig.1). This leat was banked on its south side to prevent flooding of the low land which included the moat. As it approaches the mill site the channel becomes slightly wider, no doubt to provide some storage, although as it is some 650 m. long it would itself contain an appreciable volume of water. Since the publication of the 6" Ordnance map of 1961, c.400 m. of the west end of the channel has been filled in and levelled, but its course can still be traced. The remaining east end still survives as a dry channel.

At the site of the corn mill the stone tunnel leading to the wheel pit still exists, as does the flat area on which the mill stood. A dry ditch indicates the tail race which ran directly to the Medway, and the spillway sluice is still there. Lumps of forge cinder can be found nearby, and forge bottoms and cinder are to be seen in the adjoining farm roads.

Bloomeries occur all around the area and one can only speculate on the likelihood of the forge having medieval origins. Its proximity to the moated manor site, and the care taken in laying out the leat to avoid flooding it, are perhaps added arguments.

NEW BLOOMERY SITES

Chailey.

While Lodge Pond, Chailey, was being examined by our members K. Butler and L. Funnell for a possible water-powered site (without success) two new bloomery sites were located by the discovery of tap slag.

1. TQ 4174 1898 On the E side of Lodge Pond, 95 m. S of the spillway bridge at the NE corner, tap slag was found both in the bank and also in the shallow water at the anglers' stand. There was also black soil in the bank.
2. TQ 4176 1908 Near the site of the spillway pieces of bloomery slag and furnace lining were found in the spillway stream, probably coming from a bloomery under or S of the present pond bay.

Ansty. 299 236 (Further report; see Bulletin 15 (1979) 10, under 'Cuckfield')
A widely-dispersed scatter of undoubted tap slag occurs on arable land along the S slope of the stream valley. There is nearby an old track leading W from the site of Cuckfield Forge (TQ 303 235) inside the shaw bordering the stream. This is metalled with forge slag, having the superficial appearance of bloomery tap slag.

Historical Metallurgy Society Conference 7th – 9th September 1979

The importance of the Weald in the development of the iron industry in Britain was recognised by the Historical Metallurgy Society when their 15th annual conference was held at Sussex University under the title 'The Weald — Sussex'. The programme, arranged by D. W. Crossley with the help of WIRG members, aimed to explore by lectures and visits aspects of the industry from the Roman era, through its great expansion during and after Tudor times, to its eventual decline. WIRG was invited to act as host to the conference, and many members took part.

Introductory lectures on 'The Geology of the Weald' and 'The Development of the Wealden Iron Industry' by B.C. Worssam and D.M. Meades were followed by others dealing with more specific aspects. These were 'The Roman Iron Industry in the Weald' by Henry Cleere, 'Early bloomeries excavated in Ashdown Forest and their place in the local Roman Iron Industry' by C.F. Tebbutt, 'The Fullers — Sussex Ironmasters in the 18th Century' by R.V. Seville, and 'Cannon Casting in The Weald' by D.W. Crossley.

A full day's field excursion covered a wide area of the Sussex Weald, visiting representative sites, including the Iron Age hill fort with later Roman settlement at Garden Hill, Hartfield, where excavation has shown Romano-British iron working. The nearby Pippingford bloomery, of similar date, was originally excavated in 1970 and was uncovered for the conference visit, as was the early 18th-century Pippingford blast furnace, excavated in 1974. An experimental Roman-type bloomery furnace designed by R. J. Adams, seen in operation, was of particular interest to those engaged in metallurgical research. Products of the wealden iron industry were seen in the Anne of Cleves Museum of Sussex Local History at Lewes, notably the collection of firebacks, the Pippingford cannon and the Chiddingly boring bar. Wadhurst church was visited to see the cast iron grave slabs, another important product.

Over 60 members of the Society attended the conference, many of whom expressed their interest and appreciation of the programme. It was amply demonstrated that here was the cradle of the Industrial Revolution.

M.T.

Beeching/Ashburnham. A Georgian Dial with Edwardian Scenic Engravings by John H. Combridge. Antiquarian Horology Autumn 1977.

John Combridge has added one more item of Dawsoniana to the already lengthy list of fakes, or apparent fakes, that Charles Dawson, like a magnet, attracted to himself whether he willed it or not. The Ashburnham clock and its spectacular face with engravings of the wealden iron industry seems to have been accepted as genuine by all the early writers of this century who described it, attributing it to the 17th century and the scenes depicted as contemporary. Unfortunately Straker was among their number, including an illustration in Wealden Iron (p.77). It was not until 1956 that doubts began to be expressed, both on technological grounds and due to the association with Dawson, at whose sale the clock was auctioned after his death in 1912. The clock face finally reached the Williamsburg Museum, Virginia, in the early 1950s.

John Combridge first painstakingly takes the clock itself to pieces, showing that it was an early 19th-century piece almost certainly made, or sold, by Thomas Beeching of Ashburnham about 1820, and that the engravings were not original but were added at a much later date. If this is accepted, as indeed it must be, the question then arises of who designed and carried out the engravings (possibly separate persons) and whether they were intended as a hoax. Dawson apparently never did his own illustrations, but relied on his friend and collaborator John Lewis F.S.A. who was also a member of Sussex Archaeological Society. Lewis was a competent draughtsman, but he was technically ignorant of the wealden iron industry (see illustration of Hammer Forge, Wealden Iron p.87).

Combridge thinks that, while the clock engravings might have been designed by Lewis, he was not capable of engraving them. For the engraver he proposes the name of W. J. Lewis-Abbott, a highly skilled watch and clock maker who had a curio shop at St. Leonards-on-Sea. He was an amateur geologist and a friend of Dawson’s. Cambridge suggests that a charitable view could be taken of the whole affair. Knowing Ewson’s interest in old furniture, Lewis and Lewis-Abbott might have designed and carried out the engravings, in their innocent ignorance of the industry, on an old clock from the

St. Leonards curio shop. This they might have intended to present to their friend Dawson on his marriage in 1905. Combridge does not, however, entirely rule out a hoax perpetrated on Dawson himself; like other Dawson mysteries this one has not been completely cleared up.

C.F.T.

The Excavation of a late Sixteenth/early Seventeenth Century Gun-casting Furnace at Maynards Gate, Crowborough, East Sussex 1975-76. Owen Bedwin. Sussex Archaeological Collections 116 (1978), 163-178.

This was a rescue dig, in advance of industrial development, by the Sussex Field Unit, ably undertaken by Dr Owen Bedwin. Although extensive robbing of stonework had taken place since the furnace was abandoned, and little of the furnace itself remained, other features of great interest were found and recorded before destruction. The carefully-contrived pattern of drains under the furnace was still intact, emphasising the importance of dryness in furnace working, and much of the wheel pit remained with its ashlar walls and timber base (rather surprisingly of chestnut).

Perhaps the find of greatest interest was the second wealden gun casting pit to be excavated. This dated from 100 years earlier than the first to be found, in 1974 at Fippingford Furnace. At Pippingford the timber pit lining was intact and, short of partial destruction, it had been impossible to determine by excavation exactly how it had been constructed. At Maynards Gate, perhaps fortunately, all the upright timber staves had been robbed, leaving, down the sides of the pit, a regularly-spaced series of horizontal wooden hoops to which the missing perpendicular staves had been fastened. The laths forming the hoops had overlapping chamfered joints; these were nailed together in such a way that this could only have been done before they were placed in the pit. One may therefore surmise that the large barrel- like structure, 1.5 m. across and 3 m. deep, was built on the surface and lowered into the pit. Elaborate precautions, clay caulking, had been taken to make the pit watertight. Excellent photographs and drawings illustrate the finds.

The Maynards Gate excavation has added significantly to our knowledge of the wealden gun-casting industry and we are grateful to, the Field Unit for undertaking it at short notice and in limited time. Offprints of the complete article can be obtained from Brian K. Herbert, WIRG Publications Officer, 1 Stirling Way, East Grinstead, West Sussex, price 60p, postage lOp extra.

C.F.T.