WASC 2265

Record of Headson Family connection with Mills

- 29. Hatfield House, MAPS II/23.
- 30 British Museum, Add. Mss. 5505, fos. 23-24.
- 31. Propellants, Explosives and Rocket Establishment (Waltham Abbey), 1049/a.
- British Museum, Add. Mss.5505, fos.23-24; Northamptonshire R.O., Additional Wake Papers, 1965/129.
- 33. P.R.O. WO 47/6, fo.106.
- Ibid, fo.127; P.R.O. WO 48/5; P.R.O. WO 47/8; P.R.O., PROB 11/352(141). This last source implies a Mr. Raddon owned the mills.
- 35. P.R.O. WO 47/19A, fos.7,17,140; P.R.O. WO 48/5; P.R.O. WO 48/10, fo.271.
- Propellants, Explosives and Rocket Establishment(Waltham Abbey), WASC 307; Northamptonshire R.O., BH(K) 783; P.R.O., PROB 11/352(141).
- 37. P.R.O. PROB 11/352(141), PROB 4/1508.
- 38. P.R.O. WO 48/24-27; P.R.O. WO 49/220.

- 39. P.R.O., S.P. 44/237, fo.47; P.R.O. WO 48/29-34; P.R.O. WO 55/1758.
- Cal. Treas. Books, 1689-92, 1194; ibid, 1693-96, 365; Cal. S.P. Dom., 1694-95, 150; P.R.O. S.P. 44/237 fo.47.
- 41. P.R.O., PROB 11/470(110).
- 42. P.R.O. WO 48/41; P.R.O. WO 55/344 fos.176-79; P.R.O., PROB 11/415(119); PROB 6/87.
- P.R.O., PROB 11/312(117); PROB 11/361(128); W. Winters, Centenary Memorial of the Royal Gunpowder Factory, Waltham Abbey (1887) 18.

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Book Reviews

GEORGE PARKER BIDDER, The Calculating Boy, by E. F. Clark and J. Linfoot. *KSL Publications*, Bedford, 1983. 518pp. illus. £21.00.

IN THE HEROIC AGE of 19th century engineering names like the Stephensons and the Brunels immediately spring to mind, but the name of George Parker Bidder, who was a respected friend, and indeed partner, of Robert Stephenson, is frequently overlooked and is only mentioned as a child prodigy able to resolve complex mathematical calculations in his head. In his day, however, Bidder was regarded in the same light as his great contemporaries and it has been partly the absence of an adequate biography that has led to the neglected recognition of his rightful place in 19th century civil engineering development. adequate biography is now available, excellently written and extremely readable, by his great-great-grandson E. F. Clark. Also contained is an appreciation of Bidder's calculating ability by Joyce Linfoot, mathematical scholar and Fellow of Lucy Cavendish College, Cambridge.

This important book has its place in national biography as Bidder was a national, in fact international figure, but it is the Essex connection which must be considered here. Already as a teenager Bidder was involved in calculations at a responsible level during the extensions to the London Docks and was later consulted on the construction of the London and Blackwall Railway. His interest in dock development and in Essex led to his active participation in the promotion of the North Woolwich Railway and later the London, Tilbury

and Southend Railway, originally intended to serve Tilbury Docks but with the Southend section added on almost as an afterthought. Being involved also with railway development in Norfolk and Suffolk led ultimately to his interest in the amalgamation of eastern county railways to form the Great Eastern Railway of which he became one of the first directors. He was also critical of the wild ideas of others, including the great sanitary reformer Chadwick who at one stage advocated pumping sewage from London up to Brentwood fertilize an estate there. He recognized the value of Bazalgette's London sewage scheme and was one of the coadjutors who recommended the construction of the Northern Outfall Sewer as an alternative to flooding the Essex countryside with sewage. Though this book is not specifically an Essex book, there is so much material relevant to Essex forming part of the historic development of the county, that it ought to be read by everyone who wishes to know more of the background to the 19th century changes in the landscape. This book is strongly recommended.

JOHN BOYES.

CLAVERING AND LANGLEY, 1783-1983, by Eileen M. Ludgate. Published privately by the author, 1984. 82pp. illus. £4.00, plus 50p post and packing, from Eileen Ludgate, 'Shovellers', Stickling Green, Clavering, Essex.

THE AUTHOR is the past Chairman of Essex Congress and is well-known for her interest in, and

concern for, local history. In this book on her home parishes she has wisely concentrated on the developments of the past 200 years and particularly on the life and work of the parishioners. There are three major chapters: the first deals with the pattern of land distribution and village life in 1783; the second with changes up to 1883; and the third brings the story up-to-date. In this fairly remote area in the valley of the Upper Stort, the author has been able to piece together the account of the rise and fall of local families of ordinary people as well as landowners and has demonstrated the barely subsistence level at which so many of them lived. Her book is therefore a very human document and it has been enhanced by the selection of previously unpublished and very personal photographs. With a very strong core of dissenters in the village, the problems associated with church, chapel and school were bound to be magnified and, at times, acrimonious but through the pattern is woven the thread of village unity.

It is timely that this book has been written because of the revolutionary changes which will almost inevitably ensue if sanction is given to the extension of Stansted airport on the threshold of the village. While the unusual shape of the book, 200mm x 210mm (8in x 8½in), can be explained by the desire to display the maps and photographs to better advantage and it must be said that the printing is above the usual standard — the length of line adopted makes reading more difficult. Like the book on Warley this is a valuable addition to Essex local histories.

JOHN BOYES.

nonth period; subsequent contracts maintained this vel until July 1693.39

In June 1691 Hudson complained that the Ordnance wed him £1280, but he was soon to face more serious problems. In 1693 a Treasury official recommended that ie be prosecuted for fraud in mingling bad powder with good in his deliveries to the Tower.

In his defence Hudson referred to his support for William and claimed that:

"...it lately happened to be his misfortune to employ some Workmen of lewd principles, who made a Considerable Quantity of powder for your Majesty's Use; all of it Tower proofe, but hoping to gett some extraordinary Gratuity from him, They made the last part of it Stronger... they designedly putt the Strongest powder (unknowne to him) on the Topp of the Barrells & having So layd their Plott they by a letter demanded a Sume of Money or else they would accuse him as a deceiver..."

Hudson argued that it was because he had refused to meet their demands that the prosecution had arisen. Under the circumstances he asked that it be dropped. This request was but it can be no coincidence that he never again obtained a contract from the Ordnance.40

The immediate fate of his powder business after this setback has not been discovered. His will in July 1703 makes no mention of a powder business, but he had not been ruined by the powder business, for he left over £4000 (more than £1/4 million at today's prices) in monetary bequests alone.41

The probability is that Hudson had moved out of the industry before his death and that the site at Waltham was taken over by William Walton, the eldest son of William Walton of Mortlake in Surrey. Walton signed his first contract with the Ordnance on 3rd February 1702, becoming within a few years one of the major suppliers to the Ordnance during the War of the Spanish Succession (1701-13). Besides Waltham, he was also producing powder at mills in Balham, where he was still resident when he died intestate in May 1711. His widow, Philippa, inherited the business. She and successive members of the family first concentrated on and then expanded production at Waltham until they sold the works to the state in 1787.42

Genealogical research may show family links between the powder makers so far discussed. John Berrisford, who produced powder at Sewardstone before John Freeman took over, left a will which named a Richard Freeman of Rickmansworth as a trustee of some almshouses. John Freeman the Elder bequeathed 40s to a William Walton to buy a mourning ring, and in October 1675 a John Walton married a Lydia Freeman in the parish church at Waltham.43

What remains to be uncovered is the story of the Walton family's enterprise at Waltham. The locational advantages of the Lea valley continued to exist, but during the 1670's and 1680's most powder mills in the valley were converted to other uses. After this date production continued only at Waltham and Sewardstone. Then shortly after 1715 production ceased at Sewardstone, and gunpowder continued to be made in the valley only at Waltham. The Business acumen of Philippa and her son, John, must have been a major reason for their success in expanding the works during the long years of peace after 1713.

Acknowledgements

I would like to thank the following: Dr. Ken Bascombe for

providing the exact dates of Fuller's curacy at Waltham and other aditional information which I had not seen previously; Mrs Kenneally and the staff at the Greater London Record Office for allowing me access to the recently deposited records of the New River Company; Mr. Pryor, of the Royal Armament Research and Development Establishment (Waltham Abbey), for bringing the 1669 deed to my notice and for a more than usually helpful reply to my initial enquiry; Mr. M. McLaren also of R.A.R.D.E. (WA) for providing Fig 2., Mr. V. Gray of the E.R.O. for Fig 1., and Mr. M. Walters for drawing the map.

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- W. G. Fitzerald, 'How Explosives are Made', The Strand Magazine IX (1895) 307-318.
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- Cal. S.P.Dom., 1650, 570, 579; ibid, 1651, 567, 576; ibid, 1651-52, 614; ibid, 1652-53, 131, 175, 207, 211; ibid, 1653-54, 430, 438, 461: ibid,1655,373; ibid,1655-56,114,156; ibid,1656-57,261; P.R.O. WO 47/3, fo.322.
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- P.R.O. WO 47/8; P.R.O. WO 47/19B; Dr. K. Bascombe, private communication 4,2,1985.
- 17. P.R.O., PROB 11/361(128).
- Mills worked by John Lucas between April 1665 and August 1673 and maybe later. Not known when Freeman acquired them. Site may be on Small River Lea near where it rejoins the navigable river, but not definitely known: P.R.O. WO 47/19B; P.R.O. WO 47/7. fos.58,90; British Library, B.M. MAPS K.1 TAB 18(10).
- In September 1684 John Freeman of London merchant involved in an agreement with the Glass Sellers Company. James Sotheby,lord of the manor of Sewardstone, also involved in glass production:Guildhall Library, Ms.5556; E.R.O., D/DB M202.
- P.R.O. PROB 11/380(103), PROB 11/381(161); E.R.O., D/DB M202.
- P.R.O. WO 49/220. No mention is made of Naked Hall Mills.
- P.R.O., T1/19 no.30, T1/76 no.61; T1/87 no. 127; Cal. Treas. Papers, 1720-28, 228; V.C.H. Surrey II, 325-27; Glenys Crocker, Chilworth Gunpowder (1984).
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gotiations between them and the owners of the mill, the New River Company, were unsuccessful.²⁷

Waltham Abbey Powder Mills

Having established that Fuller was referring to Sewardstone Mills, the question arises of when production began at the site at Waltham, later to be the nucleus of the only powder business in the valley. There are references to a John Tamworth of Waltham Abbey being involved with gunpowder in 1561 when the industry first developed in England. The evidence, however, suggests he was a person able to obtain contracts at Court, not a producer.²⁸

A map of Waltham made in the late sixteenth or early seventeenth century shows a fulling mill on the site under consideration;²⁹ this fulling mill was let to a Mr. Lyon in 1643.³⁰ In 1669 a deed describes the mill thus:³¹

"All that Mill heretofore an Oyle Mill and now lately converted into two Powder Mills... with all necessary outhouses for grindinge boylinge corninge & drying of powder... now in the tenure or occupation of Samuell Hudson or his undertenants".

At present, the writer has discovered no evidence of when the Hudson family first acquired an interest in these mills, or anything of their conversion to oil mills. However, the family also held the tenancy to Waltham Abbey Corn Mills between 1643 and 1674, and possibly even longer.³²

Sufficient evidence exists to provide a date for the conversion of the oil mills to powder mills. In January 1665 the Ordnance, facing shortages as a result of the Second Dutch War (1664-67), instructed their officers "to impresse soe many Mills for ye makeng of gunnpowder for his Matie Service as they shall think fitt". ³³ The following month a contract was signed with a new supplier, Ralph Hudson, the brother of Samuel Hudson and the sub-tenant at Waltham Abbey oil/powder mills.

The contract involved Hudson making powder from his own saltpetre, which he had authority to make in Bedfordshire and Hertfordshire, as well as from that delivered to him from the Ordnance. It was stipulated that he would receive an advance of £150 if he could deliver 100 barrels a month from May 1665 onwards, a deadline he achieved.³⁴ Such an advance may have been in the form of financial assistance to help with the conversion to powder mills

Hudson is mentioned in the Ordnance accounts until December 1666, but afterwards references are few until he obtained a new contract in 1672, on the outbreak of the Third Dutch War (1672-74). This contract was for 140 barrels a month.³⁵ To obtain this increased output, Hudson expanded the works by erecting powder mills near Hook Marsh Bridge.

In 1672 complaints were made to the manor court about these new mills. It was said that they obstructed the right of way over the bridge, and fears were expressed that the mills and the barges loading at the site were a danger. The manor court ordered Hudson to remove the mills, but he ignored it, and the same complaints were made in 1673. These powder mills were still standing in 1676.³⁶

Unexpectedly, there is no record of Hudson delivering powder to the Ordnance after February 1673, even though the war was still in progress and other powder makers were making regular deliveries to the Tower. On his death in 1676 he was an active powder merchant with no other business interests. He had warehouses at Tower Hill, James Rope Walk, and Knightingall Lane in London, and at Waltham, as well as production capacity at the two sites there. Significantly he lived in Great Tower Hill. His will describes

him as a gunpowder maker, the accompanying inventory as a citizen and grocer. After monetary bequests to his family, he bequeathed the powder business to his brother, Peter.³⁷

Peter Hudson continued the business, but it was not until March 1684 that he obtained a contract to supply the Ordnance. This, and a renewed contract in December 1686, were for only 500 barrels each. Such contacts illustrate the reduced demands of the Ordnance during peacetime, and, since the capacity of the works was estimated to be 168 barrels a month in 1687, hint at the importance of the private market.³⁸

Although Hudson was supplying the Ordnance Board during James II's reign, his sympathies seemed to have been elsewhere. He supplied 400 barrels to William when he was Prince of Orange, and when William came to the throne lent him large sums of money. In July 1689 he signed a contract with the Ordnance to supply 1000 barrels over a

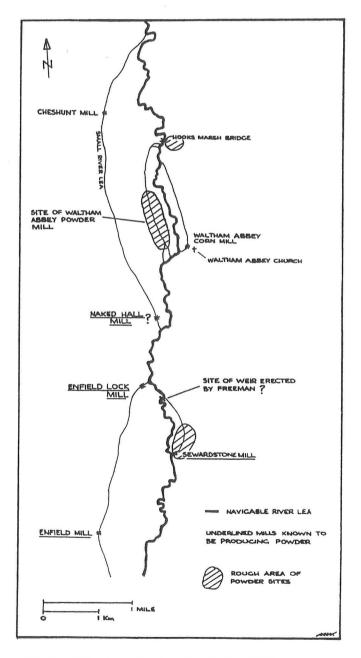


Fig. 3. Mills along the river Lea in the Waltham area. John Walton was responsible for some of the surveying for the original map on which this is based.