

GLOUCESTERSHIRE  
HISTORICAL  
STUDIES

V

Essays on Local Historical Records  
by the University Extra-Mural Classes  
at Gloucester, 1970-1, 1971-2

Edited by  
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1972

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ELMBRIDGE FURNACE, OXENHALL

The Economics of a Gloucestershire Blast Furnace in the  
Seventeenth Century

Stretching across the gap between the steep eastern edge of the Forest of Dean plateau and the southern extremity of the Malvern ridge is an area of high undulating ground that separates the Hereford Plain from the Vale of Gloucester. This area is nowadays renowned for quiet woodlands and wild daffodils, but to former generations it had more a commercial aspect.

Contrary to the usual impression, ironworking in the Forest of Dean area was not restricted to the confines of the royal forest boundaries, but extended well out into the adjoining wooded countryside of Herefordshire and Gloucestershire. Here advantage could be taken of available water power, together with freedom from the legal restrictions so frequently imposed for the protection of Admiralty timber on iron works within the royal forest. One such favoured location in the 17th and 18th Centuries was the upper valley of the Ell Brook, at Oxenhall, above the small country market town of Newent, in the area just described.

The Ell Brook, a tributary of the tiny River Leadon, had sufficient power available to drive at least two mediaeval corn mills above Newent, and both the ancient manors of Oxenhall and Newent possessed, as their waste, extensive coppice and woodlands for the production of charcoal ("Coles"). In addition, there were local outcrops of iron ore ("Myne"), and also great tracts of reworkable slag ("Cinder"), still very rich in iron, left by mediaeval (and earlier,) small hand-worked bloom furnaces.

The use of "cinder" in the smelting charge of the water-powered, charcoal-fuelled, blast furnaces of the 17th century was particularly beneficial to good quality pig iron, and the importance of this raw material to local iron production at this period is illustrated by Andrew Yarrington in his book The Improvement of England by Sea and Land, \* printed in 1677:-

"In the Forest of Dean and thereabouts, the iron is made at this day of cinders, being the poug and offal thrown by in the Romans' time; they then having only foot blasts to melt the iron stone; but now, by the force of a great wheel that drives a pair of bellows twenty feet long, all that iron is extracted out of the cinders, which could not be forced from it by the Roman foot blast. And in the Forest of Dean and thereabouts, and as high as Worcester, there are great and infinite quantities of these cinders, some in vast mounts above ground, some underground, which will supply the iron works some hundreds of years, and these cinders are they which make the prime and best iron, and with much less charcoal than doth the ironstone".

\* Quoted in H.G. Nicholls, Iron Making in the Forest of Dean (1858)

Only very limited information has so far been traced as to the earliest days of Ell-bridge, (later Elmbridge) Furnace, and this is to be found in various Oxenhall and Newent title deeds in the Foley of Stoke Edith archives held at Herefordshire Records Office. These indicate the existence at the beginning of the 17th century of a water powered corn mill owned by Thomas Hooke of Oxenhall. In 1624, for example, a mortgage redemption describes the premises as a "Mill or Water Corn Mill called Elbridge Mill in Oxenhall with garden and hemp close."

The first intimations to be found in these deeds of the conversion of the corn mill to iron working are two deeds of 1639. Both these documents refer to transactions by Francis Finch who was lord of the manor of Oxenhall. It should of course be noted that amongst the normal privileges due to a lord of a manor were the sole rights to mines, minerals and all timber trees. By the first document, dated 20 April, 1639 Finch acquired a grant of "synders" from Thomas Dobbins of Newent in a parcel of arable called the "sinderpitts" in Newent. In the second document, dated 3 August, Finch leased from Sir John Wintour of Lydney, (who owned iron-works in the Forest) for a period of 21 years, a watercourse running to a mill called "Hill howse Mill" in Pauntley. The identification and precise location of Hill House Mill, at that time (and since at least 1609) occupied in conjunction with Hill House by Thomas Hill of Newent, yeoman, are by no means certain. However, in the absence of any evidence to the contrary, it is reasonable to assume that this is the same as Crooke's Mill, a corn mill on the Ell brook some half a mile immediately upstream of Elmbridge.

The first conclusive evidence of the Furnace in being is given in another of these deeds dated 1 October, 1645. Again Francis Finch leased a watercourse, this time from Edward Hooke of "Crooks in Pauntley" running through a "close called Loveridge". The lease contains a most significant clause to the effect that when Finch "shall not have occasion to use the water at the Furnace or Ironwork near Elbridge, Edward Hooke may divert it to a water corn mill called Crooks Mill."

As to Elmbridge Mill itself, this had been acquired from the Hooke family by Edward Clarke the elder of Newent, and by a deed dated 29 October, 1642 leased for 200 years to Guy Hall of Martin Hussingtree, Worcs., together with a house called Marshalls. Francis Finch was evidently sub-tenant of the mill building and confirmation of its new use is given in a marriage settlement by Edward Clarke dated 8 November, 1647 which refers to the "messuage called Marshall, Ellbridge Mill part of which is now converted into a furnace for making iron, and meadow ground called Mill-plot."

By 1655 Francis Finch was apparently in financial difficulties, for on 12 December of that year he mortgaged the furnace to Thomas Lowbridge of Wilden, Worcs., and Thomas Foley of London, repayment being in iron delivered to Wilden. The Foleys were the leading ironmasters of the period, having amassed a great fortune by being the first to exploit the use of slitting mills for the production of wrought iron in bar form. The great Foley empire, based on a series of mills along the River Stour, was no doubt only too pleased to secure regular supplies of Forest pig iron at advantageous rates with relatively simple transport along the best industrial highway available at that time - the River Severn.

Francis Finch's difficulties continued, and with the debt of £4,000 remaining unpaid he had to transfer the Furnace to Thomas Foley on 2 October, 1658. Within a year Thomas Foley had acquired the manor of Newent, and shortly thereafter Finch sold him the manor of Oxenhall. The site of the Furnace itself was not part of the manorial land so the Foleys only had a leasehold interest until Paul Foley, Thomas's eldest son, bought out the freehold reversion from the Clarke family in 1671.

It was with Paul Foley, of Stoke Edith Park in Hereford, that the Foley interests in the Forest of Dean area really developed. These included furnaces at Elmbridge, Linton Bishopswood and Blakeney; furnaces, forges and wire-works on the Wye at Tintern; and a complex of forges around Monmouth based on a furnace at St. Neonards. In 1692 Paul Foley, in conjunction with his brother Philip, set up a partnership with John Wheeler and Richard Avenant to run a group of Stour valley forges linked with the Forest of Dean furnaces at Linton, Elmbridge, Bishopswood, and Blakeney. The annual account books of this partnership survive in a complete form for quite long periods of continuity, and it is from the accounts in respect of the years between 1692 and 1700 that the following details of the working and economics of Elmbridge Furnace have been extracted.

The accounts are, as can be expected, quite complicated, being principally concerned with the allocation of profits and assets between the partners and the apportioning of charges and sales between the various enterprises. However annual stock accounts are given in some detail for each of the furnaces and forges, and individual personal accounts do provide information as to trading costs and methods.

As can be seen from the attached summary of annual production figures for Elmbridge, Blakeney, and Bishopswood Furnaces (Appendix A) the amount of pig iron produced varied considerably from year to year but principally lay in the range 600-700 tons per annum. These variations can be traced mainly to the length of time the furnace was continuously in blast, i.e. the "campaign". At this period it was rare for a furnace to be able to be run for periods in blast of more than 12 months, although there are indications that Blakeney Furnace was achieving at least two year campaigns at that time. Unfortunately the partnership accounts do not always give the campaign dates, but for Elmbridge the general pattern was a start in late autumn, usually the beginning of November, a campaign of 250-300 days, to finish about July but often extending into September.

The choice of final date does not appear to have been governed by any shortage of fuel or ore, the closing stock accounts showing plenty in hand. Lack of water in the Ell Brook may well have been the real reason, bearing in mind the care and expense taken in later years to provide reservoirs at its head-waters.

What is remarkably consistent at all three furnaces is the rate of iron production per day in blast of 2.2 - 2.9 tons, with an overall average of  $2\frac{1}{2}$  tons per day. Linton Furnace was not in blast in 1692 having apparently ceased production a year or so before. Thereafter its stocks of pig iron, myne, and cinder were distributed to the other furnaces, and the site used only as a reception depot for cinder destined for Elmbridge.

**IRON WORKS OF THE FOLEY, AVENANT & WHEELER PARTNERSHIP**  
**AT THE END OF THE 17th CENTURY**

**FURNACES**

- 1. Blakney
- 2. Bishopswood
- 3. Elmbridge
- 4. Linton
- 5. Hales
- 6. Grange

**SHIPPING POINTS**

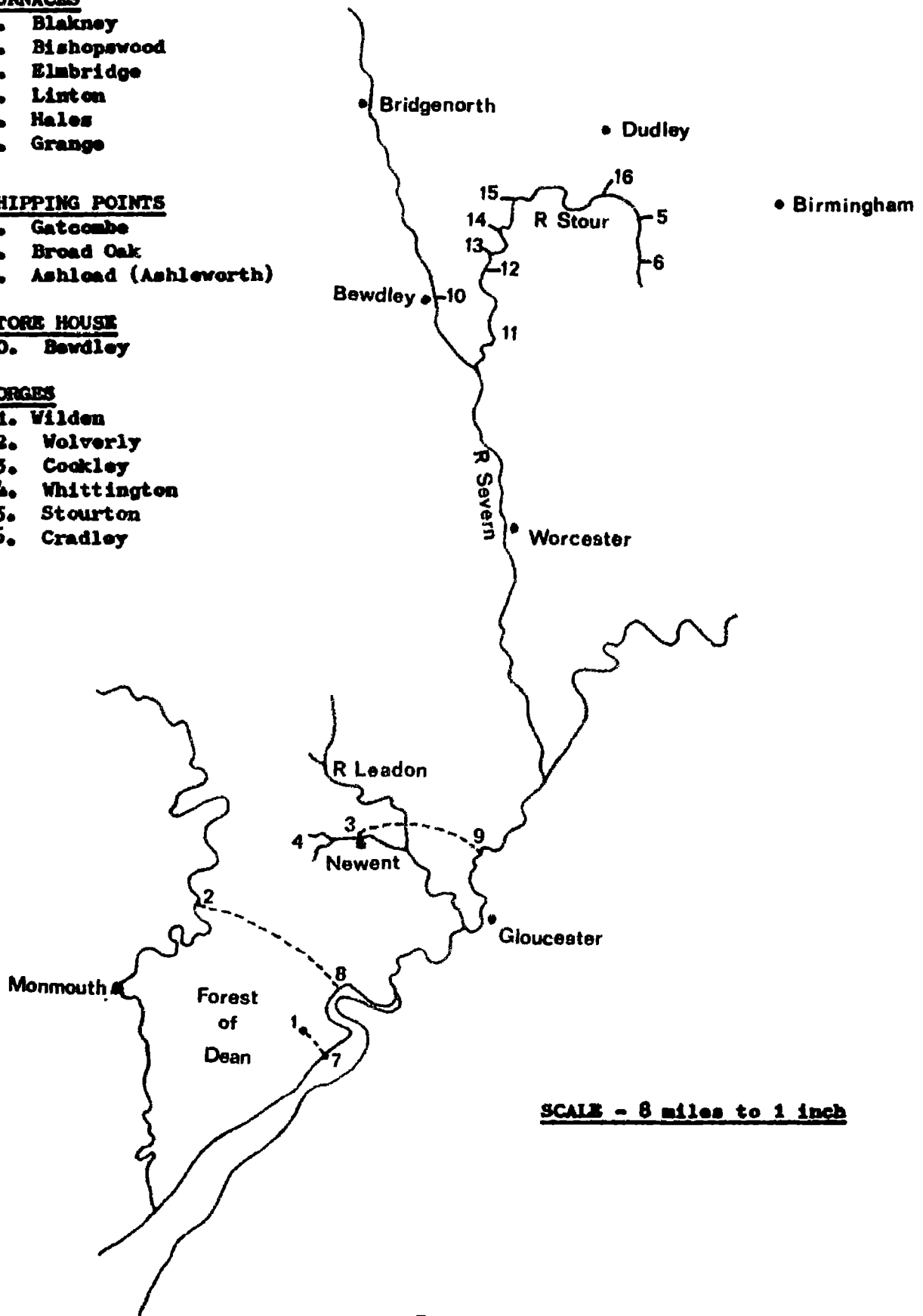
- 7. Gatecombe
- 8. Broad Oak
- 9. Ashload (Ashleworth)

**STORE HOUSE**

- 10. Bewdley

**FORGES**

- 11. Wilden
- 12. Wolverly
- 13. Cockley
- 14. Whittington
- 15. Stourton
- 16. Cradley



**SCALE - 8 miles to 1 inch**

The total costs in fuel and ore for all three furnaces in production were about 80s. to 90s. per ton of pig iron. By far the greatest proportion of these costs were for the charcoal, which for the 2 loads required to produce one ton of pig iron cost in the region of 70s. Elmbridge was using a much lower proportion of myne to cinder in its furnace charge:- 1 : 5 as compared with the 1 : 3 used by the other two furnaces, and by the turn of the century Elmbridge was using only 1 : 6. In actual amounts Elmbridge was using about 5 bushels of myne which cost approx. 1s. 7d., and about 25 bushels of cinder which cost approx. 15s., per ton of pig iron produced. The other two furnaces were using about 10 bushels of relatively more expensive myne which cost approx. 5s., but any economic advantage to Elmbridge was completely lost by variations in the overwhelming costs of charcoal.

To obtain a full understanding of a furnace in operation it is necessary to find out the quality of the ores being used. Whilst excavation of the site and analysis of residues would provide the best answer, a reasonable estimate can be worked out from the quantities quoted in accounts. One basic problem is that all quantities of cinder and myne are given not by weight but by capacity, i.e. in bushels and dozen bushels. Although we know that it was the custom in the Forest of Dean to use the national standard Winchester bushel rather than any local variant, too much reliance should not be put on the standards of accuracy of the period. An example of such lack of accuracy is shown in the accounts themselves, where, in the Linton stock account of October 1696, it was found that the amount of cinder (held in store for Elmbridge Furnace) was 358 dozen bushels short "in Mr. Merecks bad measure of Cinders brought there & chiefly in the measure at Elmbridge being much larger than at Linton Furnace."

There is also the problem of how densely packed were the ores in the measuring containers, dependant on lump size and grading, and how efficient the ore preparation works were in removing rock waste. It is reasonable to assume, although there is no confirmatory evidence in the accounts, that a certain amount of calcining (ore roasting) took place in concentrating the furnace charge.

Bearing in mind the likely inaccuracies inherent in such a calculation, the following figures give at least a reasonable estimate for ore conversion rates at Elmbridge Furnace in a typical year (1693/4):-

<u>pig iron produced</u>	542 tons
<u>cinder used</u>	1,103 doz. 4 bushels
= 13,240 bushels @ 1.285 cu.ft. per bushel = 17,013 cu.ft.	
17,013 cu.ft. @ (say) 18 cu.ft. per ton = <u>990 tons</u>	
<u>myne used</u>	244 dozen bushels
= 2,928 bushels @ 1.285 cu.ft. per bushel = 3,763 cu.ft.	
3,763 cu.ft. @ (say) 10 cu.ft. per ton = <u>376 tons</u>	

#### Conclusions

Total weight of ores used = 990 + 376 = 1,366 tons, to produce 542 tons.

Therefore recoverable iron = 39% of ore charge

And if myne is assumed to contain 50% recoverable iron

Then iron from myne = 188 tons

And iron from cinder = 352 tons which from 990 tons = 36% recoverable iron

The Foley partnership accounts are, unfortunately, most reticent on details of Elmbridge Furnace in its construction, layout, and physical working. A few scraps of information can be gleaned from items of maintenance such as:-

"By getting & carrying the Hearth & Bosh Stone £11. 0. 0."

or again

"By getting & carrying In wall Stone, building In walls & several odd charges about new In walls."

(Inwalls are the tapering upper shaft of a furnace, as opposed to the lower reverse taper or Bosh.)

The Furnace repairs and maintenance seem to have been generally carried out by local craftsmen hired only as and when required. Time payments are recorded for carpenters, sawyers, masons, and smiths, with corresponding payments for timber, stone, nails, hides, grease and tallow (for dressing the bellows) and even, on occasion, liquor for the workmen, General labouring for such works as washing and riddling cinders, or clearing the mill water leats were also dealt with on a time and materials basis.

The only permanent staff, paid an annual salary, were the Manager, the Clerk, and his assistant. Additionally a Founder was employed on a piecework basis, being paid at the rate of 3s. 4d. per ton of pig iron produced, plus 50% extra for casting in plate form, or 75% extra for casting "boules". Although this generally worked out to a sum double that of the Manager's salary a considerable portion must have been paid out by the Founder in turn employing at least two complete shifts of skilled furnace assistants to tend the Furnace continuously day and night whilst in blast.

As could be anticipated, the high costs of transporting the pig iron away from the Furnace figure prominently in the accounts, although again there are disappointing blanks on some aspects, such as the mode of transport from Furnace to shipping point on the River Severn which presumably was by pack horse. What is certain is that it cost 5s. per ton to carry pig iron the 5 miles overland to Ashload (Ashleworth) as compared with 2s. 6d. per ton for shipping it 30 miles up the River to Bewdley. One load carried by road to Hereford, about 14 miles, was charged at the rate of 11s. per ton.

The majority of the pig iron from Elmbridge went up-river by Severn trow, having been assembled into boat-loads at Ashload on a riverside wharf specially rented for the purpose of £3 per annum. The main landing places were at Bewdley, Redstone (just south of what is now Stourport), and at 'Clothouse' (so far unidentified). The shipping rates from Ashload to all these three points were identical at 2s. 6d. per ton of pig iron, half the equivalent charges to the same points from Gatcombe. At first the partnership utilised the established river trading trows, particularly those belonging to Beale & Perks. In 1695, however, they bought their own trow from George Clarke, at a cost of £95, and a barge two years later. Both these vessels were attached to the establishment records of the Bewdley storehouse but are not listed after 1698 when stocks in general at the storehouse were being drastically reduced in quantity.



Although at times a somewhat tedious exercise, the sifting of basic information from financial records can be very illuminating as to the realities of a situation. One aspect in particular that has been most clearly revealed in this investigation is the excessive proportion of the total costs of manufacturing pig iron in the late 17th century attributable to the very high cost of producing charcoal. I believe it is to this simple fact, rather than any rampant destruction of forest timber, that we may look for the principal spur to the widespread and determined experimentation by ironmasters in the following century to find ways of using coal as an alternative smelting fuel.

R.A. Stiles

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APPENDIX A

Pig Iron Production, 1692-1700

(a) Elmbridge Furnace

1692/3	=====*	597 tons
1693/4	=====*	542 tons
1694/5	=====*	689 tons
1695/6	=====*	786 tons
1696/7	=====*	694 tons
1697/8	=====*	790 tons
1698/9	=====*	346 tons
1699/0	=====*	737 tons

(b) Blakney Furnace

1692/3	=====*	273 tons
1693/4	=====*	925 tons
1694/5	=====*	810 tons
1695/6	=====*	1047 tons
1696/7	=====*	794 tons
1697/8	=====*	697 tons
1698/9	=====*	995 tons
1699/0	=====*	725 tons

(c) Bishopswood Furnace

1692/3	=====*	739 tons
1693/4	=====*	488 tons
1694/5	=====*	753 tons
1695/6	=====*	537 tons
1696/7	=====*	777 tons
1697/8	=====*	684 tons
1698/9	=====*	656 tons
1699/0	=====*	825 tons

Scale of graph      ==\*      100 tons

APPENDIX B

BASIC SUMMARY OF ANNUAL FINANCES OF ELMBRIDGE FURNACE

IN OPERATION

(Synthesised from the Foley Partnership Accounts H.R.O.  
F/VI/Def/1-8 in two typical years)

(1) FINANCIAL YEAR Michaelmas 1693 - Michaelmas 1694

Pig Iron Production, 8 Nov. 1693 - 27 June 1694 (237 days)

542 tons - valued at £5. 10s. Od. per ton "cost price" \* £2981. 0. 0.

Less

	£	s.	d.
(a) <u>Fuel &amp; Ore Costs</u>			
Charcoal used	1965	16	8
Myne used	42	18	8
Cinders used	413	15	6
Cost of washing cinders	10	5	7
	£2432 16. 5		
 (b) <u>Wages &amp; Salaries</u>			
Founder	110	17	3
Sam. Whitmore (Manager)	50	0	0
Wm. Painter (Clerk)	30	0	0
Mr. Hawkins	10	0	0
	£200 17 3		
 (c) <u>Furnace &amp; Bellows Maintenance</u>			
Materials	113	16	9
Labour	17	6	3
	£131 2. 0.		
 (d) <u>General</u>			
Watercourse rents	17	13	0
Taxes on stock	3	6	0
Rent to Paul Foley	100	0	0
Sundry charges	74	10	1
	£195 9. 1.		
Total	£2960 4 9		

"Profit" on year = £20 15 3

Stock & Inventory Value, Oct. 1694 £1,111 9s. 5½d.

\* Note The Pig Iron is valued at a basic "cost price" applicable only to internal transactions within the Partnership where the majority of the iron produced was destined. When sold direct to the public prices varied but were in the region of £6 per ton for pig iron in bulk, and £10 per ton for castings.

(2) FINANCIAL YEAR Michaelmas 1697 - Michaelmas 1698

Fig Iron Production, 4 Nov. 1697 - 19 Aug. 1698 (289 days)

790 $\frac{3}{4}$  tons - valued at £5 15s. 0d. per ton "cost price"  
£4542 10. 0d.

Less:-

(a) <u>Fuel &amp; Ore Costs</u>	£	s.	d.
Charcoal used	3082	0	0
Myne used	59	19	10
Cinders used	614	0	7
Cost of washing cinders	16	9	6
Casting sand	4	3	0
Scrap iron	8	4	4
			<hr/>
			£3784 17 3
(b) <u>Wages &amp; Salaries</u>			
Founder	152	0	4
Sam. Whitmore (Manager)	50	0	0
expenses -	3	0	0
Wm. Painter (Clerk)	30	0	0
Mr. Cordey	10	0	0
			<hr/>
			£245 0 4
(c) <u>Furnace &amp; Bellows Maintenance</u>			
Materials	45	1	0
Labour	26	6	2
Iron for tools & smith's work	11	19	2
			<hr/>
			£ 83 6 4
(d) <u>General</u>			
Watercourse rents	22	0	0
Taxes on stock	2	6	0
Rent to Paul Foley	100	0	0
Sundry charges	9	18	7
			<hr/>
			£134 4 7
	Total		<hr/>
			£4247 8 6
			<hr/>
<u>"Profit" on year</u>	=		£295 1 6

Stock & Inventory Value, Oct. 1698 - £3,033 13. 6.

THE SUPERVISION OF THE BUILDING OF DYRHAM PARK

GLOUCESTERSHIRE BY WILLIAM BLATHWAYTE c 1698-1702

William Blathwayt (?1649-1717) was the son of William Blathwayt (?1594-?1650) of St. Martin-in-the-Fields, London and was brought up by his uncle, Thomas Povey, after the death of his father. His later life shows unmistakably his uncle's influence and it was through him that Blathwayt chose to follow a Civil Service career, thus gaining useful introductions to the Diplomatic Service. His personal tastes and delight in the possession of beautiful objects were a reflection of his uncle's choices, but Blathwayt lacked both his originality and connoisseurship.

Rising through his Civil Service positions he became Secretary of State to William III and because he spoke fluent Dutch, an attribute rare in Englishmen of the period, he often accompanied the King on his frequent trips to the Hague.

In September 1686 Blathwayt heard of a possible betrothal to a Miss Wynter of Dyrham, an heiress to the country estate. Thinking it to be an advantageous match he met the lady, and seems to have been greatly attracted to her. After the complicated marriage settlement had been completed he married her, at Dyrham church; they had four children, three of whom, William, John and Anne, survived. His wife died, after only five years of marriage, in 1691.

After her death Blathwayt concerned himself with official duties and rebuilding his house, which he refurnished with paintings and books purchased on his journeys to the Hague and Amsterdam. He corresponded with his bailiff at Dyrham and carefully studied his household accounts and letters reporting on the progress of the building, sending them back with suitable comments. He was later dismissed from the Secretaryship of War at the removal of the Tories in 1710 he lost his seat for Bath in the House of Commons. At the early age of 61 he retired to the country where he lived for seven years, suffering from palsy, until his death in 1717.

Although Blathwayt's letters reveal his great administrative technique and meticulous diplomatic style they reveal little of his personality. He was thorough, honest and affectionate to his wife and children and he had an enormous talent for organisation and arranging. Rather solemn and hardworking in youth, he grew up into a serious pedantic man, nicknamed "the elephant" by his colleagues, either as an observation on his memory, or more probably on his grave ponderous manner and his inability to accept or fabricate new ideas.

William Blathwayt remarked upon the need for rebuilding the Elizabethan manor house at Dyrham, the residence of the Wynter family, even as early as 1686 while he was still contemplating the marriage with Mary Wynter. However, it was not until after her death in 1691 that actual work was started, with the demolition of the original building except probably what is now called the "Great Central" hall.

The new house was built under the supervision of two different

architects, each with a different style, in two stages between c.1692 and c.1702. The first architect who designed the west facade was a Frenchman, Samuel Hauderoy whose work was completed in 1694. The other architect was William Talman whose east side was completed after 1702. Their two contrasting appearances, that of the foreign style in the case of the west side and the more rectangular, elaborate east side make Dyrham Park almost two houses in one and if only for this would make it of interest. The building of Dyrham Park is almost entirely documented down to the last inch by documents, both letters and accounts, among the archives at the Gloucestershire Record Office.

However, this essay mainly concentrates on the supervision of the building work by Blathwayt as found in correspondence relating to it, which was sent regularly between Blathwayt, at his work in either London or the Hague, and his bailiff, Charles Watkins, in the period between 1698 and 1702. This correspondence takes the form of letters and weekly accounts which were sent to Blathwayt from Watkins, in which he describes the building progress leaving a suitable margin for Blathwayt to express his opinions, advice and criticisms which were duly complied with upon receiving the corrected letter.

These letters reveal to a great extent the amount which Blathwayt supervised the work and they can be categorized into several main groups:-

- (a) Blathwayt's orders to Watkins, the bailiff, a relation, whom Blathwayt refers to as "Cuzen" and to Trewman, the rector of Dyrham Church and his accountant.
- (b) His criticisms of delays, poor workmanship and labour difficulties, and
- (c) The obtaining and application of materials.

Documentation of the building progress starts about 1698, and the first few letters deal with the levelling of the ground and the construction of a pigeon house. A typical letter from Blathwayt to Watkins in September 1698, starts thus,

"I have no further trouble to give you at present .....  
Mr. Trewman must not advance too much money to P. West\*  
I expect proposals for all sorts of works that are to be  
carried out this winter by way of preparation, and next  
summer where hands enough and skilful ones are to be employed."

Unfortunately the system of communicating Blathwayt's orders in letters resulted in confusion in some cases, not least between the workmen, Blathwayt's bailiff and himself, as in a letter dated August 1698.

WATKINS:- ..... and the great pond will be made an end of by  
tomorrow night and then they will begin upon the wall niches  
and fountains which Broad has undertaken to do before winter.

BLATHWAYT:- ..... what is meant by these words? The work ought to be  
finished in September.

\* A builder and mason engaged on the site.

Such a system was not very efficient, a conclusion which can be reached by reading a number of the following letters. It failed because Blathwayt's orders were communicated to the workmen by his bailiff and since he was not personally at Dyrham, the workmen, who were local men hired anyway, lacked a stimulus to improve their work and were consequently tempted to leave jobs unfinished in favour of more pleasurable activities. Such events can be classified under the general heading of "labour difficulties" and consist of a number of isolated incidents rather than a continuous apathy, although this might have existed too.

There were numerous delays to the building programme which naturally enough had to be reported to Blathwayt by letter, thereby prolonging the delay until Blathwayt's orders and suggestions were received. One such delay was concerned with the collapse of the greenhouse\* roof, an incident which occurred in October 1701. Here is an extract from the letter written by Watkins to Blathwayt describing it:

WATKINS:- The matter is this; he had arched above a third of the greenhouse wrong, as appeared by the consequence for no sooner was the center taken away but the arch all fell and now its said that besides his doing it wrong there is too little abutment for it to rest upon and considering that the walls are but thin it is thought advisable to line it with another wall as high as the arch which will be a strengthening to the greenhouse and as a good abutment..

BLATHWAYT:- I suppose 'tis not intended I should be at the charge of mending this arch.

It is in this letter we read of the first instances of labour difficulties and Blathwayt's irate reply illustrates his lack of sympathy and impatience in such matters.

.... Hunter has been backwards and forwards at Bristol but has had four hands here constantly employed all but one week and then he had only two.

BLATHWAYT:- Which is not to be endured and Hunter's money is to be stopped for more men than those who are wanting that he will be sure to have his full number upon the place.

A further comment in this letter by Blathwayt firmly stresses the fact that he is unwilling to pay for his workmen's mistakes:

.... I hope you will take care not to overpay P West (the builder employed in the construction of the greenhouse) and that I be not at the charge of his false work.

From this point references to troubles over work, workmen and payments are increasing and at least one can be found in almost every letter.

\* The early term for an orangery, where the exotic plants and shrubs were moved to during winter.

It is less frequent to find a letter which Blathwayt has written on a separate piece of paper instead of in the margin of his bailiff's report but these letters were often for the more important, specific subjects:

Hague 2nd November. Blathwayt to Watkins.

BLATHWAYT: I have received your two last letters and hope by what you wrote that Hunter and Porter may be brought to reason and that they will ease me of their company as soon as may be.

I suppose the greenhouse arches are done and the glass put up ....

I wonder Hunter should exceed in the mouldings I trusted it to his skill wherin it seems I am deceived.

Later letters carry on in the same vein....

Whitehall 31st May. Blathwayt. Watkins.

WATKINS: John Jacobs has been sent for to do some jobs and make good some defects in the tiling but he sent word to Mr. Wynter that he would not come until he know how he should be paid for all his job work

BLATHWAYT: An odd answer - methinks another workman be got who be maybe more diligent.

Dyrham 4th June 1701. Watkins.

WATKINS: ....I have been stirring up Ph West all that I can and to give the fellow his due he takes little pains in his own person from 5 o'clock in the morning till after 7 at night

BLATHWAYT: .... But not to be excused for not engaging men enough.

The chief instance of labour disputes occurs in the next letter and Blathwayt's comments although intended seriously are somewhat comic in their content -

Whitehall 9th September 1701.

WATKINS: Mr. Wynter writes me word that Hunter has taken a job of joyner work at Bristol

BLATHWAYT: Abominable!

WATKINS: .... All here as even the Gate and Doors kept close and no lingering people as I can see or hear of

BLATHWAYT: .... nor their women

WATKINS: (referring to Hunter) we can easily do without him.

BLATHWAYT: .... then he is not of any use.

WATKINS: (again about Hunter) ... after the workmen have finished ...

BLATHWAYT: Hunter will never have finished.



Blathwayt's post script reads thus ...

This proceeding of Hunter is unpardonable, use all possible means to get him and his men back. 'Tis a scandal and of ill example.

Perhaps if Blathwayt had offered a larger wage to his workmen such differences of opinion would not have arisen, as it was Hunter was not the only offender in this direction ....

Thurs. 7th January 1702

**BLATHWAYT:** I have great reason to complain of Porbear who is leaving my work for a considerably time. Pray admonish him severely and lett him dispatch before I come down which I hope may be in less than a month.

This situation merited a separate letter of which here are several extracts:

Blathwayt to Watkins.

I can't forbear writing to you tho' it be only repetition. 'Tis most scandalous Hunter and his men should be permitted to leave the house they that are like to trouble it most by their long stay at Dulbury proceedings.

'Tis not to be endured and besides stopping all payments to anything that belongs to Hunter. The person at Bristol should be spoken to not to entertain my servants. I suppose Mr. Wynter being come, all goes at sixes and sevens .... 'Tis absolutely necessary for you to step down again to see things go on and brought to finishing which the workmen don't love.

Hurnall (the gardener) I suppose thinks little of the matter and no account of his fruit this year though I said so much the last. I hope Porter too will be so quickened that Monday not find any of his work unfinished not Green when I come down. These people want stirring up solidly and not to be overfed with money. Pray think of it ....

I am your assumed friend and servant.

W. Blathwayt.

Upon further examination of the following letters it becomes evident that Blathwayt's stern words had little or no effect -

Dyrham 26th June 1703.

.... some of the labourers being gone off to Harvest work.

**BLATHWAYT:** .... not to employ them any more

The recurrence of trouble led to a classic comment by the exasperated Blathwayt -

... Hunter intends never to have finished but to loiter in the country at my expense.

Not all of the disputes however were concerned with payments or bad workmanship -

Dyrham 13th July 1702

**WATKINS:** I missed some of the workmen this day particularly Richard Broad and his people and upon enquiry find it to be Box revell so must not expect them before tomorrow.

Another aspect of the building progress which can be traced through the letters is the obtaining of materials and Blathwayt's orders on their application. They are too numerous to quote so I shall confine myself to several of the more interesting examples concerning the delivery of deals from Sweden and setting up a stone eagle, Blathwayt's crest, on the top of the house.

Stockholm. Aug. 31st 1701. "J. Robinson puts the deals on a Swedish ship as he cannot find an english one. The consignment consists of both ordinary and double deals which makes a larger number of square feet than Blathwayt wanted."

November 1701. Watkins to Blathwayt

**WATKINS:** .... upon further examination I find that he (a builder named Humphreys) has left some of his chimney pieces unpolished and pretends they will lose their gloss if they are polished so long before they are put up.

**BLATHWAYT:** Nonsense.

**BLATHWAYT (undated):** I should be glad the Eagle could be sett up next week without prejudice to the House walls and Glass Windows.

There are one hundred less seven skins of gild leather for the Great Room which are to be fitted up as soon as may be and the opportunity of wet weather to be taken.

(These skins were set up in the drawing room of Dyrham Park - still called the gilt leather room to this day.)

In conclusion, I include extracts of letters which give further insight into Blathwayt's character. It seems that nobody was beyond criticism, even his favoured friend, "Cuzen" Watkins.

Dyrham. 5 October 1698. Watkins to Blathwayt

**WATKINS:** I have not yet received any answer from you since my last return to Dyrham.

**BLATHWAYT:** .... I have constantly answered all your letters.

A further instance of Blathwayt's meticulous nature -

Dyrham 25th July 1689

Mr. Watkins is desired to write in larger paper

leaving a margin for the answer.

His short temper and impatience with the asserted incompetence of  
Watkins -

November 1701.

WATKINS: .... The kitchen court lies in much disorder and  
might have been paved at this time if we had had any  
orders.

BLATHWAYT: .... How could I think of it without your mentioning  
it to me.

His preoccupation with thrift -

Whitehall 3rd Feb.

I have rec'd yours of the 8th which cost about 3d.  
postage in exceeding two ounces weight whereas if you  
had sent your dispatches in two or more packets they  
would have gone free. Pray lett this be a rule to  
you and everybody else for the future.

Finally, his reluctance to concern himself with other affairs:-

Dyrham 3rd August 1698.

WATKINS: I drank with the Mayor and some others of them at the  
same House

BLATHWAYT: All possible care is to be taken not to bring me under  
inconvenience by drinking with the Corporation or my  
spending any thing upon them or anyone on my account  
The Act not being very strict in this particular and  
tis better to do too little than too much till the  
time for bringing in petition which is fourteen days  
after the sitting of the Parliament be over.

This essay has been an attempt to explore and draw inferences from,  
the supervision of the building progress by Blathwayt. However, this is  
only a small part of the chronicle of the building of Dyrham Park and it  
is obvious that many major questions have had to be ignored through this  
specialisation. Questions like where did the workmen come from? How  
many? How much did it cost? (A question which would involve sorting  
through all the invoices and bills documenting the building, a very large  
task.) What were the original furnishings of the house? This small  
attempt is indeed only scratching the surface of a highly involved and  
absorbing topic.

C.M. Mitchell

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THE NEWENT TURNPIKE ROAD, 1726-1833

In 1726 an Act of Parliament for the repairing and widening of the roads from the City of Gloucester to the City of Hereford was passed. This Act (renewed in 1747 and 1760) empowered the Trustees appointed to improve various roads between the two cities and one of these roads was the Gloucester to Newent road. In 1769 this turnpike road, which ran from Gloucester via Highnam Pool to Newent, was extended beyond Newent, through the parishes of Pauntley, Oxenhall, Dymock and Donnington to the turnpike road leading to the town of Ledbury, by another Act. In 1812 a further Act divided the roads administered by the Turnpike Trust into districts. The section of road leading from the City of Gloucester, via Over Bridge to Highnam Pool and thence to the beginning of the parish of Newent at the five mile stone was included in the Over and Maise more District. The section leading from the entrance of the parish of Newent at the five mile stone, through the parish and town of Newent and then through the parishes of Pauntley, Oxenhall, Dymock, Donnington and Ledbury to the Ledbury turnpike road, was included in the separate Newent District.

Work on the Newent road seems to have started within a year or two of the first Act being passed. In October 1726 it was proposed by the Trustees to apply a third part of the money obtained from tolls to mend the Newent roads from Highnam Pool to the town of Newent. In the following August it was ordered by the Trustees that both ways to Newent were to be measured from the bridge at the lower end of Buttermilk Lane to the town of Newent and that the shortest way was to be repaired. The road that was chosen to be repaired, is roughly our modern road to Newent although there have been some improvements like the Newent by-pass and at Barber's Bridge. This road, or at least part of it, was repaired and widened by 1728 because in that year Messrs. Rogers, Beale and Holder, who had been appointed to inspect the Newent road, were paid £125 for repair and widening work. Between 1728 and 1833 various forms of repair work were undertaken on the road. In 1736 repair work was carried out on the sections of road from Over to Rodway Hill and from Rodway Hill to Newent. By April 13th repair work on the latter section had cost £36 15s. Od. By 1749 further work had been carried out on the Newent road in the Hamlets of Highnam and Lassington and "diggers" were paid £13 15s. 10d. for their labours. In 1751 the road between Highleadon Green and Malswick was repaired and the ditches on either side of the road between Barber's Bridge and Highleadon were closed. In 1754 all people living alongside the Newent road had to clear bushes, overhanging boughs and clean ditches along the road within twenty days, while in 1756 repairs were carried out to the Highnam section of the road. In the 1760s repair work was still being carried out because compensation was paid to landowners whose property had been damaged. In 1767 £50 was paid to Charles Jones Esq., for land between the eastern end of Highnam Green, and the town of Newent.

The passing of the new Act in 1769 seems to have inspired repair work because in that year the road at Malswick Mill and Linehouse Lane in the parish of Newent, was altered and widened and the road leading from Barber's Bridge to Highleadon Green was widened out of the common field to the breadth of thirty feet. The Trustees also proposed paying half the expense of building and widening Barber's Bridge at Rudford over the

brook leading into the River Leadon. Between 1770 and 1771 over £70 was spent on road repairs in the Highleadon and Rudford areas.

The 1812 Act which led to the division of the local turnpike roads into various districts also resulted in the Newent road being subdivided into certain districts like the Rudford and Highleadon districts. Each was under the charge of a surveyor who improved his section of road. An example of this was in 1817 when the surveyor of the Highleadon District was paid £157 for work. Improvements continued to be made. In 1819 the Trustees ordered that the lower top of the hill near Highnam Park and the hills near the pound at Rudford, should be lowered. In 1820 the Trustees resolved that an advertisement should be inserted in the Gloucester papers for separate tenders for the contract of lowering the hills on the Newent road called Park Hill, Rudford Hill and Leadon Hill. Work on the first two hills proceeded favourably, but by February 1823 the Leadon Hill had not been lowered and so the Trustees again had to advertise for a tender for the lowering of the hill. In 1820 the Trustees also ordered the surveyors of the Newent road to remove soil on the sides of the road, and to give notice to the occupiers of land along the road to remove soil, and if they disobeyed the order, to fine them. In that year the Trustees also resolved to submit to the surveyors the repair system proposed by General Guise. Guise suggested adopting the system recommended by John MacAdam. The sides of the roads should be "stocked" up and the stones to be used on the road should be broken up. A ring, 2 inches in diameter, should be bought by the surveyors for the measurement of the stones, and they should also be sent MacAdam's Treatise on the Management of Roads. Other improvements to the road included the repairing of bridges and the erecting of a fence. In 1823 two bridges in the parish of Rudford, one near Leadon Hill and the other near Tibberton Lane, were improved, while in 1834 the Trustees applied to erect a fence on each side of the road between Laynes Gate and Highleadon Green. In the following year rails and a quick hedge were placed along the road at Highleadon Green.

The materials for improving the road in the early years seems to have been obtained locally. Stone was obtained from Highnam and Rudford, Mr. Cooke of Rudford was paid 2d. for every wagon load of stone, while Widow Weale of Rudford was paid a 1d. a load. In 1728 she was paid a total of £7 10s. Od. for 1,800 loads of stone from her estate. Carriers were employed to haul the stone and in 1728, John Holland was paid 19s. for hauling materials. In 1755 the Trustees decided that vehicles carrying stone for the road must have broad wheels. Later still, in 1825 the Over and Haisemore Trust paid half the cost, with the Cheltenham and Tewkesbury Trust, for a barge to carry stone.

In the first half of the eighteenth century statute labour seems to have been used for work on the turnpike road. In 1726 the Trustees proposed that the owners or occupiers of lands of £50 value in the parish of Newent would be excused the four days statute work with a team on payment of 8s. a year to the collector of tolls. This was tried for a year and was then extended in December 1727. It was still used in 1728 because Thomas Roystone of Cugley in Newent was excused statute labour for payment of 8s. In 1748 the inhabitants of Compton, Bouldon, Kilcote and Cugley were required to do three days statute labour on the road between Newent and Gloucester. Besides the statute labour workers were

also employed, as is shown by the wages paid to diggers in 1749. However by 1820 repair work was being contracted out. In that year Mr. Westcott of Aylburton was the contractor for repairing the road to Newent. Unfortunately, he does not seem to have done the work very well, because the road had not been kept at the proper level nor was it stoned to the proper thickness. The Trustees resolved that unless Westcott immediately repaired the defects, proceedings would be taken against him. Also they decided that no advance would be made to him and that on completion of the work, payment would not be made without a certificate signed by two of the surveyors. Eventually Westcott was paid £70 6s. 6d. of which £18 13s. 10d. was for a Mr. John Thomas for stone.

Along the turnpike road there were several toll houses and gates. In 1760 a turnpike was erected on the road near Rodway Hill while in 1763 the turnpike at Rudford was thrown open. In 1769 there was a catch gate on the Newent road near Caisebrook and a turnpike house and gate opposite Deals Barn. There were several toll gates and houses used at some time or other in the history of the Newent turnpike road. There were toll houses near the Travellers Rest Inn on the Newent - Gloucester road, on the bridge on the Ledbury road near the fire station, in Dymock near the Beauchamp Arms and at Greenway near the cross roads. There are no remains of these buildings today. There were toll gates at Highleadon and near the turning to Cleeve Hill on the Newent-Gloucester road while there were chain bars in the town of Newent. One was across the road at the junction of the Ross road and Horsefair Lane, while the other was across Culvert Street.

Tolls were collected at the gates. In the eighteenth century the tolls for the Newent road appear to have been the same as the other roads administered by the Trust. However in 1812 there was a separate list of tolls for the Newent District. The tolls were:-

For every Coach, Berlin, Landau, Sociable, Shariot, Curricule, Hearse, Calash, Chaise or chair drawn by six horse or other beasts of draft	2s.
Drawn by 4 horses	1s. 4d.
Drawn by 3 horses	1s.
Drawn by 1 horse	3d.
For every Horse, Mare, Gelding, Mule or Ass drawing any waggon, wain, cart, taxed cart, car or other carriage	4d.
For every ox or other meat cattle drawing any waggon, wain, cart, taxed cart or other carriage	2d.
For every horse, mare, gelding, mule or ass laden or unladen & not drawing	1d.
For every drove of oxen, cows or meat cattle the sum of 10d a score and so in proportion for any greater or lesser number	10d.
For every drove of calves, hogs, sheep or lambs the sum of 5d. per score	5d.

The Trustees also stipulated:-

Any vehicles or animals passing through any of the gates between the hours of one in the morning and 12 at night on every Sunday, shall be charged with DOUBLE the tolls

and

no toll shall be paid more than once a day in respect of the same horses, cattle, carriages etc.

There was no mention in 1812 of additional tolls for overweight or narrow wheeled vehicles, although in 1775 the Trustees had generally ordered that waggons, wains or carts which had wheels of less than 6 inches in width and breadth should be charged a toll and a half at all gates. Also the Newent District did not have a weighing machine like the Over and Maisemore District. This machine was on Over Causeway. The Trustees did not specify any exemptions from tolls for the Newent District but perhaps like the Over and Maisemore District there were exemptions for carts laden with manure.

Along the Newent road the Trustees erected milestones and direction posts for travellers. In July 1749 the Trustees ordered that milestones should be laid every mile from the Smith's Shop at Over to Newent. In October 1778 the Trustees resolved that a milestone be set up at the end of five miles from Highnam Pool towards Newent, while in 1784 they ordered milestones and direction posts should be put where wanting on the turnpike roads. In July 1828 it was ordered that a direction post should be placed on the road between Newent and Gloucester, at the turning off at Tibberton, near Barber's Bridge. The post should direct to Tibberton and Taynton and should also have arms pointing to Gloucester and Newent. There are some milestones of the Trust still surviving, on the dual carriageway before Over Bridge, on the corner near Rodway Hill Lodge, at the turning to Tibberton and between the two petrol filling stations at Highleadon.

The Trustees, throughout the earlier history of the Trust, met at many inns to discuss work not only on the Newent road but also on the other local turnpike roads. They met in Gloucester at the Bell Inn, the King's Head, the Swan, the Boothall Inn and at the Dog (Talbot) at Over; in Huntley at the White Hart and Red Lion; in Mitcheldean at the White Horse; and in Newent at the Upper Horseshoe and the George. In 1812 the commissioners of the Newent District held their first meeting at the George. Many of the Trustees carried out their work conscientiously and provided a usable road between Newent and Gloucester. Rudder, in his New History of Gloucestershire in 1779, however, stated that the bad condition of the roads in the Newent area "makes it almost impossible for carriages to reach it (the town) except on the side next to Gloucester, where there is a turnpike road very ill repaired". The turnpike road seems, at least, to have been the best road in the Newent area judging by the accounts in the Newent Vestry Minute Books. In these records there are examples of threatened indictments and one case of an indictment being served on the Parish of Newent because of the poor condition of the parish roads. In 1812 John Wood complained that the road leading from Elmbridge to Ford House, which he claimed was the nearest waggon and carriage road from the Town of Newent to his

residence, was not of a statutable width or breadth and was in parts too narrow to let two carriages pass. He threatened the parish with legal proceedings unless the road was made safe. Similar indictments were threatened in 1813 on the roads leading from Newent to Taynton and from Anthony's Cross to Kent's Green. In 1817 an indictment was served at Gloucester Assizes on the bye road called Judge's Lane. So it would seem that travellers journeying between Newent and Gloucester would have used the turnpike road. In 1820 the coach carrying the post, which left Gloucester at 10 in the morning, used the road and passed through Newent for Wales and Ireland. Also the Hereford Post coach used the road and passed through Newent every afternoon at 3 o'clock on its way to Hereford and returned the next morning, arriving at 5 o'clock in Newent. It would seem that Rudder's description of the Newent roads being so intolerable that he had "to desert his horse and to travel with a guide on foot from one village to another" does not apply to the turnpike road especially in the early nineteenth century.

R.J. Owens

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The Structure of Land-Ownership at Stoke

Orchard, 1750-1890

The Revd. Peter Davie

My study of the structure of land-ownership in the hamlet of Stoke Orchard in the years 1750 to 1890 has shown that developments there followed the general pattern for the country as a whole. My particular conclusions fit into the national pattern as summarised by E.J. Hobsbawm:

'The fundamental structure of landownership was firmly established by the mid-eighteenth century ... large landlords whose land was cultivated by tenant farmers working the land with hired labourers ... By 1791 landlords owned perhaps 75% of the cultivated land ... occupying freeholders 15-20%. The peasantry no longer existed.' (Industry and Empire' P.98)

In 1751 the Rogers family of Dowdeswell owned 941 acres out of a total of 1378 acres. The remaining 436 acres belonged to five or six freeholders. The Rogers' estate was leased to five chief tenants whose farms ranged from 127 to 205 acres in size.

All but 31 of these 941 acres were unenclosed. Half of the area as arable land and half as pasture. The tenant farmers each had a quota of strips in each of the four main open arable fields. A study of the Survey Map of 1751 (G.R.O. D627/23) shows how many of the holdings had already been rationalised by grouping together a particular farmer's strips within the fields.

The above statistics are taken from the Survey of 1751 (G.R.O. D627/24). The suplicate copy of this is very useful for our purposes because it has figures for 1799 written in by a later hand, and these illustrate the process of change in the structure of land ownership we are tracing. This has been missed by the writer in the Victoria County History (Vol. 8., page 17) who has failed to differentiate between the figures for 1751 and those for 1799.

By 1799 the Rogers' estate had increased to 1022 acres. The freeholders, one of whom had sold out his 62 acres, retained only 374 acres. The number of chief tenants had been reduced from five to four. One now farmed a 386 acre combination of two previously independent farms. The other three farms had also increased in size.

These trends accelerated with the turn of the century and in 1837, according to the Commutation of Tithes Act (P 46 SD 2/2), we find that the Rogers' estate had increased to 1237 acres. There was only one substantial freeholder left - with 110 acres - one other with 25 acres, the new railway with 11 acres, and the remaining few acres were distributed amongst twenty-five cottagers each of whom held substantially less than an acre each.

The largest tenant farm remained very large at 373 acres, but there had been a sub-division of one of the other farms and there were five tenant farmers again.

145 acres had been enclosed since 1751, and so the final enclosure which took place at this time affected only a little more than half the land.

The Enclosure Award of 1840 made no dramatic difference to the structure of land ownership. This was already clearly established. Stoke Orchard fits into the pattern for the nation as a whole:

'Enclosures were merely the most dramatic and, as it were, official and political aspect of a general process by which farms grew larger, farmers relatively fewer, and the villagers more landless.' (Hobsbawn Page 102).

There were no dramatic changes after the enclosures. The Rogers estate remained at around the 1200 acre mark until they sold it off at the end of the century. The number and size of tenant farms fluctuated, but there was a general tendency for them to become larger in size and smaller in number.

The following table summarises the trend we have been discussing:

	Rogers' Est.	Freeholders	No. of chief tenant farmers	Largest tenant farm	Unencl. land
1751	941 acres	436 acres	5	205 acres	910 acres
1797	1022 "	374 "	4	386 "	893 "
1837	1237 "	150 "	5	373 "	795 "
1867	1187 "	200 "	4	395 "	-
1887	1207 "	180 "	3	472 "	-

(The figures for 1867 and 1887 are from G.R.O. D269a/E38 and SL493)

This study of the structure of land ownership at Stoke Orchard shows how the pattern of the landlord owning nearly all of the land which he leased to tenants as a few large farms, was fully established in the mid eighteenth century, and complete at the time of the enclosures in 1840.

P.E.S. Davie

THE TREATMENT OF POVERTY IN NEWENT:

1768 to 1820

For many centuries the responsibility of caring for the poor rested on the parish. In 1768 the basis of this responsibility was still the Elizabethan Poor Laws of 1597 and 1601. These Acts ordered that each year the churchwardens and a few substantial householders should be nominated overseers of the poor and should maintain the poor and set them to work, the funds being provided by local taxation, the poor rate. In 1722/3 an Act of Parliament authorised the parish officers to buy or rent a workhouse and to contract with enterprising businessmen to lodge, maintain and employ the poor. Paupers refusing to enter the workhouse were to receive no more relief.

Newent, in 1768, had a population of about 1,500, and writers agreed that it had been a place of "considerable importance". The people of Newent must, in the main, have relied for their livelihood on farming, and local trade, for, although coal had been discovered at Bouldson and a canal planned to link Hereford and Gloucester which would carry the Newent coal, little came of the enterprise.

Nationally, at the end of the eighteenth century, rural poverty was becoming a real problem. To help meet this problem Newent possessed almshouses given by Giles Nanfan and Randolph Dobyns. Both Bigland and Rudder agree that the almshouses consisted of ten twellings with gardens, and in the early nineteenth century the Charity Commissioners reported that the almshouses contained accommodation for twenty persons. The occupants, "such poor persons which should be orderly and fitly placed therein", were to be chosen by the vicar and churchwardens. There were other resources available, donations, and the rents from land which had been given to help the poor.

These resources were quite inadequate, and on September 22, 1768 a vestry meeting was held to draw up the rules for the recently established workhouse. It was agreed that an annual parish meeting should appoint governors of the workhouse and that the governors should meet monthly when the workhouse accounts would be examined. From the body of governors two inspectors would be chosen, to serve for a fortnight, although this was soon changed to a month. The inspectors were to "examine the several articles brought into the House, see that they are bought at reasonable rates and take care that cleanliness, order and sobriety is kept up, which is so essentially necessary in all establishments of this sort."

The first master of the workhouse was William Hooper, who was engaged at an annual salary of £10. He was to "buy the necessary articles of the House, direct the work and employment of the poor, keep up regularity and order, teach the children to read, write and say their Catechism and the girls to spin sow or knit, read prayers to them every night and keep a Day Book wherein are to be entered the expenses of the House, state of sick and poor, and an account of the work done." Hooper remained master of the workhouse until 1773 when he demanded that his salary should be doubled to £20. An advertisement was placed in the

Gloucester Journal and in August 1773 Edward Godsall became workhouse master at a salary of £15 per year.

Workhouse meals consisted of breakfast, a dinner "with hot meat every Sunday, Tuesday and Thursday, with garden stuff and a pudding on Sunday and the other days rice milk, toast and cider hasty pudding, broth, bread and chees and the like." Supper was to consist of bread and cheese and broth.

Admissions to the workhouse were to be on Mondays only, and those admitted were to bring all their goods with them. If the pauper died, the goods belonged to the parish "in lieu of maintenance and burial"; if he left the workhouse his goods were returned to him. All workhouse inmates were to work from six in the morning until six in the evening in Summer months; in winter from seven in the morning until five in the evening. The master was to send some of the inmates out to work at "country business" and their pay was to go directly to the master.

Discipline was to be maintained by the master and without his permission no one was to leave the workhouse. He could punish small offences by the loss of a meal or by extra work, and was to report grave offences to the inspectors. Those who worked hard and behaved well were to be rewarded; 1d. in every shilling earned was to be allowed them as a reward for their diligence.

Once the workhouse had been established work had to be found for its occupants, and although the Vestry Minute Book gives little detail of the work done, providing work for the Newent poor appears to have been a difficult task. On June 16th 1769 it was decided to use the separate room in the workhouse as a storeroom for wool and flax. On April 14th 1771 Mr. James Bamford of Gloucester agreed to employ the poor of Newent workhouse in spinning wool and also agreed to teach the poor how to spin. In May 1790 it was decided to buy spinning sheels and to teach boys and girls in the workhouse how to spin. A remark in the margin of the Vestry Book - "Not done" - shows the gap between intention and reality.

Another workhouse occupation was heading pins. The accounts for the year 1818/19 include expenses of £10 1s. Od. "to the woman for instructing the children in heading pins", and in the same year £44 13s. 5d was received for heading pins. In addition many of the poor must have been employed repairing the roads of the parish. The 1818/19 expenses include a sum of £52 2s. 3d. "the wages of paupers employed on the highways." Another source of employment was farm work. On August 19 1772 it was decided to send Charles Fitt "and all other that are able" out to "harvest work hop poling."

One way of combatting poverty was to apprentice pauper children. On June 13 1773 it was decided that "all poor children in the parish that are of age and fit to go out apprentice be put out quickly and bound apprentice to such farmers as are able to take them." There must have been some opposition from parents to the apprenticing of their children, for in February 1800 it was decided that all parents of children who had been drawn by ballot to be put out as parish apprentices, who refused to allow their children to go should be struck from the

Gloucester Journal and in August 1773 Edward Godsall became workhouse master at a salary of £15 per year.

Workhouse meals consisted of breakfast, a dinner "with hot meat every Sunday, Tuesday and Thursday, with garden stuff and a pudding on Sunday and the other days rice milk, toast and cider hasty pudding, broth, bread and chees and the like." Supper was to consist of bread and cheese and broth.

Admissions to the workhouse were to be on Mondays only, and those admitted were to bring all their goods with them. If the pauper died, the goods belonged to the parish "in lieu of maintenance and burial"; if he left the workhouse his goods were returned to him. All workhouse inmates were to work from six in the morning until six in the evening in Summer months; in winter from seven in the morning until five in the evening. The master was to send some of the inmates out to work at "country business" and their pay was to go directly to the master.

Discipline was to be maintained by the master and without his permission no one was to leave the workhouse. He could punish small offences by the loss of a meal or by extra work, and was to report grave offences to the inspectors. Those who worked hard and behaved well were to be rewarded; 1d. in every shilling earned was to be allowed them as a reward for their diligence.

Once the workhouse had been established work had to be found for its occupants, and although the Vestry Minute Book gives little detail of the work done, providing work for the Newent poor appears to have been a difficult task. On June 16th 1769 it was decided to use the separate room in the workhouse as a storeroom for wool and flax. On April 14th 1771 Mr. James Bamford of Gloucester agreed to employ the poor of Newent workhouse in spinning wool and also agreed to teach the poor how to spin. In May 1790 it was decided to buy spinning sheels and to teach boys and girls in the workhouse how to spin. A remark in the margin of the Vestry Book - "Not done" - shows the gap between intention and reality.

Another workhouse occupation was heading pins. The accounts for the year 1818/19 include expenses of £10 1s. Od. "to the woman for instructing the children in heading pins", and in the same year £44 13s. 5d was received for heading pins. In addition many of the poor must have been employed repairing the roads of the parish. The 1818/19 expenses include a sum of £52 2s. 3d. "the wages of paupers employed on the highways." Another source of employment was farm work. On August 19 1772 it was decided to send Charles Fitt "and all other that are able" out to "harvest work hop poling."

One way of combatting poverty was to apprentice pauper children. On June 13 1773 it was decided that "all poor children in the parish that are of age and fit to go out apprentice be put out quickly and bound apprentice to such farmers as are able to take them." There must have been some opposition from parents to the apprenticing of their children, for in February 1800 it was decided that all parents of children who had been drawn by ballot to be put out as parish apprentices, who refused to allow their children to go should be struck from the

parish list and denied relief. Apart from these general decisions there are cases in the Vestry Book of individual children being apprenticed, as on February 19 1773 when Hannah Taylor was bound apprentice to Mr. John Hatton of Baldwins Oak and was to be taken immediately to her master by the overseer.

The extent of poverty in Newent is difficult to assess. The Vestry Book gives details of the running of the workhouse but not of the number of inmates, gives details of the casual payments made to the poor, but not the regular payments made. In addition there is a gap in the records from 1800 to 1804 during which time the workhouse appears to have been closed, for the Abstract of Returns relative to the Expenses and Maintenance of the Poor for the year 1803 shows that no money was spent on maintaining the poor inside the workhouse, while £1221 17s. 8½d was spent on maintaining the poor outside the workhouse. In 1803 there were 108 poor people receiving regular relief and 89 casual relief. In 1811 the parish spent £1159 9s. 11d. on relieving the poor and by 1820 this sum had risen to £1537 11s. 4½d. During these years the poor rate, and the rents for the charity lands, were both increased.

Throughout the period 1768 to 1820 there was concern at the extent of poverty in Newent and the cost of relieving the poor. On April 12, 1783, at a very full parish meeting it was unanimously agreed that a committee should be set up to examine the accounts and form a plan to reduce the expenses of the parish "which have of late years been increasing at so rapid a rate as to threaten the most alarming and serious consequences to the ratepayers". A year later the committee's plans were accepted. No pauper was to be relieved except in case of sudden emergency unless he agreed to have his children apprenticed out. Articles used in the Newent workhouse were to be brought from Newent ratepayers and paupers who received regular relief were to wear the parish badge on their shoulders. In 1798 the Vestry Meeting again tackled the problem, setting up another committee and electing a steward, with a salary of £25, who was to provide work for the poor and supervise their work. He was also given other tasks, including the detection of all persons likely to become chargeable to the parish, and was also to "seek early confirmation of all single women in a state of pregnancy."

For there were some paupers whom the parish would not maintain. Illegitimate children were to be supported by their fathers and not become a charge on the parish. Thus on January 8 1769 Mr. Hooper was instructed to take Mary Pritchard to her father James Harper and tell him that unless he maintained her and kept the parish free from expense according to his bond he would be taken before a magistrate and prosecuted. On February 12 in the same year Hooper was sent to Farkham in Herefordshire, "there to take James [?] Summers who stands charged with a bastard child". Finally, in November 1790 the Vestry Book records the decision that "every woman that have a bastard and not sworn, to have their pay stopped until they have and the father to be taken."

Another category of pauper whom the parish would not maintain were paupers from other parishes. The Law of Settlement dated from 1662 when it was enacted that anyone coming to settle in a parish in a house of yearly value below £10 might, if considered likely to become chargeable to the parish, be removed by order of 2 JPs to the place where

he was legally settled "either as a native, householder, sojourner, apprentice or servant." Thus, on March 8 1772 it was decided that all persons who were not legal parishioners of Newent should be immediately removed to their own parishes. In October of the same year the decision was restated: "Ordered that every person residing in the parish that are not parishioners shall be removed within a month unless they produce Certificates of Settlement". On June 27 1775 the parish decided to send Elizabeth Humphreys "a widow, late of Bristol, lately come to this town and applied for relief", back to Bristol as it appeared that her late husband had been in service in Bristol for many years.

Yet, in the main, Newent seems to have treated its poor with humanity. Workhouse children were to be allowed an hour in the morning and one in the evening in which to receive instruction "in reading and in their catechism" [March 15, 1772], and on July 12 1772 it was decided that anyone sick in the workhouse should be allowed "something extraordinary as wine panader or tarts at the discretion of the inspectors and workhouse master." Outside the workhouse those reduced to poverty by old age, illness or unemployment were shown similar kindness as the Vestry Book shows:

- |                   |  |
|-------------------|--|
| December 13, 1772 | "Ordered that Anne Spiller be allowed 2/6d a week till the next Parish Meeting supposing that she continue ill so long."   |
| May 3, 1785       | "Ordered that Widow Parsons be allowed occasionally an additional sixpence."<br><br>"Ordered that Mary Drews' child have proper medicine provided at the expense of the parish." |

The parish even provided inoculations against smallpox at parish expense. In April 1775 "the gentleman employed to inoculate the poor" was paid one guinea for inoculating every five people, and in April 1809 it was agreed that free inoculations "with the cowpox" should be given to parishioners.

Much of the humanity was probably inspired by the genuine concern felt for the poor by the vicar, John Feley. On occasions of real hardship the parish made a real effort. In January 1800 when the hard weather was causing great distress to the poor Feley proposed that hot soup should be sold to the poor every Tuesday and Thursday between 10.30 a.m. and 2.00 p.m. The soup was to cost 1d. per quart irrespective of how much it had cost to make, and although Feley felt that soup was "a more cheap, more palatable and more wholesome and nutritious diet than bread", rice, potatoes and bread should also be sold to the poor at reduced prices. Not everyone shared Feley's enthusiasm for soup and "many idle and wicked reports having been raised to prejudice the minds of the poor against the soup", he invited parish officers and even the poor themselves to inspect the soup being cooked. If funds allowed, the parish hoped to supply the poor not only with soup, but fuel and warm flannel waistcoats at reduced prices as well.

Another crisis came in 1816, when the demobilisations at the end of the Napoleonic Wars caused unemployment. On this occasion the parish exhorted its principal inhabitants and landowners to sign an agreement by which they would, in rota, find employment for six days at a time for poor parishioners at a rate of wages between 1/- and 1/6 per day.

R.P. Ricketts

Sources

Glos. R.O., P 225 VE 2/1 and 2                      Newent Vestry Minute Books  
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THE POOR LAW RECORDS OF BITTON

1771 - 1821

The parish of Bitton has several claims to distinction. Its ancient church has one of the finest towers in Gloucestershire. From Hanham, then within the parish, thirteen-year-old Tom Cribb set out in 1794 for London where, as The Black Diamond, he won fame as the greatest of all the old prize-fighters. In the 18th and early 19th centuries the parish was the home of the notorious Cockroad Gang whose exploits were described in Volume IV of Gloucestershire Historical Studies. Its remarkably well-preserved parish records have been studied to find out something about the background of this gang and the social conditions which engendered such a criminal society.

At that time the parish of Bitton was unusually large. The census of 1801 recorded its population as 4,992 and by 1821 this had risen to 7,171. It included in its boundaries the chapelries of Hanham and Oldland and it was in Oldland that Cockroad lay. These chapelries had their own chapelwardens, overseers and other officials but, unfortunately, their records have not been preserved. The records studied refer only to the Hamlet of Bitton but there are many references concerning members of some of the criminal families, particularly the notorious Caineses. So far, it has not been possible to establish the exact relationship of these individuals but there is sufficient evidence to suggest that pauperism and illegitimacy predisposed them to a life of crime. At least 20 members of the Caines family received some kind of parish relief within the period.

The population of Bitton Hamlet in 1801 was 1,094; by 1821 it had risen to 1,788. The hamlet had a mixed economy. Rudder, writing in 1779, said that the soil was rich and fertile, partly arable but mostly meadow and pasture, both arable and pasture being farmed partly in enclosures and partly in common fields. An Enclosure Act for some of the meadow land was passed in 1819. Coalmining employed many men, others were engaged in feltmaking. The only industrial premises assessed for rates within the hamlet in 1771 were The Mill and the Little Mill, both occupied by a Mr. Tyndall. There were two inns: The White Hart and The George.

By 1820 there were three more inns; The Swan, The Chequers, and the Crown and Horseshoe, and a number of industrial concerns. These were probably not large. The rateable value of each is given below and may be compared with that of Beach Farm, £480; Fifteen Acre Farm, £148; and the White Hart Inn, £12.

Hole Lane Colliery	£233
Brain & Co's Colliery	£81
Logwood Co. - Logwood Mills & Little Mills	£58 (Making dyes from logwood)
Copper Co. - Copper Mills	£58
T. Bevan's Paper Mill	£46
Prothero and Co. Hat factory	£18 (for Felt Hats)

There were other large industrial concerns in the neighbourhood, notably the brass works at Warmley. Probably there was little employment for women. Rudder says that the manufacture of pins employed a large number of hands in 1779 but the industry appears to have died out soon afterwards. The factory known as The Pinhouse was used as a workhouse. Pauper children were employed in some manufacture for the records show that their work was sold. Possibly they were employed there in the making of pins. In 1790, however, the Pinhouse was converted into three tenements.

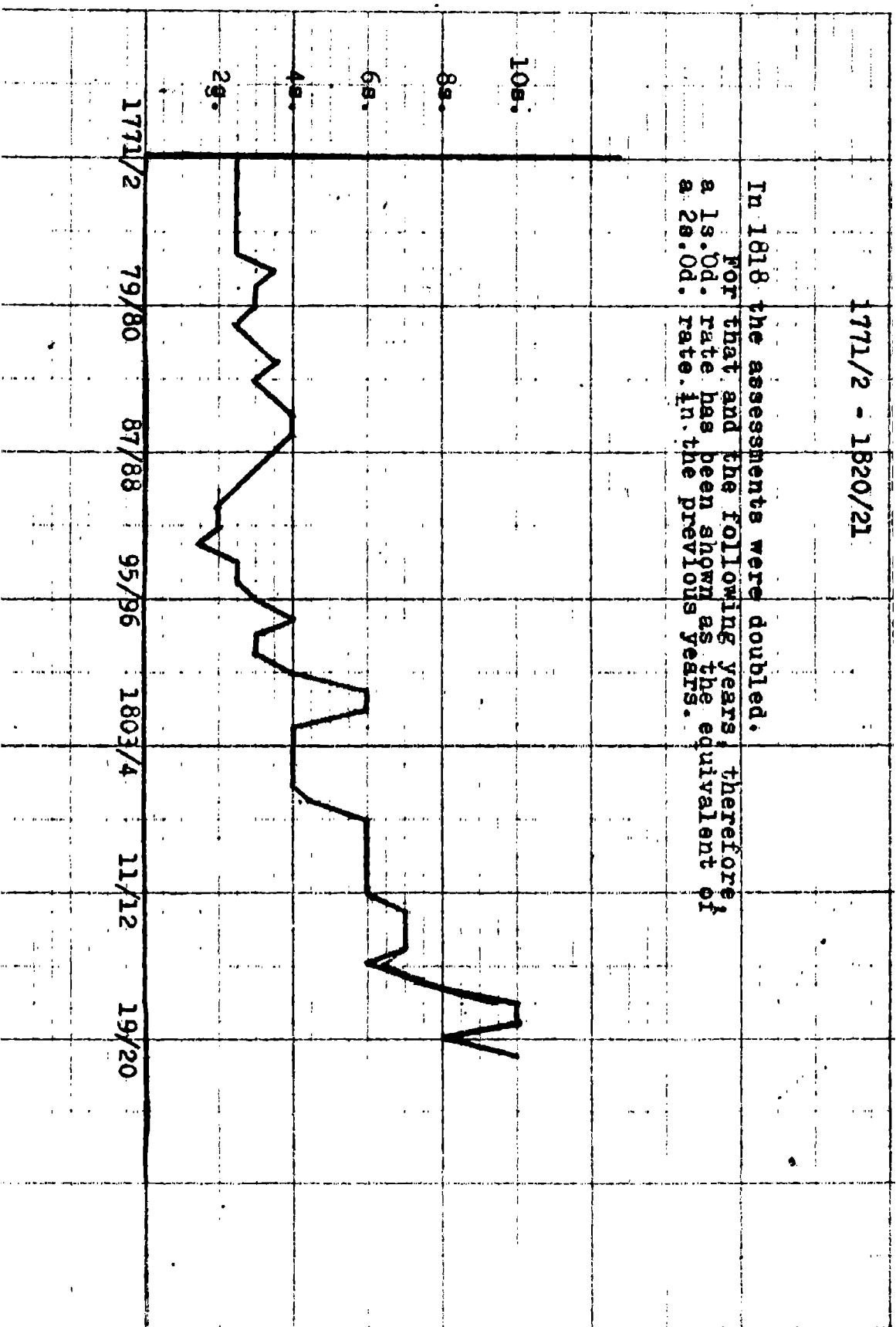
For administrative purposes the hamlet was divided into two tithings, Bitton Side and Upton Side (Upton Cheney), of almost equal rateable value. Normally one of the two Overseers of the Poor took the rates and administered relief in Bitton Side while the other did likewise for Upton Side. Each year every rateable property was assessed for a rate of 6d. in the pound. In the year 1771/2 that yielded £26 3s. 4d. from Upton Side; £24 9s. 1d. from Bitton Side, making a total of £50 12s. 5d. The rates were not levied as now in two half-yearly instalments at a pre-determined rate in the pound. Up to 1810 a 6d. rate was levied as and when required. In 1771/2 five rates were levied, in 1777/8 seven, in 1792/3 only three, but in 1800/1, a year of dearth and widespread distress, twelve rates were levied. From 1810 onwards, presumably to avoid such frequent collection, the rates were levied at 1s. in the pound. In 1817 a rate of 1s. in the pound brought in £115 2s. 3½d., little more than two sixpenny rates in 1771. In the following year all properties were re-assessed, the assessments being exactly doubled for almost every property. To all intents and purposes therefore a shilling rate after 1818 was equal to two shilling rates previously yet a shilling rate in 1820/21 brought in only £219 4s. 1d., very little more than four sixpenny rates fifty years before. Obviously there can have been little, if any, building of houses for fifty years and as the population rose by 43% between 1801 and 1821 alone, there must have been considerable overcrowding, a factor conducive to immorality and crime. Nationwide at this time there was great reluctance by parish officers to countenance the building of cottages for the poor which, it was thought, would attract to the area persons who might become "chargeable to the parish" and a burden on the rates.

The chart on the next page shows the variations in the rates levied during the period (the shilling rates levied after re-assessment in 1818 being regarded as two-shilling rates). It reflects the nationwide increase in the burden of the poor rates after about 1795. Considering that the population, and consequently the number of the aged and impotent, had increased by 43% in twenty years - and probably almost 100% in the full fifty years - while the amount of rateable property had remained almost static, the increase in the poor rates is less remarkable. One wonders how far this is true for England as a whole.

Usually two Overseers were appointed in Bitton by the Vestry but often the actual work was done by a paid Deputy or Acting Overseer, the appointed Overseers only signing the accounts at the end of the financial year. In 1771/2 only one Overseer was appointed and Thomas Proctor, a churchwarden, was paid £7 13s. as Deputy Overseers for the

1771/2 - 1820/21

In 1818 the assessments were doubled.  
For that and the following years, therefore,  
a 1s.0d. rate has been shown as the equivalent of  
a 2s.0d. rate in the previous years.



whole hamlet. The same procedure was adopted in the following two years. Thomas Hopes, Overseer in 1774/5 was unable to sign the accounts but made his mark. From 1775 to 1777 two unpaid Overseers held office but from then until 1786 Thomas Proctor was again Acting Overseer for the whole hamlet at a salary of £15 a year. After that two Overseers were again appointed for each year until 1812 though ~~in some~~ years a Deputy acted for one or both of them. Robert Hussey, an Overseer for 1811/12 was unable to sign his name. From 1813 till 1818 Stephen Jones was paid £20 a year as Acting Overseer for the whole hamlet. Then William Matthews took over until 1823 at a salary of £30. In the earlier part of the period it is probable that paid deputies were necessary because of difficulty in finding a rota of men of sufficient education and standing to perform the duties and keep the accounts. From 1813 onwards the work of the Overseers had increased to such an extent that it was an almost - if not complete - full-time occupation.

Although termed the Poor Rates, the rates were not devoted solely to the benefit of the poor; from them was taken the County Rate, or Bridge Money, (£63 in 1820/21) and the expenses of the parish constable, and also legal expenses chiefly concerned with bastardy and disputes arising from the Settlements Acts. Travelling expenses of the Overseers and the constable were sometimes considerable and there were many miscellaneous expenses such as:

1779	March 25	"To Expenses taking 3 men by a press Warrant" £2 8s. 11d.
1785	April 18	"To John Naish for Iron and revets and Nails for mending the Stocks at Bitton" 3s. 2d.
1800	Feb. 28	"To Send <sup>g</sup> for ye Curinger and Expenc for a boy kild in ye pit" £1 2s. Od.
1820	May 19	"Forged £2 Bank of England Note" £2

The Overseers administered the Gift Money. This was derived from rents of various properties left by benefactors of the poor in Bitton and neighbourhood and amounted to £5 16s. 4d. a year. It was distributed between about forty to fifty of the deserving poor in amounts varying from one to four shillings.

At the beginning of each financial year a list was prepared, presumably by the Vestry, of persons to whom regular weekly payments were to be made throughout the year. Obviously these were people who were not expected to be able to support themselves during the year because of age, infancy, or infirmity, as distinct from those persons who were in temporary distress as a result of illness, accident or unemployment. There were 25 names on the Weekly Payments list in 1771/2, 39 in 1795/6, 78 in 1814/15, and 73 in 1820/21. Unfortunately, the lists give only the names of recipients; their ages or the reasons why they needed parish relief are not stated though sometimes the Overseer made a note against a name which gives some clue. Sometimes the number of dependents is stated and if a man was married "and wife"

is added to the name, but frequently the children are given as "and family". Hence the exact number of persons "on the parish" cannot be determined but, by the most conservative estimate, there must have been more than 100 in 1814/15 and 1820/21 and these were typical years for that period.

An analysis of the list for 1820/21 shows that 18 men, 34 women and more than 51 children were receiving permanent relief. The men were, presumably, all aged or infirm. Of the women 13 were widows, 2 were mothers of illegitimate children and one was insane. Thirteen of the children were illegitimate.

Typical weekly payments in 1771/2 were: Rich<sup>d</sup>. Acreman 4s., Samuel Prigg 4s., Joyce Long 2s., William Hawkin's family 2s., Jane Brain 1s. 6d., Sarah Brain 1s. By 1814/15 the scale of payments had risen considerably in accordance with a rise in the cost of living (The Schumpeter-Gilroy Price Indices for consumer goods including cereals are: 107 for 1771, 209 for 1814). Typical payments for 1814/15 are: George Bush and family 10s., John Bell's wife and children 7s., Widow Cripps and her 4 children 7s., Francis Strong and wife 5s., John Cains (a cripple) 4s. 6s., Samuel Short's widow 1s. 6d. Interesting entries in that year's list are:

"Trotman's child by Hathway's Wife. 2s. Od."

"Susanah Palmer 2/6. Lef the Poor House with a Man Aug. 20th."

"Samuel Cains 2s. Od. Augmented 6d. Feby 11th getting Aged & more Infirm."

Weekly payments in 1820/21 were about the same as in 1814/15 though the cost of living had fallen (Schumpeter-Gilroy Index, 162).

Following the list of Weekly Payments in the account books come the records of the Casual Payments made by the Overseers during the year. These include: cash payments to those deemed in need of temporary relief; payments for clothing, medical attention, funerals, apprenticeship premiums, etc., the constable's expenses, legal fees and other items. In 1820/21 Casual Payments were made to 56 people. If their dependents are included at least 76 people received some kind of help from the Overseers in that year in addition to more than 100 who received benefit from the Weekly Payments. Most of these people received cash payments but some received only clothing or medical attention. Furthermore, the funerals of 4 persons were paid for either in full or in part and 1 boy's apprenticeship premium was paid. At a fair estimate two hundred of Bitton's seventeen hundred inhabitants received some help from the Poor Rates in that year.

Some of the people who received Weekly Payments were in the Poor House and many of the Casual Payments concern repairs to or equipment for it such as bedding. Clothing materials, needles, thread, etc., were also bought for the use of the child inmates. It is not clear from the evidence obtainable from the Account Books how the Poor House or Poor Houses were administered and organised. The Vestry Order Books, which have been preserved for the years 1761 to 1836, would supply

more information and it would be better to postpone any account of the Poor House until they have been studied.

Apart from a solitary entry in 1818 the accounts give no evidence that the Speenhamland system of supplementing wages from the Poor Rates was in operation, though the Gloucestershire magistrates had authorised such a scheme in 1795 and had drawn up a sliding scale of payments in accordance with the price of bread. This one entry concerns Joseph Cowley. He had been taken ill in Bath in May, 1818, and the Bitton Overseer had paid for his lodgings and supported his family. On July 18th the Overseers paid £1 2s. 6d. for "Batheing Lodgings &c" and brought him back to Bitton. On August 21st occurs the entry "Joseph Cowley to make up his Wages 3s. Od." There are no further entries concerning him until "Sept 25. Joseph Cowley in Distress 1s Od." At the beginning of October the Overseer paid him 2s. Od. "towards shoes" and in January 1819 he was ill again and he and his family received relief. Though, apart from the one entry, there is no evidence in the account books that the Speenhamland system was in operation, one cannot state categorically that it was not. The Vestry Order Books would probably give more definite information.

In the autumn of 1816 and spring of 1817 unemployed men, were set to work on the roads. In May 1817 as many as 17 men, plus the families of two others, were so employed. The scheme however ended in July of that year.

Were the weekly payments made the Overseers adequate? The scale of payments authorised by the Gloucestershire magistrates in 1795 allowed for 8 lbs. of bread, then costing 1½d. a lb., for each member of a family, plus 1s. for the man and 8d. for the wife for other necessary expenditure. This made the minimum weekly income for a man and wife 3s. 8d.; for a man, wife and 4 children 7s. 8d. when bread was at the price then prevalent. The national average price of wheat in 1795 was 75s 2d. a quarter. In 1771 wheat cost only 48s. 7d. a quarter so bread must have been considerably cheaper. In 1814 the average price was 74s. 4d. and for 1820 it was 67s. 10d. so bread should have been, if anything, slightly cheaper than in 1795. Judging by the scale laid down by the magistrates the weekly payments were sufficient to keep body and soul together and perhaps slightly above what the justices considered to be the absolute minimum. It would be interesting to make an analysis for the years 1800, 1801 and 1812 when the price of wheat was exceptionally high.

It will be noted that the scale allowed a family only 1s. 8d. for such expenses as clothing, rent coal, light, drink, or any other food except bread. Thus over any extended length of time the allowances were most decidedly inadequate. The Overseers evidently recognised this for the weekly payments were often supplemented with payments for these purposes. In 1800, John Caines - a cripple - received 2s. 6d. a week from the Overseer who also paid 13s. for a flannel shirt and two pairs of trousers for him. The following year he received 3 shirts. In 1805 he received 2 blankets, bed tick to repair his bed, a jacket, trousers, shoes and stockings. In 1772 Molly Battman received two shifts, a pair of shoes; a pair of stockings and

three yards of kersey at a cost of 15s. 7d. when she went into service. When the Overseers paid for the burial of Samuel Bush in 1808 they bought three yards of serge for M. Bush, presumably so that he or she could be decently attired at the funeral. Frequently the Overseers bought cloth to be made up into clothing either by a tailor or by the poor themselves. e.g. 1820 "Nov. 9. 24 yds Serge for the Poor. £2 4s." Two days later appeared the entry "Clothes for Little Pope at Mrs Tidman's £1." Women were paid for doing the washing for those unable to do it themselves. For years the Overseers were paying 6d. a week for John Caines's washing.

An interesting entry occurs on Sept. 4th 1780: "To the Widow Davis for her sons Books and Soport for her Self 10s. 6d." In May 1782 the Overseers paid 4s. 2d. for pens, ink and paper for her son Robert.

Medical attention was generously provided. From at least 1814, possibly earlier, until 1821, Dr Wingrove was paid £14 a year and he received other fees for inoculating the poor, etc. As early as 1772, when Betty Batman was in labour with an illegitimate child not only was the midwife sent for but the doctor was called in twice. In 1771 Ann Pierce, evidently a nurse or "wise woman" was paid 12s. "for the Cure of Robt Gunning's leg." In September 1884 she was paid 8s. 6d. for curing the children in the workhouse of "Anthony's fire." (Erysipelas). Women were paid for sitting up with the sick and for washing and cleaning them. Sometimes little delicacies were bought; 7d. was paid for lamb's head for Ann Jones's boy ill with smallpox in 1809, and 3s. 6d. for wine for James Butler's wife ill in 1821. In 1819 a Mrs. Gill, a stranger to Bitton was in labour and taken to the Poor House. The following entries concern her:

Jan. 18.	Mrs. Gill ill in the Poor House	1s. Od.
Jan. 23	Box to bury Mrs Gill's Child	1s. Od.
Jan. 28	Coal, Candle and Relief Mrs Gill	4s. 6d.
Feb. 5	Nurseing Mrs Gill seting up by Night	5s. Od.
	Candles for Ditto	1s. 1d.
	Sundries for Mrs Gill	1s. 6d.

There are further entries for nursing and relief until Mar. 8  
Pd Mrs Gill's carriage to London in Waggon. 10s. Od.

It is not surprising that the child died. Mrs Gill was probably lucky to survive herself for the following entries were made when she was in the Poor House.

Feb. 2.	Tobacco for Fumigation in Poorhouse.	11d.
	Vitriol Nitre &c for Ditto	1s. 6d.

Subscriptions of 2 guineas a year were paid to Bath Hospital and Bristol Infirmary and patients were taken there. In May, 1785 Sarah Prigg was taken to Bristol Infirmary to have her leg amputated and a wooden leg fitted at a cost of £2 8s. 4d. In September the Overseers paid 1s. Od. to have the wooden leg mended. John Caines, the cripple, was taken to Bath Hospital in June 1789 and the Overseers paid £3 for him. Two visits to the hospital by the Overseer cost 4s. 6d.; a horse

and cart to bring him back in January cost 3s. 6d. In March, 1800, 9s. Od. was paid for "stuf from a pottecary" for him and a further 10s. 6d. for medicine in May and June. The treatment was evidently unsuccessful for the following September the Overseer took him to Bristol Infirmary at a cost of 3s. 3d. A guinea was paid to his surgeon and in October 8s. Od. was paid for a horse and cart to bring him home. He remained a cripple and was supported by the parish for years with relief in money, clothing, bedding, and surgical shoes.

In May 1807 the Overseers paid £3 for John Bryant's fees in Bath Hospital. At the end of that year's accounts, among the monies received appears the entry "By Cash Charged Jno. Bryant being at Bath Hospital when no such thing took place. £3."

Patients were occasionally sent to Dr Bompas's private Lunatic Asylum at Bristol.

Small-pox was endemic in Bitton though more prevalent in some years than in others. In January 1784 James Bryant's wife, son and daughter died of it. The Overseers then made a Removal Order against him and on March 2nd paid Robert Bryant 8s. Od. for two days' hire of his horse and cart to take James and the remainder of his family to Stratton Foss.

Much money was wasted on legal disputes arising from the Settlement Acts and in shuttling paupers backwards and forwards to and from their place of settlement. Overseers frequently made journeys to search parish registers for evidence of settlement. The following is an extreme, rather than typical, case of a settlement dispute but is by no means unique.

In 1783 Ann Hicks and her two children were removed by order from Isleworth, Middlesex to Bitton. The Overseer of Bitton gave notice of appeal against the order at Middlesex Quarter Sessions. In the meantime he paid £1 for two week's board and lodging for Ann Hicks and her children and afterwards 5s. Od. a week for their maintenance. In May the trial was held in London. The expenses were heavy. Two guineas was paid for a chaise to take two people - the lawyers, no doubt - and another guinea to take a third. A coach to bring them back cost another three guineas. £1 10s. was paid for the wagon to take the Hicks family to London, £10 15s. 9d. for the maintenance of them and the witnesses while there, etc. In total the expenses came to £22 18s. 3d. The case was settled out of court, the authorities at Isleworth having given in and agreed to pay 17 guineas towards the costs to which Bitton had been put. The 17 guineas, however, was all paid to lawyers in Bristol. Together the parishes of Bitton and Isleworth must have spent at least £50 on the case, enough to support Ann Hicks and her children for nearly four years at 5s. Od. a week. The story has a tragic end. An entry in the accounts dated July 4th, 1783 reads: "To the officers of Calne for the Buryal of Ann Hicks Child 15s. 1d."

A dispute with the neighbouring Somerset parish of Kelston in 1818 was recorded in the following entries:



"April 7. Expences Coach Hire, Counsel &c with witness's to Wells Quarter Sessions to Try Abm Brimble's Case. £22 6s. Od."

"May 4 Pd for the Caravan with Witness &c to Bath (for Trial at Wells) 6s. Od."

Judgement was given in favour of Bitton.

"May 7. By Cash of Kelston Overseer for Abm Brimble and family's maintenance. £13. 10s. Od."

Even when there was no legal dispute the cost of removing people to their place of settlement could be heavy. In 1821 James Butler, a hatter, whose legal settlement was at Polstead, Suffolk was living with his wife and three children in Bitton. Presumably he was working at Prothero's Hat Factory. His wife was taken ill and became chargeable to the parish and, though the accounts do not state this, it is evident that she died. It seems that when the mother of young children died, if the father was not legally settled in Bitton the authorities sent him and family back to his place of settlement so that the children would not have to be taken into the workhouse for care and attention. (Note the removal of James Bryant mentioned previously). The removal of the family via Bath, Mitchell's Waggon to London and Wilson's coach to Polstead, cost about £12. It is to the credit of the Overseers of Bitton that they bought new shoes for all three children before they set out.

The Overseers made other efforts to keep people "off the parish" by helping them to go away, to seek employment or to keep them in their trade in difficult times:

1817 July 7.	Wm Jarrett to support his Family in his Trade & keep them of the parish	£1 0s. Od.
1818 Feb 13	Robt Haslet to help him to London	13s. 6d.
1819 Jan 9.	Chas Webly to assist him and family to go to Dudley to get employ	£1 0s. Od.
1820 Mar 25	Robert Jay's Wife to buy some articles to sell on her way to Glasgow	£1 0s. Od.

Evidently she came back to Bitton for -

1820 Nov 20	Robert Jay's Wife to take her to London	9s. Od.
1820 Aug 4	Jos. Cooper to keep his Goods from Seizure	8s. Od.

There were Friendly Societies or Sickness Clubs at four of Bitton's five Inns by 1805. On Nov. 25th 1818, the Overseer paid 5s. Od. to James Baln and his son, both injured in the pit. Two days later he paid up Baln's Club money, 8s. Od. - a prudent measure for there were eight people in Baln's family and he was able to keep their relief down to 5s. Od. a week. On August 22nd the Overseers lent James Whippey 10s. Od. to "keep him in Club" and in the following February advanced him another 12s. Od. "he haveing a large family."

Bastardy was the cause of considerable expense and much activity for both Overseers and Constables. It was a national problem at the time and parish officers made various efforts to reduce its incidence. When a single woman was found to be pregnant she was taken before a magistrate and ordered to swear the child's paternity. Refusal to do so was punished by imprisonment in the House of Correction. The constable, armed with a warrant, then went to arrest the putative father - not always successfully.

1804 Oct. 8. To expenses with Ann Joy to swear the Child &  
warrant. 5s. Od.  
To D<sup>o</sup> and Constable to Dodington and other places  
after The Man but could not find him. 15s. Od.

When the man could be found, if he was single, pressure was brought to bear to force him to marry the girl. There are frequent references in the Poor Books to men being kept in custody until the marriage ceremony.

1784 Oct. 7. To expences takeing up Thos. Osborn & keeping  
him in Custody all night and next day before  
marriage. 11s. 6d.

The Overseers paid for a seemly and sometimes convivial wedding, often paying the parson, buying the ring, and providing a wedding breakfast of bread, cheese and beer. They paid as much as 9s. 6d. for this purpose at the "shot-gun" wedding of Charles Williams and Sarah Bush in 1787 and a lot of bread, cheese and beer could then be bought for 9s. 6d.

When the man could not be forced to marry he had to pay the Overseers for the child's maintenance. In 1814/15 Bitton was supporting 13 illegitimate children but was recouping the money for at least 7 of them from the fathers. The Overseers paid for the midwife and the doctor, if he was called in, and relieved the mother while she was incapacitated. These expenses were sometimes heavy.

1801 Jan. 16. To a Bill for Expenc<sup>s</sup> in London for Mary Jefferis  
lying in with a Bastard Child £7 1s. 8d.

An entry in 1819/20 concerning Dinah Brimble's child by William Berry reads, "W Berry paid his arrears due and demanded the Child of the Mother to provide for it himself & the Child was delivered to him."

In 1821, in accordance with the law, Charlotte Brain who was receiving 3s. 9d. a week for two illegitimate children was sent to prison for six months for having a third. An entry on 28th June, 1821 records payment for the "Funeral of Charlote Brain's Bast. in the Lawford Gate Prison." In the same year Ann Jeffries, receiving 3s. 6d. a week for two illegitimate children was imprisoned for three months for having the second.

The records rarely, if ever, refer to illegitimate children by name but as the father's or mother's bastard. This practice continued even when the child was old enough to go to work. Such entries as

these seem very inhuman:

1773 Aug 22. Pd for the burial of Betty Battman's bastard 10s. 6d.  
1778 Mar. 20. Sarah Woodington's bastard, she going to service 6d.  
1819 Sept 24. .... Slaughter's Bast<sup>d</sup> hurt at Pit 2s. Od.

Probably it was insensitivity rather than inhumanity that caused parish officers to stigmatise these children and set them apart from their fellows by denying them the dignity of a Christian name; but such insensitivity could arouse deep anti-social feelings in the child which would be liable to develop into criminal tendencies in later life.

The shortage of housing, by discouraging marriage, tended to promote promiscuity; the binding of boys to long apprenticeships during which marriage was forbidden may well have had a similar effect. Under the Elizabethan Poor Law boys were apprenticed until they were twenty-four years of age, though after 1788 the age was reduced to twenty-one. Girls were apprenticed until the age of twenty-one or marriage, whichever occurred first. Apprenticeship usually began at the age of seven and sometimes even earlier. When the child was bound to a good master and learnt a skilled trade, apprenticeship was obviously highly beneficial but if a child was apprenticed to a bad master or to a trade which he disliked his only escape from unhappiness was to run away. If he did this he was breaking the law and runaway apprentices were a great source of vagrancy and juvenile crime.

Apprenticeship indentures for 33 children are preserved in the Bitton records; 24 for boys, 9 for girls; an interesting though incomplete collection. They date from 1733 to 1823, though mostly from 1760 to 1780, and almost all refer to pauper or parish apprenticeships. The ages of the children when apprenticed were: 8 years, 3; 9 years, 3; 10 years, 8; 11 years, 2; 12 years, 4; 14 years, 7; 15 years, 1; 17 years, 1. The ages of three are not stated. In accordance with the law, up to 1788 the boys were apprenticed until twenty-four years of age. They appear to have been given genuine apprenticeships to a skilled trade: feltmakers, 2; cordwainers or shoemakers, 5; barbers and peruke-makers, 4; butchers, 2; carpenters, 2; farmers, 5; and one each to a tailor and a brightsmith. One feels less happy about the girls who, with one exception, were apprenticed to learn "huswifery or some other useful art or mystery" and may well have been condemned to years of household drudgery. They were not taken into large houses but into the homes of farmers or artisans. One girl, Ann Bryant, was bound to Edward Baggs, mariner of Bristol to learn to be a laundress. The list of Weekly Payments for 1820/21 records that Rachel Bryant was "taken to Service by Farmer Mayne but ranaway and was committed to Prison one Month."

About half of the children were apprenticed outside the hamlet of Bitton, many in Bath or Bristol. Parish officers did this whenever possible, for when a child had completed only forty days of apprenticeship in another parish he or she gained a settlement there and had no further claim to maintenance in the parish of birth.

The road from Bristol to Bath ran through the hamlet and the

Bristol-London road skirted it on the north. Along these roads wended a constant stream of vagrants, pedlars, and poor travellers of every description. Many of these carried what was termed a "free pass." This was a document signed by Justices of the Peace authorising the bearer to ask for alms or assistance on his or her journey, either from the Overseers or from private persons. Such passes were commonly issued during the period to discharged soldiers and sailors, ship-wrecked mariners, sufferers from fire, or other poor persons tramping back to their parish of settlement. Soldiers' wives usually accompanied their husbands when their regiment was stationed in England but if it went abroad only a quota of the women was taken; the others were given passes back to their place of settlement. These passes were only valid along a specified route and within a specified period of time. They had no legal validity and there was no legal obligation on the Overseers of the parishes along the route to relieve these travellers. Some parishes refused to give aid; the Vestry at Dursley in 1738 ordered that nothing should be given to such travellers from the parish account and a similar order was given at Brislington in the following year. Bitton was more generous: in 1811/12 rather more than 227 such foot-passes were given relief; 48 men, 93 women, 77 children, and 9 persons whose sex and age were not stated. The number was greater than normal that year. Among the passes were 5 soldiers, 10 soldiers wives and 12 soldiers children; 25 sailors, 5 sailor's wives and 1 sailor's child. Twelve "passes" were described as being ill on the road and nineteen as being "in Distress."

The amount of relief given was usually small and totalled only £4 9s. 6½d. These entries are typical:

1811.	May 2.	To Man & Wife in Distress	6d.
		To 7 Saylor's in D <sup>o</sup>	1s. Od.
	July 15.	To a Saylor & Wife being Ill	1s. Od.
1812	Mar. 2.	Woman & 6 Child <sup>ren</sup> with Pass	1s. 3d.
	Mar. 6.	2 Soldiers with a Pass.	4d.

Sometimes, however, the expenditure was much more:

1812	Jan. 31.	Man & Wife being Ill on Road	8s. 6d.
	Feb. 7.	To the Woman Ill in the Poor House	3s. Od.
	Feb. 10	To Edith Cripps looking after Woman in Poor House	4s. Od.
	Feb. 14	To the Woman Ill in D <sup>o</sup>	3s. Od.
		To Gave the Woman to go Home to her Parish	2s. Od.
		To Ann Cripps to Carry her Bundle	1s. Od.
		To Widow Cripps looking after ye Women	2s. Od.

Other examples of generosity to the stranger within the gates are:

1810	Nov. 2	To Expenses at Hart Inn for a Traveller	7s. Od.
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1820 July 17. Pd Lodgings & Nurse for Soldiers' Wife £1. Os. Od.

The account books make occasional reference to inhabitants of Bitton being sent home by pass under the Vagrancy Laws.

1811 June 14. Hannah Bryant B<sup>t</sup> with a Pass in Distress 3d.  
To taking D<sup>o</sup> Home in a Cart 5s. Od.

Mary - or Moll - Caines was brought back with a pass in July 1785. She was relieved by the Overseer with 1s. 6d. a week until 5th September when she was given 5s. Od. "to buy shoes & go away" but was back again and receiving relief in 1778. In that year, too, Elizabeth Caines was "brought from London with a pass in the foul'd disease." At the risk of being uncharitable one may guess the nature of the "foul'd disease" and how Elizabeth had been earning her living in London.

The pauper funeral, described in poem and prose, has become almost a legendary symbol of the final degradation of the poor. Watching one in Harrow churchyard is said to have aroused Lord Shaftesbury that sympathy with the poor and oppressed which inspired his life-long struggle on their behalf.

In the chancel of Bitton church lies the body of Berkeley Seymour and beside it the body of his brother William who robbed and murdered him and was hanged in Gloucester in 1742. Outside in the churchyard are buried the Caines brothers, Francis who was hanged at Ilchester in 1804 and Benjamin who suffered the same fate at Gloucester in 1817. Bitton gave even its criminals a Christian burial and, as far as one can tell from the records, its paupers were laid to rest with decency and dignity.

The usual expenditure on a pauper funeral about 1820 was twenty-seven or twenty-eight shillings. This expenditure is usually not itemised but one can estimate what kind of funeral was provided from the entries concerning the burial of Samuel Bush in 1808 which cost £1 9s. 6d. It provided for coffin, shroud, bell and grave at £1 1s.; pall, 2s. Od.; four bearers at 5s. 6d. and 1s. Od. for "putting him in the coffin". There are frequent references about this period to the provision of bread, cheese and beer at pauper funerals.

Early in October 1810, Jonas Watson of Bitton was taken ill in Bristol. The Overseer relieved him and on 7th October paid 10s. Od. to bring him home to Bitton. Sarah Ellis was paid 1s. Od. on three occasions for looking after him and 6d. was paid for washing his shirts. He died about the middle of the month. The Overseer paid £1 for his coffin, 4s. Od. for four bearers, and 2s. 8½d. for beer "&c" at the funeral.

The Overseers occasionally laid out a little money on entertainment. On 6th September 1813, they spent 3s. Od. on 2 gallons of beer for the local Militiamen when they were disbanded. Beer was also provided for men joining the Royal Navy, and even in 1820, when the rates were high, they expended about £1 1s. on beer for the poor on "Turnover Day" - 25th March - when the new Parish Officers took office.

The documents studied are of absorbing interest and give a comprehensive picture of life in Bitton at that time. We would like to analyse the accounts more fully and complete the research to the year 1834 when the old Poor Law was abolished. The study so far completed indicates that at Bitton that law was administered with compassion and at least a measure of generosity.

Irene and John Wyatt

Sources:

Bitton Overseers of the Poor Accounts 1771-1821.

Settlement Papers 1700-1830.

Apprenticeship indentures 1700-1800.

[All kindly lent for study by the Vicar of Bitton]

ISAAC TAYLOR'S MAP OF GLOUCESTERSHIRE, 1777

Isaac Taylor's map appears to be an excellent starting point for many investigations into local history in Gloucestershire in the 18th century; but how accurate and useful a guide is his map? While a complete evaluation would involve a study of the county to a considerable depth, some estimate is possible from a study of large scale manuscript maps available in the County Records Office.

Taylor's map has only to be compared with the map published by Bowen in 1760 for the great advance in his information to be seen. Bowen does not even mark the present A 38 Bristol to Gloucester road even though this was turnpiked in 1726-7. Nevertheless, by modern standards, Taylor's "survey (was) sketchy, lesser roads vague, rivers (1) and streams weak and inaccurate, place-names not always convincing." One important matter needs further investigation: it is said that Taylor's work took five years (1772-7) between the survey and the difficult engraving. But some information on the map appears to predate 1772, so Taylor may have started work earlier.

Taylor's major roads are reliable and accurate. His road out of Gloucester towards Barnwood shows two churches to the south of the road near Wotton turnpike. One of these buildings today is north of the present road, but this is the result of later realignment. (2) At Ampney St. Mary, between Cirencester and Fairford, Isaac Taylor shows the main road passing south of the church, which it did at that time, (3) not north of the church - the line which the main road takes today. These are only two of many examples which could be given where today's map is very different from that of Taylor's because of subsequent alterations. At Williamstrip Park, Coln St. Aldwyns, the alterations were made in the very year that the map was published. (4) Suspected inaccuracies in Taylor's main roads must be carefully checked against subsequent realignments. The likelihood is that Taylor was right.

On lesser roads, Taylor is weak but not altogether to be despised. His villages are in the right place, but roads linking them which passed through open fields sometimes disappear. Some small tracks he may not have explored - or perhaps he marked misleading paths to discourage travellers on them? An extension of Akeman Street towards Coln St. Aldwyns from Cirencester peters out on Taylor's map; but no track is marked on a map of 1750, nor is there any sign on more recent maps. Perhaps Taylor tried to take a short cut which ended at the banks of the river.

Occasionally Taylor appears confused. The estate map of Quenington (c.1775) shows the road running south to Fairford as today, but Taylor's road does not go through: the road which he marks as the through route (by the stream) was not a through route in 1775. At Preston, Taylor's road pattern is very different in detail from that drawn by the local surveyor, Richardson (5), and where Taylor has two roads running either side of the church, Richardson's map of 1770 has a straight road, with a duckpond between the church and the road. But in other places, Taylor's accuracy is amazing; around

Cranham (6) - then far more isolated than today - the roads still twist and turn now as in Taylor's day.

Taylor seems to have spent little time on the streams and rivers. The loops and bends have no real significance, although the bridges and fords on main routes are accurate. An example of Taylor's inaccurate placing of streams can be seen at Stratton (7), where the stream flowed closer to the main road than he indicates. Taylor did however try to mark the important water-mills on his map. He places two mills between Stratton and Baunton: a third, lesser mill is marked on the enclosure map. Taylor's mills can form a minimum basis for a survey: but lesser mills may not be marked.

When did Taylor survey the county? His map of Worcestershire was published in 1772, but in 1769 Taylor was already advertising that his survey of Gloucestershire was imminent. (8) The evidence suggests that he soon got down to work. The estate map of Oxenhall (9), in the west of the county shows that in 1775 the present Newent-Dymock road was complete and open, having been authorised in 1768-9. Taylor could hardly have missed it. But his map does not mark it. In the east of the county the Ampney and Barnsley map shows that the southern of two parallel roads marked by Taylor running to Gallows Corner was blocked by a hedge in 1771. At Preston, Taylor's survey precedes the implementation of the inclosure act of 1772.

Isaac Taylor made a remarkable map considering the brief time in which the county appears to have been surveyed. While it is undoubtedly a valuable contribution to our knowledge of the Eighteenth Century, it needs to be checked carefully whenever possible against other contemporary sources.

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THE CONSTRUCTION OF THE STROUDWATER CANAL

An Act authorising the construction of a navigation to connect the wool manufacturing district around Stroud with the river Severn was passed as early as 1730. A pamphlet of 1775 called The Case of the Stroudwater Navigation is quoted by J. Phillips in his book A General History of Inland Navigation (1784). The pamphlet, says Phillips, claimed no more than that the proposed navigation offered excellent investment prospects.

Such was the progress of the scheme in 45 years! Yet Stroud and its surrounding district was said to contain some 50,000 people (1); and communications were so bad that corn prices, according to the pamphlet already referred to, were "higher in Stroud than anywhere in the Kingdom". That may or may not have been the case, bearing in mind the purpose of the pamphlet it was probably a piece of salesmanship. But in comparison with river transportation, overland haulage was expensive; it accounted for large divergencies in local prices. The pamphlet presses home its point with comparative statistics:

25 times more manpower was needed to move 70 tons of coal by road from the River Severn to Stroud than by water.

The case for the building of a canal or a navigation clearly stems from the co-existence of good potential markets and poor communications. Having been rather carried away in his description of the glowing prospects of the venture, the author of the pamphlet is then faced with the obvious difficulty of explaining why the venture had not so far found enough local backing to get started. Rather unconvincingly he states: "This Act, though supported with great spirit, whether from want of money or through some misunderstanding among the undertakers, was neglected until 1755".

He might well have mentioned the opposition of the mill owners whose premises occupied sites between Stroud and the Severn. They feared that a navigation with locks would rob them of the water power on which the mills depended. That this opposition was significant is apparent in a private scheme put forward by a local 4-man syndicate in 1755 for a navigation that employed no locks. It is this scheme to which Phillips was referring in the passage just quoted.

All goods were to be carried in containers. Changes in water level - one at each mill - were managed by transferring the containers from a barge on the higher level into one waiting in the lower level by way of a crane built on the top of the dam which spanned a specially constructed channel skirting each mill pond.

The scheme foundered, and its promoters were brought to near-ruin. Phillips may have overstated the case for the canal but his remark about "great spirit" is borne out by the evidence; for it was on land belonging to Mr. Kemmett a member of the syndicate, that, twenty years later, the excavation of the Stroudwater Canal began. It is

reasonable to suppose that he was a canal enthusiast - the type that made possible the canal boom of the 1770s.

As an achievement, the Stroudwater Canal does not rank high in the annals of canal building. It includes no great single feat of engineering; no soaring aqueduct, no great tunnel, no spectacular hill climb; nor is it especially long - a mere "feeder" to the Severn, in fact. It has the dubious distinction of having taken 50 years to get started. Then, after about a century of moderate success, it gradually declined in importance. In the early 1950s an effort was made to preserve it for holiday cruising, but the estimated cost was prohibitive and nothing was done. Apart from the initial £140,000 required to make the canal navigable again, the upkeep would have demanded a further £1, 00 per annum (2). After 1954, Gloucestershire County Council replaced several of the original bridges, together with their steep approaches, by concrete structures that just clear the surface of the water. These effectively put an end to any hope of a revival of the canal as a waterway. More recently, motorway construction works have obliterated parts of the canal completely and the lock and basin at Framilode, originally part of the ever-optimistic Mr. Kemmett's orchard, have been filled in and grassed over.

In 1775, a Framilode miller, supported and financed, by business interests along the proposed line of the canal, brought an action against the canal commissioners (as they were then called) at the Gloucestershire Assizes for allegedly going beyond the powers invested in them by the Act of 1730. He claimed that the Act did not authorise the cutting of new channels to straighten the line of the navigation - only the widening and deepening of the river. Such a cutting would by-pass existing mills and deprive them of vital water supplies. The fact that an influential section of opinion in the City of Gloucester was on the side of the miller may have made a difference, for records show that Gloucester Corporation owned mills on the stretch of river concerned. (3).

The miller won his case. By this time (1775) then, the Commissioners had at last begun the long expected canal. With the completion of the case came the news that no further work could be done. (4) Unless a more acceptable scheme could be submitted by the Commissioners, there would be no canal under the 1730 Act. But already the venture had cost £4,000: too much to write off. The commissioners responded to the decision in the only way they could: they promoted a new Bill in Parliament which would authorise the construction of the sort of canal they had in mind. Canal traffic demanded a fairly straight waterway. The river with its sharp bends was of no use to them, however much widening and deepening was done. Landowners whose property lay along the line of the proposed canal were to be obliged to sell to the canal company at a fair price, the land it needed.

Once its form was thrashed out the Bill was promoted with desperate energy. Opinion was canvassed in all quarters in an effort to disprove the opposition's claim that the rate of flow in the river was inadequate to supply both the canal and the mills. Mr. Thomas Yeomans, one of the commissioners, managed to measure the rate of flow in the river as 37,990 tons per day and even to convert the figure into lockfuls of

water. He further showed that with the proposed reservoir completed, less than a Sunday's flow of water would keep the canal supplied for the ensuing week. (5) A succession of elderly employees from the local mills, all experienced in maintaining water supplies for the use of the mill, were invited to affirm that it was common practice for the "Sunday water" to go to waste.

Representatives of the commissioners were sent to arrange a favourable reception for the Bill in Parliament. Yet others were sent to seek the support of the landed gentry. The strong feeling in favour of canals that was very much in the air at the time lent extra power to the promoters' hand. The Bill was passed in the early part of 1776.

Share capital of £20,000 was authorised with an option on a further £10,000. In the event, a total of more than £41,000 was needed to complete the canal and its installations. A third instalment of capital - the difference between the authorised amount and the final cost, was raised finally by passing round the minute book so that the shareholders present at the Special General Meeting on April 1st, 1779 (6), could record voluntary subscriptions in units of £100. It was only this eleventh-hour support which enabled the last stretch of canal to be completed. It is interesting to note that an early estimate for the whole work was £14,000, a figure which shows that the £20,000 share capital that the commissioners were authorised to raise, was probably a genuine estimate of the upper limit of cost.

Under the new Act, the old commissioners of the canal re-styled themselves the "Committee of Directors". The proceedings of the regular meetings of the Committee survive from these early days. They fill up a large leather bound volume, recorded in the fine hand of the clerk Benjamin Grazebrook (7). The record of proceedings, (subsequently referred to as "the minutes") provides the basic source material for the analysis that follows; for they provide a more than interesting account of the operations of a committee of entrepreneurs working 200 years ago. They contain enough evidence to enable the reader to speculate on the question that must have been uppermost in the minds of the committee throughout the entire period of the construction.

Why were the actual costs so much higher than the estimates? The reasons as they emerge from a consideration of the minutes are fascinating because although they mirror a social structure that has changed greatly in the intervening 200 years, they nevertheless leave the reader with the impression that the economic man of Adam Smith's time differed little from his counterpart of today. Further, the unfortunate experiences of the directors of this comparatively minor engineering project have a significance beyond themselves. They epitomise a situation in which non-specialists are at odds with an interlinked system of problems, which, after a period of evolution, called forth the highly expert specialist companies that dominate civil engineering today.

After the passing of the Act, no time was wasted in removing the dust sheets, so to speak, from the work already in hand. The work at Framilode, mostly completed before the injunction of 1775, had been

covered up against the winter frosts before the labour force had been laid off. But from the recommencement of the work in the spring of 1776, the minutes recount a succession of difficulties and delays where the directors are nearly always seen at a disadvantage.

Indeed, had it not been for the fact that half a Stroudwater Canal would clearly have been a greater loss than a complete canal at an inflated price, the scheme would have foundered for lack of funds. The prospect of the greater loss guaranteed the acceptance of the lesser. This was the instrument of blackmail that lurked behind the glowing prospectus of every canal undertaking.

It is appropriate at this point to give some account of the Committee members, 13 in number, since it is with their decisions that this study is mostly concerned. Local directories show that they were mostly involved in the manufacture of woollen goods and its finance. Significantly, those who owned mills had premises upstream from the terminal of the canal. These included Joseph Wathen, Thomas White and William Knight. At least 4 were bankers: Grazebrook and Wathen were partners in a firm whose premises in Rowcroft, Stroud, later became the headquarters of the canal company. Hollings and Dallaway were also Stroud bankers. None of these men could have had much practical experience in canal building. Furthermore their time was partly occupied in the day to day administration of their respective businesses.

The task that these 13 men undertook involved them in a succession of decisions, each serving the same central purpose: namely, to maintain a balance in the two main areas of fund deployment, bearing in mind that the flow of funds was limited. The two main areas referred to were those of land purchase and construction. Subscriptions from shareholders were collected at intervals: 10% of each shareholder's total commitment at any one time. And, like the financial resources, the time available for decision making was scarce.

The committee of directors met formally once a fortnight at the George Inn in Stroud (now demolished to make way for a modern chain store). There they would review the progress of the work, issue new orders and deal with the problems arising. Business must have been conducted briskly: from time to time, the minutes include unfinished sentences, indicating perhaps the clerk's concern to catch the next item on the agenda as soon as it was broached, rather than wait until the last sentence of the previous one was completed.

Everyone was aware that shareholders expected a return on their money with the minimum delay. There was a pressing need therefore to keep the work on the move. So capital locked up in premature land purchase was not available for meeting current construction costs. It represented a less than optimum deployment of funds in the two areas already mentioned. Conversely, if land was not available when needed, construction would be held up and the specialised labour force might begin to drift away. An entry of July 1776 in the minute book refers to the canal surveyor's mission to Warwickshire and Leicestershire. His orders were to recruit (or, possible, poach?) extra labourers. Recruitment of the right sort of labour must have

been difficult when so much canal building was going on in the Midlands. Such a situation offered obvious opportunities for hard bargaining to the landowners with whom the committee had to deal. Figures suggest that the further the canal proceeded, the stronger the sellers' position became: more capital sunk in the work, an urgency to produce some return on it. There was a premium on the quick deal, so prices were forced up, notwithstanding a clause in the Act which demanded a fair price of the sellers. The committee couldn't afford to wait for arbitration in disputes over prices. Between 1775 and 1778 land bought outright rose from £20 per acre to as much as £59. Land bought on 35-year purchase agreements was as low as 20/- per acre per annum in 1775 and rose to 40/- per acre in 1778. It is not possible to show exactly how much money was spent in obtaining land because the proportion of outright sales to 35-year purchase agreements cannot be ascertained, but it is safe to say that the cost was much higher than the original estimates allowed for.

The land purchase position is well illustrated from two entries in the minutes book dated May 9th and 16th 1776. A Mr. Purnell of Dursley refused to bargain with the committee over his selling price of £40 per acre, preferring to let the dispute go to arbitration. Since no jury was immediately available, the committee decided to pay Mr. Purnell his full price.

The same urgency led to other inflated costs in other areas. On March 5th, 1778 - a whole year after the final line of the canal at that point had been fixed, negotiations opened with the vicar of Stonehouse for the acquisition of part of the churchyard. The piece in question lay at the southern edge. An inspection indicates that all the graves in that area are of recent date, so it is likely that the purchase agreement was not complicated by the presence of old graves. A piece of land to the east of the church had been bought by the directors, in the hope that an exchange or part-exchange could be arranged. In June, the vicar was holding out for a price of £35 for the piece of churchyard, plus the immediate payment of all tithes due on parish land already owned by the directors. The company was very short of funds: it was in the following February that the appeal for voluntary subscriptions was made. An application was made to the Bishop of Gloucester, and in this case a favourable decision was obtained. The land was exchanged on payment of £18. 7s., and on August 13th, the navvies moved in. A delay of over 5 months at that time, meant that when work began, it had to move along with all speed: quality of workmanship suffered and its inevitable sequel was a larger maintenance bill later on.

The Stonehouse churchyard incident well illustrates the "position of disadvantage" earlier referred to. As incidents like this occur, the committee is seen firmly fixed on the horns of dilemma. Its plight seems inevitable: yet perhaps this was because the directors with their inexperience could not cope with more than one strategic move at a time.

There is a row of mean cottages skirting the canal at Framilode. Looking at their walls, the observer will notice how many bricks are mis-shapen, cracked, semi-vitrified like clinker, and discoloured. From early references in the minutes, it appears that the clay used in the

manufacture of bricks for the lock at Framilode was obtained on the site of the lock itself. Clearly, with a heavy commodity like bricks, there was a strong incentive to reduce transport costs. There was clay of a sort at hand, so the committee ordered bricks to be made of the local clay. The results were disappointing. Many of the bricks were unusable in the construction of the lock, which probably explains their presence in the walls of the cottages.

The committee of directors brought its decisions to bear on the construction of the canal through the office of the Surveyor. The surveyor was the sole full-time paid executive of the company. He was expected to give an informed opinion on all aspects of canal engineering. This was reasonable: but beyond this he appears to have been expected to attend to many problems that arose during the work, even though they might have nothing to do with canal building as such. Even the supply of hay for the company's horse(s) was attended to by the surveyor. In a series of entries in the minute book dated December 1776, the story is told of the purchase of a hayrick and its unfortunate sequel. Anyone buying hay in December would find himself in a seller's market, so the surveyor - at this period it was Mr. Lingard - was sent out to obtain "the best terms he can". The phrase crops up often in the minutes. Often, as here, it probably did not reflect the true situation. Mr. Lingard was after hay at any price: the survival of the horse as a company servant depended on it; if he failed, the horse would have to go. His progress is reported: a hayrick was bought on the undertaking that it could stay where it was while the horse consumed the hay. Then it was found that the hay was bad because the thatch of the rick was damaged. The fate of the horse is not recorded. It would be interesting to know whether Lingard was censured and whether his failure in the role of chief forager contributed to his dismissal later on, but the hayrick incident suggests that the committee expected too much from its surveyor. Incidentally, Lingard was the third surveyor to work for the company. His two predecessors were dismissed apparently without a reason and Lingard himself was replaced in November 1777 by Thomas Frewen. At a salary of £3 a week Frewen survived only until May 1778, after which the post was taken over by Benjamin Grazebrook now a member of the committee. As an event in the history of the construction of the canal, Grazebrook's assumption of the responsibilities of surveyor is significant because it adds support to the view that the committee was constantly at odds with its construction problems. Is it not reasonable to suppose that, in the belief that the "real" reason that so much money was being spent was the negligence of the surveyor, the committee, in desperation, appointed someone who identified himself entirely with the company's fortunes, and who could be trusted to have the interest of the company at heart?

The £200 that Grazebrook received on taking up the appointment then appears as the value the company set on his allegiance. In contrast, the other surveyors had been paid well in arrears. Frewen received no salary at all until his dismissal. Perhaps better treatment would have secured their loyalty from the beginning.

The fate of the surveyors leads on to the question of labour relations in general. Lingard was dismissed ostensibly for not inspecting the constructions twice a week. This inspection would appear to include a tour of the completed sections as well as the work in progress, because in the minutes prior to the date of Lingard's dismissal, there are

references to the committee's concern over the state of the lock gates at Bristol Road. John Pashley, the employee in charge of the lock at Bristol Road, then in use, allowed the lock gates to leak badly. Lingard failed to see that Pashley repaired the gates. The fact that Pashley was getting away with overcharging on tonnage dues also angered the committee. Lingard was held responsible, and both he and Pashley lost their jobs.

The few references to the general labour force that occur in the minutes are confined to those occasions when it gave trouble, either through misbehaving itself or by doing its work badly. Here it should be said that the men were not directly employed by the company but through a sort of labour contractor who agreed on a piece-rate figure for the various jobs that his men had to do: for example 3d. per cubic yard of earth moved. The contractor presented a weekly account of the gang's work and paid the men out of the proceeds. Presumably the committee followed an established procedure in following an arrangement which placed a premium on speed rather than on quality of workmanship. But the wisdom of the decision is questionable because in canal building careful work is vital. The puddling stage of the work, for example, requires great care. If it is done carelessly, the water leaks away and any loss of water on the Stroudwater canal needed to be avoided, in view of the limited water supply. Yet leaks were repeatedly reported.

The company needed, above all, reliable workmen; so it needed a good relationship with its labour force. The following incident shows the treatment that the committee handed out. In March 1778, trouble arose in Mr. Beswick's gang. The men refused to move turfs a certain distance from the canal. They also refused to use a piece of equipment called "the porcupine". In response, the committee ordered that Mr. Beswick should employ other men to move the turfs and find pay for them out of the money he received when the whole job was completed. No negotiating: just the ultimatum. So it is hardly surprising that acts of pilfering are reported. Dishonesty and bad workmanship, the twin consequences of exploitation of labour, must have added their share to the final high cost of the canal.

Amid great relief rather than great rejoicing, the canal was opened on July 21st, 1779. The committee exchanged the responsibility of construction for that of administration. There was still great optimism though; after all, the canal represented a revolution in transportation, and it could offer much better terms than its business rivals. Some small but valuable experience had already been gained in the collection of tonnage dues as successive sections of the work had been opened to traffic. The committee would keep a more careful eye on men like John Pashley, following the exposure of his fraudulent practices.

Careful watch would be kept, too, on barge owners who tried to avoid tonnage dues by off-loading cargo at points between the official wharfs. Penalties would be established for the careless use of the canal: for the sinking of overloaded barges, for the ramming of lock gates. Running a canal had its problems, but at least it brought a return on the large capital sum invested in it. So the committee was relieved when the construction stage was completed.

It is not the object of this study to pursue the fortunes of the

committee beyond the summer day when the last section of the canal up to the basin at Wallbridge was opened. The minutes that cover that period of the construction have provided the material on which certain conclusions have been based. They give information, firstly, on the way canal construction was organised, they tell of the regular committee meetings in Stroud, of the orders issued, of the chain of command by which the orders were carried out. Secondly, through the interchange of information between the committee room and the site, they give an account of the relationships that existed between those in charge and those hired to carry out the work. They build up a picture of a system of relationships which belongs to a different era, but one in which the men portrayed bear an unmistakable likeness to their modern descendants.

The committee does not emerge as a highly efficient decision-making body. Its members appear to suffer from the lack of foresight due to inexperience. They seem to indulge in a culpable and expensive high-handedness in their dealings with their servants. Yet there was justification: confidence, even over-confidence in canal building was the vogue. The high-handedness was typical. The directors did, after all, successfully extract from local sources the money they needed, so presumably their approach commanded the confidence of local men of substance.

Nor must one judge the committee's enterprise in the light of the subsequent fortunes of canals. These Stroud manufacturers and bankers brought a commendable forward-looking attitude into their business activity. In their age they were wise, callous perhaps, but wise.

J. James

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### THE REFORM OF GLOUCESTER PRISON

The reform and rebuilding of Gloucester Prison were largely the work of one man, Sir George Onesiphorus Paul. He was a disciple of John Howard, and endeavoured to put into practice some of that reformer's ideas. Paul's massive new prison is still in use today. Although out of date by modern standards, it stands as a solid monument to his pioneering zeal.

The need for reform was clear to Howard when he visited the old prison in the Castle (1). He found a ruinous and unhealthy building. It served as a combined gaol and bridewell or house of correction, in which different classes of prisoners were mixed together, those guilty of serious crimes with those imprisoned for lesser offences, and men with women and children. Discipline was lax, townsmen coming in to drink with prisoners in the taproom. The gaoler received only £10 a year salary, and the inmates had to pay him fees for their keep, varying from 13s. 4d. for those sentenced at quarter sessions to 17s. 8d. for those sentenced at assizes, and £1 Os. 10d. for debtors. It is true that some felons received an allowance from the county, but there was nothing for some of the obviously needy prisoners, like those imprisoned because unable to pay a fine, and debtors. There was no work, either to relieve idleness, or to give an opportunity to earn some money.

Sir George Paul first made proposals for reform in 1783, believing "that not only the sickness of the prisoners, but that the general increase of immorality and outrage may, in great measure, be attributed to the useless state of the Houses of Correction, and the consequent indiscriminate mode of confinement in the County Gaol". (2) The gaol was so crowded at the time, reported the Gloucester Journal, (3) that there was a shortage of fetters, and the smiths were hard at work forging new ones. Although a correspondent to the Journal (4) complained that Paul's plans for rebuilding were too expensive, and said that the existing prison could be suitably adapted, Paul had his way, and a special Act of Parliament was secured in 1785.

New methods in the treatment of prisoners were being discussed at this time, because transportation had temporarily become impossible. The former American colonies, after independence, refused to take convicts, and the Botany Bay settlement was not begun till 1787. A new sentence of imprisonment with labour was provided by the Penitentiary Houses Act of 1779, and until a national penitentiary was built, J.Ps. were authorised, in another Act in 1782, to adapt bridewells for the purpose.

The rules for the new prison were authorised in 1789, and the building received its first prisoners in 1791. A notable innovation was a governor (Mr. Cunningham), with a salary of £200 a year. Under him came a manufacturer (Mr. Green), who was in charge of the prisoners' labour, and got £50 a year. There were a surgeon (Mr. Wilton) and a chaplain (Rev. Edward Jones), who visited the prison two or three times a week. Two visiting magistrates were appointed each year; but any member of the bench was free to visit the prison, and Paul was often there inspecting and making recommendations.

The prison was divided into four main parts, to make possible the classification and separation of prisoners which Paul believed so vital. The gaol or sheriff's ward provided space for felons and fines (i.e. those imprisoned because unable to pay a fine), and for those awaiting trial. Debtors were accommodated in the magistrates' ward. The penitentiary was the part where the new sentence of imprisonment with labour was carried out. The bridewell or house of correction normally received prisoners for a short spell of about a month.

There continued to be women and children in the new prison. The Justices' and Surgeon's Journals record that various female prisoners gave birth to children (5), and that others were admitted with young children. Some of the prisoners were clearly very young. Stanley Organ, only 16, was ordered to be kept apart from the profligate transports. Thomas Hinton had been brought in for stealing at the age of 12, but despite a stay of two years and being flogged, he went out "the same incorrigible boy". Another boy who spent two years in the prison, Joel Fry, was only 15 when he was discharged.

Solitude was believed by Paul to be most effective in bringing prisoners to repentance and reforming their characters. Complete solitary confinement was a special punishment for misbehaviour, but penitentiary prisoners had little or no opportunity for conversation. They were put in separate cells at night, and although the rules allowed them to work together (6), they were often in fact said to be working in solitude in their own cells. (7) During exercise in the yard silence was the rule. In 1800 it was found that prisoners were holding conversations in the night; the ventilation holes were therefore re-arranged, so that they did not face each other across the passages, and under-floor heating flues were fitted. Prisoners were kept from any contact with the outside world; they were allowed no visitors; and after a penitentiary prisoner found out news from outside and spread it round, it was decided that no penitentiary prisoner should in future be cook.

The rules for discipline show a great contrast with what had gone on before. Liquor, especially spirits, was banned. However debtors might have wine or beer; and the surgeon sometimes ordered beer, or even brandy, for the sick. Tea and sugar also needed the surgeon's authorisation. Attempts to smuggle spirits into the prison were discovered from time to time and severely punished. Smoking was evidently allowed, for the governor was given £1 5s. Od. from the prison charity to buy tobacco for distribution at his discretion. Paul disapproved of fetters, and, reviewing his work in 1809, was able to say, "for many years the sound of a fether has not been heard within the wards of this prison". (8) Irons were used only in extreme cases, for example, to secure prisoners who had tried to escape or who were desperate characters. The surgeon recommended for a particular prisoner an iron collar instead of a ring on the leg. The ultimate punishment for refractory prisoners was solitary confinement, which included "the dark cell". Flogging was used but is mentioned only occasionally; it was to be administered by a person from the town, and not by one prisoner upon another. Debtors who misbehaved were removed to the sheriff's ward. Executions took place in the gaol, and it was considered salutary to gather the prisoners to watch them. (9).

Convicts in the penitentiary wore a uniform of white jacket and trousers, some of which were made in the prison workshop. Only convicts sentenced to six months or more had their head shaved. Clean sheets were provided every six weeks in winter and every four weeks in summer. The food seems remarkably good. In 1797 Paul worked out a new dietary, which allowed each convict a pound of beef, mutton or pork for dinner on Sunday and Thursday. (10) Special meals were provided by the prison charity fund, which, for example, paid 10s. 9d. for 30 lbs. of mutton for Christmas dinner in 1792. The surgeon's regular reports show that the health of the prisoners, one of the reasons why reform was begun, was greatly improved.

The abolition of fees was another great change. In the new prison no criminal paid them, but only debtors. These had to pay 1s. 0d. a week if they brought their own bedding, and 2s. 6d. if not. Often they were too poor to pay, and the fees were remitted; but remission was refused to any debtors who misbehaved and were put in the sheriff's ward. Occasionally men who had paid the debt for which they were imprisoned were detained longer because they owed fees to the prison. This was the situation which had aroused the indignation of Howard, and Paul tried to avoid it. For instance, he recommended that Ellis Jones, who owed £16 8s. 6d. in fees, should be released on payment of £10. Sometimes needy debtors were paid an allowance by the county, having been issued with a certificate that they were "objects of the public bounty". Debtors were supposed to receive help from their creditors, and the justices also issued certificates to them to "sue for their groats".

In place of fees prisoners were expected to work and earn their keep. Felons and fines either received an allowance from the county and paid back half their earnings, or they could give up the allowance and keep three quarters of their earnings. Debtors were not obliged to work, but they were encouraged to do so, and their earnings helped to pay their fees. They were paid weekly, and the visiting magistrates often watched them receive their money. For penitentiary prisoners hard labour was an integral part of the regime; they received no pay, though they might be given up to £3 on discharge. Bridewell prisoners were to be given work if it was available, and they kept a proportion of their earnings which varied according to their class.

Work was intended not only to pay for the prisoners' maintenance, but also to improve their characters. This was a main article of the reformers' creed, and shows a marked contrast to the dangerous idleness of earlier days. The organisation of labour was the responsibility of the manufacturer. Weaving is the occupation most often mentioned, and a spring loom was installed in 1794. The articles produced included sacks, stockings and occasionally prison uniforms. There was also rope making, since oakum was available. One prisoner was taught straw bonnet making by a lady brought in from outside. The setting up of a prison workshop offered risks, for in the early days a prisoner made a key there, with which he effected his escape. From a commercial viewpoint the prison's operations were very successful; a profit of £218 17s. 1½d. was recorded in 1798 (11). But when Paul reviewed the prison's achievements in 1809, he complained that "the late improvements in machinery have so diminished, or rather so annihilated, the objects of work by hand, that the power of supporting a system of hard labour in prisons, to be

productive of emolument, is entirely out of the question" (12). Prisoners also helped in the running of the prison; a prisoner working as a constable got 2d. a day. When a partition wall had to be moved, the work was done by prisoners, which saved £40. There are other references to men working as painters, masons and cooks, and to women acting as nurses in the hospital ward. All this was valuable. But the rules provided that penitentiary convicts should be kept at "labour of the hardest and most servile kind . . . such as treading in a wheel" (13). However there are only very occasional references to the treadwheel - for example, the surgeon said that prisoners should be allowed time to cool off after being on it - so perhaps it was not much used.

Besides earning money by their own labour, prisoners might also get help from the prison charity. This fund, the earliest of its kind in the country, was for long organised by Robert Raikes, whose concern was praised by Howard. Raikes used his newspaper, the Gloucester Journal, to publicise the fund; he printed acknowledgements of gifts, and from time to time expressed the prisoners' thanks. While the prison was in building the large sum of £300 was given by George III to be used to help debtors settle with their creditors. (14) Paul and other magistrates gave much time arranging compositions with creditors. No individual debtor was to be helped with more than £5 5s. Od., and then only if he were willing to surrender his effects. When the new prison was opened the balance of the king's gift was paid into a re-organised charity fund managed by a new committee, which included Paul and Raikes. There were a number of regular subscribers; for example, Paul and the bishop of Gloucester each paid £2 2s. Od. annually. Among individuals making gifts are found John Howard, Matthew Boulton and Lady Hester Stanhope. Boxes were put at the prison gate, but not much money came from them - in 1792 £2 16s. 5d. for debtors and 16s. 6½d. for criminals. The fund was divided into two parts, one "the fund for the relief and discharge of poor debtors", and the other "the fund to encourage penitence and good behaviour in criminal prisoners". More money was spent on debtors than criminals - in 1795-96, for example, £57 11s. 10½d. went on debtors, and £3 0s. 8½d. on criminals. The fund continued to help debtors pay a composition to their creditors, and so secure their discharge. The other prisoners got help in the way of increased comforts, like the tobacco and Christmas dinner already mentioned.

A final useful service of the new prison was help given on discharge. Well-behaved prisoners were usually given clothes and money to carry them to where they planned to live. For example, "William Malpas's time of imprisonment expiring this day - ordered as his behaviour has been uniformly good - to be allowed on leaving the prison, 1 coat, 1 shirt, 1 pr. breeches, 1 pr. stockings, and three shillings in money to carry him to Wotton Under Edge." (15) Soon after the prison opened Britain was at war, and frequently prisoners were discharged on condition that they enlisted in the army or navy.

Although Paul set himself to improve conditions for the prisoners, he had also to concern himself with their security. There were some critics who believed that Paul was more interested in providing comfort for the prisoners, than in protecting society from their crimes. The new prison started badly, when two men escaped, using ladders left around by workmen completing the building. One of the men who escaped

was persuaded by his wife to give himself up, and returned to the prison the next day. There were not many successful escapes in the following years. Three men got away in 1792, using a key made in the prison workshop. In 1799 three men were caught preparing to escape, and were put in 7lb. irons, the heaviest allowed by the rules. Later in the same year three felons tried to get away, but two of them were stopped by a debtor in the sheriff's ward. Two more escapes were prevented in 1803. A more slippery prisoner was Charles Buckingham, committed to gaol for highway robbery. He escaped at the end of 1808, and the night watch, John Brown, was suspected of assisting him. Brown was put on trial, but acquitted - quite rightly, as it turned out. For about six months later Buckingham was recaptured in London by the Bow Street officers, and told the full story of his escape. He had managed to obtain nails, a knife and an iron spoon, with which he got out of his cell. He used a rope made from his bed clothes to get over the outer wall. Buckingham was sentenced to transportation. However after being sent off with three other transports in the London coach, chained and handcuffed and guarded by three armed men, he and two others escaped at Uxbridge. The two other men were retaken four months later, but not Buckingham.

The results of the reform of Gloucester prison cannot be accurately gauged, but there are certain indications of its success. In 1792 the surgeon wrote, "the felons behave in a very contumacious and refractory manner, and threaten with Horrid Imprecations the life of the Gov<sup>r</sup>." (16) By 1806 the Justices' Journal was recording, "several of the prisoners were desirous of expressing the greatest gratitude for the kind and humane treatment they received from the officers of the prison." (17) Some prisoners even asked to stay. In 1798 Mary Bayley was kept by her own consent a fortnight beyond the term of her sentence in the hope of getting a place for her. (18) Ann Warren made a similar request in 1805. She was soon found a post, but was dismissed for misconduct, and asked to come back to the prison, because she had nowhere else to go. "The repeated instances of depravity, which this young Girl has exhibited, afford a strong presumption, that her reformation is very far distant. She seems therefore to be in a peculiar degree a proper object of the Penitentiary discipline, more particularly as she herself desires it". (19) The fame of Paul's reforms attracted many visitors to the prison. Robert Raikes seems to have been eager to make the prison known, for once Mr. Green was censured for taking round a party with Mr. Raikes without an order. (20) Other visitors included the Prince of Orange, the Duke of Cumberland, and representatives of the assembly of Jamaica, who planned to build a prison in Kingston. Gloucester prison was taken as the model when the national penitentiary was at last built at Millbank in London in 1811.

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### A LOOK AT SOME 18th AND 19th CENTURY RECIPES

Of the six collections used only one, by the Gloucester School of Cookery and Domestic Economy, was printed and is in fact the latest, being published in 1893. The other five are all handwritten and two have names attached; one made by Charlotte Guise, 1817-1826 and one in a memorandum book kept by William Cother of Longford, 1831-1837.

In the handwritten collections the usual spelling of recipe is 'receipt' probably explained by the fact that both words have the same latin origin and 'receipt' was commonly put at the head of a list of ingredients of a medical prescription. This may also account for cures for ailments both animal and human, being found with the cookery recipes and, perhaps, for the inclusion of items we should now classify as household hints:- how to get rid of rats, how to prevent iron rusting, and how to stick chairs together.

The handwritten collections include recipes for puddings, wines, jams, cakes, sauces, pickles, meat and fish dishes and many are obviously personal ones - "Lady Oxford's carp sauce, Mrs. Saunders catchup and fish sauce, Sauce for boiled carp, Mrs. Langton; Sauce for boiled carp, Mrs. Master; Witcombe receipt for curing hams, Mrs. Grisedale's receipt for curing hams, Mrs. Folkes receipt for curing hams, Mrs. Pearce's receipt for curing hams" (1). The cures too, have this personal aspect as Charlotte Guise recorded "Dr. Warren's Restorative, excellent remedy for a cough, Mr. P. Hicks: Mr. Abel's cough mixture for children." "Dean Chamberlayne's receipt for curing rheumatism, Mr. Trigg of the Rainbow in the Bowling Alley Westminster, cure for the bite of a mad dog; and a cure brought from Tonquin by Sir George Cobb, baronet" are in a collection made by the Leigh family of Broadwell. (2)

The printed collection differs from the others in that it does not include recipes for jams, wines, pickles and curing hams, nor are there cures for any ailments. The only household hints relate to cookery and all the recipes are costed. The only other reference to cost is given by William Cother who says that he paid 6s. for sugar for preserving damsons. Perhaps these differences indicate for whom it was published and why: to help the middle class housewife, who did not have to deal with the produce of a country estate, provide her family with good nourishing meals.

Some recipes have a local connection like that given by Charlotte Guise for making Gloucester Jelly:- "2ozs pearl barley, 2ozs sago, 2ozs candied eringo root. Boil in two quarts of water and reduce to one. It may be taken in milk or wine, a teacupful every day at noon." The instruction for use suggests that it was a tonic, rather far removed from our twentieth century idea of a jelly. She also gives two recipes for stewing lampreys and there are two in a book belonging to the Beake-Browne family of Salperton, and as it is traditional for Gloucester to present a new monarch with lamprey pie I consider these to be of local interest. "Clean the fish very carefully. Remove the cartilage which runs down the back and season it with cloves, mace, pepper, alspice, put it into a small stewpan with a little strong gravy,

then add port wine, and an equal quantity of sherry, cover it close and stew till tender, take out the lamprey and keep hot. Boil the liquor with an anchovy or two chopped, tablespoonful of mushroom catchup, some flour and butter, strain the gravy add lemon juice and a little made mustard. Cyder will do instead of sherry" (3) Charlotte Guise uses cyder instead of sherry and says they will take about 3 hours doing.

Just as there is much similarity between the recipes for stewing lampreys so there is between those for curing hams. Charlotte Guise gives two, William Cother includes three, one belonging to a Sister Commeline, on of the other collections has instructions for making Westphalia Ham, and the other has **five** recipes, all bearing peoples names, for curing hams. (4) All use coarse sugar, brown sugar or treacle, salt, bay salt and salt petre mixed together and rubbed into the ham over a period of 3-4 days after which water is added and the hams left to soak for anything from 3-6 weeks. One of Charlotte's recipes specifies spring water while the other uses strong beer instead. After this the hams are hung up to dry usually in a chimney, one recipe saying cottage chimney while another insists on a coal chimney. Among these recipes are the following hints "if your pickle should mother you may boil it up, let it stand to be cold" (5), Mrs Folkes "always had a large handful of common salt rubbed on the skin of the ham and then rub on the mixture and just a little ground pepper on the fleshy side before they are hung" (6) and "To prevent insects getting into the hams strew pepper over them and paste some brown paper over the meat. The paper must be occasionally looked at, and if it appears damp, dried or changed for fresh should it be torn, or as it is necessary. By burying the hams for 6 or 7 days in the group previous to soaking them they are rendered more mellow. N.B. the hams should be first sprinkled with a handful of common salt before they are put into pickle and let them lie to drain the blood from them for two days." (7)

These recipes give some idea of the time and energy spent in the kitchen in the 18th and 19th centuries when kitchen equipment as we understand it today was non-existent and when many of the ingredients could not be purchased in packets or tins ready for use but had to be prepared. Among Charlotte Guise's recipes are the following:- "Take 1 lb salt,  $\frac{1}{2}$ lb bay salt, 3oz salt petre,  $1\frac{1}{2}$ ozs black pepper pounded and sifted through a fine sieve." "1lb loaf sugar pounded and sifted and the white of an egg well beat, then mix it together, let it be beat with a whisk for a full two hours." "1lb bitter almonds, blanch and pound them very fine in a mortar,  $\frac{1}{2}$ lb stoned raisins, pound them."

Cooking instructions, if given at all, are very vague compared with those of today because the heat of a fire cannot be controlled like that of our gas and electric cookers. When cooking red soup the Gloucester School of Cookery and Domestic Economy say "simmer for  $1\frac{1}{2}$  hours"; for potato soup in which there is one ounce of sago "boil till sago is clear"; for roasting, baking, boiling beef and mutton allow  $\frac{1}{4}$  hour per lb plus  $\frac{1}{4}$  hr; for veal and pork 20 minutes per lb plus 20 minutes, for fish except salmon 5 minutes per lb plus 5 minutes and for salmon 8 minutes per lb. plus 8 minutes. Their readers are also given this instruction:- "Flues of stoves must be thoroughly swept or it will be impossible to depend on getting the required heat." Cooking



instructions in the handwritten recipes vary from the non-existent to the obvious:- "Air cakes. Whisk up the whites of 4 eggs to a froth, put 10 spoonfuls of fine loaf sugar pounded, into it and the rind and juice of a lemon. When you put them in the oven sift a little sugar on the top". (8) When trying this recipe the only thing to do was to follow the cooking instructions for meringues. As for "Orang nackerons. Drop them in little cakes on a pewter dish, put them before the fire to dry, and as they skin over turn them . . . . . not too near the fire, they burn." (9) Colour is the governing factor for cooking Corporation Cake, "bake them light brown" (10) Cooking Mulford's cakes suggests a way of dealing with underdone baking "let not the oven be too hot before you bake them, they may afterward be baked by the fire as muffins." (11) This suggests hotter summers than nowadays, "then put it into plates and place them where the sun has most heat, when the sweetmeat is dry on the top turn the cakes and dry the other said." (12)

Judging by the frequency with which they are given some dishes seem to have been more popular than others. Such was rice pudding. " $\frac{1}{4}$ lb rice, 3pts milk, 3 eggs and 3ozs powdered sugar. Rice to be boiled in the milk till tender. You may add a little grated lemon peel and nutmeg." (13) "Boil  $\frac{1}{2}$ lb best rice in a quart of best milk one hour, keeping it well stirred, the night before and let it remain in a basin until the next day, then add  $\frac{1}{2}$ lb good raisins,  $\frac{1}{2}$ lb suet, one nutmeg grated fine, 3 eggs,  $\frac{1}{2}$ pt milk. Let it all be well stirred together and well baked in 2 or 3 dishes." This is given by William Cothier who has a second recipe, similar, except that you are told to boil it in a kettle and use best beef kidney suet chopped to the size of a pea and from which all skin has been removed. Charlotte Guise lists a baked rice pudding " $\frac{1}{2}$ lb ground rice, put it into a quart of boiling milk, keep stirring it over the fire till it is quite thick, then put it into a pan, stir into it when hot  $\frac{1}{2}$ lb butter, when nearly cold grate in half a nutmeg, add 8 yolks and 3 whites of egg,  $\frac{1}{4}$ lb white sugar. Bake it."

These recipes are all rich compared with the printed recipe for rice pudding:- "2 tablespoons of carolina rice, 1 tbsp brown sugar, a little nutmeg, 1pt skim milk, a little chopped suet." These ingredients are mixed together and baked in a moderate oven for 2 hours. It does suggest adding a beaten egg or using new milk instead of skim milk and suet. The School of Cookery use the following to make Bath buns - 1lb flour, 3ozs butter, 3ozs sugar, 2 small eggs,  $\frac{1}{4}$ pt milk, 1 tsp caraway seeds,  $\frac{1}{2}$ oz yeast and a few lumps of sugar. In the handwritten recipes the following was necessary to make Bath Buns -  $\frac{3}{4}$ lb flour,  $\frac{1}{2}$ lb butter, 4spnfls white wine, 4 spnfls barm, 4 eggs, 2 spnfls cream,  $\frac{1}{2}$ lb caraway comfits, and sugar. Surely these examples support the idea that it was published for the less well-off members of late Victorian England.

Sometimes there appears to be a recipe for the same dish in two collections but on closer examination they are very different. Bath Pudding. 3ozs ground rice to a pint of cream. Boil till thick then put it to cool. When cold put to it 6 yolks and 3 whites of eggs well beaten, 6ozs sugar, 6ozs butter, 12 sweet and 12 bitter almonds pounded and a glass of white wine. Bake for  $\frac{1}{2}$ hr." (14) "Bath Puddings. 1lb bread cut into thick slices, pour almost a quart of boiling milk over it with 2 or 3 good slices of butter cut into it. Let it stand covered over all night, then beat it very fine and add the rind of a lemon

grated, 7 eggs leaving out 2 of the whites, sugar it to your taste and put in a wine glass of brandy. The puddings must be baked in small lampen pots or they will not be good - when done turn them out on to a dish and send them to table with white wine sauce. One hour will bake them in a quick oven." (15)

Without a knowledge of the properties of the various plants and other ingredients listed in the cures given it is not possible to comment on their efficiency. People in 18th and 19th century Britain suffered from much the same ailments as we do today:- headache, bilious complaint, chilblains, cramp, general weakness and rheumatism. The one exception seems to be the bite of a mad dog for which many cures are given suggesting this accident occurred frequently in the past. The basis of many of these remedies was a salt solution applied to the wound which sounds agonising but from the comments given seems to have been effective. "The discoverer of this recipe was bitten six times by mad dogs and cured by it. A poor man was also cured by it after hydrophobia had commenced." (16) At the end of Mr Trigg's recipe quoted in the London Evening Post of Thursday August 15th 1728 it says "he was bitten six times and cured himself." These prescriptions often give directions for use with humans and animals, Mrs Rosier's remedy says "8 or 9 spoonfuls warm to man or woman three mornings fasting and cold to any beast fasting. A smaller quantity to weaker people. 10 or 12 spoonfuls to a horse or bullock. 3, 4 or 5 spoonfuls to sheep, dog or hog."

Finally to quote two remedies from one collection which conjure up some amusing pictures:-

"For sore eyes, coughs, rheums and to free the head from pains. Lignum, aloes, borax, saffras bark and amber.  $\frac{1}{2}$  dram of each. Cut belony  $\frac{1}{2}$ oz. Rosemary flowers or leaves  $\frac{1}{4}$ oz and same quantity of tobacco. Mix all together and take in a pipe going to bed. (enabled Lady Mallet to leave off spectacles after 30 years at her age of 83)."

"A mouth water to keep the teeth sound and fasten them when loose. 8pzs sage water distilled.  $\frac{1}{2}$  drachm spirits of sea salt.  $\frac{1}{2}$ oz lemon juice. Mix together and wash mouth with a little every morning." (17)

P. Bath

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- Glos. R.O. CC/C 1893A Recipe book of Gloucester School of Cookery and Domestic Economy
- Glos. R.O. D326/F43 Recipe Book of Charlotte Guise, 1817-26
- Glos. R.O. D1928/Z2 Household and medical recipes 18th to 19th Century
- Glos. R.O. D177 List of recipes and remedies in memorandum book of William Cother of Longford, 1831-7.

### References

1. D269C/F16
2. D610/F18
3. D269C/F16
4. D610/F18; D269C/F16.
5. D269C/F16, Witcombe recipe for curing ham
6. D269C/F16, Mrs Folkes recipe for curing ham
7. D326/F43, p.61
8. D269C/F16
9. D1928/Z2
10. D269C/F16
11. D1928/Z2
12. D1928/Z2 raspberry cake recipe
13. D269C/F16
14. D326/F43 p.87
15. D177
16. D326/F43
17. D610/F18

Estcourt Park Estate Accounts, 1819-1827

The accounts for this Cotswold estate were carefully kept during these years, especially the earlier ones. The expenditure was entered under three headings, the farm, the estate, and the house, stables and place. The receipts were entered under the headings, the farm and the estate.

Income over this period varied from £5,000 to £7,500 per annum and approximately threequarters came from rents for farms, land and cottages. From the names and payments given, about thirty tenants and four groups of cottagers were paying rents which varied in amount from over £600 p.a. paid by Thomas Tanner and William Holliday down to Martha Pritchard paying 10s. p.a. for a room and one of the Shipton Cottagers paying 5d. p.a. for waste land. Rich and poor alike paid their rent twice a year on Lady Day and Michaelmas Day usually in arrears, sometimes considerably in arrears and this was not a favour granted only to the wealthier and more important tenants as these entries show:- February 1823 William Morse paid £74 15s. the balance of half a year's rent due Michaelmas 1821: 1821 William Pinkney paid £6 6s for three year's house rent.

From the entries for rents it is not easy to know what was the price per acre for land on the Cotswolds during these years. The chart below shows that the price remained steady throughout the period although it varied according to the fertility of the particular piece.

	James Prior	Waste land	Prime Gardens in Parish of Newton	Land in the Tyning
1819	£7.10s for 5 acres	Hannah Hayward & Simon Stevens paid 2d per lug	½ acre £1 p.a.	¾ acre 15s p.a.
1821	"	"	"	"
1823	"	"	"	"
1826	"	"	"	"

Occasional entries show that the Estcourts, besides allowing their tenants time to pay their rents, helped in other ways: in 1821 James Taylor paid £2 2s. 3d ½ a year's interest at 7% on money loaned him for draining his land. In 1825 a deduction of 10s. was made to each of 17 cottagers as their houses were in good repair.

The majority of entries do not indicate exactly what is covered by the rent but the cottagers usually have two entries, so much for their house and so much for the land, for example, in 1821, Robert Box one year's house rent £2, one year's land rent 9s. and in 1826 his house

rent was the same but his land rent was 6s. and there is no explanation. From some entries the use of the land is made clear - Daniel Bicknell paid 26s. 6d. for a garden, William Clark paid 42s. for a withy bed and Francis Weaver paid 20s. 6d. for a vineyard.

As would be expected there is little change in the names of those paying the rents. Among the larger tenants, those paying £200 or more p.a., the same names appear throughout this period. Looking at the names listed in the four groups of cottagers, one group has the same names throughout and for the other three groups seventy five per cent of the names appear throughout.

Timber and Coppice is the heading for the other major source of income from the estate and this varies from £59 18s. 5½d. in 1825 to £1,268 19s. 5½d. in the following year, the average for this period being £416. In the ordinary years the brushwood was made up into faggots and sold, some wood was sold as poles of varying sizes, some was made into particular items such as plough beams and sheep cages and there are separate entries for the sale of the bark. The names of many of the purchasers were the same as those paying the rents; Thomas Miles paid 5s. for two plough beams and there is a Thomas Miles paying 13s. each half year for land and among the purchasers of faggots. The exceptionally high income in 1826 is explained by the sale of timber valued at £793 in July and just over £100 in December. Higher entries for the sale of bark in the same two months, July £268 and December £31 also help towards the high income, and suggests that some of the timber was stripped on the estate. The timber sold was oak, ash, elm and a small amount of fir, chestnut and beech; and the bark was oak, larch and ash.

Other income from the estate was Fines and Quit Rents and sundry items entered under Casuals. The total estate income gave Estcourt most of his profit as the other source of income, the farm, involved expenditure which took about fifty per cent of the receipts and often more. This part of his income was entered under the headings, corn, hay and other dead stock, cows, sheep, pigs and casuals. The most notable feature is the drop in income from cows and the sudden appearance of income from corn starting in 1824 which indicates that he was changing his type of farming. Throughout the period a certain amount of each item was sold to the house, hay was supplied to the stables and kennels; and from time to time ox teams and men were used by the estate and the house for both of which income was entered in the farm account. The other main outlet for the farm produce was the markets at Tetbury and Malmesbury. The chart on page 68 gives some idea of the prices during the years 1819-1827 but time for a more detailed examination of the accounts and for a comparison with prices generally is necessary before any comments of value can be made.

Another important factor to consider in commenting on prices of stock is its quality and only occasionally is this indicated:- in 1825 a casualty cow fetched £5, in 1827 £2 for a cow died which after calving, in 1823 23s. 4d. for four sheep that died, in 1827 small ewes 27s. each.

	1819	1823	1824	1825	1826	1827
Barley			34s to 35s 6d a qtr			43s a qtr
Wheat			5s 9d to 7s 3d a bushel			5s to 8s 3d a bushel
Pork pig		6s to 6s 6d a score				9s to 9s 6d a score
Store pig	25s					
Pigs	30s 6d to 41s				28s	
Cows	£9 to £16	1822 £10				
Bull Calf	19s	10s				
Oxen	£9 to £18		£14			£31
Lambs		14s		11s - 27s		
Ewes		1822 14s - 21s				34s - 37s
Sheep price	per lb 6d	5d				5d & 6d

The total farm income varied from £265 in 1823 to £837 in 1819 but against this must be set an expenditure which varied between £334 in 1827 and £522 in 1825. The highest single item of expenditure each year is on wages although as a proportion of the total farm expenditure this declines during the years under review, perhaps a reflection of the change in type of farming. For the few who worked on the farm all the year the daily rate was higher during the summer months, presumably because the longer hours of daylight meant a longer working day. Except for Ann Garrett in 1824 the women were employed only in the summer months and had a higher rate when haymaking. The number of casual employees does fall from 31 in 1819 to 22 in 1827, again probably a reflection in the different farming. Wage rises usually start from Lady Day and the customary increase seems to have been a penny a day but there is no indication of the age of the young workers.

	1819			1824			1827		
	Winter	Summer	Haytime	Winter	Summer	Haytime	Winter	Summer	Haytime
W. Fowles	1s 6d	1s 8d							
J. Wilcox	2s 9d	2s 9d							
D. Bicknell	1s 9d	2s 1d		1s 9d	2s		2s	2s	
R. Wilcox	7d	8d							
W. Clements				1s 2d	1s 4d		1s 4d	1s 4d	
J. Richards				1s 2d	1s 6d		1s 7d	1s 9d	
D. Bicknell junr.				5d	6d		8d	9d	
Ann Garrett				7d	9d				
T. Bicknell							6d	7d	
Women		8d	10d		7d	9d		8d	9d

Some entries just give the days worked and daily rate but frequently there are details of the work done:- D. Bicknell is referred to as shepherd, J. Richards as oxman, in turn D. Bicknell, junr. and T. Bicknell as oxboy, the majority of the casual payments to women are for haymaking, E. Reeves is paid for sheep-shearing and later in the year for thatching ricks, E. Barrett and W. Clements are paid for hewing turnips, and in 1819 Elizabeth Bicknell is paid for two weeks, at 3s a week for the unpleasant job of shovelling dung. From time to time there are special payments such as:- W. Ackland & Son paid for making and repairing hurdles in 1819; T. Shipton, carpenter and G. Hopkins, his assistant, paid for building a new barn in 1824; and Henry Young was paid for planting potatoes by contract in 1827.

The change in type of farming is no obvious in the expenditure accounts until they are examined in detail, as purchases of livestock and seed are entered under the one heading, stock. Entries are sometimes detailed to the extent of describing the item by kind and weight but on other occasions only a total is entered. This makes any comparison of prices difficult but the chart on page 70 gives some idea of the price of various items during this period.

Expenditure for the estate varies from just under £600 to over £2,000 and is entered under the following headings, Taxes, Repairs and Improvements; Permanent Charges, Timber and Coppice, Casuals, Interest and Principles, and Bills left over from previous years. The exceptionally high expenditure in the years 1823 and 1824, is partly accounted for by the high amounts entered in the Casual column and partly by the fact that expenditure under Interest and Principles varies from £20 p.a.

	1822	1823	1824	1825	1826	1827
Swede and turnip seed	9s	30lbs - 15s	10lbs - 8s		Norfolk turnip 44lbs - 29s 4d	33s 6d
Clover seed			2yrs supply £6 2s 9d		£4 12s	
Wheat		£5 10s			8s and 9s a bushel	
Vetches		10 bushels £3 10s				11s
Rye grass		7s 6d				
Ewes young		18s each		30s each		
Barley seed				46s a qtr		25s a sack

to £562 p.a in the years 1819-1824 and nothing for the following three years. The cost of suppers for the tenants, the meetings of the manor court, stationary and dealing with stray animals are the usual charges entered in the Casuals column but expenses are increased in the years 1822/3/4 by allowances made to tenants on account of the decrease in the value of agricultural produce and this entry for May 1823, "Mr Aitken the balance after deducting the rent, for the growing crops, corn, hay, live and dead stock taken into account and valuation on his relinquishing the possession of the farm £498 12s. 4d." The expenditure under the heading Interest and Principles is payments to various people of capital sums or the interest thereon, possibly bequests and interest accumulated while the matter was going through probate. This would account for the complete absence of entries in the later years after matters had been settled.

Although there is no great variation in the total annual expenditure under the heading Permanent Charges, it is interesting to note the items entered in this section, - 12 weeks allowance to Robert and Mary Crook, 12s; Hester Shipton,  $\frac{1}{4}$  year's annuity, £5; Rev. Mr Davies for preaching 4 sermons in Tethury Church agreeable to the will of the late Sir Thomas Estcourt, £2; Insurance on Shipton Mill, 18s; payments under the will of Mrs Anne Estcourt, to Rector and churchwardens for apprenticing boys, £10; and in lieu of 6 quarters of coal for heating schoolhouse at Newton, £2 2s. Most years' expenses of this kind amounted to about £200.

There is no income from the House, Stables and Place but expenditure in this section averaged £531 during these years and covered House and



Servants, New Work and Repairs, Cellars and Fruit, Stables and Kennels, Place, Gardens, and Rents and Taxes. The Place cost most during these years except in 1820 when the cost of repairs exceeded it. For the first five years £40 to £50 was spent annually on the garden and included W. Morris' wages, seeds, trees, shrubs, payments for killing rats, and expenses incurred in taking garden produce for sale at Tatbury Market. In the later years only the payment of the various rates is entered in the Gardens column, payments for killing vermin are found in the expenses of the Stables and Kennels and payments for trees, shrubs and seeds are entered against the Place.

Entries under the heading House and servants are a rather miscellaneous collection. In 1821, the only year in which the cost of this section is over £100, is an entry of £90, the years wage for Marshall the bailiff. Is he the same person who receives £110 p.a. in the Estate account permanent charges section and whose name is Thomas Marshall? In the years 1821/2/3 John Richards is regularly paid for working in the house and in later years a man of the same name receives wages in the farm account as oxman. It seems that special people were brought in for particular jobs, for example in 1821 W. Fowler, J. Shipton, E. Barrett, senr., J. Richards and J. Harding were all paid part of a day's wages for beating a carpet: Mrs. Shipton received three days wages for putting up bed curtains. There are occasional references to housemaids; Sept. 1821, expenses for going to the Plough Inn for two maidservants, 1s 6d.; July 1826, advance to Elizabeth, the housemaid, £3 10s. Entries in this column also give an idea about various household expenses; January 1822, Thomas Shipton and his assistant George Hopkins, received £2 19s 4d for making dressing tables and in April £1 10s 2d for altering them; the following year they received £2 4s 8d for making a chest of drawers; William Bunting is paid for sweeping the kitchen chimney; November 1823 postage on a foreign letter is 2s 6d.; each year the ringers and singers of Newton receive 5s. and the annual insurance for Estcourt House is £12 10s.

Rents and Taxes are an outlay in each of the three sections of expenditure, as the chart on page 72 shows; but not all such payments were entered in the column with this heading. The rates include a poor rate levied three or four times a year; highway rate and church rate levied annually, and in 1821 a Shire Hall rate is mentioned. A chart shows the Poor Rate and for 1819 Estcourt paid £45 5s. as follows:- Farm £29 5s., Estate £7 11s 6d. House, Stables and Place £8 2s 6d plus 26s on the Garden entered separately. Other rates were not such a drain on his income. In 1821 on the Place he paid Poor rate £3 11s. 10½d., Church rate at 3½d. in the £, 3s. 10½d.; Highway rate at 4½d in the £, 9s. 4½d and Shire Hall rate 4s. 8½d. Payments for the Garden in 1826 show a similar pattern, poor rate £1, highway rate 3s. and church rate 2s.

In addition to these rates he paid 4s. a year in market tolls and there are many entries of turnpike levies appearing under almost every heading in the accounts, and various national taxes paid twice a year through Messrs. Emerson & Chapman. for instance in 1819 for 64 windows, £19 17s 9d; 5 male servants and bailiff, £13 5s; hair powder duty, £1 3s. 6d; armorial bearing, £1 4s.

Rates and Taxes

	Farm	Estate	House Stables & Place	Total
1819	£36 1 6	£12 0 6	£110 0 0	£158 2 0
1820	£31 10 0	£11 14 9	£93 6 1	£136 10 10
1821	£33 14 6	£14 6 3½	£51 10 6	£99 11 3½
1822	£25 18 6	£15 10 7½	£49 0 11½	£90 10 1
1823	£32 8 9	£17 9 3	£51 8 8½	£101 6 8½
1824	£45 9 7½	£14 18 3½	£47 6 4	£107 14 3
1825	£41 16 10½	£13 12 9	£32 3 11½	£87 13 7
1826	£49 12 6	£17 8 0	£33 3 8½	£100 4 2½
1827	£52 8 4½	£14 11 6½	£32 19 7	£99 19 6

Poor Rate.      Amount in the Pound

	1819	1820	1821	1827
January	-	-	-	1s
February	1s *	1s	1s	-
March	-	-	-	-
April	9d	6d	-	9d
May	-	-	9d	-
July	1s *	-	-	1s
August	-	1s	-	-
October	6d	-	-	-
November	-	6d	1s 1½d	3d

\* the rate for the House is given as 6d in February and 9d for the woods in July.

These account books provide a wealth of information on the economics of a country estate and indicate the great variety of matters in which the owner took an interest. It is also interesting to look at the names of those receiving wages and other payments, and to follow them through the accounts.

Bicknell is a name which frequently appears. In the early years Daniel, William and Thomas are paying rent with the Shipton Cottagers; Daniel 26s 6d. a year for a garden, William 4s a year for land until 1825 when he is replaced by John, and Thomas 8s a year for land. In 1826 John paid 5s for half a hundred brushwood faggots and so did Ann Bicknell; was she the wife of one of the others? Throughout these years Ann received wages for work on the farm, mostly during haymaking; in 1819 5s 8d, 1824 39s 9d, 1827 34s 1½d. She also received a payment in October 1819 of 11s. for breeding a nest of pheasants and partridge. Perhaps she was Daniel's wife as he received most of his wages as a farm worker. In 1819 he was referred to as oxman and was paid for work with the team generally on the farm but occasionally for the estate, doing such things as hauling timber, and for the house when he haled coal, faggots and even dung from Tetbury for the garden. In 1824 he was referred to as shepherd but other payments made by the Estcourts to him suggest that he could look after all livestock on the farm:- November 1824, to D. Bicknell for 8 pigs, £4 9s; April the same year, to D. Bicknell for 4 gallons milk for lambs 2s 8d and October, to D. Bicknell milk for two calves weaned by him £3. The farm income shows D. Bicknell paying £8 for the rent of two cows each half year and also buying potatoes, in 1824 4s 6d a sack; wheat at 7s a bushel in 1825; four sheep that died in 1822 for 23s 4d and in the same year he paid £2 for a sow. There is also mention in the farm wages of Daniel Bicknell junior as ox boy, (almost certainly his son), Thomas Bicknell who took over as oxboy in the later years, and the Elizabeth Bicknell who did the dung shovelling and during the summer months got the usual women's rate for haymaking.

Another interesting person is Edward Reeves who was employed as a labourer with wages entered in all three sections usually at 1s 2d a day with frequent entries of "7d a day, unable to work on the roads". He was paying £7 a year rent but allowed £1 a year out of his rent. The Estcourts were very considerate to this employee and tenant but there is no indication why he merited these special arrangements. In 1824 an Edward Reeves junior appears in the list of wage earners on the farm and received 1s 4d a day in winter and 1s 6d in summer. He was also paying £2 10s a year rent for a house and 16s for land.

Poole is a name which appears frequently. At the beginning of this period Samuel Poole was paying £2 16s a year land rent and in 1825 Samuel Poole junior was paying the same amount; he had taken over his father's tenancy? Among the tenants of Newton cottages there was Edward Poole paying 36s a year. Samuel Poole was referred to as a mason and received payment for various building work. Samuel Poole junior received payment for work on the farm during haymaking. In 1819 a John Poole was paid for pointing a wall and two years later he was paid for the use of a horse to the Plough Inn.

These brief comments highlight some of the information to be found

in the accounts of a country estate on the life, character and interests of the owner and the lives of those living and working on the estate. There is much scope for speculation about the families who depended on the Estcourts and the parish records would probably clarify many points.

P. Bath

Sources

Glos. R.O., D1571 Account books, 1819-27.

### THE NEWENT COALFIELD

Coal is concealed beneath the undulating countryside of North West Gloucestershire and outcrops in a narrow band extending from the flanks of May Hill as far as a point about a mile east of Dymock. The occurrence is of geological and historical rather than economic interest, for although many attempts at mining were made from the eighteenth century onwards, almost nothing has been done for many years and its existence is largely forgotten.

In this description, only the two main centres of working will be dealt with, the first of which was at Great Bouldson, being indicated as 'coal works' on Isaac Taylor's map of 1777. Here a Mr. Noarse, who occupied the property, seems to have started mining about 1760; the venture failed after about six years (1,2). The appalling state of the roads as mentioned by Rudder, probably hindered development and nothing more happened until 1790 when the promise of a canal linking Gloucester to Hereford via Newent provided a stimulus.

According to the Gloucester Journal 'the stratum of coal at Newent exceeds the warmest expectations formed of it. The depth - - - is only 41 yards; and though the workmen have sunk six feet eight inches in coal, they have not yet passed through the bed. A body of coal of this thickness is rarely met with. By means of the intended canal, these coals will be constantly and regularly delivered in this city, at 8s 6d per ton' (3). Further similar insertions followed but it seems that the reports of coal prospects 'now ascertained beyond all doubt' expressed hope rather than conviction (4). Both the canal and the colliery owners were looking to each other for salvation.

The pits did not turn out successfully, but another attempt was soon made. In 1803, two shafts had lately been sunk and coal was being raised at the rate of seven tons per day (5). The works were certainly active in 1805, by which time the Bouldson Coal Company had probably been formed (6). This concern was the one mentioned by Sir Roderick Murchison, writing in 1838, 'At Bouldson, 6 shafts were opened about 30 years ago by a Joint Stock Company. Here, as at Lower House (see later) there were 4 seams of coal lying nearly all together, the first being 1ft 6ins, the second 10ins, the third 10ins, and the lowermost 2ft 6ins in thickness. The shafts were from 63 to 80 yards deep; the faults were very numerous, and the enterprise was abandoned owing to the great influx of water - - -' (7). During the Bouldson Coal Company period, the ground belonged to the Hon. Andrew Foley. In 1810/11 the directors were a Mr. Capel, John White (Gloucester), J.S. Morse (Newent) and a Mr. Hartland of Bouldson who acted as treasurer. There was also a Mr. Pruen of Cheltenham, described as 'very obstinate'.

From a statement of Morse on March 1811, the concern was clearly in serious difficulties - 'I am in hopes Mr. Foley will take into consideration our heavy loss and will make some abatement'. The particular issue involved a £144 bill for poles (pit proprs) (8). According to a later writer, 'the workings were abandoned in consequence of the bad state of the roof above the coal, requiring large quantities of timber for support'. A trial pit sunk 600 ft. to the south, found

nothing of value (9). The Bouldson company probably collapsed soon after 1811 since when mining seems to have ceased. Thirty years later however, fields on the west side of the road were known as 'coal ground' (10). Even today after ploughing, the area is quite black with coal. Local information reveals that a spring in the one field issues from an old level driven into the coal beds. Several old shafts close to Great Bouldson have been swept away by bulldozers recently, but the green mound of one shaft remains by the roadside.

The second and perhaps more interesting portion of the Newent coalfield lies between Lower House and White House,  $1\frac{1}{2}$  miles west of the town. It is shown on the appended sketch plan. The former part of the district was situated in a detached portion of Pauntley (later transferred to Newent parish) and the latter is in Oxenhall parish. By observing coal particles in the fields, the outcrop is seen to take a line from the Kilcot Inn to Hill House. It again appears curving round White House and everywhere forms the western boundary of the seams.

Pits at Lower House were 'working with good profit' according to Bigland's county history, published in 1791, so presumably they were at least being sunk, if not actually producing, in April 1791 when the Herefordshire & Gloucestershire Canal Act was passed. Resulting from the impetus of this Act, prospecting intensified and 'great exertions are now making to establish collieries on the estates of the Hon. Andrew Foley at Oxenhall' (11). These exertions included a boring, begun on 20th December 1790, which in a month had reached a depth of 71 feet after passing through four coal seams aggregating nearly 8 feet in thickness (12). The site is not known.

Towards the end of 1793 canal construction was well under way from Gloucester to Newent. The canal company began to think seriously of mining the coal themselves and were considering the use of 'fire engines' for pumping (13). A few months later the committee was able to report a very satisfactory boring in the land of Mrs. Phillips, owner of the pit at Lower House, and had gained permission to sink a shaft (14). Judging from descriptions in the canal company's minutes books, and from the geology of the area, the spot was most probably west of Lower House on low lying ground. It is called 'Part of Coal Field' on the 1841 tithe map although by that time had reverted to pasture (15). Sinking the shaft to the seam took five months but the coal 'not promising from its present appearance to be fit for any other purposes than lime burning and the like', it was determined to sink another, more on the dip of the seam, whilst still continuing the existing pit (16). Terms of one seventh were agreed with Mrs. Phillips on the price of coal at the colliery, the small coal being worth only about three shillings per ton (17). In January 1795, ten waggon loads of coal went to the poor in Newent, at Rev. Foley's expense.

At this time a seam over six feet thick was reached at a depth of 31 yards, but the coal was apparently of no better quality, so in May 1795 a pit was sunk on the land of a Mr. Wood at Hill House 'between the present pit and the brook' (18). This became known as Hill House Colliery and we can be pretty certain that the grass-grown and bramble-covered hillocks midway between Lower House and Hill House constitute its remains. (Surprisingly, the brook did not form the boundary between

these properties.) Meanwhile the Lower House pits were still raising coal and in June 1795 an agreement was drawn up with Robert Niles to haul 200 tons to the canal at Newent, for 2s 6d per ton (19).

At this point the canal company had a chance of handing over its colliery interests which had yet to become profitable, to a Richard Perkins of Oakhill, Somerset. The opportunity was quickly taken and as an inducement it was decided to build a mile-long branch to the pit from the main canal at Oxenhall (20). In return, Perkins agreed to supply the company with up to 4,000 tons of small coal annually for brick and lime burning, also to pay 2d per ton for coal carried on the branch, and to guarantee 70 tons per day if it could be raised and sold (21). His first action was to dismiss all the colliers including John Webster the foreman who, with wife and family, had come from Nailsea near Bristol. Four guineas travelling expenses were allowed for their return home.

Nearly a year later, nothing much had happened though the branch was largely finished. The anxious canal company advised Perkins to hurry with 'sinking your new shafts - - - - - as a disappointment in this instance will be big with consequences the most disagreeable to yourself and the company' (22). By the end of 1796 Perkins was said to be erecting a steam engine. Coal had been raised but was too poor for the canal company's use and in the following February it suffered the bitter irony of a request to supply a boat to trade on the newly opened canal from Gloucester to Newent, for the purpose of bringing 'foreign' coal to the town (23).

In 1798 Hill House Colliery was being managed by a concern trading as Perkins, Moggridge (of Boyce Court) & Perkins, which also dealt in stone and lime, and had at least one other pit in the vicinity. The coal traffic on the branch had still not developed although Perkins & Co. were understood to be raising a considerable quantity. The canal company thereupon issued a strong reminder about the agreement. Some improvement in traffic must have resulted since Moggridge, Junior, applied for a reduction on coal tonnage from the colliery to clothiers on the Stroudwater canal (24). After 1800 the canal company, whose minutes have proved so useful in compiling this account, held very few meetings until 1829. There is however an entry in 1817 which referred to 'The land cut, to make the branch to colliery' (25). The branch had presumably been isolated and drained.

In 1833 the Hill House pits had been closed for several years at least, when it was reported that 'The seven ft coal was the bed principally worked; but it was much disturbed and dipped rapidly, or two ft in a yard to the N.E. or E. In 300 yds, four faults of considerable magnitude were encountered and the coal contained a large quantity of sulphur'.

The section was as follows (26)	Clay and Rock .....	102 ft
	COAL .....	7 ft
	Clod .....	4 ft
	COAL .....	2½ ft
	Clod .....	15 ft
	COAL .....	4 ft

Sir Roderick Murchison writing in 1838, noted that all the Newent pits had then been 'abandoned many years and the information now to be derived from a few old workmen is scanty and imperfect - - - . At Hill House Colliery - - - - the coal strata were found to be so highly inclined, that the works were soon abandoned, though not before the ruin of those concerned' (27). However, Hill House Colliery was at work in a small way in 1839 (28). It had closed again by 1842 but was going in 1846 (29). William Perks was engineer at the pit, and he gave some details 30 years later when a further reworking was being considered (12). Unfortunately his evidence was garbled and unreliable - for example, Mr. Perkins had 'realized a fortune' and the ground was 'altogether favourable for working'.

The pit may have been reopened for exploration, for in 1957 Mr. Baldwin of Pool Hill, aged 74 years, told me that he could remember an open shaft and a winch at the site. This renewal of interest which took place in the 1870s notwithstanding the record, had one considerable consequence; the formation of The Newent Colliery Company, being the last serious attempt at mining in the area. Pits over 400 ft deep were sunk near White House, to the north of Hill House, and it is interesting to learn that between these two forms various borings and trial shafts had been put down in the 1800-1840 period without much result (30). No signs remain of these trials.

The Newent Colliery was a determined attempt to exploit the tiny coalfield but regrettably the management had to cope with a bad slump in the trade, heavy pumping problems and a sulphurous coal. The enterprise collapsed and the plant came under the hammer in 1880. The position of the colliery is marked by an oval brick-lined shaft and grassy spoil tip on the side of the lane from Oxenhall to Gorsley.

Apart from a few trial broings in recent years nothing has been done subsequently, nor are any developments likely, unless centred to the east, well away from the faulted and unsettled ground. Nevertheless, in these wiser days, we ought not to forget the old miners, following those beckoning seams of coal that only led to ruin.

D.E. Bick

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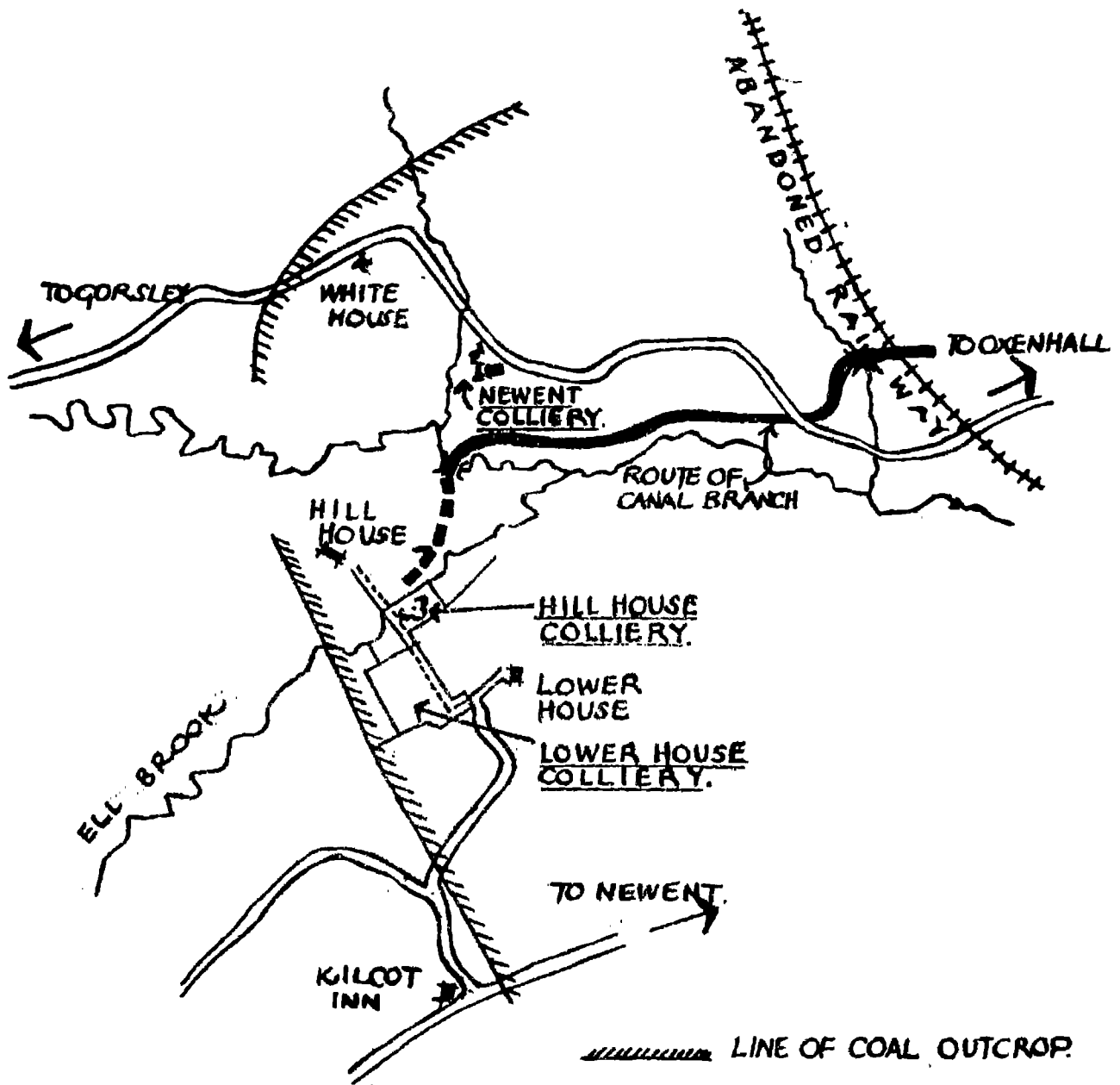
Note: H.G.C. = Herefordshire and Gloucestershire Canal

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# SKETCH OF PART OF THE NEWENT COALFIELD GLOUCESTERSHIRE



scale 6 inches to 1 mile.

drawn. mg jones. march '71.