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UNIVERSITY OF KEELE

DEPARTMENT OF HISTORY

THOMAS AND JOHN GILBERT : A STUDY IN BUSINESS
ENTERPRISE AND SOCIAL MOBILITY IN EIGHTEENTH
CENTURY ENGLAND

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CONTENTS

List of plates	page ii
List of figures (Maps, plans and diagrams)	iii
Abstract	iv
1 Ancestors	1
2 Land Stewards	28
3 The Duke's and Earl's Canals	57
4 The Grand Trunk and other public canals	85
5 Thomas Gilbert, M.P.	134
6 Entrepreneurs	173
7 Epilogue and summary	204
Appendix One	226
Notes and References	227
Bibliography	283

LIST OF PLATES

1	Aerial view of Lickshead (Herbert Chester)	page 9
2	Cotton Hall, c.1798 (William Salt Library)	12
3	Arms granted to Thomas Gilbert in 1759 (William Salt Library)	27
4	John Gilbert (Hugh Malet)	29
5	Francis, third Duke of Bridgewater (Manchester Ship Canal Company)	50
6	James Brindley (Josiah Wedgwood & Sons Ltd.)	64
7	Worsley Delph, c.1770 (From Arthur Young's <u>Six Months' Tour through the North of England</u>)	67
8	Barton Aqueduct, c.1770 (From Arthur Young's <u>Six Months' Tour through the North of England</u>)	73
9	Josiah Wedgwood (Josiah Wedgwood & Sons Ltd)	89
10	Henshall, Gilbert & Co.'s warehouse, Castlefield, 1807 (Manchester Reference Library)	101
11	Sneyd's letter on boat inclines, 1773 (P.R.O.)	105
12	Granville, the second Earl Gower (William Salt Library)	142
13	Thomas Gilbert, M.P. (William Salt Library)	157
14	The title page from one of Thomas Gilbert's pamphlets (British Library)	163
15	Clough Hall, c.1895 (The collection of the late Harry Minshall)	206
16	Clough Hall, 1812 (Staffordshire Record Office)	211
17	Cotton Hall- sale catalogue, 1844 (Staffordshire Record Office)	219
18	Clough Hall- sale catalogue, 1812 (Staffordshire Record Office)	224

LIST OF FIGURES

MAPS, PLANS AND DIAGRAMS

1	Socio-occupational analysis of the parish of Ellastone, 1597-1607	page 4
2	(Summary graph) Socio-occupational analysis of the parish of Ellastone, 1597-1607.	5
3	(Map) Industrial activities, c.1742	20
4	(Map) The Bridgewater Canals	75
5	(Map) The Trent and Mersey Canals and branches	96
6	(Plan) Castlefield, Manchester, 1793. (Manchester Reference Library)	100
7	(Map) The East Shropshire canals	113
8	(Diagram) Divisions within the House of Commons	151

ABSTRACT

During the eighteenth century many members of the lesser gentry turned their attention from the land, towards the world of business and the professions. Their motivation was a desire for financial and social advancement and they were quick to seize on the opportunities that existed in eighteenth century England. The careers of both John and Thomas Gilbert provide excellent illustrations of this process at work and the complex pattern of interests that engaged their time and effort. Such individuals sought to enlarge their estates and income by these means and having achieved their aims, they reinvested their capital in land. These entrepreneurs were succeeded by rentiers, as the need to increase income disappeared.

Chapter One

ANCESTORS

(A) THE GEOGRAPHICAL SETTING

The surname of Gilbert was not uncommon in the central and northern parts of Staffordshire during the sixteenth and seventeenth centuries. One particular concentration of people bearing this name was in the triangular tract enclosed by the villages of Alton, Ellastone and Rocester. The precise ancestry of the two eighteenth century entrepreneurs, Thomas and John Gilbert has proved difficult to establish,¹ but without question their ancestors were well established in this area by 1600. Their branch of the family was centred on the village of Ellastone, later to be immortalised in literature by George Eliot. Her father, Robert Evans spent his early life here and as Hayslope it was the scene of some of the incidents in Adam Bede.² The first reference to the Gilbert family concerns a 'Rycharde Gylbarte', who was buried at Ellastone in 1589;³ and this unusual spelling of the family surname is consistently followed in the Ellastone Parish Registers until the incumbent changed. Another source records a George Gilbert who was an 'Alekeeper' at Rocester in 1599.⁴

This area on the edge of the Staffordshire Moorlands was a rugged one whose physical nature limited the scope of human activity. Agriculture could perhaps be best described as marginal, and this point is strongly reinforced by the name of one house in the Ellastone area which was known as 'World's End'.⁵ Doubtless improvement of the land was

undertaken, but in such a moorland area this would have been less spectacular because it was less complete. For the most part the moorland was not strictly speaking 'reclaimed' at all; for it was used more or less in its natural state for rough-grazing. Though animals grazing there would have modified the natural vegetation, they would not have transformed it. Some idea of the nature of the agricultural holdings in the area can be obtained from the details of a law suit which involved a member of the Gilbert family:-

'On the Morrow of Holy Trinity 5 James I

Between Thomas Gilbert, complainant, and Robert Meverell, armigor, and Elizabeth, his wife, and Thomas Nabbes and Jane, his wife, deforciantes of a messuage, a garden, an orchard, 10 acres of land, 10 acres of meadow, 10 acres of pasture, 60 acres of furze and heath, and common of pasture for all kinds of cattle in Caldon.

The deforciantes remitted all right to Thomas and his heirs, for which Thomas gave them £60.' ⁶

The economic exploitation of such a holding obviously laid emphasis on pastoralism, the concentration, then as now, being laid on the keeping of cattle rather than sheep. Up-and-down husbandry was probably practiced in part, some land being alternatively used for arable and pastoral purposes.⁷ Clearly there was a dependence on marginal grazing in the "furze and heath" and on the common pasture at Caldon; so it is evident that in this area husbandry was practiced in a largely open field setting.

(B) THE SOCIO-OCCUPATIONAL STRUCTURE OF ELLASTONE,
1597-1607.

By means of a careful analysis of the Ellastone Parish Registers for the period 1597-1607⁸ it has been possible to establish a fairly precise picture of the socio-occupational make-up of the village (see figures 1 and 2).

Figure 1 shows the various occupational groupings which can be distinguished within the sample. Some 75% of the population were involved in agriculture, as would be expected at this time in this kind of community. This group can be sub-divided into three categories: Yeomen (15); Husbandmen (56) and Labourers (48). The proportion of tradesmen (20%) seems a little higher than would be expected but this could be explained by the fact that Ellastone appears to have been something of a service centre for the surrounding moorlands. Another unusual feature was the presence of industrial workers, namely charcoal burners and ironworkers who were employed at Ellastone furnace.⁹ In this sector there was upward mobility (based on skill) as demonstrated by the case of Thomas Turneley; a 'labourer' in 1603, he attained the position of 'founder' within four years.¹⁰

It has not been possible to establish economic criteria for the various groups involved in agriculture in this area of North Staffordshire. Dr. Margaret Spufford has carried out the exercise for Cambridgeshire in the seventeenth century and her figures are as follows:-

	Agricultural Workers		Tradesmen		Industrial Workers	
	Actual Numbers	Percentage	Actual Numbers	Percentage	Actual Numbers	Percentage
Yeomen	15	9.2%				
Husbandmen	56	34.4%				
Blacksmiths			3	1.8%		
Thatchers			1	0.6%		
Tiler			2	1.2%		
Miller			1	0.6%		
Shoemakers			4	2.5%		
Tailors			5	3.1%		
Freemasons			3	} 4 2.5%		
Masons			1			
Websters			4	2.5%		
Wood-Collier (Charcoal Burner)					5	3.1%
Wheelwright			3	1.8%		
Carpenters/Joiners			4	2.5%		
Shepherds						
Hammermen					2	1.2%
Founders					1	0.6%
Glovers			1	0.6%		
Shearman			1	0.6%		
Labourers	48	29.5%				
TOTALS	119	75%	33	20.0%	8	5.0%

FIGURE 1
SOCIO-OCCUPATIONAL ANALYSIS OF THE PARISH OF ELLASTONE, 1597-1607.

(Based on entries in the Parish Registers for this period.)

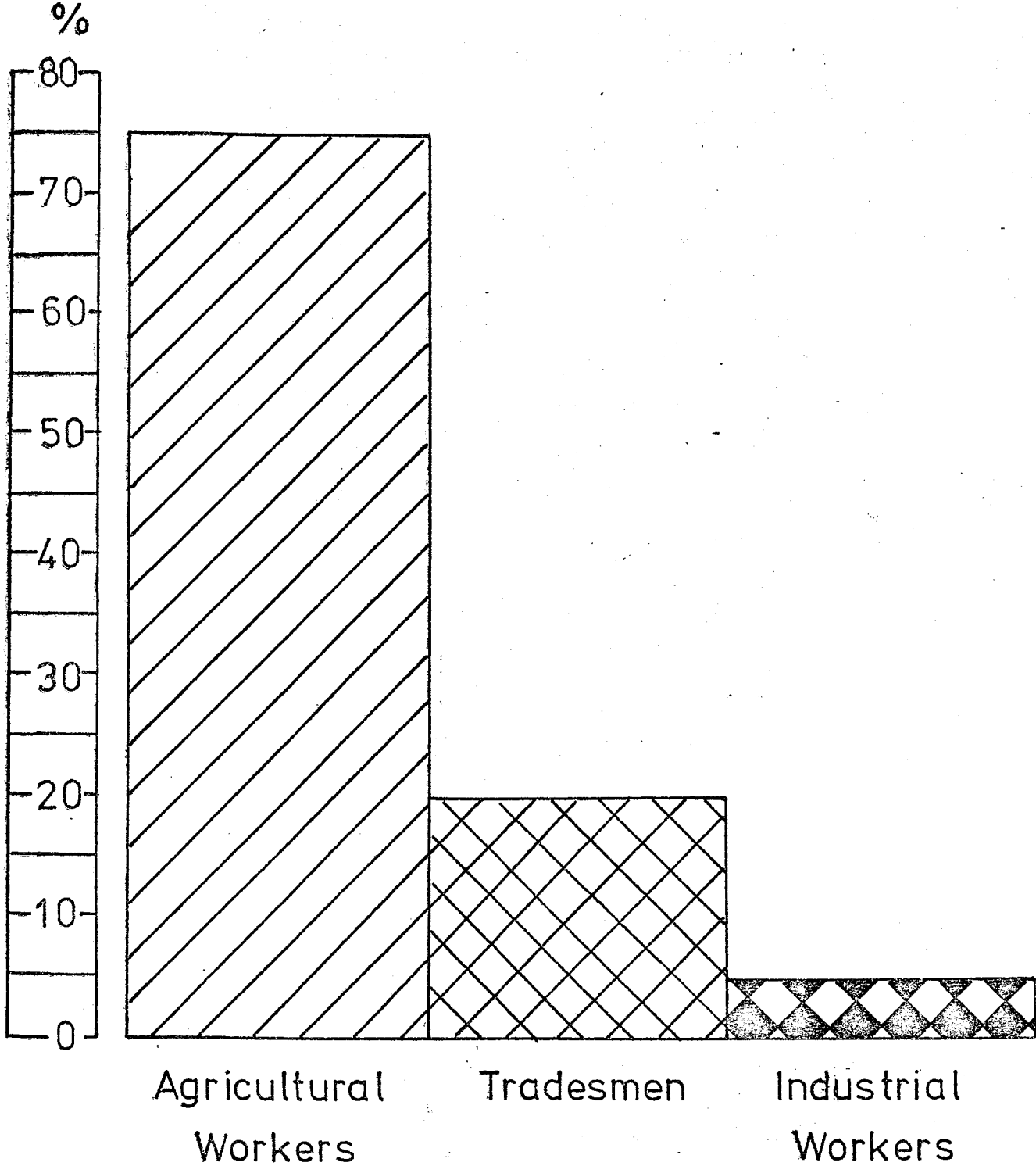


FIGURE 2

SOCIO-OCCUPATIONAL ANALYSIS OF THE PARISH OF ELLASTONE,
1597-1607.

SUMMARY GRAPH

Median Wealth

Yeomen	£180	
Husbandmen	£ 33	11

However, Lorna Weatherill compiled a list of inventories and wills from Burslem for the period 1661-1757, which allows some estate values to be calculated and compared with Dr Spufford's figures. The nature of the agriculture in these two areas of North Staffordshire was almost identical, although the land was more fully developed in the Burslem area due to the higher population density. Some of the people who figure in Mrs Weatherill's study were involved in the infant pottery industry, but it is possible to identify these individuals and to make the contrast with those solely involved in agriculture. The sample size of the Burslem yeomen (for the period 1661-1702) was 19; plus 4 yeomen/potters. Also included in this sample were 5 Husbandmen, and 3 Gentlemen (with estates ranging in value from £87 to £849).¹²

Median Wealth

	<u>Cambridgeshire</u>	<u>Burslem</u>
Yeomen		
<u>Farmers</u>	£180	£126
Yeomen		
<u>Potters</u>	-	£191
Husbandmen	£33	£35

Such figures suggest that there was quite a sharp division between the Yeomen farmers and Husbandmen, but this did not

prevent social mobility. The key to social and economic advancement was often marriage, and this is confirmed by later examples from the Gilbert family. The Ellastone sample contained 163 men and of these 4 managed to improve their status in the period 1597-1607. The case of Thomas Turneley has already been mentioned but this is an unusual case as it was brought about by effort rather than by connection. A more typical example is provided by Raphe Aynesworth, a 'Husbandman' in 1604 who acquired the status of Yeoman within three years through his marriage to the widow of a fellow husbandman. Thomas Cowoppe married a widow called Elizabeth Byckestaffe and rose from the status of labourer to that of husbandman.¹³ The last example of such social mobility is provided by John Hopewoode, who had a daughter by a local widow but ended up marrying another woman from outside the parish and in so doing acquired the status of husbandman.¹⁴

This then was the predominantly agricultural society to which the Gilbert family belonged and it was one where an individual or family could advance its own fortunes, even if only in a modest way. The example par excellence of personal advancement is that of Gilbert Sheldon, who was born at Ellastone in 1598 and became Archbishop of Canterbury in 1663.¹⁵

(C) LABOURERS, TO 'LITTLE COUNTRY GENTLEMEN' ¹⁶

Despite the vaguely grandiose claims made in the illuminated account of the life of Thomas Gilbert, MP,

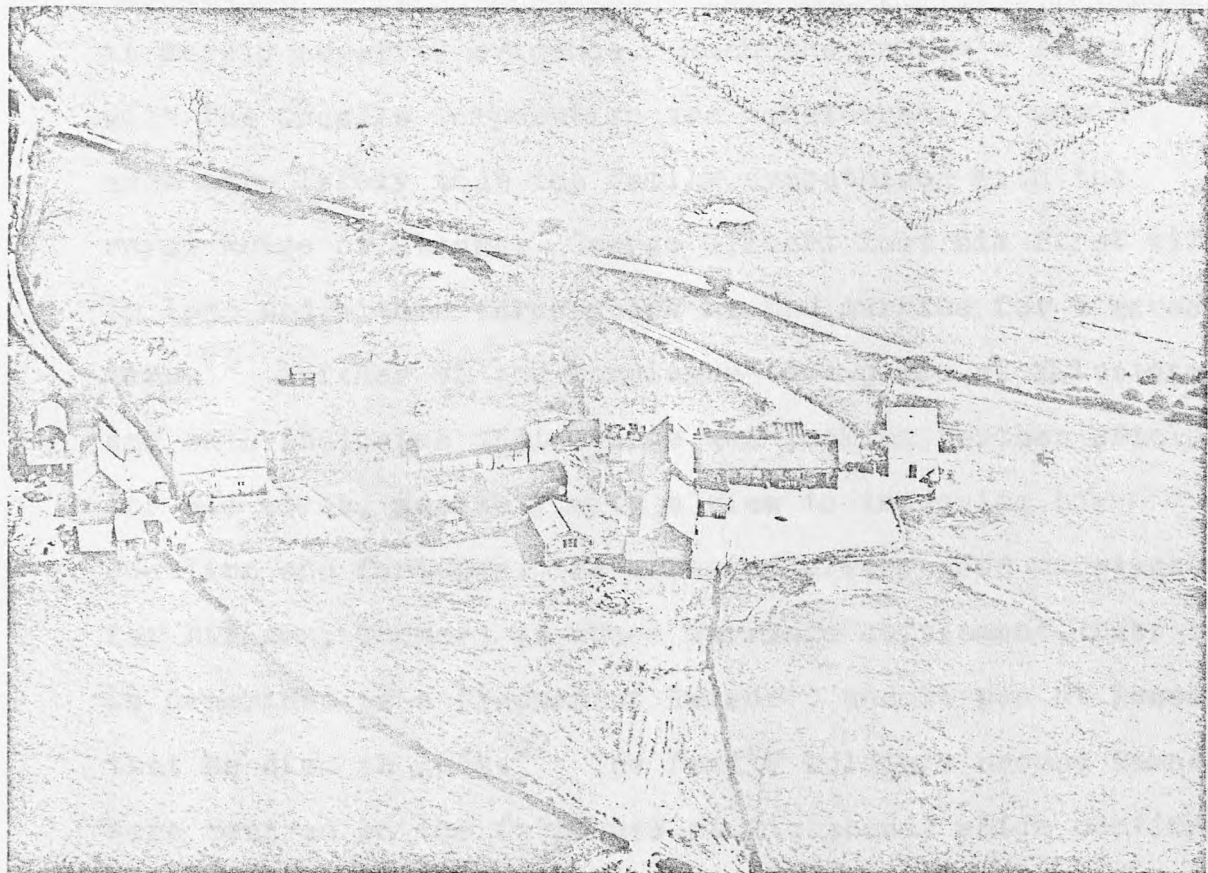
exhibited in the small chapel at Cotton;¹⁷ the earliest known members of the Gilbert family were of a modest standing in their community. The Rycharde Gylbarte (who died in 1589) may have been either a labourer or a husbandman. His son, Richard certainly belonged to the second group as he was described as a 'husbandman' in 1599 at the time of his marriage to Margarye Slacke; and in a number of subsequent entries in the Ellastone Registers up to 1610.¹⁸ Richard was also one of the two Churchwardens at Ellastone for the year 1606-7, which says something of his standing in the community;¹⁹ for as W.E. Tate points out:-

'All churchwardens or Questmen in every parish shall be chosen by a joint consent of the Minister and Parishioners, but if they cannot agree then the Minister shall chose one and the Parishioners another.'²⁰

The Thomas Gilbert who was involved in the litigation in 1606 may well have been Richard's brother. He would appear to be of at least yeoman status, as he was able to buy off rival claimants to a farm and 90 acres of land.

The office of Churchwarden at Ellastone was also filled by Richard's son, George (born 1601); who served in this capacity for the years 1630-31 and 1643-44.²¹ Little is known of his life although he lived through the local smallpox epidemics of 1636 and 1641; and the storming of Wootton Lodge by the forces of Parliament in 1643,

Plate 1



LICKSHEAD

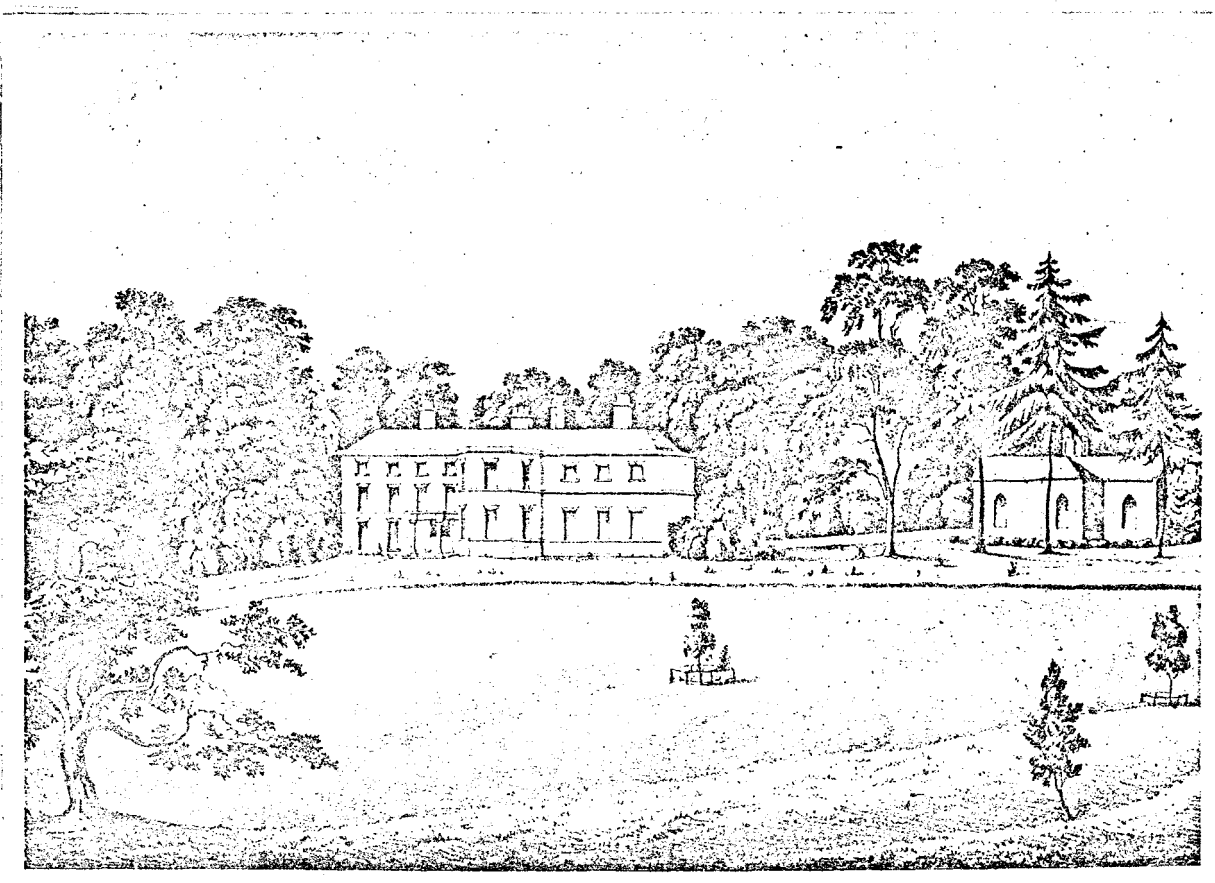
without apparently being affected by any of these events.²² Indeed the Gilbert family do not figure in either the Order Book of the Staffordshire County Committee²³ or the list of Active Parliamentarians of 1662,²⁴ but this is merely negative evidence. When the family's links with the Cheadle Corporation are considered, it would seem more likely that the family sympathised with the royal house of Stuart. George Gilbert lost his first wife in 1635 and within three years he had married for a second time.²⁵ Neither of the marriages took place at Ellastone, and this indicates that George was looking farther afield for his wives, possibly with a view to improving his position and fortunes. He arranged a very good marriage for his son, Thomas; in whose Marriage settlement, George is described as a 'Yeoman of Ramsor', and it was at Ramsor that he died in 1664.²⁷ The family holdings around Ramsor were centred on the farmhouse at Lickshead, which continued to be held by the family into the eighteenth century. Aerial photographs of the farm show two period farmhouses and it is possible that it was the base for an extended family. (See photograph.)

Thomas Gilbert (1628-1694) followed in the footsteps of both his father and grandfather, in that he served as a Churchwarden at Ellastone in 1668/69 and again in 1669/70.²⁸ He married very well in 1661, when he wed Elizabeth Morrice of Lockwood Hall (near Kingsley) and this may have occasioned a removal to what is now Cotton Hall.²⁹ The

original house at Cotton appears to date back to 1630 and was probably built by the Morrice family.³⁰ As late as 1742, one of the main holdings at Cotton was known as 'Morrices Liveing', and this seems to strengthen the view that the Gilberts acquired their initial interest in Cotton through this marriage.³¹ Thomas was definitely living at Cotton in 1687, when he was described in a Marriage Settlement as a 'Yeoman of Nearer Cotton';³² and the modern Ordnance Survey map confirms that Near (or Nearer) Cotton is the name given to the area around Cotton Hall.³³ Another indication of this movement of the main family home is provided by the Ellastone Parish Registers, for in the 1670s Gilbert entries became scarcer and it is clear that the family started to use the parish church at Alton.³⁴

Thomas was succeeded in the estate by his son, George; who broke all family records by marrying three times.³⁵ One important development was occasioned by George's first marriage to Ellen Whieldon of Blackbank (Ipstones) in 1687.³⁶ Through this marriage the Gilberts acquired an interest in the Cloughead Colliery which they worked with the Bill family for about forty or fifty years, mainly as a source of fuel for lime burning at Caldon Low and later for the smelting mill at Alton.³⁷ George and his son Thomas, also witnessed an agreement between Joseph Banks and John Philips, for Philips to work the coal measures near 'Churche Gorse', Kingsley. This

Plate 2



COTTON HALL, c.1798.

agreement was signed and sealed in September 1721,³⁸ some ten years after Thomas Gilbert had married Elizabeth Philips.³⁹ Such patterns of family partnership were to become common and fundamental to the development of the family's fortunes in the years to come. Another contemporary document describing the Gilbert holdings mentions a lead mine in the parish of Alton which yielded £9 per annum, but it is impossible to link George Gilbert with this enterprise.⁴⁰

During his father's lifetime, Thomas lived 'at Farley' (possibly at Lickshead), whilst George occupied the embryonic Cotton Hall. Apart from their own lands they both rented land from the Earl of Shrewsbury; but at the same time they were increasing their own holdings through enclosure. George Gilbert made at least two such enclosures at Farley and in this he was clearly following a well established pattern laid down by his ancestors.⁴¹ The solid nature of the Ramsor holdings is indicated by the election of a Churchwarden at Ellastone in 1702/03 for 'Gilberts tenement'; and similar references are made in contemporary tithe records.⁴²

George Gilbert was probably the first member of the family to be included in the ranks of what John Aikin termed the 'little country gentlemen'.⁴³ As such he became an Alderman of Cheadle Corporation in January 1701/02; a society set up in September 1699 and open to 'honest

gentlemen who were free and willing'. Thomas Pape considered that the society owed its origin to the sympathy felt by the clergy and landed gentry for the Stuarts. By 1699, when the Cheadle Corporation was founded, Parliament was considering a possible successor to William and subsequently Anne. The outcome of these deliberations was the Act of Settlement in 1701, which decided in favour of the Protestant House of Hanover. The troubled state of England following Queen Anne's death in 1714 is reflected at Cheadle. There was an influx into the Corporation of new gentlemen members who lived at some distance from the town, some of which were described as 'persons of loyalty and sound principles'.⁴⁴ By 1709, both George Gilbert and John Bill (son of Richard Bill, of Alton Lodge, 'Baylife' to the twelfth Earl and Duke of Shrewsbury)⁴⁵ appear to have ceased to attend the meetings of the Corporation, although this cannot be established with certainty as the attendance lists for the society are not always complete. They may well have been early subscribers to the views expressed in John Byrom's poem, which seems to sum up the viewpoint of the whole Corporation after the failure of the 1715 Jacobite rebellion:-

'God bless the King - I mean our faith's defender
 God bless (no harm is blessing) the Pretender
 But who pretender is, or who is King -
 God bless us all, that's quite another thing.'

In 1720, John, Lord Gower was elected Mayor of Cheadle for the following year, and this could have provided an opportunity for a first contact between the Leveson-Gower family and the Gilberts.⁴⁷ However, the absence of detailed Corporation records prevent the establishment of any positive link before 1742.⁴⁸

(D) INDUSTRIAL ENTERPRISE

The Corporation at Cheadle was also a means of promoting social contact among the local gentry and business men.⁴⁹ Herbert Chester has shown how the "iron men of the Moorland Works" found time to play important roles in the Society.⁵⁰ Amongst these was John Wheeler of Stourbridge, who was initially the Foleys's Manager and then a partner in the Cheshire ironworks. He bought Wootton Lodge in 1700 and this purchase provided a clear statement of the degree of social and economic advancement that could be achieved through industrial activities.⁵¹ Two members of the Foley family were also sworn as Burgesses following an introduction by one of their local employees.⁵² This great iron-making family provides a superb example of how progress could be made through industrial enterprise, having risen in a few generations from nail-making to ennoblement by Charles II. Richard Foley, the son of a Dudley nail-maker was born in 1580 and married the daughter of William Brindley of Kinver. Brindley is credited with introducing 'the German method' of making

iron to Kinver mill, the first one to be erected in England for rolling and slitting of iron. To perfect his knowledge of the slitting process, Richard Foley made two journeys into Sweden and by deception learnt the finer points of the process. On his return to England, he borrowed capital and developed a group of furnaces and forges in the Midlands. This work was carried on by his son Thomas and his sons Paul and Philip, so that they were able to take full advantage of the opportunities opening up in the Midland iron trade in the seventeenth century. By the end of the century, the family were involved in an 'industrial empire' that stretched throughout the ironworking areas of the Midlands, the Forest of Dean and beyond.⁵³

The returns from the iron industry were considerable and provided the basis for the advancement of a number of local families:-

'In addition to the Dudleys, Levesons, Foleys, and Foulkes, the notes of Simon Degge state that the Chetwynds of Rugeley, Parkes of Willingsworth and Wednesbury, and Gorings of Bold, obtained their estates from iron works.'⁵⁴

The Levesons were associated with ironworks on their Lilleshall and Trentham estates in the 1580s and 1590s, but they were not actively involved, preferring to lease out the ironworks to local operators.⁵⁵ But this was not the real basis of their wealth, which had been acquired

in the sixteenth century wool trade and then invested in land. They bought a great deal of monastic land, including Lilleshall and Trentham; but unlike the Chetwynds of Rugeley, they avoided further involvement in trade or industry. As a Royalist family, the Levesons suffered badly during the Civil War, but recovered sufficiently by the end of the seventeenth century to rebuild their house at Trentham. Frances Leveson married Sir Thomas Gower - and eventually in 1689, the lands of the Levesons were joined with the Yorkshire estates of the Gowers, in the hands of Sir William Leveson-Gower.⁵⁶

The rise to affluence of such families was well known to the local gentry who were anxious to emulate their superiors. Indeed, the gentry were vital to the aristocracy who wished to develop their lands and resources, but at the same time did not wish to become too actively involved themselves. So various forms of association grew up with the local gentry acting as agents for the aristocratic landowners, or indeed as partners in an increasingly varied number of enterprises, but mainly concerned with extractive industries.

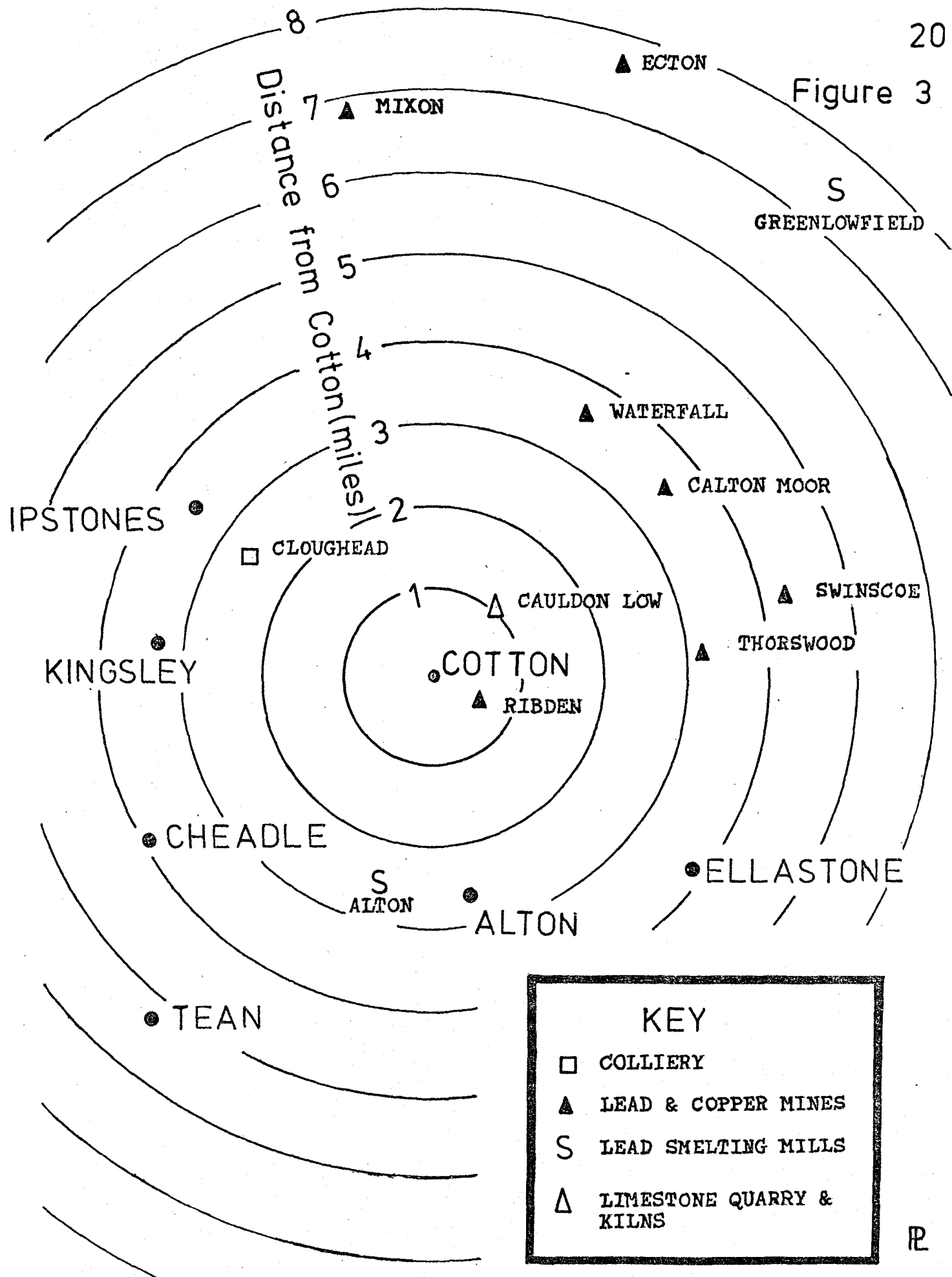
Copper and lead had been worked in the north-east portion of Staffordshire since at least medieval times, but serious mining only began in the early seventeenth century.⁵⁷ The Civil War interrupted operations; despite the efforts of the Staffordshire County Committee to "set on worke such myners for searching and getting of leade ore

within the Lordshipp of Blowre and County of Stafford being late the possessions of Wm. Marquess of New-Castle and now sequestred for the use of King and Parliament."⁵⁸ During this period the copper and brass industries were under the monopolistic control of the Company of Mines Royal, and the Company of Mineral and Battery Works, originally chartered by Elizabeth I in 1568 to encourage the home production of these metals. By the time of the Civil War and Protectorate, the Company was mainly concerned with leasing their rights to those wishing to carry on mining operations.⁵⁹ One such individual was the Third Earl of Devonshire who reopened the Ecton Mines in 1660, but was forced to close down operations due to the cheapness of imported Swedish copper.⁶⁰ A revival in the mining industry began about 1690 and it has been associated with the rescinding of the monopolistic powers under the Mines Royal Acts of 1689 and 1694, which freed copper-, lead- and tinmines. This together with the development of the reverberatory furnace for the smelting of copper using coal as a fuel, and the decline of the main Swedish mine at Falun, started a major upsurge in mining activity.⁶¹

One such venture was launched by a partnership of five 'adventurers', including Richard Bill who leased the Ribden mines in 1692. The mineral rights belonged to the Earl of Shrewsbury who had initially tried to work the mines himself in the period after the Restoration, but the attempt proved abortive and this prompted the Earl to lease out

his rights.⁶² Thomas Gilbert (1688-1741/2) first became involved in mining ventures, when in January 1722/3 he took over the lease of the Calton Moor mines from Thomas Rivett of Derby.⁶³ He extended his interests in 1727, when he bought out Samuel Seale's share of the Ribden lease;⁶⁴ and with his partner Anthony Hill he sublet them in the same year.⁶⁵ They again sublet their rights in 1732 to the Duke of Chandos, who was to carry on working the mines at his sole expense.⁶⁶ Meanwhile in 1730, Thomas Gilbert in partnership with Robert Bill obtained the lease of the Nixon Mines for twenty-one years, although nothing else is known of this venture.⁶⁷ The mines at Swinscoe were successfully leased by Thomas in 1732 from Leeke Okeover,⁶⁸ and they were sublet with the Ribden interest to the Duke of Chandos in the same year.⁶⁹ By 1737 he had acquired interests in the Thorswood mines and the Burgoyne mines at Ecton; and in both these ventures he had Robert Bill as a partner.⁷⁰ A surviving account between these two partners reveal something of the operations at the Thorswood Mines; and from this Dr J.R. Robey has estimated that 770 tons of ore (mainly lead) were raised 1737 and 1742, with a value of nearly £2,600.⁷¹ At the same time expenses could be high and £169 13s 9d was expended on driving ~~the~~ **soughs** at Ecton in 1739.⁷² The final component in these extensive mining enterprises were the mines at Waterfall; the lease of which was negotiated by Thomas but was granted (after his death) to his eldest son, Thomas in April 1741.⁷³

Figure 3



INDUSTRIAL ACTIVITIES c.1742

R

The rent of such mines was always a proportion of the ore and the contractors agreed to keep the mines open for a fixed period during each year. At Mixon, the partners agreed to pay 1/7th of the ore raised,⁷⁴ although another lease of 1718 specified a yearly royalty of one twelfth of the ore raised.⁷⁵ The contractors had to meet the expenses of all work and these could be of astronomical dimensions. The first stage of a sough at Ecton is said to have cost a rival group of 'adventurers' £13,000 with no return.⁷⁶ Thomas Gilbert also began the family's involvement with lead smelting mills, for in his will he left to his youngest son, John:

'one 2⁴ part of the smelting mill at Alton and of my son Thomases share of the smelting mill at Greenlow ffields.'⁷⁷

These were interests that were to be built up by the younger Thomas and his brother, John. The elder Thomas also worked Cloughead Collieries in partnership with Robert Bill, mainly as a source of fuel for the lime-kilns at Caldon Low, but also a small quantity for sale which realised a profit of £5 ls 6³/₄d in 1739.⁷⁸ At the time of the elder Thomas's death in January 1741/42, his estate was said to be worth £300 a year⁷⁹; but his contribution to the family's ascent was not simply a financial one; for he had laid the foundations of the interests which his two sons were to develop and he also nurtured the contacts which were to be so important to his sons.

By the time of Thomas's death, the Gilberts firmly belonged to the category of smaller squires, although

with an income well above that laid down by H.J.Habakkuk.⁸⁰

'The drift of property', according to Habakkuk 'in the sixty years after 1690 was in favour of the large estate and the great lord' who expanded largely at the expense of the small squire and landed gentry. Habakkuk saw seventeenth-century legal developments relating to marriage settlements and mortgages as being the key factor in this process. In the moorland areas of North Staffordshire there is some evidence for this process, the best example being the expansion of the Earl of Shrewsbury's estates around Alton Lodge (now Alton Towers). However, families like the Bills and the Gilberts protected themselves against this trend by diversifying their interests and by careful alliances built up through marriages. In short, by employing the same tactics as those used by 'the great lord'.

The Gilberts were clearly successful in holding their estates together. Younger children were established on the estate or provided with money to establish themselves in a trade or profession. John Gilbert (1724-1795) was handsomely provided for in his father's will, for in the form of land he received:

'a certain liveing at Cotton afforesd. Called Tompson Liveing and all Morrices (but that which is my own land) and that piece of Ground which John Edge holds at ffive pounds and ffive shillings a year called Falknor Close and the land wch. was purchased of Barnets at £400 now in the possession of Tunicliff and Tunicliffs living wch. was purchased of Buxtons.⁸¹

In addition, John received a share of his father's entrepreneurial interests, namely:-

'One twenty fourth part or share of those mines at Ecton call'd Clayton Grove, Clay Grove, Water Work and Bowloes Grove and also one 24th part of Thorswood mines and one half of my share of the Lymekilns and one 24th part of the smelting mill at Alton and of my son Thomases share of the Smelting Mill at Greenlow ffields.'⁸²

He had also been given something of even greater value, a grounding in business and an example of entrepreneurial potential. For after attending the village school at Farley, John was 'bound apprentice to Mr Boulton'.⁸³ Such apprenticeships were common and took the form described by Aikin as applying to those who served apprenticeships to Manchester Merchants. Apprentices were taken from families who could pay a modest fee, those again whom Aikin terms 'the little country gentry'. Aikin's account relates how the work could be 'laborious', but highlights the key to the merchant's prosperity: 'The improvement of their fortunes was chiefly owing to their economy in living, the expense of which was much below the interest of the capital employed.'⁸⁴ This was fundamental to entrepreneurial success and it was a lesson that John Gilbert learnt well in the years in which he was apprenticed to Matthew Boulton, Senior;

father of the Matthew Boulton of Boulton and Watt fame. Matthew Boulton, Senior was a manufacturer of buckles with a workshop at the corner of Snow Hill and what is now Slaney Street, in Birmingham.⁸⁵ Doubtless part of John's apprenticeship would have been of a practical nature, but the most important element would have dealt with practical book-keeping and other aspects of daily business life.

The arrangement of such apprenticeships is of interest as it illustrates once again the role played by family connections. John Gilbert provides an example of such an arrangement, albeit an abortive one. In a letter to Josiah Wedgwood, written to secure an apprenticeship for a Derbyshire lad (possibly a member of the Bird family), he writes:

Worsley 9th March 1769.

'Sir,

A friend of mine Desired I would recommend a near relation of his. The young man, I think is about 14 or 15 of a good family, but small Fortune. I am informed he wishes a good trade.'⁸⁶

It does not take a great deal of imagination to envisage Robert Bill, John's father's friend and partner, writing a similar letter to Matthew Boulton, around 1737. For Robert Bill was also a partner in the Cheadle Copper and

Brass Company (along with his brother-in-law Robert Hurst);⁸⁷ and this company sent the greater part of its output to Birmingham and Wolverhampton. Indeed the rapid growth of the manufacture of copper and brass in England and Wales between 1690 and 1730 was closely linked with the rise of the Midland toy trades.⁸⁸

One of Robert Bill's sons, another Robert, served a similar apprenticeship in London; and following his marriage in 1757 to Dorothy Walton,⁸⁹ he moved to the Hague in Holland where he used his wife's settlement to set himself up as a jeweller.⁹⁰ This was another practice sometimes employed by the noble families, two contemporary examples being provided by the Egerton family of Tatton Park. The second son Samuel (1711-1780) was apprenticed in 1729 to Joseph Smith, a picture-dealer based in Venice. The agreement was that Smith was to be paid £100 pa. for the five years during, which Samuel was to be under instruction and that at the end of the period, the clerk was to be taken on as partner.⁹¹ The youngest son, Thomas Egerton was apprenticed to a Rotterdam merchant with a yearly salary of £40.⁹²

As Thomas Gilbert was to inherit the bulk of his father's estates and industrial interests, it seems clear that John's future either lay as a modest farmer or in some form of industrial enterprise. His father's death cut short his apprenticeship in Birmingham and determined the

pattern of his future career. As his brother was still completing his legal training in London, John returned to Cotton where he ran the family estate and maintained their mining interests.⁹³ At the age of seventeen he began the second phase of his education, that in estate management and this early experience coupled with natural flair must have commended him to future employers. Two years later, he married Lydia Bill,⁹⁴ who brought him a marriage settlement of £300. As John was not old enough to make a will, the marriage settlement made ample provision for Lydia and any children of the marriage.⁹⁵ Thomas Gilbert was forty-two years old when he married Ann Philips in 1762.⁹⁶ As Thomas's mother had also been a member of the same family, it indicates how closely alliances were forged between neighbouring families of gentry.⁹⁷ Thomas made his fiancée a present of a lottery ticket, which yielded a most unusual and fortuitous wedding present in the form of a £10,000 prize.⁹⁸ As there was a strong convention whereby a wife's portion was used to purchase land which was added to the estate settlement, it is reasonable to suppose that Thomas used the money to make purchases of land, as for example, at Goldenhill in 1760. He may also have used this windfall to finance his investments both at Lilleshall and in the Trent and Mersey canal. If this marriage marks the success of the family's tactics in a monetary sense, then the grant of arms to Thomas Gilbert in December 1759 marked the climax of one phase of their social ascent.⁹⁹

Plate 3

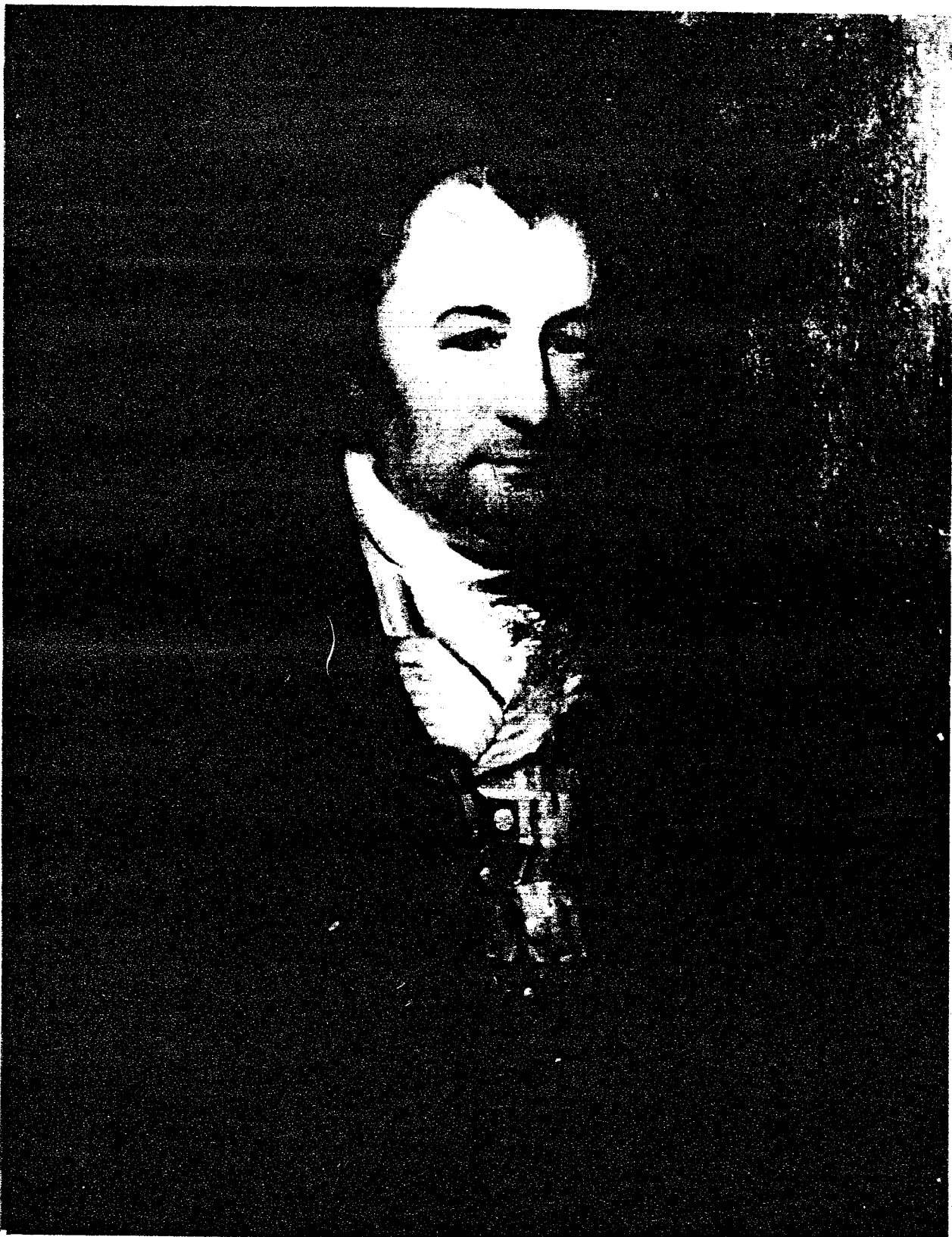


ARMS GRANTED TO THOMAS
GILBERT IN 1759

Chapter Two

LAND STEWARDS

In medieval times, the royal household included a steward, who 'was always close to the King, an intimate.'¹ Such individuals also appeared in the establishment of the barons and the knights, where they had general oversight of their master's household and estates. As many of these estates were widely scattered and the steward was required to remain close to his master to regulate his household, it became necessary to appoint bailiffs also, who would look after component estates or farms.² These roles remained largely unchanged until the eighteenth century, when the increasing complexities of estate management were responsible for considerable changes in the work undertaken by such individuals. This was made necessary by the agglomeration of estates, frequently very scattered, beginning with the sale of monastic lands in the sixteenth century; and continuing with acquisitions by marriage and purchase during the following two centuries. Estate improvements of a more scientific nature were to ensure that the people occupying these positions would have to be something more than glorified husbandmen. Sometimes, a progressive landowner would employ an additional functionary, in the form of a surveyor. This person would primarily be concerned with the measurement of land, but in the case of Sir Harvey Bagot (of Field, near Uttoxeter), he was involved in calculating the quantities of wood supplied to make charcoal for the local iron industry. In a list of employees, the 'Steward' appears first, followed by the 'Baylif' and the 'Surveyor'.³



JOHN GILBERT (1724 - 1795)

Isolated estates would sometimes be the sole concern of a bailiff as was the case with the Alton estate of the Earl of Shrewsbury. A Mr Hattfield held the position of 'baylye' there, in 1608⁴; and Richard Bill was still termed 'baylife' in 1702.⁵ On many estates, Richard Bill would have been styled 'steward'; or as the eighteenth century progressed 'agent', which could be qualified by various prefixes: so chief-agent, or estate-agent, or land-agent.⁶ When John Gilbert arrived at Worsley in 1759, it was to be the Duke of Bridgewater's 'steward';⁷ and at that time Thomas was also described as 'steward to the duke.'⁸ Meanwhile, on Earl Gower's estate at Trentham, John's brother-in-law was described as his 'agent.'⁹ So it can be seen that by the eighteenth century the terms 'steward' and 'agent' had come to be virtually synonymous, local custom being the deciding factor in which one was used. The office of steward was not simply used in a rural sense, in as much as it implied someone employed to manage a country estate. Thomas Fenton was summoned to Trentham by Thomas Gilbert, in 1776; to be offered the stewardship of Earl Gower's Newcastle estate, which he readily accepted.¹⁰ Both Fenton and his predecessor, Nathaniel Beard, had been Mayors of Newcastle, a clear indication of the relationship between the Earl's political interest in the borough and the allocation of this post.¹¹

Professor Mingay in his study of the eighteenth century land steward has observed that they were 'recruited from

a wide field - lawyers, farmers, merchants, ironmasters, army officers, senior domestic servants - almost any persons sufficiently well known and respectable to inspire confidence as to their honesty and ability. They were essentially middle class, however, since education and some financial standing were requisites for the post.¹² Most stewards were lawyers or farmers, the younger sons of country gentlemen or gentlemen farmers in their own right. Numerous lawyers acted as stewards, since much of the work was of a legal nature and disputes were relatively common. This caused certain agricultural writers to advise against such appointments because a lack of skill in husbandry would make them disinclined to introduce agricultural improvements. Such observations may have had some substance, but men like Thomas Gilbert had been raised on farms and through their estates, maintained an interest in agriculture.

It was not always easy for an outsider to break into these appointments, and family connection was a vital recommendation, and sometimes almost a prerequisite. John Coyney was the 'baylife' to the Earl of Shrewsbury at Alton in the late seventeenth century;¹³ and another member of the family held the same post some fifty years later.¹⁴ In the intervening period, it was held by the Bill family, passing on the death of Richard Bill in 1716, to his son Robert Bill; who was the father-in-law

of John Gilbert.¹⁵ At the end of the century, a Charles Bill was acting as agent to the Earl, at the time that the Uttoxeter Canal was under construction.¹⁶ The Bills were also closely connected with Earl Gower's Trentham estates, William Bill (John Gilbert's brother-in-law) being agent there from the 1760s until 1774.¹⁷ Interestingly, Charles Bill (William's elder brother) qualified as a barrister like Thomas Gilbert; whilst their two younger brothers, William Bill and John Gilbert, became agents or stewards to noble houses.¹⁸

The family connections went even further than this. Elizabeth Bill (John Gilbert's sister-in-law) married a Michael Barbor in 1754,¹⁹ possibly the 'Ensign Barbor' who served in Earl Gower's Regiment.²⁰ One of their sons, Robert Barbor also appears to have taken up the law and he was working as an agent for the Marquis of Stafford (previously the second, Earl Gower) by 1797.²¹ In 1803, he wrote again to the Marquis seeking a position; and the letter reveals a great deal about the hereditary nature of such positions and the interrelationship between agencies in the two estates:-

'The acquaintance your Lordship has had with my family and connections and the friendship and patronage which both my father and myself have in succession been honoured with The favourable notice of my late, most respected Patron, the Duke of Bridgewater, which was

continued to me for near twenty years to the time of his death, was originally issued to me from the same source, your Lordship's Patronage.'²²

The presence of Michael Barbor in London, by 1760²³ and the address 'Charterhouse' on the above letter, suggest that both father and son undertook work in the capital for both Earl Gower and the Duke of Bridgewater.

Mary Gilbert, a younger sister to Thomas and John, married Thomas Birds of Bakewell and although he did not take up an agency, his sons did.²⁴ David Birds was making payments in respect of legacies and debts for the trustees of the Duke of Bridgewater, between 1804-1805; and it seems reasonable to suppose that he had enjoyed some sort of agency during the Duke's lifetime.²⁵ Another son, or possibly grandson, William Birds was acting as an agent to the Earl of Shrewsbury at the time that he began the redevelopment of his Alton estate.²⁶

John Farey identified the need for another stratum of agents:

'on large estates, especially where they lie in detached and scattered parts, it is considered necessary to have other assistants, as a woodward, land-reeve or ground officer, a clerk or under-steward, a law assistant or solicitor, and a surveyor. As the under-steward, a tenant's

son who has been properly educated, and is fully acquainted with farming, is the most suitable and proper person that can be found for the business.'²⁷

Here again family connections appear as being of paramount importance. John Gilbert's eldest son, Thomas, assisted his father with the management of the Worsley estate, as well as with the construction of the Bridgewater Canal to Runcorn.²⁸ By 1776, he was negotiating with the Mayor of Liverpool over proposals to extend the duke's dock at that place.²⁹ The younger Thomas does not appear to have been the Duke's agent there, for in 1778, Thomas Gilbert sent instructions to John to 'discharge the 2 Mr Banks's as he (the Duke) is very sensible how much his affairs suffer under their present management at Liverpool.' John Gilbert may have been trying to obtain an agency or stewardship for his son, Thomas; as this same letter continues: 'as to obtaining a Land place for the young man, that is not an easy thing to get - it would require both time and good Interests to accomplish - he (the Duke) will talk with you upon it when he sees you.'³⁰ Robert Gilbert, John Gilbert's second son, was 'educated for the church' and as the Reverend Robert Gilbert, he was given the Duke's 'second best preferment at his disposal to the amount of about £1200 per annum.'³¹ This was the living at Settrington, near Malton in Yorkshire, which he held from 1775 until his death in 1820.³² The

appointment was not merely a clerical one as he was involved with some agent's work and improvements to the estate.³³ Possibly, Thomas Gilbert's eldest son's appointment to the living at Little Gaddesden, near the Duke's main seat at Ashridge, also involved him in certain work of the same nature.³⁴ The family involvement was completed by the younger John Gilbert, who like his father was employed mainly on the Worsley estate. After his father's death in August 1795, the younger John Gilbert left the Duke's employment and with his mother moved 'to Barton House early in 1796.'³⁵ Unlike most of the family, he appears to have been of a too independent nature and his relationship with the Duke deteriorated rapidly.³⁶

A great estate in the eighteenth century was really a complex of enterprises which in addition to agricultural pursuits also embraced mining, quarrying, timber production, transport undertakings, housing developments and a host of miscellaneous industrial undertakings. They represented, consequently, one of the largest concentrations of capital and productive capacity that was known, and its control, administration, and development called for someone with managerial capacity and a wide range of technical knowledge and experience. The Duke of Bridgewater had an annual income of £106,000 in 1802; of which some £75,400 was derived from his estates and

passed through the hands of various agents. The chief portion of this, a figure of £49,000 came from the: 'Canal, Lancashire Estates & Cheshire Estates & Dock at Liverpool.'³⁷ John Gilbert, towards the end of his employment with the Duke, was responsible for the collection of a figure approaching £50,000, and for collective properties worth in excess of a million pounds.³⁸ Thomas Gilbert had oversight of all the Duke's affairs, despite the muddled statement made by Robert Lansdale in 1843, that he was merely the land agent for only six out of the twelve of the Bridgewater estates - 'his grace's Shropshire, Northampton, Bucks, Herts, Durham and Yorkshire estates.' But in fact his responsibilities were for the general oversight and running of the total entity.

John Farey, who had been 'land steward' for the Duke of Bedford at Woburn, from 1792 until 1802, wrote a very full account of the duties of such a person.⁴⁰ The account is so detailed that it almost reads like a job specification for what his contemporary, J. Lawrence, termed 'the modern land steward.'⁴¹ The match between the requirements outlined by Farey and the qualities, skills and knowledge possessed by John Gilbert is very striking; and this must mark him out as one of the first, if not the first, of the new breed of professional land agents that developed during the eighteenth century. Thomas Gilbert, on the other hand was cast in a more traditional role, that of the lawyer⁴² who also dealt with accounts, but at

a higher level than the mere bookkeeper, or embryonic accountant. In as much as the early methods of industrial management were borrowed from the great estates, he should be seen more in the role of legal adviser and financial director. The major difference being that employers like the Duke of Bridgewater had the overriding say in policy formation, as Malet has demonstrated.⁴³

Age was considered a primary qualification, for as Farey points out: 'stewards should have attained that thorough and correct knowledge of the business of life which ought not to be expected earlier than the middle age.'⁴⁴ The eighteenth century view of 'middle age', however, was different from the contemporary one; for John Gilbert was thirty-five on appointment and John Farey was only twenty-six.⁴⁵ Employers were sometimes concerned that 'no material part' of their steward's time, or 'attention should be engrossed by their own private concerns';⁴⁶ but in practice many stewards developed other enterprises and frequently enlisted their employers as partners.

The main concern of any eighteenth century land steward, provided that he was a 'resident manager',⁴⁷ was agriculture. John Gilbert came from stock that could be best described as 'Gentlemen farmers';⁴⁸ he, himself had been brought up on a farm. When he returned from Birmingham to run the Cotton estate, he was already to have control of a

considerable holding at the young age of seventeen.

'Agriculture,' wrote John Farey, 'is considered as the only firm foundation on which the other acquired attainments can be securely reposed. It is not more essentially valuable in the superintendence, than in the improvement of an estate.'⁴⁹ John Gilbert was responsible for a number of improvements on the Worsley estate, but his attitude to improvement is perhaps best seen through the interests of his son. The younger John worked with his father at Worsley and this clearly shaped his outlook when it came to agricultural practices. He was to be an early vice-president of the Newcastle-under-Lyme and Potteries Agricultural Society,⁵⁰ whose aims were to encourage s:-

'spirit of industry, emulation & improvement in husbandry; as well as by affording an easy opportunity for the communication of rural facts, observation and experiments, together with the most useful modes and practice.'⁵¹

His father may not have belonged to such a society, but he was certainly interested in 'experiments' and 'practices', as his work at Worsley demonstrated.

The most remarkable of these improvements was the draining of the Duke's portion of Chat Moss, 'a peat bog of immense size by computation 6000 acres.'⁵² This operation was linked with the construction of the

Duke's Canal which was extended gradually into the very heart of the Duke's holding, the first 'gutters' being cut in 1760 or 1761.⁵³ Problems were encountered with these drains as the soft, spongy peat was so mobile that it soon closed up again; and 'large bodies of peat' sometimes rose from the bottom of the branch canal to block the channel.⁵⁴ Such problems were overcome by patience and a systematic policy of dumping around the banks of the branch canal, the sole purpose of which had been to facilitate the dumping of 'all the rubbish which was necessarily brought out of the suff and coal pitts.'⁵⁵ If the Worsley Canal scheme is seen as the answer to a number of problems that will be described in Chapter Three; then this scheme of John Gilbert's must be seen as an extension of the same kind of logic. Not only was he able to dispose of the 'spoil' from the mines, but at the same time he employed the 'spoil' to act 'much like marl' and so many acres of previously unusable land could be gradually brought into production.⁵⁶ Gilbert was to use the same tactic on Earl Gower's Lilleshall estate, although it was the overburden from the limestone that was dumped in this instance.⁵⁷ The idea may have come from his father, Thomas Gilbert who when working the Clough Head Colliery with Robert Bill, had dumped 'Pitt Lowes and Stone' to form an access road known as 'the Causey'.⁵⁸

Dr. Aikin mentions earlier schemes of drainage in the moss

areas of Lancashire in the late seventeenth and early eighteenth century, but he adds that they had limited success.⁵⁹ The presence of a canal added a whole new dimension to such improvements, as demonstrated by the case of Trafford Moss which was 'manured' with marl and 'compost brought by canal from Manchester.'⁶⁰ John Gilbert's steady progress at Chat Moss appears to have attracted the attention of other landowners and one of these, Thomas Eccleston, enlisted his help with another scheme in 1778.⁶¹ Eccleston, incidentally, was the first person to pay public tribute to John Gilbert's achievement at Worsley, for he wrote that he 'had judiciously planned, and happily executed the astonishing works of his grace, the duke of Bridgewater.'⁶² The project involved the drainage of Martin-Mere, a large pool and area of bogland, near to what is now Southport. Gilbert surveyed the area, drew up a plan and assisted Eccleston with the direction of the undertaking, including the legal element of obtaining leases. He also designed a series of 'flushing-gates' and encouraged Eccleston to use 'a draining or guttering plough.'⁶³ In all these respects, he was fulfilling the role of a good agent or steward, except that in this instance he was acting in a freelance capacity. Gilbert was acting as a consulting land-agent and engineer, for as will be seen later, these two emergent professions were often combined in eighteenth century land stewards.

John Farey felt that 'land surveying was another requisite qualification' needed by a land steward.⁶⁴

By this he meant surveying for the purpose of measuring and mapping estates, although by the eighteenth century there was a growing body of professional surveyors to undertake such tasks.⁶⁵ The possession of such skills by John Gilbert is indicated by his statement before a House of Commons committee, in 1758, that he 'attended at the Levelling and Measuring of the ground' for the first Bridgewater Canal.⁶⁶ Farey does not list a knowledge of geology amongst the desirable attributes of a land steward; which is curious, unless he considered it to be a too specialised branch of knowledge. After leaving Woburn, Farey set up as a consulting surveyor and geologist in London, following closely the principles of William Smith.⁶⁷

Smith was one of the most outstanding practical British geologists, whose achievements were all the more remarkable as he was self-taught, and received little professional or financial support from others. He was the first to recognise the importance of fossils in identifying the chronology of rock-strata on his country-wide travels as a surveyor for the construction of canals and bridges.⁶⁸ The sciences of surveying and prospecting were closely related, and the Worsley scheme could not have been conceived by anyone who did not have a detailed knowledge

of the geological structure of the area. This could be partially obtained from old outcrop workings, but John Gilbert also had borings made before finalising his plan.⁶⁹ The collection of such information could be dangerous, as John Gilbert knew from his close escape during a fire-damp explosion in one of the Lilleshall levels, which left the miner who was assisting him, permanently crippled.⁷⁰

The Woburn estate had another important functionary in Robert Salmon, who was variously described as 'Resident Surveyor' and 'resident architect and mechanist'.⁷² His actual title may be the subject of some doubt, but his role was not as he was the 'inventor of many useful and valuable surgical instruments, implements of agriculture, hydraulics, etc.'⁷³ Farey, his one time colleague at Woburn, felt that stewards ought to have 'some knowledge of mechanics, and the other sciences that are requisite to the business of an engineer, may be highly useful in prosecuting the improvements incidental to landed property.'⁷⁴ John Gilbert certainly had such a knowledge and it developed as he became more advanced in years and experience. At Worsley, he called Brindley in to assist in the work there, for Brindley as a practical millwright knew about the practical construction of machinery and how to utilise water-power.⁷⁵ But some twenty years later, at Martin Mere, Gilbert was able to exhibit an understanding of what might be termed the millwrights secrets.

Likewise, in the Boulton and Watt papers, there are engine drawings accredited to John Gilbert, which show that he took an early interest in parallel motions and beams.⁷⁶ The drawings could have been made in connection with the rotative, sun and planet engine that was installed at Marston rockpits, under an agreement dated 1st January 1789.⁷⁷ The younger Matthew Boulton was a childhood friend of John Gilbert and the brothers had bought their first engine from him some ten years earlier.⁷⁸ The younger John Gilbert may also have spent some time at the Soho factory, but this did not prevent him from gleefully pointing out that some of the components sent for repairs to the Marston engine, lacked fixing holes and were thus useless.⁷⁹

John Gilbert employed a number of what would be termed consulting engineers at Worsley. James Brindley is the best known, but at the time of his arrival at Worsley he was still calling himself a 'millwright'.⁸⁰ Indeed most of the 'other ingenious persons' employed by the Duke were millwrights, including Ashton Tonge who designed and constructed an impressive water-engine, which Sir Joseph Banks saw during his visit to the works.⁸¹ James Brindley had erected a water-engine at Trentham Hall for Earl Gower in 1758⁸² and another at Cheadle for the Gilbert brothers in 1759.⁸³ Aikin describes Gilbert as meriting 'a distinguished place (among the) other ingenious persons',⁸⁴ employed by the Duke, a statement

that confirms his knowledge, if not practical skill, of mechanics. The Gilbert brothers introduced Brindley to the Duke and this was part of an on-going policy of recruiting talent and evaluating new ideas.⁸⁵ Thomas was also very actively involved as revealed by a letter that is very tantalising as it is incomplete:

'At Lady Dumfries's desire, I met a Mr Gilbert as he passed to England. He is a member of Parliament. He comes from a mining county, and was desirous to have a few specimens of the different kinds of white ore, which I carried down. He gave me some account of the mines in his county, and made inquiry concerning the nature of the mines here. He likewise wanted much to be informed concerning the steam carriage, and from what I told him of its power, he said it would be a great affair for the Duke of Bridgewater on his canals, and desired me to inform you that if he could (end)'⁸⁶

This little known letter adds a completely new dimension to the Duke of Bridgewater's involvement with steam tugs, and William Symington, the builder of the Charlotte Dundas.⁸⁷ The letter written in 1786 was concerned with a steam powered road carriage, which Thomas Gilbert apparently thought could be run along the towpaths of the Duke's canals to pull his boats and barges. This idea was not developed until 1888, when the first experiment with locomotive towing was carried out on the Middlewich branch of the Ellesmere and Chester canal.⁸⁸ Presumably, Thomas

Gilbert communicated his idea to the Duke, who although he did not take up the idea was nevertheless very interested in the steam tug developments of the 1790s, and subsequently ordered eight tugs along the lines of Symington's Charlotte Dundas.⁸⁹

The employment of these skilled workmen, who by the end of the century would be known as engineers, created certain problems of a management nature. Brindley was frequently tetchy and he disliked working under John Gilbert's supervision, but there could be even more threatening problems.⁹⁰ Josiah Wedgwood records a 'mutiny' among the canal-cutters on the Bridgewater Canal in 1773, which John Gilbert had to deal with.⁹¹ Before 1765, a group of Earl Gower's miners were 'proceeding to Trentham to pull down the Hall', until confronted by the Reverend John Middleton who managed to convince them of the 'rashness and wickedness of their conduct', whereupon they dispersed.⁹² Such incidents indicate that the control exercised by land stewards had to be firm, but tempered with an almost paternal compassion. During John Gilbert's lifetime tips given to the boatmen, by visitors to the underground workings at Worsley were paid into a fund that he drew on to make payments to miners' widows and from time to time for ale for the boatmen.⁹³ His son, John had a similar nature and made a generous donation to a Provisions fund for poor potters,⁹⁴ as well as distributing 'among his poor work people, a

fine fat cow.⁹⁵ These measures were associated with periods of food shortage, when employers and agents assumed responsibility for their work people, often purchasing food to be sold at cost price or lower.⁹⁶

At the time of the younger John Gilbert's death in 1812, he is said to have 'devoted nearly one thousand pounds per annum to genuine acts of discriminate charity.'⁹⁷

Above all, the agent or steward was responsible for keeping the estate accounts; or in the case of a large grouping of estates, a chief agent would check the accounts for individual estates and compile a general account.

Between 1760 and 1788, Thomas Gilbert audited the Lilleshall accounts; and made payments in respect of rents, taxes, pensions and sums sent to Earl Gower and other members of the family.⁹⁸ He relinquished this responsibility to John Bishton, who after 1791 took over Thomas Gilbert's role as chief agent and auditor.⁹⁹

This pattern of accounting was also followed on Earl Gower's estates at Trentham (which for accounting purposes included Newcastle), Wolverhampton, Lichfield and on the smaller estates.¹⁰⁰ From these accounts a general account was compiled with the receipts analysed under: Rent receipts; profits from timber; profits from collieries; profits from farms; cash from his Lordship; and incidental receipts. Expenditure was broken down into: cash paid to my Lord; building and repairs; rents; annuities; charities; purchases and interest; tradesmen; servants wages; servants board; gardens; husbandry; draining and

improvements; housekeeping; lewns and taxes; travelling; barley, oats and straw (animal feed and bedding); rent day expenses; cattle bought; woods and contingent expenses.¹⁰¹ Likewise, on the Bridgewater estates, each estate kept a separate set of accounts, which after auditing by Thomas Gilbert were used to draw up a general statement. The same practice was followed for the Bridgewater estates, for as Robert Lonsdale recalled: 'He came to Worsley every Xmas 'till 1795 to examine and state His Grace's accounts, staying about 10 days and taking the General Accounts with him for his Grace's eye.'¹⁰²

The many and varied nature of a steward's or agent's duties meant that he often needed help, especially of a clerical nature. John Gilbert's letter writing was a serious weakness and indicative of his limited formal education, so that he had an assistant in Robert Lansdale to help him 'examine vouchers, make up books, copy letters, &c.'¹⁰³ Lansdale also observed that he (John Gilbert) was 'by profession.. a Collier Miner, Canal Navigator a practical, persevering and industrious outdoor man, (who) loved mines and underground works.'¹⁰⁴ There were other assistants as well, people like Thomas Kent, who was chief cashier and accountant at Worsley.¹⁰⁵ Thomas Gilbert also employed men who helped him with his estate work and his private business. John Johnson and William Garrett were his two clerks at the time of his

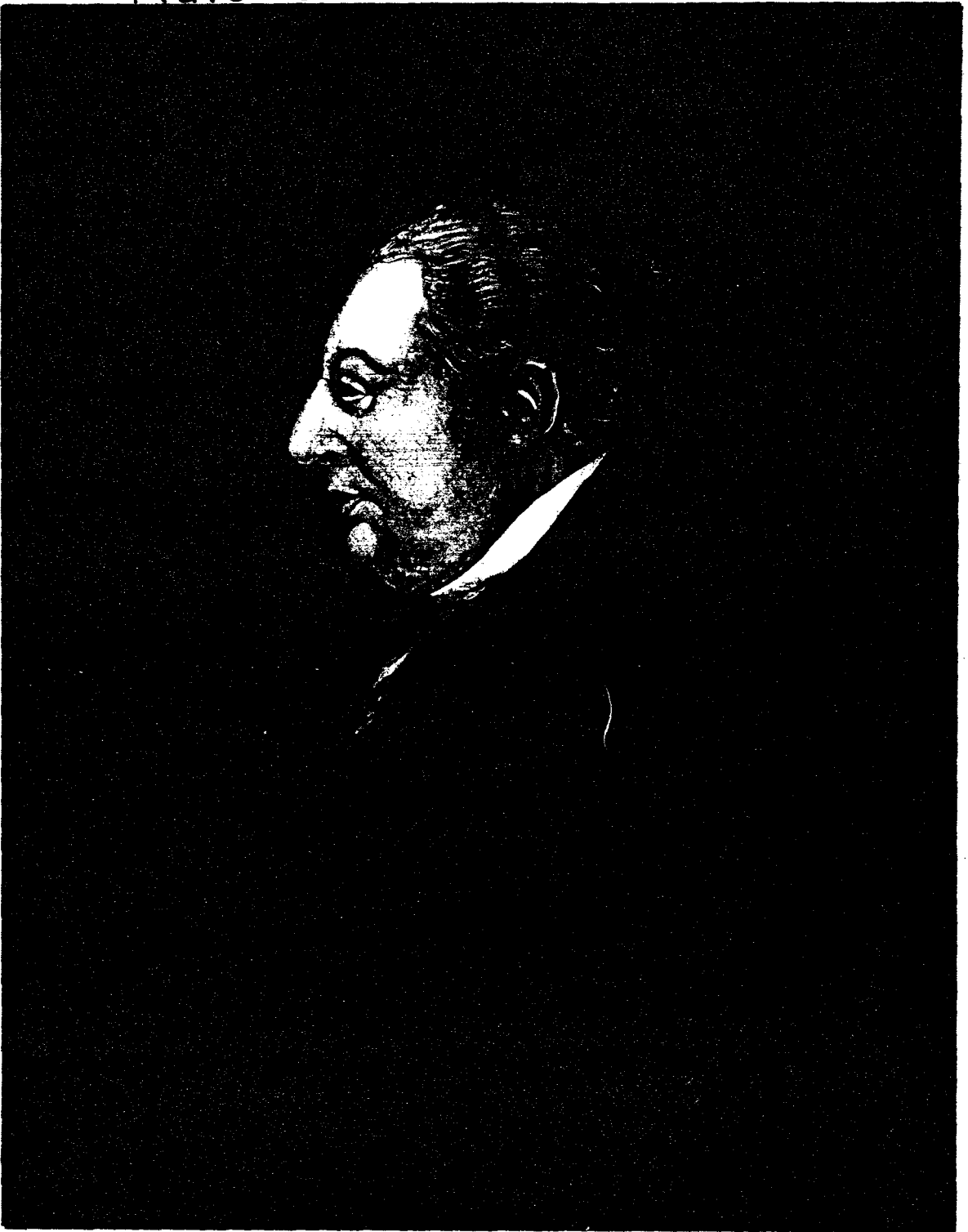
death in 1798, but it is clear that he employed more assistants during his active years.¹⁰⁶ One of these was Francis Adams, who was in Thomas Gilbert's employment by 1769,¹⁰⁷ but who at the time of his death had found a post with the Duke of Bridgewater.¹⁰⁸ These assistants did not become agents in the course of time, presumably because they did not have sufficient social status and experience at the relevant level.

Thomas Gilbert's practice as a steward or agent really came about because of his limited success as a barrister.¹⁰⁹ The writer of his obituary notice relates that he never 'made any very conspicuous figure, either in the courts at Westminster, or on the circuit.'¹¹⁰ This meant that his prospects of making a really successful career in the law were limited, as 'seldom, if ever, were men raised to the Woolsack or the Bench who had not distinguished themselves at the Bar.'¹¹¹ So the other way of improving his 'fortune' was to attach himself 'to a noble family, that possessed great influence in his neighbourhood.'¹¹² There was nothing novel in this strategy and a number of lawyers had employed it to their considerable advantage.

One lawyer, who had been very successful in this way, had bought lands in the manors of Cheadle and Kingsley in the late seventeenth century.¹¹³ He was Joseph Banks, steward to the Dukes of Norfolk, Leeds and Newcastle; and

a Member of Parliament. Banks also acquired estates in Lincolnshire, where he bought Revesby Abbey for his son.¹¹⁴ This son, also called Joseph, became Lord of the Manor of both Cheadle and Kingsley;¹¹⁵ and in 1721 he made an agreement with John Philips to mine coal at Kingsley. The document was witnessed by George Gilbert and his son Thomas (1688-1741/2),¹¹⁶ who had married Elizabeth Philips, daughter to John. So the potential of a career in law and the benefits of obtaining a stewardship, may have been realised in the Gilbert family, even when the future agent, Thomas Gilbert was still an infant. The first Joseph Banks had been successful in founding a gentle family and that was clearly the aim of the Gilberts at that time.¹¹⁷

The post of steward or agent could pay quite well. On smaller estates, a salary of £50, with a house and a small farm on the estate, was the normal pattern of remuneration.¹¹⁸ This was the exact package given to the steward at Worsley, before John Gilbert's arrival in 1757.¹¹⁹ But he was appointed with a salary of £200 per annum,¹²⁰ raised to £300 in 1762;¹²¹ plus the tenancy of demesne farm on very lenient terms.¹²² In addition, he appears to have lived rent free in the Brick Hall at Worsley, which was still one of the Duke's residences.¹²³ The arrangement may have been the same as that worked out between the Earls of Shrewsbury and their agents at Alton. The agent leased



FRANCIS, THIRD DUKE OF BRIDGEWATER,
(1736 - 1803)

Alveston Lodge, described as 'a comfortable homestead with farm buildings adjoining', from the Earl, who had rooms reserved for his private use within the lodge.¹²⁴

Whatever, the precise nature of the arrangement, the opportunity to run a farm must have been a profitable sideline.

Some agents received much higher salaries, like the £700 given to the Duke of Bedford's 'agent-in-chief' in 1732, and by the end of the century the Duke of Devonshire's agent was paid £1,000. But as Professor Mingay has noted: 'these two posts, of course, were at the very top of the profession, and the general run of steward's salaries was considerably more modest.'¹²⁵ Thomas Gilbert occupied a position that was equal to that of any steward in the land, especially since through him the estates of the Duke of Bridgewater and Earl Gower were run as a sort of loosely structured combination. But despite this, he does not seem to have been paid a salary as such. He was probably paid a small retainer as legal adviser and 'receiver-general', but in the main, he charged for the work that he actually did. This is confirmed by many of the estate papers being accompanied by Gilbert's own account for legal work completed during the year,¹²⁶ and he appears to have had a monopoly of this kind of work.¹²⁷ John Gilbert also received special payments for the additional work involved in obtaining the Acts of Parliament for the Bridgewater canals.¹²⁸

Another source of income for agents was freelance work as either legal or technical consultants. John Gilbert's involvement with the draining of Martin Mere has already been described, but it was his mining expertise that was in greatest demand. In 1768, he made an inspection of some of Earl Gower's collieries in the Longton area, and his report contains recommendations about improving the drainage and the need 'to get proper Articles Executed to confirm the agreement.'¹²⁹ John Gilbert was also employed by Ralph Oakden and Partners of Stafford, to construct a boat level for them into their mine at Castleton, after the fashion of the Worsley one.¹³⁰ The Speedwell level was excavated between 1774 and 1781; and during its construction, John Gilbert made extensive use of gunpowder to blast out the tunnels. The venture was not a success as there was insufficient lead ore to make it pay.¹³¹ Earlier, in 1766, John Gilbert had been drawn into a partnership to work a lead mine, near Winster, which involved the construction of another boat level. The Hillcarr Sough mine had as its principal shareholders, the Barker family, agents to the Dukes of Rutland and Devonshire, and it was their idea to bring in John Gilbert.¹³²

Thomas Gilbert also did some estate work, mainly of a legal nature, for Lord Waldegrave, Earl Gower's brother-in-law. He spent some days with the Duke of Bridgewater

at Lord Waldegrave's house in 1778, and the next year coal was discovered on his estate at Radstock. This could imply that John Gilbert may have been called in to look over the estate, but there is no evidence to confirm this view. The colliery was worked by a partnership, who fell behind with the payment of royalties to Lord Waldegrave, so Thomas Gilbert was involved in writing a number of 'pretty smart letters' before the matter was settled. One of Gilbert's letters also refers to a farm and the need for 'a proper course of Husbandry, to prevent it being made impoverished;' a further indication of his agricultural knowledge.¹³³ Again, this work would have been paid for on a fee basis as would John Gilbert's work as a consulting, mining engineer.

Dr Trinder has identified early examples of agents, who 'leased some of the enterprises on their masters' estates and worked them in their own right ultimately (acquiring) sufficient capital to extend their operations elsewhere.'¹³⁴ This should not be taken simply as an indication of a generous master, for employers realised that the entrepreneurial flair of their agents could also benefit them through the development of their estates. Professor Richards has described Earl Gower as 'the eighteenth century aristocrat/industrialist par excellence,' but it was the Gilbert brothers who did so much to organize the large-scale capitalist enterprises on his estates.¹³⁵ The most striking example of this being the

formation of the concern known as Earl Gower and Company in 1764, to work the various mineral resources on the Earl's Lilleshall estate.¹³⁶ Earl Gower was to provide the capital and to allow the Gilberts to organise the exploitation of the mineral wealth on the estate, and in return he was to receive one half of all profits. They, for their part, were to receive equal shares in the other half of the profit. Earl Gower did safeguard his own income by leasing the workings to the Gilbert brothers and requiring them to sign a bond.¹³⁷

Once the Donnington Wood Canal was completed, then the coal, lime and ironstone resources could be exploited systematically, and the whole concern would become profitable. But the purpose of investing so much capital in the canal was to attract further investment, so increasing the profit from the sale of minerals and the collection of ground-rent. This additional investment was introduced by Richard Reynolds, who aware of the potential of the site, erected iron furnaces near the canal in 1772.¹³⁸ Such developments increased the demand for raw materials, and so the profits drawn by Earl Gower and the Gilbert brothers. Thomas Gilbert's interest in Earl Gower and Company were left to his nephew, David Birds; and in 1800, he was made a handsome offer by the Duke of Bridgewater, who was renowned for knowing a good investment when he saw one.¹³⁹ Another example of the employer/employee partnership is provided

by the Alston Moor enterprise, which will be discussed in a later chapter.

On a more modest level, there were the enterprises that were allowed on the estates with the employers involvement limited to that of landlord. Edward Coyney, agent to the Earl of Shrewsbury was a major shareholder in the partnership that operated the Alton lead smelting mill, under lease from the Earl.¹⁴⁰ On the Trentham estate, William Bill, Earl Gower's agent there, leased a flint mill as part of a partnership. He wrote in 1777 that 'our stonemill is likely to turn out very well, the Pottery trade is extremely good, and I believe we shall begin of another mill at Consall this summer.'¹⁴¹ They were successful in establishing the Consall mill and this was run in conjunction with a third flint mill at Kibblestone, near Stone.¹⁴² At Worsley, John Gilbert leased a mill which he converted into a mill for pounding black lead to make pencils.¹⁴³ But the Duke helped in other ways, including the use of his workshop and millwright at Worsley: 'to make an engine for pounding the Black lead.'¹⁴⁴ He also helped the firm of Worthington and Gilbert, canal carriers and in doing so sparked off the acrimonious dispute with the management committee of the Trent and Mersey Canal Company.¹⁴⁵

Finally, there was a less tangible benefit to the Gilbert brothers being employed by Earl Gower and the Duke of

Bridgewater. One writer said of James Brindley that he had unusual talents 'and under the patronage of his grace the duke of Bridgewater, they had an opportunity of being unfolded and exercised to their full extent.'¹⁴⁶ Afterwards, James Brindley liked to be known as the Duke of Bridgewater's engineer, even though the Duke had refused to offer him permanent employment.¹⁴⁷ Indeed, he built his second career as a canal engineer on his association and involvement with the Bridgewater canals. In a similar manner, John Gilbert had been given the opportunity at Worsley to demonstrate his talents and the practicality of his ideas. The success of his scheme was to ensure that he would be in demand as a consultant land-agent, mining engineer and canal engineer.¹⁴⁸

Chapter Three

THE DUKE'S AND EARL'S CANALS

Most of Britain's rivers were used for elementary transport purposes long before the start of recorded history, but little systematic improvement of river navigations took place until the fifteenth century when works were carried out on the Thames, the Lee and the Yorkshire Ouse. These improvements involved building artificial cuts or canals across the bends and it was an easy step from this to building a true canal to avoid a difficult section of a river. This step was taken for the first time in Britain between 1564 and 1566, when John Trew constructed the first Exeter Canal. Although it was only $1\frac{3}{4}$ miles long it incorporated Britain's first pound-locks, fitted with vertically-rising gates.¹

The art of improving and constructing navigations was much more advanced on the Continent at this time. In Germany, the first waterway to cross a watershed was constructed between 1391 and 1398. The Duke of Milan's engineer, Bertola da Novate, built the first canal to overcome the problem of a rising gradient by the use of pound locks in 1452-8. A later successor to the same post, Leonardo da Vinci, further developed the Duke's waterway network through his invention of the mitre lock, about 1485.² Some indication of the gap between British and Continental canal technology can be gauged from the fact that the mitre lock was not employed until the 1570s or 1580s in England.³ The first French canal of note was the Briase Canal, built between 1604 and 1642. During

the construction of this canal an even more ambitious scheme had been mooted to join the Mediterranean to the Atlantic Ocean. The vision of such a canal was the product of discussions between Francis I and Leonardo da Vinci, but it was too expensive a project and too technically difficult for the resources available to the King in 1516. By 1662 the scene was very different as Louis XIV now possessed the resources to see that the canal was built, and the 150 mile long canal had been completed by 1681. Voltaire typified the reaction of all who saw this Languedoc Canal (now called the Canal du Midi) when he wrote:

"Le monument le plus glorieux par son utilité, par sa grandeur, et par ses difficultés, fut ce canal de Languedoc qui joint deux mers."

In many ways Voltaire's words are reminiscent of the eulogistic descriptions of the early British canals that can be read in many eighteenth century newspapers.⁴ The Languedoc Canal included numerous locks, aqueducts and a 180 yard tunnel, meriting Hadfield's judgement that it was 'the first modern canal.'⁵ It quickly became something of a tourist attraction for foreigners, especially the English engaged in the fashionable Grand Tour. One such visitor in 1754 was the seventeen year old Duke of Bridgewater, who had specifically sought the permission of his guardians for a visit to the region served by these remarkable engineering works.⁶ No record of the Duke's impressions appear to have been recorded, but the subsequent hatching of the various canal systems around

Worsley reflect the impact of what he saw. The subsequent adoption of the Dutch treckschuyts as the model for the Duke's passenger boats, suggests that as he passed through Holland he also took a keen and observant interest in the Dutch system of waterways.⁷

Francis, Third Duke of Bridgewater, is generally credited with the building of Britain's first modern canal and it is undeniable that his first canal caught the public imagination when it opened in 1761.⁸ But two decades before, in March 1742, the eighteen miles long Newry Canal had been opened and the British Canal Age had begun. This canal was promoted so that the coal-mining area of Tyrone south-west of Lough Neagh could have a waterway link with the sea at Newry, and thence to the rich markets of Dublin. The engineers were E.L. Pearce and his employee, Richard Castle, a French Huguenot refugee who had made a study of continental waterways and was doubtless the more knowledgeable of the two. However, they were both dismissed and the role of engineer was undertaken by Thomas Steers from 1736 until the canal was completed.⁹ Steers was a remarkable figure who had spent four years in Holland in the 1690s, before returning to undertake harbour work in London.¹⁰ In 1715 he built Liverpool's first dock and then made the Mersey and Irwell Navigation under powers granted in an Act of 1720. Thomas Steers died in 1750, but he represents the link between the first British canal and what could be termed the first canal in England. His pupil, Henry Berry built this precursive

waterway under powers granted in an Act of 1755; nominally this involved making the Sankey Brook navigable, but due to its small size it seems certain that a canal must have been envisaged from the inception of the scheme.¹¹

The emergence of Liverpool as a great port and an increasing awareness amongst the merchant community of their Hinterland gave rise to the navigation schemes already mentioned. This awareness also gave rise to the Douglas and Weaver Navigations, both of which were authorised by Acts of Parliament passed in 1720. Steers was involved in both of these undertakings and was probably the main motivating force.¹² These developments caused Daniel Defoe to remark:-

'The situation of Liverpoole gives it a very great advantage to improve their commerce, and extend it in the northern inland counties of England, particularly into Cheshire and Staffordshire, by the new navigation of the Rivers Mersee, the Weaver, and the Dane, by the last of which they come so near the Trent with their goods, that they make no difficulty to carry them by land to Burton, and from thence correspond quite through the Kingdom, even to Hull, and they begin to be very sensible of the advantage of such a commerce.'¹³

So it is hardly surprising that the first survey in 1755 to determine 'the practicability of joining the river Trent with the Weaver or Mersey' was paid for by the Corporation of Liverpool.¹⁴ The Duke of Bridgewater's

schemes should also be seen against this background development and then the inevitability of his extending his system to the River Mersey (possibly through the Mersey and Irwell Navigation) becomes obvious. As will be demonstrated, the Duke of Bridgewater's achievement was not that of the original innovator, but more that of the entrepreneur who took existing ideas and combined them in a new way and with startling success. Although Charles Hadfield does not explore this idea in any great detail he provided a very neat summary when he wrote:

'Yet the credit for creating the heavy transport basis of the Industrial Revolution must go to the third Duke of Bridgewater, for it was his work that found time and place and need correct.'¹⁵

The influence of these local navigational works almost certainly exercised as much influence on the Duke of Bridgewater as had the impressive Languedoc Canal. But the Duke's canal could have met with only modest success had it not been for the central contribution of John Gilbert.

The myth that James Brindley was the genius behind the Bridgewater Canals has proved to be very durable, despite the findings of modern researchers.¹⁶ Samuel Smiles took the already cherished Brindley myth, and bending it to his purpose, succeeded in introducing an element of almost universal appeal, which further distorted the truth.¹⁷

Although accorded a limited importance by Smiles, the Duke of Bridgewater and John Gilbert (his Agent), sometimes take on the appearance of interested bystanders. One source which Samuel Smiles missed (or chose to ignore) was Abraham Rees' Cyclopaedia, (1819), which contains the only published biography of John Gilbert. The author of the actual article is not known for certain, although there are strong indications that it came from the pen of John Farey (Senior), a skilled engineer and noted writer on technical matters.¹⁸ In this detailed life, the following statements are particularly telling:

'Mr Gilbert's name has seldom occurred in connection with this very important and lucrative undertaking; and as he preceded Mr Brindley in this business, of which we have ample and satisfactory evidence, we thought that justice required a candid and impartial statement of the case.'

..... 'The tunnel was entirely executed as well as planned, by Mr Gilbert; who, being acquainted with Mr Brindley as a neighbour, and knowing him to be a very ingenious and excellent mill-wright, engaged his assistance in the conduct and completion of this arduous undertaking, and introduced him to the Duke for this purpose.'

..... 'Mr Gilbert was probably so modest and unassuming, that he did not, during his life-time lay claim to the honour which belonged to him, with respect to the Duke of Bridgewater's canals and collieries; and

we have introduced his name into the Cyclopaedia, in order to do him justice, without meaning to detract from the merit of his coadjutor and successor, Mr Brindley, to whom we have already paid ample and deserved respect under this biographical article.¹⁹

John Gilbert may have been 'modest and unassuming' as the author suggests, but a more likely reason was that in asserting his role he may have offended the Duke of Bridgewater himself. Unlike Brindley, John Gilbert was a salaried permanent employee of the Duke and both he and his family greatly benefited from the Duke's bounty. Quite simply, John Gilbert stood to lose more than he stood to gain. James Brindley on the other hand was self-employed and dependent on his reputation to earn him new commissions. Although there is no proof that he claimed the credit for the Worsley plans for himself, there is also no evidence that he made any positive efforts to set the record straight. Brindley's widow petitioned the Duke after her husband's death for non payment of salary for the years 1765 to 1772, stating that Brindley's 'plans and undertakings have been beneficial to His Grace's interest.' The original appeals were made through John and Thomas Gilbert and in a letter she wrote that 'I conceive it owing to this channel of application that no settling ever took place.' She did, however, acknowledge that in 1774, 'the late Mr John Gilbert paid my brother, Mr Henshall, the trifling sum of £100 on account of



JAMES BRINDLEY

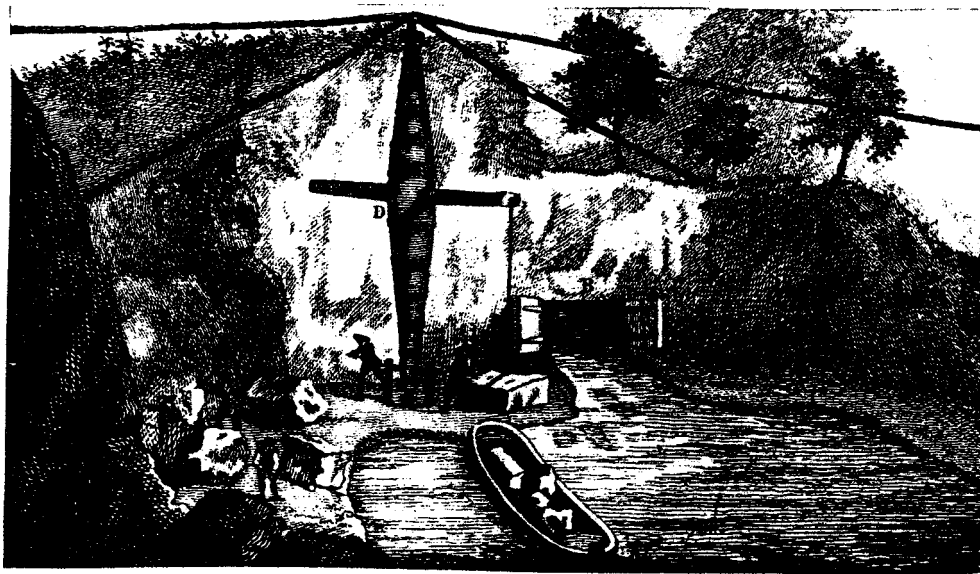
Mr. Brindley's time.' She wrote directly to the Duke of Bridgewater in 1801, but he did not even bother to reply. Not to be deterred she made a claim against the Duke's estate, following his death in 1803; and she seems to have been under the general impression that the Worsley scheme had been devised by Brindley.²⁰

This belief may have been fostered by her brother, Hugh Henshall who supplied Thomas Bentley with 'some raw materials' which were worked up into - 'The Life of Mr Brindley.' for Biographica Britannica.²¹ Indeed as Hugh Henshall took over Brindley's mantle, it would have been in his interests to make the most of Brindley's achievements. As many of Mrs Brindley's claims for compensation were sent through Thomas and John Gilbert, it must have been irksome for John Gilbert to read Mrs Brindley's exaggerated accounts of her husband's achievements.²²

The idea for a canal may have been that of the Duke or of John Gilbert, although credit for the novel scheme as an entity clearly rests with John Gilbert. One key questions which remains unanswered is where John Gilbert obtained his knowledge of canal engineering. His family were still living at Cotton in 1751 and indeed probably remained there until their removal to Worsley.²³ However, it is unlikely that his activities were confined to that area but the period of his life from about 1745 to 1759 is at best sketchy. He may have followed his brother, Thomas, into the service of Earl Gower, but there is no evidence for this before he became involved with the Bridgewater estates, perhaps as early as 1753.²⁴ Two

marriages point towards some sort of involvement with the Rochdale area,²⁵ and if he was travelling that far afield it seems likely that he was aware, if not acquainted with the various navigational schemes around the River Mersey. He may also have visited South Wales because of his involvement in the copper trade and seen for himself the navigational level at Clyn-du which was started in 1747, or the idea may even have come from a secondary source. For the Gilberts were involved in the Ecton mines and so was an individual called John Rotton. The name of Rotton also appears amongst the many firms who had copper smelting works at Swansea, although it has not proved possible to link these with the Derbyshire Rottons.²⁶

Thomas Gilbert, in his capacity as the Duke's steward directed his brother to examine the Worsley mines in 1757. John Gilbert was immediately struck by the possibilities of bringing the coal by water to the expanding market in Manchester;²⁷ and in this he was adopting an approach that was being implemented elsewhere in the area.²⁸ In a fashion reminiscent of James Brindley, John Gilbert is said to have 'secluded himself altogether from company for two days, at the Bull Inn at Manchester, to consider how this might be done by water-carriage.' The account goes on to state that 'the Duke was no less struck with the proposition suggested by Mr G than the projector himself.'²⁹



WORSLEY DELPH, c. 1770.

(Entrance to level -B)

John Gilbert's scheme was brilliant in the sense that it solved three engineering problems in a very simple way. If a sough could be constructed that was big enough to take boats, coal could be taken directly from the coal face to a wharf in Manchester. The springs inside the hill would fill the canal but at the same time the canal could be used to drain excess water from the mines. Such a navigational level had been constructed in South Wales by 1757 and two more were nearing completion.³⁰ They all served to drain mines and could be used to convey coal to the mouth of the mines, but the idea of linking them to a surface canal was the essential difference and original component in John Gilbert's scheme. An alternate source of inspiration may have been the Scot, Michael Meinzie, who took out a patent in 1750 which proposed to remove coal from the mine by a navigational level. His patent also covered a self acting incline and he proposed that boxes filled with coal could be drawn up shafts. This was an early suggestion of the container idea that was used in connection with the Bridgewater Canal and it lends weight to the notion that Meinzie provided some of the inspiration for the Worsley scheme.³¹

The first stage in implementing this scheme was to obtain an Act of Parliament and on 25th November 1758 'A Petition of the Most Noble Francis, Duke of Bridgewater' was laid before the House of Commons.³² William Tomkinson, the

Duke's Manchester agent and solicitor, presented further evidence to the House on 6th December of the same year. On this occasion he was supported by John Gilbert who exhibited the original canal plan, stating that he had 'attended at the levelling and measuring of the ground.'³³ Their combined evidence carried the day and the House agreed to bring in a Bill which was to be sent to a particularly large select committee and in due course the Bill was passed (23rd March 1759).³⁴ John Gilbert's contribution was that of Resident Engineer, but he was also clearly responsible for collecting the considerable body of evidence that supported the Duke's application. Now work could begin in earnest and John Gilbert was joined by his family at Worsley,³⁵ as clearly he would not have the time repeatedly to make the long trip back to Cotton. From this point in time, all his energies were needed to see the grand design through to completion. This first Act enabled the Duke to build a canal from his Worsley mines to Salford with a branch to Hollin Ferry, but this project on its own was of doubtful financial viability because of the restrictive clauses concerning the price he was allowed to charge for his coal in Salford.³⁶

The route of the main canal from Worsley to Salford was planned to run wholly to the north of the River Irwell, above the 82 foot contour and so avoid the need for locks.

By the end of 1759 it appears that a decision had been made to alter the route and powers were sought. The Duke's second Act (Royal Assent granted 12th March 1760) allowed the canal to be carried across the River Irwell Navigation by an aqueduct at Barnton; thus laying the foundations for the realisation of the prime aim of connecting Liverpool and Manchester by canal.³⁷ John Gilbert was again involved in collecting evidence and generally administering the affair, but in the Parliamentary Committee stage, James Brindley appeared to present significant evidence.³⁸ Brindley had arrived at Worsley on 1st July 1759 with his small band of craftsmen, to find work already under way on the soughs and canal.³⁹ He had 'rare gifts when it came to machinery and water'⁴⁰ and these abilities were to be employed in a complimentary way to those of John Gilbert. Brindley had erected a 'Mobile Water Engin' for the Gilbert brothers at the Woodhead Colliery, Cheadle, in May 1759; so they were well aware of his skills.⁴¹ Indeed, Dr Aikin describes Brindley as 'the author of a very ingenious improvement of the machine for drawing water out of mines by the contrivance of a losing and a gaining bucket.'⁴² Gilbert as an experienced mining engineer knew about tunnelling techniques and as an estate agent he had the skills of the surveyor. However, he did not have any practical experience of making water work towards a particular end. He appears to have learnt from the Sankey Navigation and

indeed he recruited men who had worked on that project for the Worsley canal.⁴³ Brindley as a practical millwright knew how to construct dams and leets, which provided him with the background knowledge and experience that could be scaled up and utilised around Worsley. Brindley, therefore, should be viewed as the consulting engineer and John Gilbert as the resident engineer, a point made by Sir Joseph Banks in 1767, when he wrote of the Duke of Bridgewater as 'author' and of his 'chief executor' and 'Mr John Gilbert.'⁴⁴ Banks continued his description of the canal works with an evaluation of James Brindley's contribution:

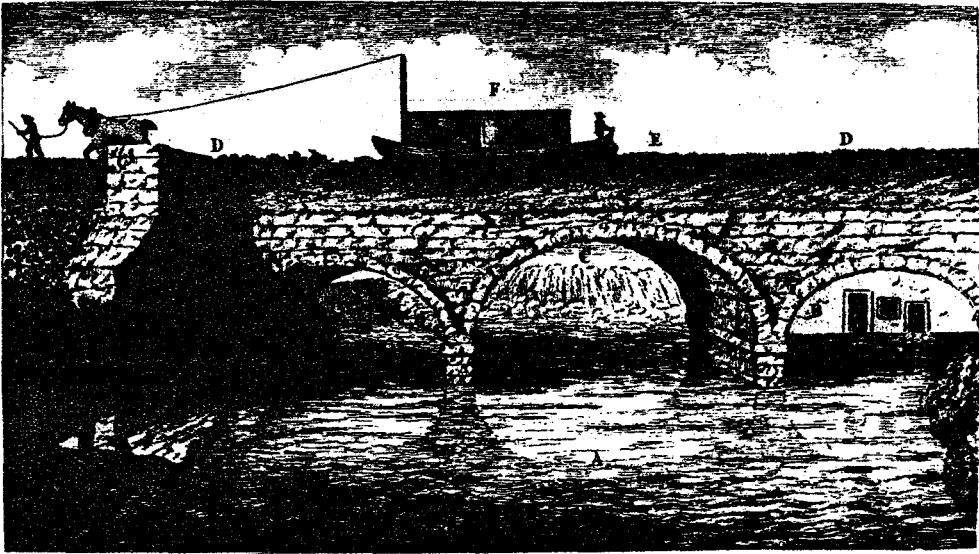
'Many useful and ingenious inventions were thought of and executed by Mr. Brindley who also did most of the Engineering work of the canal. He is a man of no education but of extremely strong natural Parts. He was recommended to the Duke by Mr Gilbert who found him in Staffordshire where he was only famous for being the Best Mill Wright in the Countrey.'⁴⁵

Banks also relates how John Gilbert displayed 'most indefatigable industry himself overlooking every part and trusting scarce the smallest thing to be done except under his own eye (as) I myself have been witness of.'⁴⁶ This leads into a consideration of one important aspect of the two men's character and status. During the construction of the Bridgewater Canal, Josiah Wedgwood observed John Gilbert 'engaged amongst his men' who had

'mutinied'. This suggests a manager who stood above his workforce but at the same time one who could keep them at the job in hand.⁴⁷ Brindley lacked this necessary detachment and this is brought home by a tart note in the Oxford Canal Company's Minute Book - 'the Engineer, Surveyor (Brindley) and Clerks of this Company do not associate or drink with any of the Inferior Officers or Workmen.'⁴⁸

A clear example of their relative roles is provided by the Barnton aqueduct. John Gilbert designed the structure and James Brindley was entrusted with the job of constructing it. Brindley appeared to be up to the task, but when he adjudged the structure to be complete and flooded it, one of the arches showed signs of buckling. The whole affair proved to be too much for Brindley who promptly retired to his bed at a nearby inn, leaving John Gilbert to save the structure and with it the creditability of the whole scheme. Brindley had laid too much weight on the sides of the arch and so Gilbert had to remove the clay and puddle it again.⁴⁹ His efforts were successful and on 17th July 1761, the aqueduct was again flooded and a flat carrying fifty tons was towed across fulfilling 'the most sanguine expectations of everyone present.' More than any other early canal work it was the Barnton aqueduct which symbolised the potential of canals; for as the reporter at the opening noted 'the canal is 38 feet above the navigable river under it.'⁵⁰

Plate 8



BARTON AQUEDUCT, c.1770.

In the conception and construction of this aqueduct, John Gilbert added incalculable momentum to the slowly awakening interest in canals.⁵¹

Amid a blaze of national publicity,⁵² the Duke and his agent set about obtaining their third Act of Parliament, which would enable them to construct the canal between Manchester and Liverpool. This bill met determined opposition from a body of Cheshire landowners, who protested that the canal would divide their land and even reduce its value by causing it to become waterlogged. The Duke's main opponents were Lord Strange and Sir Richard Brooke, but on the critical vote the canal lobby won by 127 votes to 98. The Duke's third Act received the royal assent on 24th March 1762, but the confrontation had not been finally settled. Brindley gave valuable evidence for the third Bill, but he was also supported by the authoritative submission of John Smeaton;⁵³ and he continued in his employment as consulting engineer. Increasingly, he appears to have found it difficult to work under John Gilbert's direction and he found it particularly irksome when he was denied the use of particular workmen. The whole matter came to a head on 13th November 1763 when Gilbert sent an instruction to Brindley and received the curt reply 'no more society.' Brindley remained at his work but John Gilbert and his eldest son Tom called on Brindley a few days later and took him out for a night's drinking.⁵⁴ In the short term

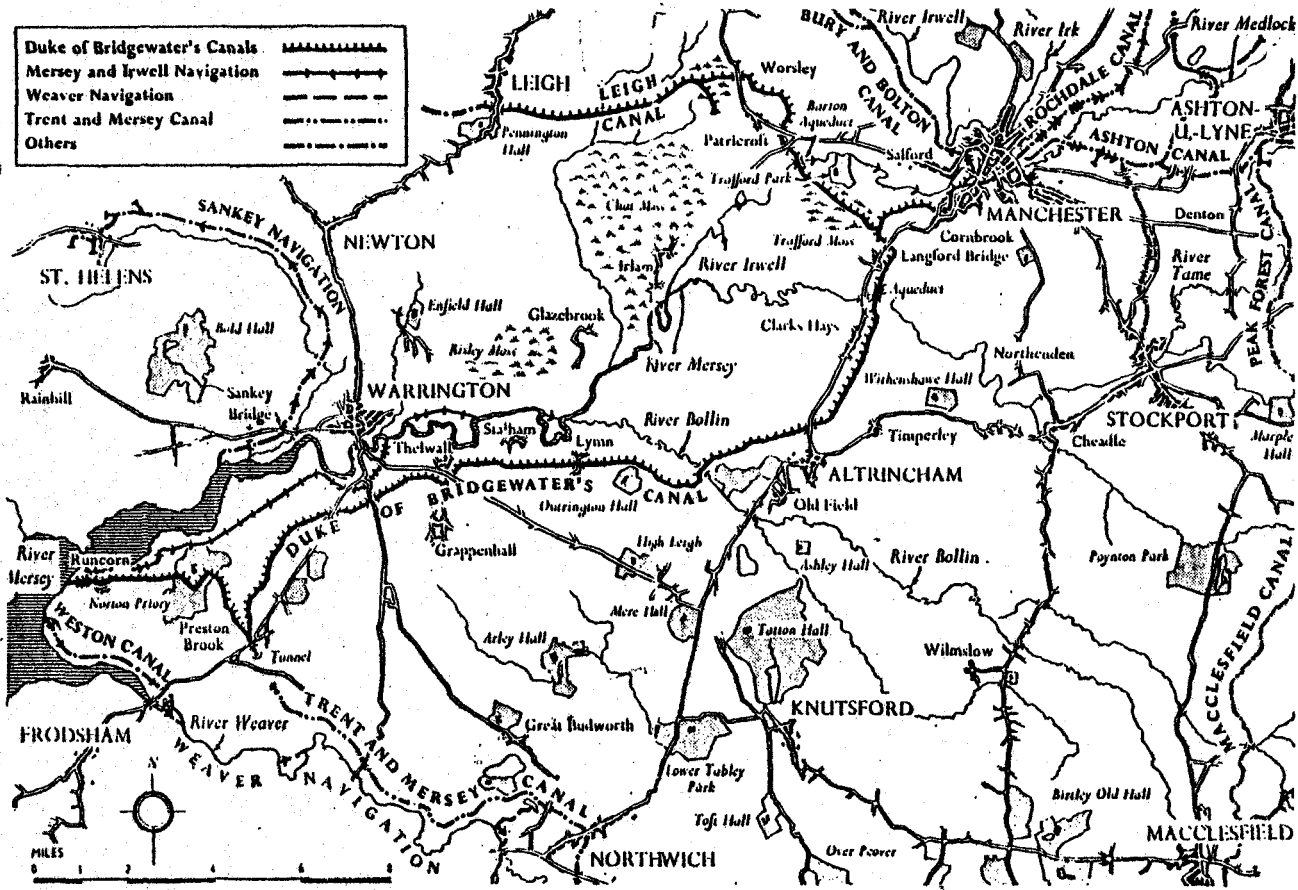


FIGURE FOUR: THE BRIDGEWATER CANALS (From Hugh Malet, Bridgewater; The Canal Duke, (1977), page 1)

they seem to have placated him but increasingly Brindley only visited the canal works to advise on specific problems, so that the brunt of the work fell on John Gilbert and other consulting engineers who were employed (like Brindley) from time to time.

The canal was fraught with technical difficulties, including the building of an embankment across Sale Moor, the crossing of the Bollin Valley and problems connected with the building of the Manchester terminus. The Chat Moss line had been included to carry coal to the established markets in the Hollin Ferry area and to provide additional water. By September 1763 coal was being unloaded and sold at Cornbrook, where the Gut linked the canal to the Irwell and Mersey Navigation, but it was 1764 before the canal reached Castlefield. The canal was opened as far as Preston Brook by 1771, but the connection with the tidal section of the Mersey estuary was not complete until the 25th March 1776.⁵⁵ The delay was caused by the opposition of Sir Richard Brooke of Norton Priory, near Runcorn, who placed every obstacle he possibly could in the path of the projected canal. Josiah Wedgwood visited Norton Priory in 1774 and at that time the canal had been constructed either side of Sir Richard's property.⁵⁶ The obstinate landowner finally gave way when public opinion was swayed in the Duke's favour; but the legal knowledge and parliamentary influence of Thomas Gilbert had also made its impact.⁵⁷

The final act in the realisation of the grand design of joining Manchester to Liverpool by means of a canal network, involved the construction of a dock in Liverpool that would always be open to the Duke's craft. He had purchased the land near Salthouse dock as early as January 1768;⁵⁸ and a newspaper report of 1776 announced that he had begun work on a dock and that he planned 'Warehouses in the Manner of those' he had built 'at Manchester.'⁵⁹ However, in the same year the Corporation of Liverpool refused to lease the Duke a further parcel of land so that he could extend his proposed dock. They seemed determined to limit this intrusion from a Manchester based interest and despite the efforts of John's son, Thomas on the Duke's behalf, the matter was still unresolved in 1790.⁶⁰

The developments at Worsley and the subsequent extension of the Duke's canal system grew out of the Duke's desire to develop his mineral resources. But unlike many great landowners of his day he did not seek to do this by leasing them to others, but instead sought to achieve this by direct exploitation organised by agents. The same involvement was a feature of the development of the Lilleshall estates by Earl Gower at the same time. The Duke and the Earl were brothers-in-law and they both worked in a partnership with the Gilberts, one formal and the other of a more informal nature. The original plan for the Worsley estate was to supply a single urban market, but as the scheme progressed the more widespread possibilities

became more and more attractive and the Duke of Bridgewater had the nerve to grasp the opportunities that lay before him. He was favoured by the area in which he was operating with its rapidly expanding industries which desperately needed a cheap and reliable means of access to the port of Liverpool. For had this not been so the Worsley system would have remained as modest as the small network of canals engineered in east Shropshire by John Gilbert.

Sir Joseph Banks was shown over the Lilleshall works by Thomas and John Gilbert in 1767 and he recorded the following brief description of the Donnington Wood Canal: 'the navigation which Lord Gower has made for five miles (upon the same principle as the Duke of Bridgewater's) for the conveniency of his coal and lime with both (of) which it communicates and carries them to the turnpike roadside upon the canal'.⁶¹ This waterway actually ran from Pave Lane on the Newport-Wolverhampton road to Donnington Wood and was authorised by an agreement between Earl Gower and the two Gilbert brothers drawn up in 1765.⁶² In just the same way as he had done at Worsley, John Gilbert carried this canal into an underground navigational level which ran to the coal faces; and he was simply repeating a proven solution to a particular set of problems. Soon after this canal was completed a branch from Hugh's Bridge to the limekilns at Lilleshall came into use. However, these two canals did not form a

junction with each other and there was a 43 foot difference in height between the two levels.⁶³ Again, John Gilbert employed a tried and proven solution. At the Castlefield terminus of the Bridgewater Canal, a tunnel gave access to the base of a shaft and a crane lifted the containers full of coal up the shaft to street level. The idea of winding up a shaft using containers is reminiscent of Meinzies, but the Castlefield winch was powered by a water-wheel and operated in an identical fashion to a Miller's hoist. The credit for this refinement belongs squarely with James Brindley and Sir Joseph Banks confirms this.⁶⁴

The solution employed at Hugh's Bridge was a modification of the Castlefield idea. There were two shafts approached by a tunnel at the lower level, and as the hoisting gear was interconnected, the descending container helped the ascending one.⁶⁵ In his adoption of containers for use within the boats, John Gilbert had taken up the ideas expounded by Meinzies, but he was also using an idea that had been proven practical, for:-

'Mr Bridge, about the year 1759, upon the Stroudwater river before mentioned, where the cargoes of the boats were disposed in a number of boxes or frames, just adapted to the size of the boats; which boxes of goods were drawn up by cranes to be lodged in other boats on the higher level, and the reverse in descending; which method was afterwards more successfully tried on the Bridgewater Canal.'⁶⁶

Once again, John Gilbert had demonstrated his talent for taking ideas and making them work. However, he was not

without inventive powers and he must be accorded the credit for the design of the first Shropshire tub boats which appeared on the Lilleshall system. The boats were small, carrying only about 8 tons and measuring 19 ft 8 in by 6 ft 4 in. These wooden boats were square at both ends and were chained together in short 'trains' for haulage by horse along the canal.⁶⁷ Their beauty lay in their simplicity of construction as they could be constructed by the average carpenter and so avoided the expense of employing a boat builder.⁶⁸ The later versions were made of iron plates riveted together and in this form they survived on Shropshire canals into the twentieth century.⁶⁹ The Lilleshall canal system remained isolated until the Shropshire Canal was completed in 1792, thus linking it by means of canals and inclined planes to the River Severn at Coalport.⁷⁰

Both Earl Gower and the Duke of Bridgewater had been moved by 'economic' considerations. The Worsley canal and the Donnington Wood Canal had brought remuneration through the increased volume and increased profitability of coal and lime sales. They were part of a general policy of estate development, although this was not always so regarded in the short term. The Bridgewater accounts for 1782 reveal a net profit of only £2,000 on coal sales in 1781, but a profit of £7,000 on the carrying trade.⁷¹ This does not take account of the revenue received from associated ventures for the Duke had numerous other

'economic' interests, including one in the general prosperity of Manchester. The Donnington Wood and Worsley canals also played significant roles in the agricultural developments on the two estates, especially in terms of land reclamation and the increasing practice of "liming" the land.⁷² The realisation of the profit to be made from the passage of other men's goods also introduced 'financial' motives to the Duke of Bridgewater's schemes; and it was these motives which kept the Duke on course despite a debt that rose to £319,927.⁷³ Only in 1786 was Thomas Kent, the chief accountant at Worsley, able to enter in the ledger 'Debt decreased this year by £434 7s 7d.'⁷⁴ When the Duke had a statement of his income drawn up in 1802; it revealed that the Canal, the Dock at Liverpool; and his Lancashire and Cheshire estates yielded £49,000 per annum, out of a total annual income of £106,000.⁷⁵ Such were the potential long term returns on his investments, although it should be remembered that he was still paying off his canal debt at the time of his death. By 1803 the gross income amounted to:-

On tonnage carried	£48,403
Colliery profits	£24,300
Lime	£ 91
Net profit after deductions	£65,952

and so in a single year he was able to reduce the canal debt by £57,832,⁷⁶ even though it still stood at £162,397.⁷⁷

John Farey, who had himself been a land steward, felt that

any person worthy of the name ought to be 'well versed' in 'the cutting of canals'; and that their 'intelligence (knowledge) ought also to extend to the valuable inventions and improvements of other countries.'⁷⁸

Farey was writing some sixty years after John Gilbert had begun work at Worsley; and in view of this it is possible to see Gilbert as one of the first of a new breed of land steward that evolved during the Industrial Revolution. They needed a much wider range of knowledge and skills, plus the energy and determination to carry out a multiplicity of duties.

The development and improvement of their estates was a primary aim of aristocrats like Earl Gower and the Duke of Bridgewater, who were intelligent men with a real interest in such matters. The mineral wealth of their estates had long been known, but the problems of transport and a limited market meant that the rewards were frequently outweighed by the financial risks involved. One major contribution made by Thomas and John Gilbert was to convince their employers of the practicality of canal construction and of the profits to be made from the large scale and systematic exploitation of mineral resources. In the first instance, they were entering what was largely new ground for them; but in the case of mining, they could offer advice based on expertise derived from personal involvement over a number of years.

John Gilbert may not have always had actual experience of 'inventions and improvements', but he certainly had the necessary knowledge that enabled him to bring them together in an original way. He was also aware of his limitations and in such instances he was prepared to call in consulting 'engineers' like Smeaton and Brindley. The canal projects also called for a high degree of management skills as he had to recruit and control a sizeable workforce, which lacked the stability associated with the existing estate workers. There were also numerous legal problems to be overcome and this could be done more expediently due to the close co-operation between the two brothers. Thomas dealt with the bulk of the legal work, or directed other lawyers like Tomkinson; but John as the Duke's steward would have been involved with the sorting of leases and the like. The additional payments made to John for work in obtaining the canal acts serve to demonstrate that he had also played a significant role in this essentially legal exercise.⁷⁹

The canal work of both brothers was initially part of their role as diligent stewards, but there was also a financial slant to their interest. At Lilleshall, they were the Earl's partners in a business enterprise; and on the Worsley estate they were able to draw profit from a variety of enterprises associated with the canal as well as from the beneficence of a grateful Duke.

The Duke of Bridgewater is frequently regarded as 'the

father of canal navigations', but it would be more accurate to see him as 'the patron of canal navigations.' For his contribution to canal development in Britain hinged on the fact that he had provided the opportunity and resources for John Gilbert to try out his ideas. The soundness of Gilbert's logic was proved by the success of his scheme, but also by the fact that numerous landowners were keen to emulate his achievements at Worsley and Lilleshall. Sir Nigel Gresley and Sir John Glynne were two such landowners, who built short canals on their estates to carry coal from the mines to a place of sale.⁸⁰

Chapter Four

THE GRAND TRUNK AND OTHER PUBLIC CANALS.

The River Trent was navigable as far as Nottingham throughout the seventeenth century, but efforts at improvements further upstream were blocked by determined landowners. An Act was passed in 1699 for improving the Trent Navigation from Wilden Ferry to Burton, but little seems to have been achieved and a further effort in 1714 appears to have shared the same fate.¹ The improvements were subsequently made but even in 1766, Staffordshire merchants were complaining at the poor state of this river navigation and about the monopolists who controlled it.²

The potters of North Staffordshire made use of the three river navigations; china clay from Cornwall and Devon was brought by coaster to the Mersey, where it was transhipped to flats for its journey up the Weaver to Winsford and thence by waggons and packhorses to the Potteries. For the return trip the waggons and packhorses carried ware destined for Liverpool and the rapidly expanding export market. Waggons and packhorses also made regular trips to Willington on the Trent Navigation with loads of ware for the London market and carried back flintstones brought from the south coast through the ports of Gainsborough and Hull. Sir Richard Whitworth described the weekly traffic to Bridgnorth on the river Severn as amounting to 'about eight tons of pot ware to be conveyed to Bristol', with back loads of groceries, foreign iron and 'white clay for Burslem.'³

The high costs and delays involved in transporting ware was a terrible burden to the master-potters, who were doing their utmost to be competitive. Therefore it is hardly surprising to find them amongst the most fervent supporters of the plan for a 'Staffordshire Canal.' Sir Richard Whitworth expressed their hopes when he declared that 'inland navigation will encourage old manufacturers to work with fresh vigour, now their materials come cheap to them, and will give opportunity to set up new trades and manufactures as they can convey the produce or materials to any part whatsoever.'⁴ Potters figure prominently among those who shared the expense of James Brindley's 1758 survey, along with landowners like Earl Gower who were equally aware of the possibilities created by a dependable navigation.⁵ The subsequent Act makes clear the consideration that was being given to the development of Staffordshire mines and industries as well as the untapped parts of the Cheshire Saltfields.⁶

The original impetus for the joining of the rivers Trent and Mersey came from John Hardman, MP for Liverpool; who was the 'intelligent merchant' responsible for organising a survey in 1755 on behalf of the port's merchant community.⁷ The interest of this body came to nothing as the Liverpool merchants became involved with the less ambitious Sankey Brook project and so the initiative passed to the 'Staffordshire interest.' This

consisted of a group of Staffordshire potters and land-owners (including Earl Gower), who sponsored James Brindley to carry out a survey.⁸ There is no basis for the myth that Brindley conceived the idea of joining the two rivers, and the involvement of John Smeaton in checking and revising the proposed route indicates that the 'Staffordshire interest' had reservations about his capacity to undertake such a major project.⁹ Smeaton had viewed French waterways before working on various Yorkshire schemes, most notably the Calder and Hebble navigation; thus unlike Brindley, he had practical experience of this type of engineering.¹⁰

The exact route took some time to settle, and in February 1758 the plan was for the canal to run from 'Longbridge' (now Longport) to the River Trent, near Wilden Ferry. A wharf at Longport would have served Burslem and Tunstall, and completed the link between the pottery towns and Hull.¹¹ Later it was proposed to extend the canal to the southern side of Harecastle Hill, so that the coal measures could be worked in the same fashion as was being pioneered at Worsley. This proposal was made in 1760, when a partnership made up of John Gilbert, Thomas Gilbert, Hugh Henshall, Robert Williamson and John Brindley (a younger brother of James) purchased the Goldenhill estate. Curiously, James Brindley does not appear to have been one of the principal partners in the purchase of this

estate, although he probably had a financial interest;¹² however, he did play a part in the planned exploitation of the mineral resources.¹³ The original plan involving the joining of the two rivers was not revived until 1765-6 with Josiah Wedgwood and Thomas Bentley as the principal activists. Josiah Wedgwood spent a great deal of his time between 1765-6 popularising the scheme and seeking the help of influential local figures, like Earl Gower.¹⁴ He also succeeded in protecting the yet unborn canal from the monopolistic Gower-Bridgewater interest represented by the Gilbert brothers.

On his return from Liverpool in December 1764, Wedgwood was presented with a copy of a pamphlet¹⁵ written by Thomas Gilbert which argued that the projected Trent and Mersey canal should be controlled by a group of proprietors. Such an arrangement would have provided both the Duke of Bridgewater and Earl Gower with extensive powers and a disproportionate financial return on their investment. Wedgwood was able to express his strong objections to such a plan to John Gilbert, who arranged a meeting with Earl Gower and Thomas Gilbert. According to Wedgwood's own account of the meeting, he clearly got the better of an unconvincing Thomas Gilbert, before asking Earl Gower bluntly:

"if it would not be very cruel, when a set of men had employed their time, talents & their purses for

Plate 9



JOSIAH WEDGWOOD

ten years together in the execution of a design by which the Public would gain 300% and when they have executed this laborious task - what is their reward? Why a new sett of Masters are raised up to controul both them & their works."

Faced by such a positive statement of the fears of the humbler promoters, it became obvious that the whole scheme would collapse if a committee system was not adopted as the mode of management for the projected canal; so Earl Gower gave ground and remarked that 'if the Proprietors can save so much to the Public as Mr W. hath proposed I do not think their plan can be rejected by Parliament.'¹⁶ It was a classic example of compromise brought about by mutual need; for the Duke desperately needed a northern junction between his projected canal and the one to be built between the Trent and Mersey, whilst Wedgwood's friends needed the 'great and ministerial weight' of the Gower-Bridgewater interest.¹⁷

Even though the form of management had been agreed, the precise route and indeed the extent of the canal still remained unsettled. A meeting of the Burslem potters at the Leopard Inn, was addressed by James Brindley, in March 1765; and they discussed the original plan for a canal from Longport to the River Trent at Wilden Ferry.¹⁸ Some weeks later, Josiah Wedgwood and

Thomas Sparrow had 'prevailed upon' the Mayor of Newcastle-under-Lyme, 'to call a Hall in order to petition Lord Gower to take this Navigation under his patronage,'¹⁹ a further indication of the importance that was placed on Earl Gower's support. The Duke of Bridgewater's interest in forming a junction between the two projected canals was conveyed to Wedgwood, by John Gilbert who pointed out that it would 'be allmost as near a way to Liverpool, & much nearer to Manchester & save our locking down into the River, for which we might afford to give his Grace a small Tonnage.'²⁰ Evidently, the 'Burslemites' had taken up the idea favoured by the Liverpool and Cheshire interests, of building the northern section of the canal to the River Weaver. At the same meeting the rift between Wedgwood and Thomas Gilbert was healed, for Gilbert expressed his approval of the plan and afterwards Wedgwood wrote 'one might plainly see his heart was engaged along with his tongue in the scheme, so that I have no doubt of his being a steady friend.' Thomas Gilbert also suggested that they needed to 'get a Pamphlet well wrote upon the subject'²¹ and this led to Thomas Bentley's famous A view of the advantages of Inland Navigation.²²

When Wedgwood launched the subscription to cover the expense of obtaining an Act of Parliament, he once again expressed his concern that the less powerful promoters

should not be ousted by 'one individual who hath no other connection with it.'²³ The subscription was arranged by Thomas Whieldon and Josiah Wedgwood, and in line with Wedgwood's wishes ninety-seven subscribers raised a total of £766, although the Duke of Bridgewater and Earl Gower each gave £100.²⁴ The then current plan for the northern junction was revealed to the Weaver Navigation Trustees at Northwich in May 1765, by Josiah and Richard Wedgwood. This plan envisaged a canal to the Weaver at Frodsham Bridge, which meant that the canal would enter the part of the Weaver over which the Trustees had no control and no powers to levy tolls.²⁵ The Trustees were very anxious that the canal should join the Weaver, so a survey was ordered 'from Harecastle where Mr Brindley's survey ended' to the Weaver at Winsford with an alternative route by Middlewich to Northwich. A further survey was also undertaken "in order to discover the most convenient places and properest method of making a communication between the river Weaver" and the "intended" Bridgewater canal.²⁶ In the light of such comprehensive plans, it becomes clear why Wedgwood felt there was 'but little danger of any powerfull opposition as I believe we shall be able to make both the Duke of Bridgewater & the Committee of the Weaver our friends.'²⁷ The Northwich meeting was followed by another in Newcastle and the result was a further example of Wedgwood's ability to bring together opposing factions.

In a document lodged with the Mayor of Liverpool in May 1765, Wedgwood outlines the full scale of the plan at that time:-

'As this canal is proposed to be carried from Wilden in Derbyshire to the Duke of Bridgewater's navigation in Cheshire, with branches to Birmingham, Litchfield, Newcastle & the River Weaver, it will extend the inland navigation from this port (Liverpool) through a fertile & manufacturing country for upwards of a hundred miles.'²⁸

The problems posed by the Gower-Bridgewater interest reappeared and by October 1765, both were said to have declared publicly that they would have nothing to do with the canal 'if it had any connection with the river Weaver.'²⁹ Wedgwood apparently heard the same report and both John Gilbert and James Brindley added that they doubted whether the Duke would fall in with the compromise plan.³⁰ John Stafford, a Weaver Navigation representative, provided a very sinister interpretation of the Duke's motives in pressurising the Burslemites, when he wrote that he aimed at becoming 'the largest dealer as a carrier in Europe.' He also thought that 'a monopoly in the hands of a peer of the realm' was like 'a monster, as I hope this land of liberty will never suffer to live.'³¹ Wedgwood also had doubts about Earl Gower's motives, he commented that 'it grieves one to suspect such a Character should mean to serve himself only at the expence of what is most dear to a people by whom he is so much beloved.'³²

By this time 'the Potters were determined to accept the best Navigation they could get if they could not get the best they wished for.'³³ Wedgwood suspected they would be 'humbug'd' and he employed the same sort of tactic that had brought him victory over the management issue. In a conversation with Thomas Gilbert he expressed the desire of the lesser promoters 'to put our intended Navigation under the protection of his Lordship and the Duke.' He also pressed Gilbert and so indirectly Earl Gower to come 'down into Staffordshire and PUBLICLY at a meeting of the Gentlemen of this County to be appointed for that purpose to put himself at the head of our design.'³⁴ This meant that if Earl Gower served his own interests, or those of the Duke, he would lay himself open to attack and he was too practiced as a politician to allow this. He had two choices open to him, he could take up the cause of the navigation on what were essentially Wedgwood's terms, or he could disassociate himself from the whole affair which would damage the interests of the Duke of Bridgewater. Faced as he was by a direct choice between the Gower-Bridgewater and the Weaver interests, Wedgwood and his associates had opted for the support of the most powerful potential ally. It did mean that the promoters would have to confront the Weaver trustees along with the proprietors of the Trent navigation, and as Wedgwood noted 'The Weaver will die hardest.'³⁵

No notification of the changed plan was forwarded to the

Weaver trustees, but they received their answer at the meeting of the canal promoters at Wolseley Bridge on 30th December 1765. This meeting was the result of Wedgwood's campaign to pressure Earl Gower into acting as patron to the canal scheme. The Earl presided and firstly Sir Richard Whitworth outlined his rival scheme, which would have united the ports of Liverpool, Hull and Bristol.³⁶ It was to receive little attention, other than that dictated by a sense of fair play and politeness.³⁷ When Thomas Gilbert introduced the plan for a canal from the Trent to the Duke's canal, near the Mersey, he was in fact introducing an already agreed plan to the general public. No mention was made of the plan earlier agreed with the Weaver Trustees and this caused John Stafford to remark: 'A glorious scheme it will be for him if he (The Duke of Bridgewater) can draw all the carriage between the two great ports of Liverpool and Hull and a great deal from the interior parts of the country into his canal.'³⁸ Stafford realised that the Duke had in fact won, although Wedgwood had incorporated enough safeguards to prevent him from dominating or even controlling the projected canal. Subscriptions were immediately opened for the construction of the canal and a further one towards the cost of obtaining an Act of Parliament. The first petition was presented to Parliament on 15th January 1766 and this requested leave to bring in a bill. After the second

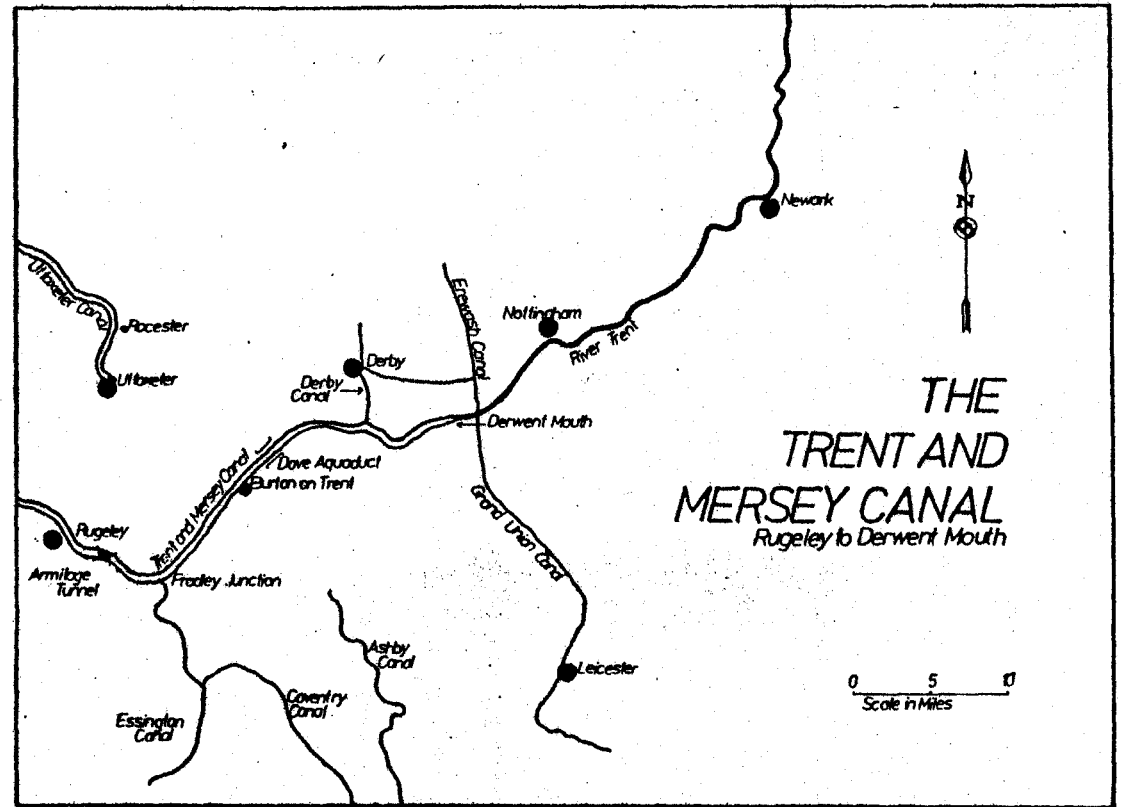
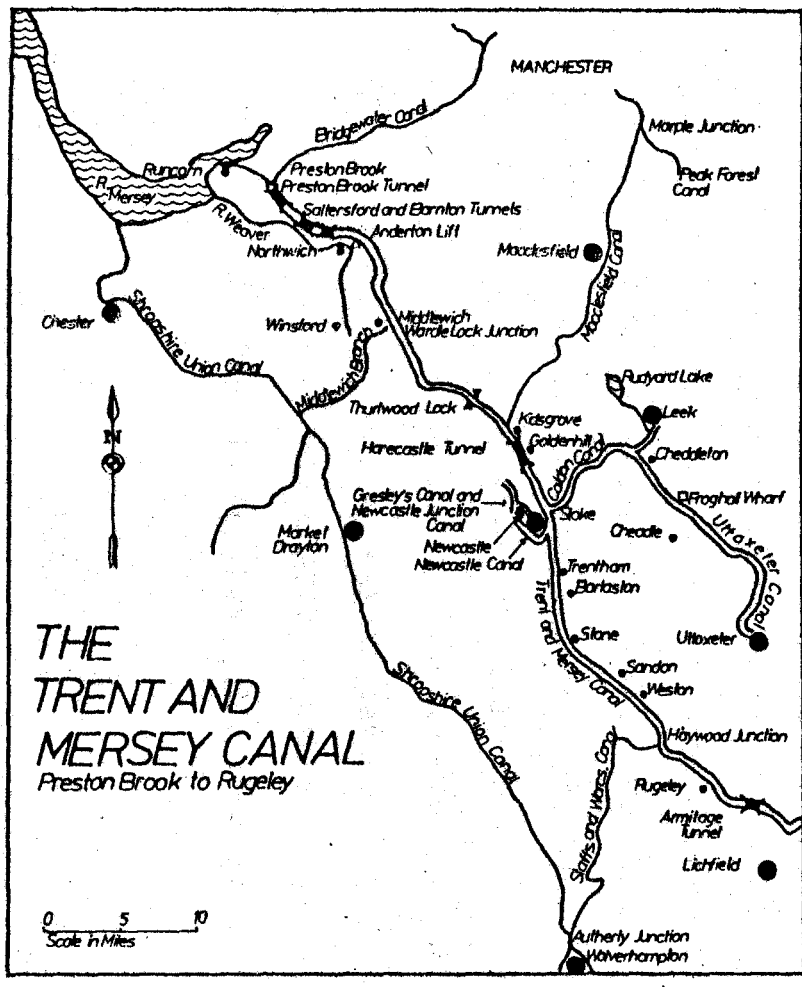


FIGURE FIVE: THE TRENT AND MERSEY CANAL AND BRANCHES (From - Peter Lead, The Trent and Mersey Canal, (1980), pages 8 and 13.)

reading it was referred to a committee of which Thomas Gilbert, in his capacity as a Member of Parliament for Newcastle-under-Lyme, was Chairman.³⁹ The Duke of Bridgewater, true to his promise to 'exert all his talents and interest',⁴⁰ presented a petition against the proposed Macclesfield Canal and one to alter the line of his own canal to form a junction with the Trent and Mersey at Preston Brook.⁴¹ The Act was passed on 14th May, authorising a line from the Trent near Wilden Ferry to Preston Brook.⁴² The news was greeted with great enthusiasm in the Potteries, where they had long realised that 'nothing but an Inland Navigation can ever put their Manufactory on an Equality with their foreign competitors.'⁴³

The Act laid down that there were to be two bodies: the Company of the Proprietors of the Navigation from the Trent to the Mersey, and the Commissioners of the Navigation. There were 101 proprietors, all of whom were shareholders, and they included Earl Gower (10 shares), the Duke of Bridgewater (10), James Brindley (10), Thomas Gilbert (10), John Gilbert (5), Samuel Egerton (15), Josiah Wedgwood (10½) and the only person to take up a full quota of shares, a William McGuire (20).⁴⁴ The subscriptions do not appear to have been payable immediately, for in March 1769, John Gilbert asked Wedgwood to pay his 'subscription to the Navigation for a wile.'⁴⁵ The

function of the 816 commissioners named in the act was 'to settle, determine and adjust all questions, matters and differences,' which might arise between the Canal Company and individuals interested in land or water affected by the Act.⁴⁶

The first Committee was appointed on 3rd June 1766, but no list survives of the original membership of this body. Four officers were appointed: James Brindley, Surveyor General; Hugh Henshall, Clerk of the Works; Thomas Sparrow, Clerk to the Proprietors and Josiah Wedgwood, Treasurer. Thomas Gilbert was present at this meeting and in view of his prominent role in the earlier Wolseley Bridge meeting, it would not be unreasonable to suppose that he took the Chair.⁴⁷ The first list of the Committee members dates from 1776, by which time a powerful group based on the Gilberts existed within the Committee:

"Independent members"

Josiah Wedgwood

John Eld

Richard Morland

The Rev Dr Falconer

Mr Boyer

Mr Hollinshead

Mr Twemlow

"The Gilbert faction"

Edward Salmon } Business
Mr Griffin } Associates

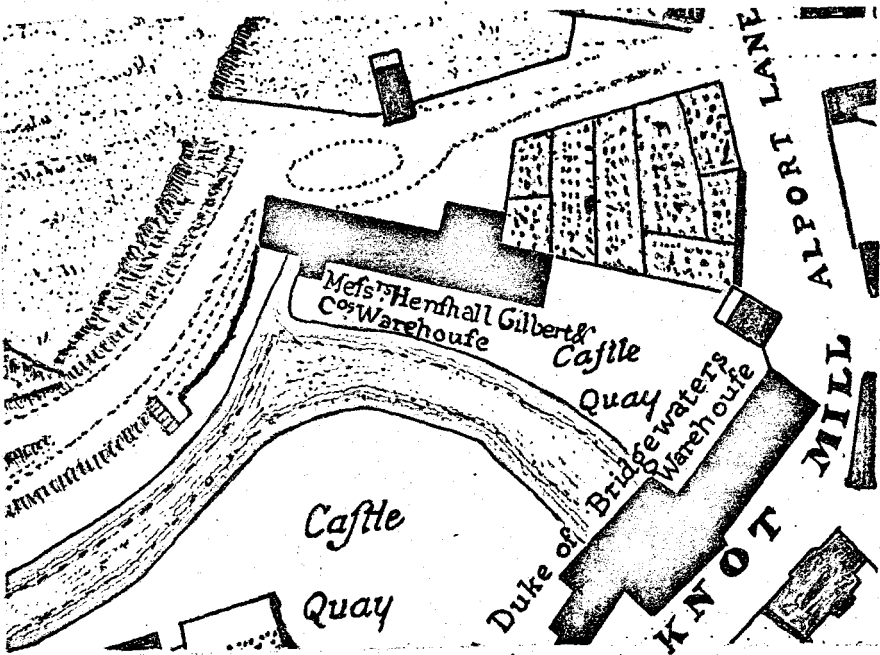
The Rev Bill } Related
Mr W Bill } by

Mr Phillips } Marriage

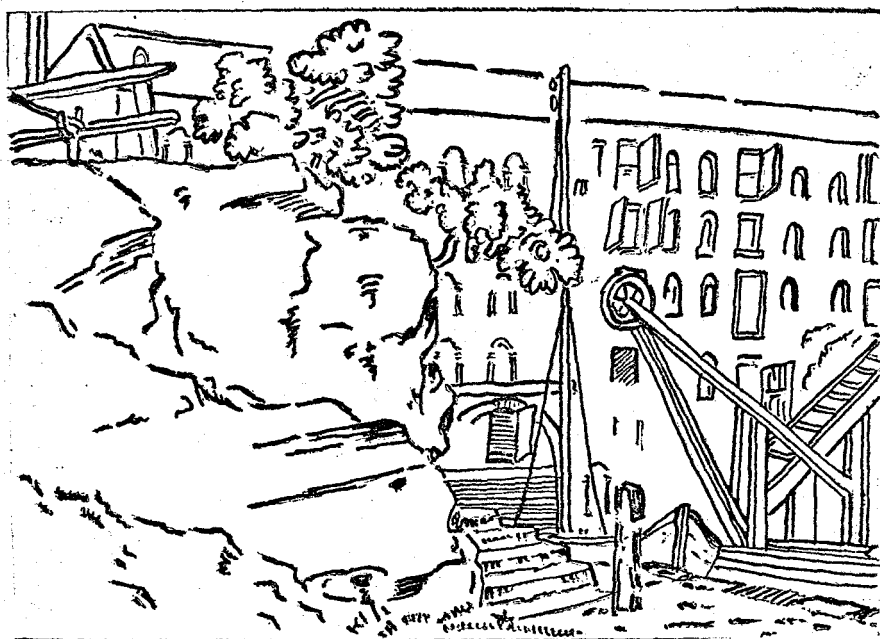
& Thomas Gilbert (Chairman)⁴⁸

The balance between the two groups was even, until Thomas Gilbert's casting vote as Chairman is considered. In this way, the Gower-Bridgewater interest could be protected and eventually it was bound to lead to a serious dispute amongst what Earl Gower styled 'the Amicable society of Navigators.'⁴⁹ Such disputes, involving personal attacks on individuals do not seem to have been uncommon. Josiah Wedgwood laid himself open to attack in December 1767, when he spent two days 'at Hetruria, in seting out the canal' and trying to persuade Hugh Henshall to alter the line of the canal so it would run through his estate. Henshall, who Wedgwood described as an 'inflexible vandal', would not alter the line of the canal, claiming that he had to take the most direct route or Brindley would be furious.⁵⁰ Three months later Wedgwood's problems were made worse when John Brindley and a group of other potters objected to any deviation to the proposed route that would be to his advantage. Wedgwood tackled them at a committee meeting and clearly got his way.⁵¹ Work started on the Etruria factory in 1768 and it was practically completed towards the end of the same year.

A more serious charge was made against Wedgwood by 'a junta of our Proprietors', concerning the purchase of a piece of land at Etruria for the Canal Company in 1773.



MAP OF CASTLEFIELD, MANCHESTER,
1793



HENSHALL, GILBERT & CO'S
WAREHOUSE, CASTLEFIELD,
1807

This 'junta', according to Wedgwood 'represented the transaction as a fraud upon the Company by myself, the Deputy Treasurer and many of our Proprietors.' The whole matter was taken to a Committee meeting presided over by Earl Gower, who 'summed up the evidence by which it appeared to the entire satisfaction of all present,' that 'the transaction was a fair one.' Thomas Gilbert observed, 'that he and the Proprietors had ever unlimited confidence in me,'⁵² but despite this Wedgwood shortly afterwards gave up his post as Treasurer, although he remained on the Committee.⁵³ The next quarrel was to bring Wedgwood and both the Gilbert brothers into direct conflict with one another, and to cause Thomas Gilbert to relinquish the position of Chairman, possibly in favour of Wedgwood himself.⁵⁴

The apparent cause was the new carrying firm of Worthington and Gilbert, which intended to compete for the carriage of goods between Manchester and Stourport with Hugh Henshall & Co. (a carrying firm owned by the Canal Company itself).⁵⁵ Not unnaturally, the Duke's traffic went to his Head Steward's firm, and 'His Grace's people' were said to be 'very partial to Worthington'; his boats being unloaded in two hours, whilst those of Hugh Henshall and Company had to wait up to two days to be unloaded.⁵⁶ The whole affair took on a more sinister aspect when a rumour was spread that Hugh Henshall & Co.

intended to give up the carriage of goods between Manchester and Stourport.⁵⁷ By the end of 1782, the two factions of the Committee were at each others throats and it became clear that the group centred around Wedgwood were determined to prove to the Duke of Bridgewater that they would not tolerate him treating the canal as a branch of his own. The Trent and Mersey Company's chief agent at Manchester provided Wedgwood with ample examples of the partiality shown to Worthington and Gilbert, so that when his evidence was shown to the Duke he was furious. He demanded Caister's dismissal and threatened to part with his shares if his demand was not met.⁵⁸ Meanwhile, Thomas Gilbert was circulating shareholders about the Committee, 'representing their affairs as totally derang'd' due to 'constant Quarreling'; a strange admission from the Chairman.⁵⁹ However, Gilbert was desperate and he realised that Wedgwood was determined to break the dominance of the Gower-Bridgewater interest. William Jessop reported that by April 1785, a large proportion of the shareholders were 'in favour of a proposition to give up trading as a Company', despite pressure brought to bear by both Earl Gower and the Duke of Bridgewater.⁶⁰ Whether Wedgwood and his faction were bluffing is not known, but he did succeed in breaking up the faction centred around the Gilberts and the new Committee wrung certain undertakings from the Duke. Wedgwood was left as the most influential

member of the Committee and as such he brought in many reforms prompted by the 'problems of late'.⁶¹

Thomas and John Gilbert retained their shares in the canal and later Thomas at least, was reconciled to the interests of the Company, following Josiah Wedgwood's death in January 1795.⁶²

Even before the main line of the Trent and Mersey had been completed in 1777, plans were being advanced for the further development and intensification of the company's system. The Caldon Canal was the second important canal development in North Staffordshire; and most of the credit for its promotion must go to the Gilbert brothers and their associates in the Cauldon Low quarries. James Brindley had made his final survey for this canal in 1772, but as he was taken ill during the work he never had the opportunity to report his findings.⁶³ However, on 9th January 1773, John Sneyd was able to write to Sir Joseph Banks (who owned an estate at Kingsley), providing him with a detailed description of the plan:

'We are going to petition Parliament for a navigable canal from ye Potteries beyond Leek principally for coal and lime carriage wch. be executed at a very moderate Expence by means of an Invention one of our Moorlanders has hit off for drawing loaded Barges 7 or 8 Ton up an inclined plane wch rises 13 inches in ye yard instead of Locks. This has been tryed at large and a Boy of 12

we are going to petition Parliament for a navigable Canal from $\frac{1}{2}$ Potter, beyond Leek, principally for Coal & Lime Carriage wh^{ch} be executed at a very moderate Expence by means of an Invention one of our Moorlanders has hit off for drawing loaded Barges of 7 or 8 Ton up an inclined plane wh^{ch} rises 13 In^{ch} in $\frac{1}{2}$ yard, instead of Locks. This has been tryed at large & a Boy of 12 years old draws them up wh^{ch} $\frac{1}{2}$ greatest ease by a common Capstan. The Boat swims over a 4 wheel'd Carriage wh^{ch} sinks to $\frac{1}{2}$ bottom of $\frac{1}{2}$ Canal it is then fasten'd upon it & so drawn over.

The Capstan should be first at $\frac{1}{2}$ Summit

Surface of $\frac{1}{2}$ water

Bottom of $\frac{1}{2}$ Canal

Section of $\frac{1}{2}$ Canal, Boat &c

Bottom of $\frac{1}{2}$ Canal

SNEYD'S LETTER-BOAT INCLINES (1773)

years old draws them up with ye greatest ease by a common capstan. The boat swims over a 4 wheel'd carriage wch sinks to ye bottom of ye canal it is then fastened upon it and so drawn over,'⁶⁴

Some weeks later, Josiah Wedgwood wrote to Bentley outlining the same scheme, but adding that 'The Canal 12 feet wide only and the boats to carry five tons burthen.'⁶⁵ Essentially, the scheme was to build a canal like that constructed at Donnington Wood by John Gilbert which would employ tub boats. The only refinement was the use of inclined planes instead of locks, a technique used extensively on the Shropshire canals after 1788.⁶⁶ Despite Sneyd's statement, the idea was probably not new as it grew out of an idea that had been imported from Flanders by Davies Ducart, who began building an ill-fated canal from the Drumglass Colliery to the Tyrone Navigation in 1757. The canal consisted of a series of level pounds connected by inclines which the boats were to be let down on rollers. John Smeaton inspected the completed canal and unfinished inclines in 1774 and subsequently recommended the replacement of the whole system by a waggonway. But it was too late to change and Ducart adopted the method proposed in connection with the Caldon Canal, that of laying rails on the inclines, with wheeled cradles for carrying the boats. An interesting point is that this work must have

been carried out between 1774 and 1777.⁶⁷

Josiah Wedgwood viewed the proposed route of the canal in October 1775, a month after saying that "we (the Company) are begun upon it in earnest." In a letter to his nine year old son John, he describes how the course of the canal was to run 'parallel with the road from Leek to Ashbourne for some miles' until it reached the western side of Cauldon Low.⁶⁸ By November of the same year this plan had been finally approved and an estimate prepared. Then for some reason the Company had a change of mind and decided on a route which would follow the Churnet Valley down to Froghall. A possible explanation for this sudden change can be found in the Act which refers to a group of colliery owners, in Kingsley and Cheadle, agreeing to advance £5,000 towards the cost of building the canal.⁶⁹ The Gilbert brothers had collieries near Cheadle and there is sufficient evidence to show that they were instrumental in raising this sum, which was to be a definite incentive to their fellow proprietors to undertake the construction of the canal.⁷⁰ Clearly it was in the best interests of those colliery owners in that area to have the canal follow the route that it finally did; and it was also of advantage to the Company who were short of funds and faced with estimated costs of £23,000.⁷¹ Another factor contributing to the change of plan was the acquisition of Consall forge and slitting mill by William Bill and

Thomas Griffin.⁷² They were both members of the Canal Company's Committee and without their support, it is doubtful whether a Parliament jealous of guarding water supplies would have accepted a plan that brought the canal to within ten yards of the mill buildings. The motives of both men were not as unselfish as it might seem for they were able to redevelop the site into a highly successful and profitable flint mill.

The Canal Company made agreements with the owners of the various limestone quarries around Cauldon Low. These proprietors fell into two groups; those who held leases from the Earl of Shrewsbury and those who owned quarries in their own right. The first group consisted of John Gilbert, Richard Hill, George Smith and Sampson Whieldon; and the second of Thomas Gilbert, Henry Copestake, Robert Bill, Sampson Whieldon and William Wooliscroft. The proprietors also bound themselves to supply the Canal Company with limestone, the various proprietors to supply a proportion of the required quantity.⁷³ When the canal and railway opened in 1778, it had an immediate effect on the income derived from the quarries which had previously only supplied limestone for a restricted local market.⁷⁴ The canal enabled a string of limekilns to operate throughout North Staffordshire and it must have provided a tremendous stimulus to improving landowners. John Gilbert derived particular benefit from the canal

through his creation of the Cheddleton Lime Company. This concern started trading in 1778, using limekilns at Cheddleton and Horsebridge on the Caldon Canal and supplied lime to the area around Leek. Coal was supplied to these kilns from the adjacent Shafferlong Coalfield by the Reverend Edward Powys, who was under contract to the Company.⁷⁵ All of John Gilbert's partners in the Company (except his son John) were quarry proprietors, these being Sampson Whieldon, Richard Hill and George Smith.⁷⁶

The original plan for the Caldon Canal was with little doubt the work of John Gilbert, although there are indications that the more detailed surveying work was undertaken by Hugh Henshall.⁷⁷ The two Gilbert brothers were also the main movers in the campaign to get the branch adopted by the Canal Company, moves which led to the passing of the authorising Act in May 1776.⁷⁸ John Gilbert was also responsible for the final link in the system linking the quarries to the main line of the canal, namely the railway from Froghall to Cauldon Low. The problem was to transport the limestone through the 700 feet which separated the wharf and the quarries; and again John Gilbert drew on his Shropshire experience. He was very familiar with the Coalbrookdale railway system and as M.J.T. Lewis points out 'the track (was) pure Shropshire.'⁷⁹ The railway opened in December 1778,

but within a year Edward Ball (a Canal Company employee) wrote that: 'The Railway has been repaired but in Frost the Waggons slide so much that it is almost Impossible to carry anything upon it.'⁸⁰ John Farey expressed the problem more precisely when he wrote of:

'The railway branch to Mr Gilbert's Caldon lime-works, made about the year 1777 or 1778, was composed of cast-iron bars pinned down upon the rails of wood fixed across wooden sleepers it appears to have been set out before the true principles of this excellent mode of conveyance were so well understood as at present (C. 1805), being very crooked and with frequent variations in the angle of its ascent.'⁸¹

This was obviously one of John Gilbert's less successful projects, but perhaps it is excusable when it is considered that it represents a pioneer effort. When claiming railway "firsts" great care needs to be taken to qualify what is actually being asserted. It has long been known that the Middleton Colliery Railway was the first railway to be built using powers granted by an Act of Parliament in 1758. However, it is still not widely known that the Caldon Low Railway was the first railway using iron rails to be constructed (1776-1778) with an authority derived from a legislative enactment, albeit a mainly canal Act. The situation was not irretrievable

and the most expedient solution was to partially rebuild the railway, abandoning the worst sections and attempting to create a more workable line with easier gradients. A new Act was obtained in 1783 and this gave the Company powers to carry out the necessary improvements.⁸² The bulk of the work was carried out in 1785 at a total cost of £2,697 13s. 8½d,⁸³ and so considering that the original line cost about £1760 per mile,⁸⁴ it seems that much of this expenditure was **on** expensive embankments and cuttings. A desire to avoid such expensive earthworks, which is also reflected in canal engineering at this time, may have in fact been the root cause of the unsatisfactory construction of the original 1778 railway. The Gilberts maintained their interest in the reconstructed railway and in 1787 Thomas Gilbert agreed to organise the transport 'down the Railway.'⁸⁵

Following the committee crisis of the 1780s, both John and Thomas Gilbert had little to do with the affairs of the Trent and Mersey Canal, apart from being interested to the same extent as any inactive shareholders. Instead their energies were directed towards promoting developments that were taking place on the Shropshire Coalfield. Twenty years had elapsed since the building of the Donnington Wood Canal, when in 1787-88, William Reynolds built two short private canals on the coalfield. One ran from a junction with the southern terminus of the Donnington

Wood Canal to a colliery at Wombridge, hence its name of the Wombridge Canal. The other was the Ketley Canal, just over a mile in length from Ketley ironworks to Oakengates. This was significant chiefly because of the inclined plane, which conveyed boats from the ironworks in the valley floor to the summit level above. It was the first practical inclined plane in Britain, although John Gilbert had put forward the same idea for the Caldon Canal, some fifteen years earlier. The boats used on the Ketley Canal were also similar to those employed on the Donnington Wood Canal.⁸⁶ The credit for the Ketley incline is generally given to William Reynolds, the Shropshire ironmaster. His father, Richard Reynolds was a tenant of Earl Gower and the 'very respectful and obliged friend' of Thomas Gilbert.⁸⁷ He was almost certainly on friendly terms with John Gilbert as he had visited Worsley in 1769. This visit appears to have left a lasting impression on him:

'We went to the Duke of Bridgewater's coalworks, and came along the side of the navigation as far as it extends towards Warrington, which is, I think, within two or three miles. There have been frequently published in the newspapers descriptions of the works and navigations, but I shall only say, I never read one which gave me an adequate idea of the performances: they are really amazing, and greater, I believe, than were ever before attempted, much less achieved by an individual and a subject.'⁸⁸

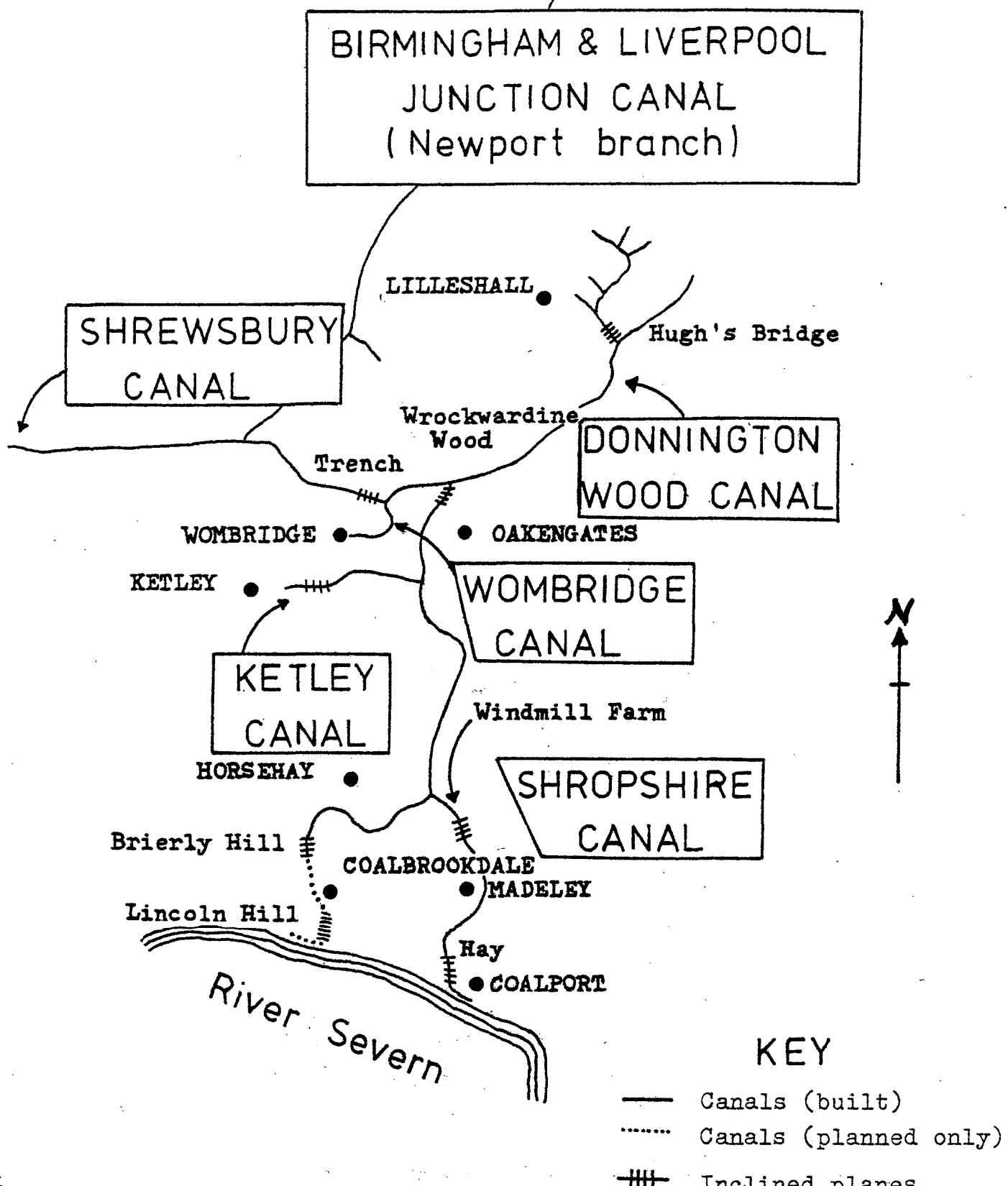


Figure Seven
THE CANALS OF EAST SHROPSHIRE

Whether, the Reynolds were prompted or encouraged by the Gilberts may never be known, but they must have discussed such matters with the Gilberts during their frequent business visits to Shropshire. William Reynolds certainly did take up another of John Gilbert's favourite strategies, when in 1787 he began to cut an underground canal from a point near the banks of the Severn in Madeley towards the Blists Hill collieries. Dr Trinder has noted that newspaper reports of the time 'reported that a level had been driven'..... 'partly as a drain (to the collieries) and as a navigable waterway'. After being driven for about 300 yards, the tunnellers struck natural bitumen or mineral oil, although to the people of that time it was known as 'natural tar', hence 'The tar tunnel.'⁸⁹

This initial burst of private enterprise was followed by the promotion of the Shropshire Canal. In 1788 Richard Reynolds took a leading part in obtaining an Act of Parliament to allow the construction of a canal from major ironworks to the River Severn.⁹⁰ The Act received the Royal Assent on 11th June 1788 and the next day, Thomas Gilbert was elected Chairman of the Committee at the first General Assembly, held at the Tontine Inn, Madeley Wood. Thomas held 10 shares of £100 in the company and he continued to play a very active part in their affairs until the construction phase was concluded.⁹¹ The fact that they were able to hold their first General Assembly so soon after the Act was passed, suggests that

Thomas Gilbert helped to guide the Bill through the various parliamentary stages. John Gilbert also held shares in the company and like his brother, he sat for a while on the Committee of Management.⁹²

The Shropshire Canal was confined to the coalfield and it linked together the three earlier and private canals. From its junction with the Donnington Wood and Wombridge Canals, it ran southwards to a junction with the Ketley Canal and then to Southall Bank where it split into two branches. One branch was to go to the River Severn near Dale End, Coalbrookdale, but it was never completed beyond Brierley Hill, above Coalbrookdale. The other branch terminated by the River Severn in what is now Coalport, a settlement that grew up around the canal-river interchange. The canal included three inclined planes, all built to the design of Henry Williams and John Lowdon; but obviously inspired by the Ketley incline.⁹³ The construction of the canal was carried out to a design prepared by William Reynolds, who was wrongly accorded the credit for the tub boat designs by Thomas Telford: 'It is proper to observe that Mr Reynolds reduced the size of his canal boats, for instead of making use of boats of 70 feet in length, each carrying from 25 to 30 tons, he made them only 20 feet in length, 6 feet 4 inches in width, and 3 feet 10 inches deep; each capable of carrying eight tons.'⁹⁴

In 1793 an Act of Parliament was obtained for the Shrewsbury

Canal, which extended the tub boat canal system to Shrewsbury.⁹⁵ This canal joined the Wombridge Canal at Trench, where another inclined plane formed the junction. The canal then descended by means of eleven locks to Eyton, from where it followed a contoured path to Shrewsbury. A major engineering feature was the aqueduct over the River Tern at Longdon, which was begun by the first engineer, Josiah Clowes as a conventional masonry structure; and completed by Thomas Telford as the World's second iron aqueduct.⁹⁶ Clowes was a North Staffordshire engineer, who had previously been resident engineer to the Thames and Severn Canal Company and he had renewed his acquaintance with John Gilbert in 1785, when Gilbert was called in as an arbitrator by that Company.⁹⁷ John and Thomas Gilbert held shares in the Shrewsbury Canal⁹⁸ and sat on the management committee, but they were both advancing in years. By the time the canal was completed to Shrewsbury in February 1797,⁹⁹ John Gilbert was dead and Thomas Gilbert had retired to Cotton and only had months to live. The respect felt for Thomas Gilbert and his usefulness as an ally, brought representatives of the Trent and Mersey Canal Company to seek his aid in 1796. At that time, the Trent and Mersey Canal was threatened by a rival scheme for a Commercial Canal, prepared from a survey by Robert Whitworth and later re-surveyed by William Jessop. The promoters of this scheme seem to have been Sir Nigel Bowyer Gresley, a canal and colliery owner, the Burton

Navigation, representatives of the Ashby and Chester Canals and certain pottery manufacturers anxious to promote transport competition. The proposal was for a barge canal from the Chester Canal at Nantwich (a broad canal providing a connection to the Dee at Chester and the Mersey via the Wirral line) through a tunnel to join Sir Nigel Bowyer Gresley's canal in Apedale, then across the Trent and Mersey Canal near Burslem and the Caldon Canal near Bucknall, and by the Cheadle Coalfield to Uttoxeter and then down the Dove Valley to join the broad section of the Trent and Mersey below Horninglow. A further section would take it across the Trent below Burton and form a junction with the Ashby Canal.¹⁰⁰

This canal offered the Potteries an alternative route to both the west and east, avoiding the Duke of Bridgewater's canal altogether. The use of barges would also have brought economies of bulk and it would have been impossible for the Trent and Mersey to compete. The Duke of Bridgewater recognised a common enemy in the scheme and pledged his support for the Trent and Mersey's Uttoxeter Canal plan. However, the Canal Company's main agent, William Robinson did not pursue his intention to secure Thomas Gilbert's aid, for as he wrote to Charles Bill: 'I should have waited on Mr Gilbert on Monday in hopes of prevailing on him to sign some letters to his friends which would no doubt be very useful but the

account Mr Yeoman's gave me of his declining state, induced me to think such application improper.¹⁰¹

As was common in such matters the controversy became heated and the tactics positively underhanded. An anonymous hand-bill was circulated entitled Observations upon the Committee of Subscribers to the proposed Commercial Canal Scheme; and later John Gilbert's son, John signed a declaration with forty-two other pottery owners dis-associating himself from a declaration supposed to have been made by a meeting of pottery manufacturers in support of the Commercial Canal scheme.¹⁰² Thomas Gilbert seems to have been sufficiently recovered to sign an answer to the Commercial Canal scheme in June 1796¹⁰³ and he attended a proprietors meeting in October of the same year.¹⁰⁴ A lack of funds and the powerful alliance formed against them, ensured that the Commercial Canal scheme failed but not before the Trent and Mersey Canal Company had been forced into an undertaking to build the Leek and Uttoxeter Canals.¹⁰⁵

John Gilbert's involvement as resident engineer on all the various parts of the Duke of Bridgewater's canal system led to his sons, Thomas and John receiving a training in canal construction techniques. The two brothers were certainly involved in the work on the Manchester - Runcorn line of the Bridgewater Canal and

later John (Junior) was to embark on contract work for the Rochdale Canal. The early canals were not usually built by a single contractor, for contracting firms of sufficient size did not appear until the 1820s. Instead, the principal engineer would authorise a number of contracts to separate contractors, for cutting a few miles of canal, at about 3d to 6d per cubic yard. Puddling and lining were also calculated on the same basis, but separate contracts were normally arranged for the construction of locks, bridges, tunnels and canalside buildings. Before the Napoleonic Wars, there was still not sufficient public works contracting to promote the development of a class of professional construction workers and generally the men were recruited from the immediate neighbourhood.¹⁰⁶ This did not mean that labour was not moving from one canal construction site to another, but the workforce can not be compared with the professional railway navvies of the nineteenth century. Possibly, advertisements were placed in local newspapers like the advertisement placed for 'Sober (and) Diligent Colliers' in 1762.¹⁰⁷

The first plans for what eventually became known as the Rochdale Canal were laid in 1766,¹⁰⁸ but the time was clearly not ripe for such a scheme and the plans were abandoned. One of the subscribers to this first preliminary survey was John Royds, a merchant of Rochdale, who had married Ann Gilbert in 1754;¹⁰⁹ and so was brother-in-law to both

Thomas and John Gilbert. He had a son, also called John Royds and it is not clear whether it was the father or the son who took such an active role in promoting the canal during the 1790s.¹¹⁰ However, it is clear that it was John Gilbert (Junior) who took an active interest in the promotion of the canal, as well as having an interest in its construction. In 1791, the survey work was offered to both William Jessop and Robert Whitworth, but these two established canal engineers were fully engaged elsewhere and had to turn the offer down.¹¹¹ John Gilbert (Junior), by then a committee member, wrote to Matthew Boulton (Junior) 'to enquire the carracter of a Mr Rennie as a Navigation Survayor.'¹¹² In view of Rennie's reputation as a civil engineer this enquiry might be regarded as churlish, but it should be remembered that at that time Rennie had not been involved in any canal building projects. A vital requirement to the success of this canal was a junction with the Duke of Bridgewater's Canal in Castlefield, Manchester. The first approach was made to the Duke in September of the same year and he turned the request down as he feared a loss of revenue, for goods came to his canal by road and he could charge for wharfage and warehousing. The dejected promoters were to return to him with a request for his permission to build their canal 'so near his Navigation, that the Goods Etc transported on those Canals might be unloaded from the Vessels on the One, into those on the other by means of a crane.'¹¹³

The main intermediary between the canal committee and the Duke was John Royds, who presumably would expect a more cordial reception as he was related by marriage to the Duke's Head Steward. The interviews with the Duke went badly and in his dealings with the Rochdale Company, he is once again revealed as the monopolistic figure who had loomed over the infant Trent and Mersey Canal. He only appears to have relented when threatened by a rival canal scheme, but he demanded an enormous compensation toll of 3s 8d a ton on all traffic except flagstones from the Rochdale Canal Company.¹¹⁴ The Rochdale Canal was also threatened by the Bury and Sladen Canal project and so in desperation they accepted his terms as 'reasonable', despatching John Royds to the Duke to thank 'his Grace for his good Intentions.'¹¹⁵ By the time the Act passed in 1794, this compensation toll had been reduced to 1s 2d per ton on all goods except flagstones that passed either way through the junction lock.¹¹⁶ The elder John Gilbert had no direct involvement in the Rochdale Canal and it seems likely that his son's involvement was the initial cause of his dispute with the Duke.¹¹⁷

Many of the enterprises that the Gilberts were involved in were very dependent on the availability of transport by canal. The cases of the Donnington Wood Collieries and the Cauldon Low quarries provide two prime examples. Likewise, the land purchases at Goldenhill in 1760 and

Clough Hall (Kidsgrove) in 1780 were the beginnings of large scale coal mining operations, adjacent to the Trent and Mersey Canal.¹¹⁸ In both these instances lateral tunnels were driven from Brindley's Harecastle tunnel into the various collieries and the coal was brought out by means of small boats. This practice seems to have still been going on in the 1880s or 1890s, for one boatman recalled that his father 'said the coal was brought down in a little boat to be loaded in the big boats and he had seen the men coming on the big boats.'¹¹⁹ His story can be substantiated by reference to a photograph of one of these small boats which survived until the late 1940s at Kidsgrove.¹²⁰ At first the practice was simply knock a hole in the tunnel lining and construct a lateral boat level, so the colliery undertakers were constantly making payments to the Canal Company for repair work.¹²¹ One major branch canal ran under the Goldenhill ironworks and its functions were described as follows in 1826:

'The Harecastle Tunnel of the Grand Trunk Canal Runs under this Estate; by which means, as well as by a cross canal which has been driven at an immense Expence beyond the Furnace, the mines are not only laid dry to a depth of from 45 to 75 yards but Coals, Ironstone and Lime-stone are conveyed to the Furnace, and manufactured Iron carried to Market at very light expense.'¹²²

The local legend that the original section of this lateral tunnel was built by John Gilbert appears to be confirmed

by the name of Gilbert's Hole. The ironworks were probably commissioned after John Gilbert's death and apart from his involvement with the Donnington Wood furnace of 1783,¹²³ there is no evidence of his direct involvement with ironmaking elsewhere. John Gilbert (Junior) had a foundry at Middlewich which was on the banks of the Trent and Mersey Canal,¹²⁴ but like his father, he does not appear to have had any interest in the Goldenhill ironworks. There was a small ironworks on the Clough Hall estate which was operated by John Luckcock, at the time of the 1812 sale.¹²⁵

Following the completion of the Trent and Mersey Canal, John and John (Junior) soon established a steady trade in supplying broken limestone to the various kilns that sprung up at various points along the canalside. They supplied their own kilns at Cheddleton and Horsebridge on the Caldon Canal; and by 1781 they were making regular deliveries to the Etruria and Longport kilns.¹²⁶ John Gilbert (Junior) extended this interest when he erected limekilns and a coalyard at Stonefield, near Stone in 1796.¹²⁷ Burnt lime was reaching Acton Bridge (in Cheshire) before 1808 having been 'brought by the Staffordshire Canal, in iron boats, from the neighbourhood of Leek.' The trade may have been even more widespread as the Forebridge kilns at Stafford were burning 'Froghall stone' (limestone from Cauldon Low), as well as Dudley limestone by 1812.¹²⁸ The younger John Gilbert was able to maximise

the return from his carrying operations between Froghall and Kidsgrove in 1806, when he 'contracted with the Lime burners for all (slack) I now get.' This is revealed in a letter to Josiah Wedgwood (Junior), written in June of that year, but the seasonal nature of such a trade is underlined by the comment 'in about two months that Trade will decrease.'¹²⁹ John Farey noted this same trade, when he wrote 'I saw the Caldon and Froghall Limeworks in 1808 (and) the Coals used thereat, were brought 22 miles along the Canal, from Mr Gilbert's Kidcrew Collieries.'¹³⁰

The Gilberts involvement in carrying concerns was very widespread. The Cheddleton Lime Company were said to have seven boats in July 1795,¹³¹ a number that had decreased to four boats and 'two old boats past work' by 1804. They also had a dockyard at Cheddleton and they appear to have built their own boats there, as well as using it for more general maintenance purposes.¹³² Sometimes these boats operating into Cheshire, brought back a load of salt from 'Gilbert and Company, of Marston.'¹³³ The salt mining operation at Marston seems to have provided the original incentive for John Gilbert to become involved in the carrying trade. John Gilbert had formed a partnership to work this salt mine, and owned seven boats in partnership with Cornelius Bourne, a Liverpool merchant and Edward Mason, also of Liverpool, to take salt along the Trent and Mersey Canal to Runcorn.¹³⁴ These boats also operated to Anderton by 1799, where salt was transhipped

from the Trent and Mersey Canal to the Weaver Navigation.¹³⁵ This would have reduced the revenue on the Bridgewater Canal and may have further contributed to the friction between the younger John Gilbert and the Duke of Bridgewater. At Anderton, the Trent and Mersey lies just over 50 feet above the River Weaver and salt was transferred from the canal to river craft, by means of wheelbarrows, which ran along wheeling stages to chutes which discharged into Weaver flats.¹³⁶ In 1799, the Weaver Trustees were prepared to construct a "railed way" to facilitate a more varied interchange of goods, provided that Gilbert and Co. entered into a bond to carry their rock salt and other goods on the Weaver.¹³⁷ The "railed way" was built, but there is no evidence that the younger John Gilbert agreed to such a restrictive bond, he was too shrewd a businessman to bind himself to such a restrictive practice and he was unlikely to give the Duke so positive an indication of his intentions.

Before 1800, the emphasis at Anderton had been almost entirely on salt, but on 11th September of that year, a party of gentlemen 'concerned in the pottery trade' approached the Trustees 'and proposed to carry, flint, and crates down and up the canal and to reship the same to and from vessels navigating on the river Weaver.'¹³⁸ The younger John Gilbert as a Burslem potter, may have

been amongst this deputation and he was certainly involved in this sort of traffic two years later. In January 1802, Wedgwood and Byerley paid him £133 for 'Freight and Tonnage on clay from Anderton'.¹³⁹ A list of boat-owners drawn up in 1795 shows that 'John Gilbert, of Clough Hall, Merchant',¹⁴⁰ had 16 boats and the role of merchant is emphasised by his offer to sell Wedgwood and Byerley '32 tons of Flint, then at Clough Hall.'¹⁴¹ This demonstrates that the operation based at Kidsgrove was not simply a carrying concern and it should be remembered that the chief cargo leaving Kidsgrove was coal and coke from the four kilns on the Clough Hall estate. The life of a merchant and carrier was not without its upsets, as David Birds, the younger John Gilbert's chief clerk and agent at Clough Hall, noted in a letter to Wedgwood and Byerley in April 1802:

'Sirs,

The Continuation of the Excise Law upon salt by which Mr Gilbert already had three Boats seized and condemned obliges him to advance the price of Coals conveyed by his Boats.'¹⁴²

The elder John Gilbert's involvement in the firm of Worthington and Gilbert had precipitated the Trent and Mersey Canal Company's management crisis in the 1780s, but it also represented his second venture into canal carrying and his first into warehousing. The exact date when the partnership was established is not known, but

it seems likely that it was formed just before the first complaints were made by the Trent and Mersey Canal Company as these complaints were brought on by the appearance of this new competitor. John Gilbert's partner was Jonathan Worthington, a carrier on the Bristol route who like Pickfords was originally a road waggon proprietor.¹⁴³

To make matters worse, Worthington and Gilbert shared a warehouse at Castlefield with Hugh Henshall and Company (the Trent and Mersey Canal Company's carrying concern), so any preferential treatment given to Worthington and Gilbert could hardly be expected to go unnoticed.¹⁴⁴ The Duke of Bridgewater also allowed the firm to use his clerks and in 1791, he made a charge of £40 for work undertaken by his clerks at Preston Brook.¹⁴⁵ Warehousing and wharfage could be quite profitable. John Gilbert (Junior) made £45 each year from the small Newton Wharf at Middlewich,¹⁴⁶ on the Trent and Mersey Canal; and presumably this accounts for his purchase of a wharf at Berkhamstead, on the Grand Junction Canal, worth an estimated £30 per annum.¹⁴⁷

Worthington and Gilbert were operating 23 boats by 1795,¹⁴⁸ quite independently of the other carrying concerns which involved the Gilberts. The younger John Gilbert does not appear to have been included in the partnership and after the death of his father in 1795, Jonathan Worthington carried on the business on his own account. According to one writer on the pottery industry, he lived at Moorhill

Hall, Worcestershire and his granddaughter married William Adams (1833-1905), of Greenfield, Stoke-on-Trent.¹⁴⁹ A directory of 1820 refers to 'Worthington & Co, Liverpool and Manchester, Carriers' and the same work indicates that the Company's activities were very widespread at that time:-

'Worthington & Co's Fly Boats to Birmingham, Wolverhampton, Stafford, the Potteries, Congleton, Warrington, Liverpool, Manchester, and intermediate places, from whence goods are forwarded by respectable carriers, to all parts of Cheshire, North Wales, Westmorland, Cumberland and parts of Scotland adjacent.'¹⁵⁰

As land stewards to major landowners, the two Gilbert brothers were bound to become involved in any canal scheme which envisaged a route through or near, the extensive and widespread estates of their aristocratic employers. In the first instance, the rights of their employers as landowners had to be safeguarded, but they were also aware of the value of canals in the development of their estates. They were the principal activists in obtaining a junction of the projected Trent and Mersey Canal with the Duke of Bridgewater's Canal, which was to ensure that the Duke received increased revenue from his own canal and access to new markets for his coal.¹⁵¹ There was also the awareness of how public canals could help in the development of Earl Gower's estates in both Staffordshire and Shropshire.

In the case of the Earl's estates in North Staffordshire, any stimulus to the growth of the pottery industry would in turn increase the demand for coal and so boost the Earl's income from his collieries. The canal would also act as an encouragement to the employment of more progressive agricultural practices, such as 'liming' the land. Before the construction of the Trent and Mersey Canal, small amounts of poor quality lime were obtained from Clayton and Madeley, but with the construction of the canal vast quantities were processed through the limekilns at Hemheath.¹⁵²

The two brothers were also aware of the value of a canal network as a means of further developing their own estates; and in creating the opportunities where they could exercise their entrepreneurial flair. The motivation behind their involvement in the promotion of the Caldon Canal was the prospect of increased sales from their quarries at Cauldon Low. Always alert and quick to seize opportunities, they launched operations like the limekilns at Cheddleton and Horsebridge at the precise time that the canal was opened. Other interests like the carrying company and the Marston Saltworks were all dependent on the existence of the Trent and Mersey Canal. John Gilbert's purchase of the Clough Hall estate (near Kids Grove) in 1781, again demonstrates how closely he identified canal transport with estate development.¹⁵³ He had clearly been aware of the great mineral wealth of the Kids Grove area, even before

1760 when he was one of the partnership who purchased the Goldenhill estate. At Clough Hall, he intended to build a new hall and to develop the estate which would be the most profitable part of his business empire.

To safeguard the interests of their employers and to promote their own interests, it was crucial that the brothers became involved in the management of the Trent and Mersey Canal Company. This was easily achieved, as the other promoters needed the support of influential figures like Earl Gower and the Duke of Bridgewater, both in a local sense and in Parliament. Josiah Wedgwood would have preferred to have been able to do without this support as it did give the Duke of Bridgewater the impression that he was capable of arranging the affairs of the Company. This unbearable situation brought about the 'management struggle' of 1782-85, which ended with the 'independent' promoters asserting the autonomy of the Canal Committee. Following on from this crisis, Thomas Gilbert, who had done so much to guide the Company's various Bills through Parliament, was ousted due to his leadership of the Gower-Bridgewater group within the Committee. This whole episode is a fascinating example of how rising industrialists were able to exercise their new found power in a rapidly changing society.

There was another important aspect to the involvement of the two brothers in canal promotion and management. John

Phillips recognised that the Bridgewater Canal had 'shewn the great advantage to be derived from such works', and in this sense, the Gilberts had helped to perform a national service. For at that time, it was widely recognised that such enterprise was in the Nation's best interest, even if this was not always recognised by the 'landed interests'. Wedgwood's memorial in Stoke parish church records how he 'converted a rude and inconsiderable Manufacture into an elegant Art and an important part of National Commerce.' The same kind of national service is also mentioned in a comment on his Etruria Factory, described as being for 'thirty years and upwards, all the efficacy of a public work of experiment.'¹⁵⁵ No writer described the Worsley Canal system in such terms, but it is undeniable that it served the same sort of function.

To the modern mind, the idea of patriotism and personal profit often seem incompatible; but to the eighteenth century mind no such division existed. The Duke of Bridgewater was praised for creating new jobs and for providing a stimulus to the growth of Manchester; but these were by-products of his schemes which were 'like in a Merchant's Counting House' calculated on 'profit and loss, and individual interest.'¹⁵⁶ The same is true of the Gilbert brothers as their primary concern was to promote the interests of their employers and themselves through

their involvement with various canal schemes. It would be unjust to suggest that someone like Thomas Gilbert, who expended so much energy on the improvement of the Poor Laws, was not aware of the benefits that canals could bring to the Nation as a whole. He richly deserved the accolade of 'worthy senator' as he had not:

'confined his exertions for the good of his country to the House of Commons. (Instead) he had a very considerable share in promoting the execution of the second canal in point of consequence in this Kingdom, that of the Grand Trunk (Trent and Mersey), to the promotion of which he dedicated a considerable portion of his time.'¹⁵⁷

In their involvement with the Shropshire and Shrewsbury Canals, the Gilberts should be seen in less active roles but nevertheless important ones. In the first instance they both had considerable status in the world of canal companies and promoters, so that any scheme they were associated with acquired additional credibility through their involvement. Thomas still retained his seat in Parliament until 1795, and the standing of John can be seen from his role as an arbitrator for the Thames and Severn Canal Company, in which he had no personal interest. They were also keen to promote the interests of Earl Gower and Company, the partnership made up of the two Gilbert brothers and Earl Gower. Initially, their Donnington Wood Canal had existed in isolation and the

two Shropshire Canals brought the vital link with the River Severn, as well as with the local ironworks. From Earl Gower's point of view, a number of the local ironmasters were his tenants and so his investment in these canals was again an indirect means of stimulating the development of his estate in a very wide sense.

During their initial involvement with the Trent and Mersey Canal, the incentive of the interest paid on canal shares was limited. Returns were modest during the period of construction and consolidation, although there was the long term prospect of a healthy return on the initial investment. The test of the financial success of any canal was the dividend paid on the capital, and the price of the shares when sold in the open market. Thomas Gilbert's shares in the Trent and Mersey Canal, purchased for £2,000, were yielding a mere £130 (6½ per cent), in 1790. These shares were bequeathed to his nephew, David Birds, who in 1810, was drawing a princely £800 (40 per cent) per annum from this source. Likewise, one £200 share had a market value of £1,000 in 1790, which rose to £2,100 by 1810.¹⁵⁸ As John and Thomas Gilbert were both dead before their shares began to pay really handsome dividends, the benefit of their canal investments were enjoyed by their beneficiaries. It seems certain that they never really expected considerable returns, except in the sense that the canal network ensured the prosperity of their many other enterprises.

Chapter Five

THOMAS GILBERT, M.P.

The eighteenth century corporation at Cheadle was considered by the late Thomas Pape, to owe "its origin to the sympathy felt, especially by the clergy and the landed gentry, for the unfortunate Stuarts."¹ The presence of George Gilbert amongst the membership would suggest that he shared this feeling as did John Bill, son of Richard Bill, the Earl of Shrewsbury's 'Baylife'. Significantly, neither the Earl or his 'Baylife' were associated with the Cheadle corporation, despite the fact that the Earl had extensive estates centred around his lodge at Alton. The aristocratic involvement in the corporation was provided by the Leveson-Gower family, whose Staffordshire estates were grouped around their principal seat at Trentham Hall.

Charles Talbot, twelfth Earl and Duke of Shrewsbury had been one of the "Immortal Seven" who had signed the famous letter "inviting William to come over, suitably supported, and investigate the complaints of James II's electoral activities and the rumours concerning the birth of the Prince of Wales".² This assured Shrewsbury a place as one of William III's most trusted advisers, a role he also retained during the reign of Queen Anne. Whilst Queen Anne was inching "her way across the frontier into death", Shrewsbury was issuing "a stream of orders that secured the country against a Jacobite invasion or coup d'etat."³ But at the same time, he also contributed

to the Pretenders campaign fund, a form of insurance against a sudden change in the political climate.⁴

Such actions may seem to be purely mercenary, but like so many aspects of eighteenth century politics, superficial interests tended to conceal the more deeply rooted realities of the situation. The explanation of Shrewsbury's contradictory actions is concerned with the difference between heart felt feelings and commonsensical thoughts. The Pretender gave no assurances of protection to the Church of England so that there was still a real danger of civil war; by contrast the Hanoverians' quiet assumption of power seemed to promise stability for the future. Stability was important and it had been the effect of James II's policy on the nobility that had caused the invitation to be sent to William of Orange in 1688.⁵ Though the Jacobite cause made its appeal to many amongst the nobility and gentry, at the same time they realised that it was potentially disastrous. This awareness was best developed amongst those nearest to the central political stage, including individuals like the Earl of Shrewsbury; but even though it took a little longer it was eventually accepted by the Leveson-Gowers and the majority of the gentry of North Staffordshire.

After the failure of the 1715 Jacobite rebellion, the corporation at Cheadle began to decline and its final

meeting in 1729 was attended by a mere seven members.⁶ During this period, the corporation became even more of a social and business gathering. The political momentum of the corporation fell to a level where they merely gestured like the Staffordshire Blue Coat Hunt, who went out hunting, supposedly, with the hounds dressed in tartan and the fox in a military red coat.⁷ The gradual transition came to its completion in 1745, when families, such as the Sneyds, Mainwarings, Gilberts and Barbors, who had belonged to the Cheadle corporation, all found officers for Earl Gower's Regiment.⁸

The Leveson-Gower family were strongly identified with the so called Tory opposition in 1715 and their involvement with the Cheadle corporation was consistent with their political stance. However, to continue an association with the Tories was in effect to commit political suicide as the King would not grant office or preferment to any Tory now always to be identified with the treacherous Jacobites. So those who still desired office quietly dropped their Tory identity and gradually infiltrated the amorphous body of the Whigs. This was the route chosen by the Leveson-Gowers and scores of others, as the old Tory party lost its Court wing and was left as a party in the country only. Some country members retained their Tory identity as an act of defiance, to show their disdain for Hanoverian Kings and their Whig Ministers.⁹

Before 1832, Staffordshire returned to Parliament two members for the county and two for each of the boroughs of Stafford, Newcastle-under-Lyme, Lichfield and Tamworth. The last borough was controlled by the families of Peel and Townsend, but elsewhere during the eighteenth century the Leveson-Gowers both built a connection and "also raised an opposition which awaited a mistake in their tactics."¹⁰ The Leveson family had provided representatives for the Borough of Newcastle-under-Lyme in the sixteenth and seventeenth century, but the connection really began with the election of William Leveson-Gower as Member in 1675. He held the seat until 1691, when on his death his place was taken by his son, John (1675-1709), who held the seat until his elevation to the peerage in 1702. There then followed a period of twenty years, when the members for the borough were found from the local gentry.¹¹ This was not an inactive period for the Leveson-Gower interest, for between 1709 and 1720, John, Lord Gower (1694-1754), acquired property in the Ironmarket, in the Butchery and the Roebuck Stables in the High Street, Newcastle-under-Lyme.¹² These and other purchases enabled the Leveson-Gowers to gain control of the borough, so that between 1734 and 1774 there were no contested elections and the family returned its own members. John, Lord Gower's brother, Thomas Leveson-Gower, was elected as one of the members for the borough in 1722 and remained so until his death in 1727. He was then succeeded by Baptist Leveson Gower, another brother.¹³ To complete

the picture, Lord Gower's eldest brother, William was M.P. for the county of Stafford from 1720 to 1756.¹⁴ Not only did brothers serve, but sons in law as well. John, Lord Gower's daughter, Elizabeth married John Waldegrave in 1750, who at that time was M.P. for Oxford. Waldegrave was elected at Newcastle unopposed in 1754 alongside his wife's uncle, Baptist Leveson-Gower.¹⁵

The 1747 election was the only county contest during the eighteenth century and the Leveson-Gower interest carried one seat. Henceforth, until 1820 the family nominated one of the county members and the Tory lesser gentry the other. At about the same time, the Leveson-Gowers extended their influence in Lichfield and Stafford, although with differing degrees of long term success. Such patronage gave them tremendous political power within the county as well as making them attractive to those wishing to develop a faction in the House of Commons.¹⁶

After 1737, John, Lord Gower's, political stance became more moderate after his daughter, Gertrude married John Russell, Duke of Bedford, the leader of the Whig faction known as the Bloomsbury gang. This change was recognised by a measure of royal trust (although Gower was still suspected of strong Tory sympathies) when he was appointed as one of the Lord Justices in the King's absence from the Realm during 1740. He served in the same office in 1743, 1745, 1748, 1750 and 1752. The Bedford faction had opposed Walpole and with his downfall in 1742, they

came into office. Under Wilmington, Gower served as Lord Privy Seal until the premier's death in August 1743 allowed certain Whigs favourable to Walpole to return to office under Henry Pelham. Gower resigned as Lord Privy Seal, but retained the office of Lord Lieutenant of Staffordshire which he had been given in 1742.¹⁷

The fall of Carteret (now Earl Granville) on 23rd November 1744, enabled the Pelhams to reshuffle the Ministry.

Both Lord Gower and the Duke of Bedford were included in this 'Broadbottom Administration', Gower as Lord Privy Seal and Bedford as First Lord of the Admiralty.¹⁸ These appointments confirmed Gower as a sound member of the Whig establishment and was at variance with the strong Tory bias shown in the Staffordshire county elections of 1742. This change of allegiance angered many of the Staffordshire gentry and Dr. Samuel Johnson told Boswell: 'You know, Sir, Lord Gower, forsook the old Jacobite interest. When I came to the word Renegado, after telling what it meant "one who deserts to the enemy, a revolter," I added, sometimes we say a Gower. Thus it went to the press; but the printer had more wit than I, and struck it out.'¹⁹

Gower retained the post of Lord Privy Seal until his death in 1754, apart from a short period in February 1746, when he resigned for two days.²⁰ During the 1745 rising

Gower's loyalty was tested to the full and he related in a letter how as:

'Many of the Lord Lieutenants of this Kingdom having offered his Majesty to raise Regiments at this critical juncture to defend his Kingdom against the Rebellion at home or any invasion from abroad, I have ventured also to make the same offer.'²¹

He continues his letter by describing how the county gentlemen, faced with the reality of a rebellion, opted for expressions of loyalty and for more positive action:

'I had been down to the Quarter Sessions and saw how the Gentlemen of the County relished the Proposal. I opened it to them at Stafford on Wednesday last, where it was received with unanimity and applause by a bench of above threescore Justices who all signed a very loyal address which I am to carry up with me (to London) Gentlemen of Family and fortunes in the County have taken the Captain's Commissions and undertaken to raise their companies at their own expense.'²²

A month later, with the Pretender in possession of Carlisle, Earl Gower was laid up in London with an attack of gout and almost certainly nerves. His regiment (including Thomas Gilbert) was sent to Chester as a garrison,²³ along with a company of Bligh's Regiment who later played a prominent role in the destruction of the Highland Army at Culloden.²⁴ At this time, he may have doubted the wisdom of his recent change of allegiance, but

subsequent events confirmed the wisdom of his loyalty which George II recognised by his creation as Viscount Trentham of Trentham and Earl Gower (8th July 1746).²⁵

The Earl's eldest son, Granville Leveson-Gower entered Parliament at the age of twenty-three, being returned for the borough of Bishop's Castle at a bye-election in December 1744,²⁶ but at the general election in 1747 he was successful at the City of Westminster. Family influence secured for him an appointment as a lord of the admiralty in Pelham's administration (18th November 1749), and he was again returned as Member for Westminster after a severe contest with Sir George Vandeput, the Tory candidate.²⁷ He also belonged to the faction of the Whig party known as the 'Bloomsbury Gang', led by his brother-in-law, the Duke of Bedford and he resigned office at the same time as his kinsman in June 1751.²⁸ At the general election in 1754, he was returned as one of the members for Lichfield which was one of the family's 'pocket-boroughs'; but his service in the lower house was cut short by his father's death and his succession to the upper house as the second Earl Gower. He succeeded his father as Lord-Lieutenant of Staffordshire early in 1755; and in December of that year he was made a Privy Councillor and Lord Privy Seal.²⁹ Gower resigned the Privy Seal in June 1757; and in the following month he was made Master of Horse, a post he retained until his appointment as Keeper of the Great Wardrobe in 1760.³⁰



GRANVILLE, THE SECOND EARL GOWER
(1721 - 1803)

Henry Fox, who was a shrewd and not always lenient judge of his fellow creatures commented in a memorandum 'wrote at Lord Bute's desire' that Gower 'is of a humour and nature the most practicable; and if any man could do the office of Southern Secretary without either quarrelling with Charles Townshend or letting down the dignity of his own office, he would.'³¹ Fox's memorandum was written in 1763 and in that same year, Gower was made Lord Chamberlain of the Household, an office he felt compelled to resign when Rockingham formed his ministry in July 1765. Chatham offered Gower a place in his ministry as First Lord of the Admiralty, but he turned it down when he realised that the offer was confined to him alone and that no offices were to be offered to his fellow Bedfordites.³² George Grenville who had the confidence of the Bedford faction, and played a part in these negotiations, remarked that 'the evident purpose of all this is to break and divide us if possible.'³³ Gower owed most of his earlier appointments to the influence of the Duke of Bedford, and his demonstration of loyalty showed Chatham that he would not easily destroy the existing political factions. The breakdown of Chatham's health forced Grafton to take command and finding himself threatened by a union of the enemies of the administration, he formed an alliance with the Bedford faction. Gower took office as President of the Council in 1767 and from this time onwards, he played an important part in the debates in the House of Lords. His position within the Bedford faction was recognised

when Bedford died in 1771, and Gower took his place as a Knight of the Garter.³⁴

The Bedford faction took a strong line on the maintenance of order in the American colonies. The Duke himself petitioned George III to revive an obsolete statute of the reign of Henry VIII, under which colonists, suspected of treason could be brought back to England to stand their trial. Gower pursued a similarly tough line and in February 1775, 'declared in the most unreserved terms for reducing the Americans to submission.'³⁵ Two years later, he spoke against Chatham's motion for an address to the King to put a stop to hostilities; but the following year, his son-in-law, the Earl of Carlisle led the commission sent out to America by Lord North 'to treat, consult, and agree upon the means of quieting the disorders.'³⁶ The turning point for Gower, like so many of his fellow countrymen was the British defeat at Saratoga; after which France entered the war,³⁷ and it became clear that the suppression of the colonists would be a costly and prolonged affair. Armed with Lord Howe's judgement that the American colonies could not be held, Gower and his fellow Bedfordite, Weymouth resigned from the Ministry, arguing that it was Lord North who made victory impossible.³⁸ In December 1780 during the debate on Shelburne's motion of censure on the ministers for their conduct towards Ireland, Gower made a violent attack upon the government and declared

that he had 'presided for years at the council table, and had seen such things pass there of late that no man of honour or conscience could any longer sit there.'³⁹

In the same month, the Earl of Carlisle arrived in Dublin as the new Lord-Lieutenant and soon managed to win the respect of the Irish people.⁴⁰

Gower's political career reached a peak in March 1783, when the post of Prime Minister was offered to him following the fall of the Shelburne ministry.⁴¹ Described as having rarely risen 'above the level of respectable mediocrity', although possessing 'a fund of good humour and tact, sufficient to make him a useful member of any administration;' it was a reflection of his own sense of realism that he had sufficient sense to refuse the offer.⁴² Upon Pitt's appointment as first Lord of the Treasury in 1783, Gower once more became Lord President of the Council in a cabinet that was described as containing 'more blue blood than strength.'⁴³ A year later he was made Lord Privy Seal and he held this office until his resignation in July 1794, when the Portland Whigs joined Pitt's administration.⁴⁴ This marked the end of his active political career, the value of which had been recognised by his creation as the first Marquis of Stafford in 1786.⁴⁵

The politics of the Gilbert family were almost certainly originally Tory, but like the Leveson-Gowers and the local gentry of north Staffordshire, they ultimately had to

recognise that this cause was a lost one. Their various mining enterprises flourished in the period of stability that followed the Hanoverian succession and they were doubtless aware of the disruption caused to such enterprises during the Civil War of the seventeenth century.⁴⁶

If such recollections had passed from the collective memory of the family, then the passage of the Young Pretender's army within two miles of Cotton Hall in 1745, would have served as a timely reminder.⁴⁷

The earliest known involvement that Thomas Gilbert had in the world of politics was as the manager of the Lichfield interest for the Leveson-Gower family. The Lichfield interest was in fact shared between the Leveson-Gowers and the Ansons of Shugborough Hall, who after a ruinously expensive contest in 1747, concentrated their efforts on the burgage vote.⁴⁸ Vast sums of money were spent in buying up burgage property which was conveyed to their supporters before elections, and this was combined with attempts to purchase freehold and freeman votes. The process was a slow one because of the complicated franchise and the stubborn independence of the freeman voters. Much of the work was initially the responsibility of Thomas Cobb, a Lichfield mercer, who bought up most of the burgage property, whenever possible. Following the election of Viscount Trentham (later the second Earl Gower) and Thomas Anson in 1754, Thomas Gilbert was brought in to examine the interest. His brief was to put it in order and to

find ways of avoiding wasteful expenditure in future elections; and his report describes how he found it to be a:-

'tedious and very disagreeable task, but as I have seen the disadvantage that you and my Lord Anson have laboured under for want of knowing the state of your affairs at Lichfield, I have long wished for an opportunity of representing the whole to you in such a light, that upon every occasion when anything is proposed you may be able to judge for yourselves, and not depend entirely upon representations from one person or other; I see your interest now in such a view, that with a tolerable degree of management for the future no opposition can hurt you or put you to much expense.'⁴⁹

Gilbert approved of Cobb's purchases, but had several suggestions to make for the future management of the property. His main concern was to prevent any future repetition of the huge sums paid out to ale-house keepers during the two previous elections. The exact cost of free food and drink for voters is not known, but Thomas Gilbert managed to save the interest £1,073 10s 4d by reducing by 3d a gallon some of the bills for ale for the 1753 and 1754 elections. Three days after his report was submitted to the first Earl Gower, Thomas Gilbert was writing to Granville Leveson-Gower (later to be the second Earl Gower), one of the sitting members for Lichfield about the arrangements for yet another election at Lichfield.

Henry Vernon was to be the Gower candidate for the vacancy caused by Granville Leveson-Gower's elevation to the peerage.

Thomas Gilbert's careful preparations were to prove extremely valuable, for despite his optimism there was an opposition to be overcome at the election of 1755, just as there was to be in the election of 1761. Polling at the next general election took place in March 1768 when Thomas Anson and Thomas Gilbert were elected unopposed.⁵⁰ Thomas Gilbert was to sit as one of the members for Lichfield until December 1794 (five months after Earl Gower's retirement) but he never had to fight an election.⁵¹ The Ansons and Leveson-Gowers in coalition continued to nominate the members for Lichfield for a further thirty years; and the only other election contest before the end of the century, that in 1799, only served to confirm the strength of the interest consolidated by Thomas Gilbert. This control continued until the 1820s when it was realised that 'boroughs were becoming too large and politically conscious to control.' The Leveson-Gowers gave up Lichfield, Stafford and Newcastle at this time, 'while sheer force of opinion drove them from the county seat.' The defeat of the Leveson-Gower interest was a clear indication of the disintegration of the old political systems in the 1820s. James Lock's examination of the various estates after his appointment in 1812 were

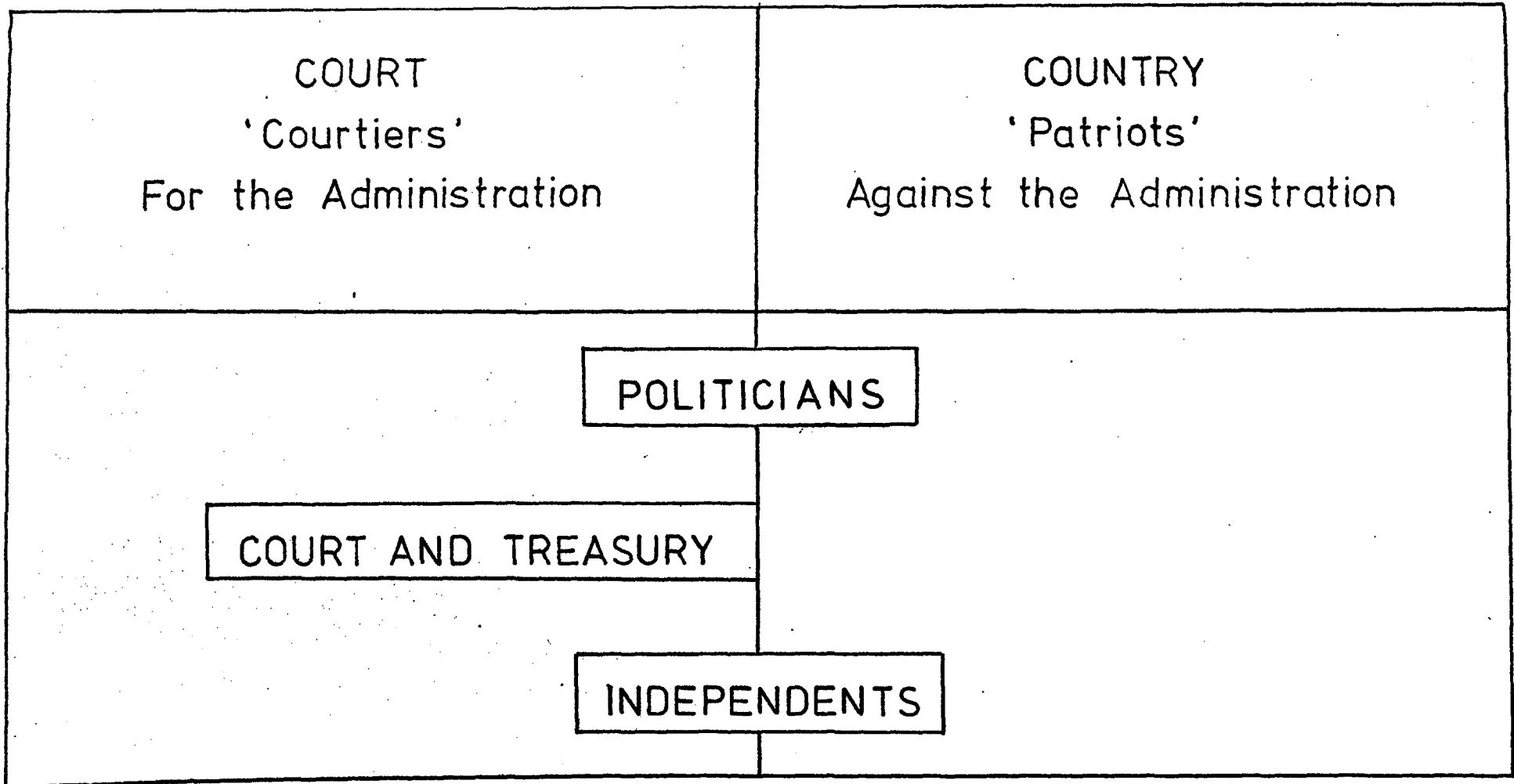
to reveal another reason for this withdrawal from the local political scene.⁵² George Granville Leveson-Gower, first Duke of Sutherland (1758-1833) was an immensely wealthy man, but he was also a careful one and he was made aware that his father's (the second Earl Gower) political activities had caused:

'The Staffordshire and Shropshire estates (to be) burdened under a system of leases for lives, to meet the election expenses incurred by the late Marquis, a system which, by destroying the enterprise of the tenant and crippling the landlord, had reduced the tenantry to considerable penury and backwardness.'⁵³

Thomas Gilbert was brought into Parliament by the Leveson-Gower interest as a member for Newcastle-under-Lyme, when the seat was vacated by John Waldegrave (later Earl Waldegrave) in December 1763.⁵⁴ The House of Commons that Thomas Gilbert entered did not have a party organization in any coherent sense. This was because there was an absence of the great issues around which parties tend to crystallize, but also because the vast majority of members did not wish to become associated with aspiring party leaders. Nevertheless politicians needed to increase their bargaining power - and hence their chance of gaining or retaining office, so that they needed to build up personal followings. Meanwhile the House of Commons could be divided broadly into the supporters and opponents

of Administrations or, as they were sometimes styled 'Courtiers' and 'Patriots'. This obvious division concealed a more fundamental one into three different types of member (see Figure 8).

The politicians included in their ranks members of the most prominent political families, including Earl Gower's relatives.⁵⁵ This group occupied the two front benches, dominated debates and often gave the erroneous impression that two distinct parties existed within the House. If they sat with the Administration, they could hope to gain preferment; and if they sat as opponents of the Administration, they would hope to force their way into office. The Court and Treasury Group were placemen, but unlike the politicians, they had few ambitions other than the security of tenure. This meant that in order to survive, they could not become too closely identified with any politician, even if that politician had been instrumental in obtaining an office for them. This group preferred instead to give their allegiance directly to the King, and were prepared to support any minister whom he chose to appoint. As 'Court officials, sinecurists, forerunners of the modern civil servants, or holders of military governorships'; they were all dependent on the Crown for their salaries. When Administrations changed there was a reshuffling of politicians, as demonstrated by the career of the second Earl Gower, but the vast



DIVISIONS WITHIN THE HOUSE OF COMMONS

(A modified version of that given by John B. Owen, in The Eighteenth Century,
London (1974), page 106.)

majority of the Court and Treasury Group were left undisturbed.

The remainder of the House was made up of the 'independents', although the label of 'non-dependents' was considered more appropriate by Dr. Owen.⁵⁶ This was a body of essentially back benchers, who did not rely on the Crown for income, although they were not above seeking favours for themselves or others. The basic inclination of the Court independents was to support the Administration appointed by the King, so long as they exercised the powers of government in accordance with established traditions. On the other hand, the characteristic Country independent had a thinly disguised hostility to all Government and a deeply rooted distrust of all politicians. But the independents could move either towards the Administration or the Opposition, depending on how these 'Patriots' viewed a particular issue. The three basic types of member identified in the diagram are frequently difficult to distinguish, and some members moved from one category to another during their parliamentary careers.⁵⁷

Despite having been brought into parliament by the Leveson-Gower interest, Thomas Gilbert enjoyed a considerable degree of freedom in his political life. Only once is it recorded that he needed to be reminded where his loyalties ought to lie, and that was with regard to a vote of censure against the Admiralty in 1782. The Earl of

Sandwich (then the First Lord of the Admiralty and a 'Bedfordite') wrote that 'the Duke of Bridgewater has spoken to Gilbert, and has told him that he is sure those who bring him into Parliament do not approve of him absenting himself.'⁵⁸ Exactly how Gilbert was desired to vote is not clear. Sandwich was a 'Bedfordite', but he held office at this time, whilst Earl Gower was with the Opposition. In the division of 20th February 1782, Thomas Gilbert voted with the Administration; but in two subsequent divisions, both on motions against the war, he voted with the Opposition.⁵⁹ Earl Gower had declared against the war in November 1779, but in December 1781, Gilbert had voted against a motion to end the war. Presumably, his votes for the Opposition in February 1782 was what was expected of him by 'those who (had brought) him into Parliament.'⁶⁰ Late in December 1781, he was in contact with Sir John Sinclair⁶¹ who with Gilbert was convinced that the solution to the nation's problems was to be found in a coalition government. Their activities among the independent members resulted in the meetings of these members at the St. Alban's Tavern in 1784.⁶² They were determined on a coalition that would force some agreement between Pitt and Fox; and their patriotic reasoning is very strongly expressed in a letter written by Thomas Gilbert:-

'I think we cannot do better service at present than by communicating our plan to such public-spirited members as we happen to be connected or acquainted

with, who have the real love of their country at heart; all these, I doubt not, will cheerfully co-operate with and assist us, in a work so essential at this crisis, and which promises so much relief to this poor, I may add unfortunate, divided, and distracted country; at the very brink of ruin, whilst she is possessed of resources sufficient to extricate her from her present distresses, to make her a scourge to her haughty and perfidious enemy, and to raise her to a greater pitch of glory than she has ever yet attained: if they were properly exerted, and her affairs administered with that spirit, equity, justice and economy which they ought.'⁶³

Gilbert and Sinclair were also concerned to effect reforms in Government and they felt that all these aims could best be achieved under a Coalition Ministry. Sinclair had two plans for such a government, one headed by Earl Gower and the other by the Marquis of Rockingham; but both lists included the names of Fox and Pitt.⁶⁴ Some months after writing the letter, Gilbert made a public statement in the House during a vote of no confidence in North's administration, in which he said that:-

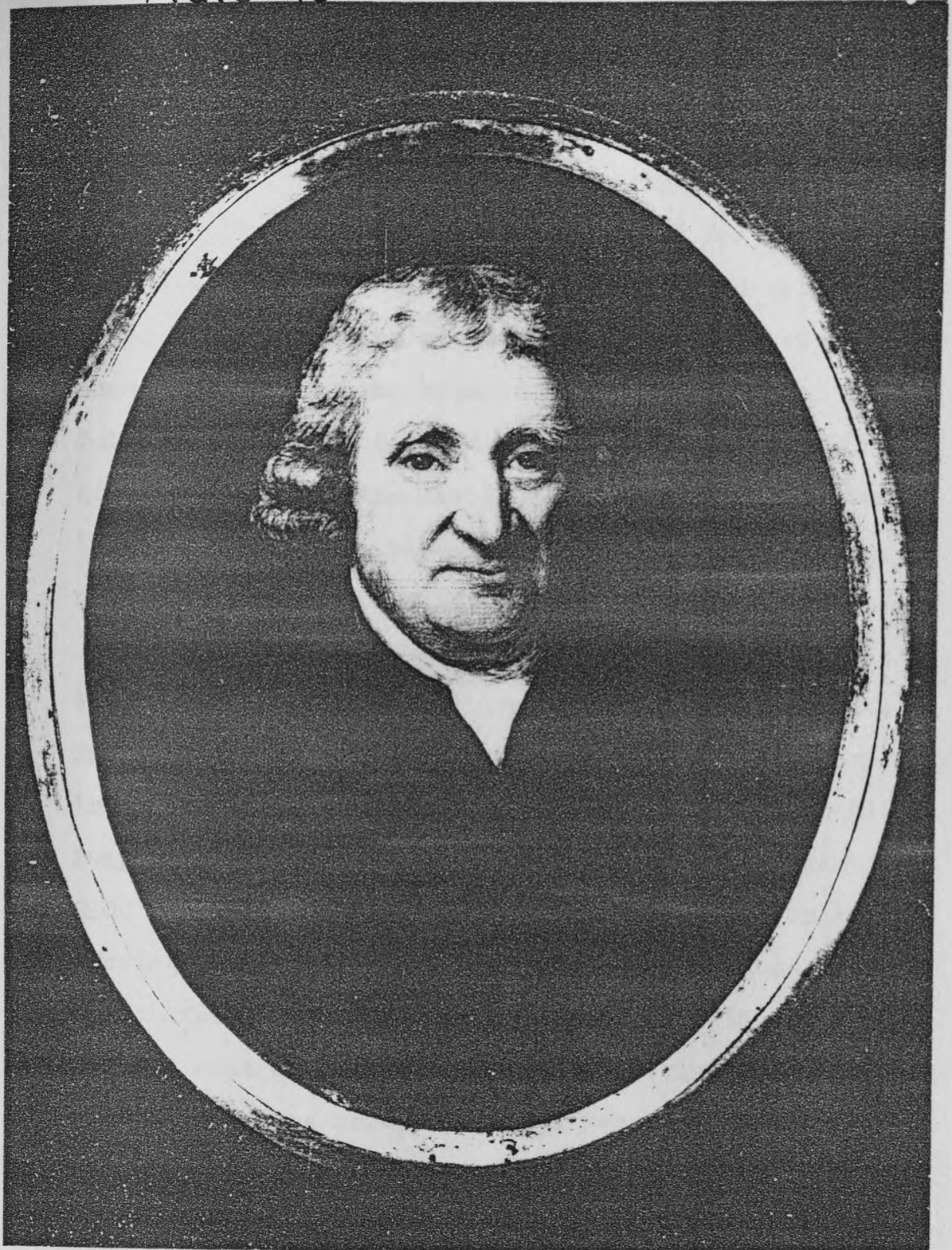
'He was quite undetermined how he should vote; he did not believe all his Majesty's ministers were bad, but some of them undoubtedly were; he thought if there was a coalition of parties a good Administration might be formed that would be a means of saving this country if it was not too far gone.'⁶⁵

He was a firm believer in the 'patriotic line of conduct, avoiding both factions, opposition and subservience, which men of honest character could recognise and follow.'⁶⁶ James Harris, in a letter to his son, called Thomas Gilbert 'a kind of demi-coutier, demi-patriot';⁶⁷ which seems a fair assessment of his political stance as he was deeply aware of the need for change, but cautious of abandoning the existing order of things. A year after this, in 1779, he was classed by John Robinson as 'pro, out of town';⁶⁸ in other words, he saw him as belonging to the 'Country' element.

Until 1778, Gilbert rarely spoke on political questions and he voted consistently with the Bedford faction. Indeed, his first recorded speech was in line with 'Bedfordite' policy and it was directed against the repeal of the Stamp Act.⁶⁹ Even though he was later to become passionately involved with reform, he accepted the Court office of Comptroller of the Great Wardrobe in 1763, which Earl Gower, himself Keeper of the Great Wardrobe, secured for him. He held this office until 1782, when the post was abolished under Burke's Civil List Act.⁷⁰ In addition, he held the office of Paymaster of the charity for the relief of the widows of naval officers from the initiation of the fund in 1763 until his death in 1798.⁷¹ Apparently, this post carried no salary and he undertook the duties for purely charitable motives. There is no record of Gilbert ever applying for

an office, even when the Duke of Bedford joined the Administration. The reason for this may have been the pressure of work imposed by his duties as Agent to the Duke of Bridgewater and Earl Gower, for later he remarked that he had been 'so much engaged in a variety of business as to prevent my attention to those very important concerns respecting the public.'⁷²

When he made one of his rare speeches in March 1778, he took the whole House by surprise. He expressed concern at 'the expenditure of public money, particularly the exorbitant contracts and abuses of office', and proposed 'a tax of one fourth upon the incomes of all placemen.'⁷³ Horace Walpole related how both 'Lord Gower and the Duke of Bridgewater had taken great pains to dissuade him, but he said he could not be easy in his mind without proposing it.' Gilbert defended his proposal by saying that it would 'better enable his Majesty to indicate the honour and dignity of his Crown and the dominions thereunto belonging.'⁷⁴ George III may have applauded the motive, but he confided in Lord North that it was utterly impracticable. Nevertheless it was carried in committee against Lord North, but was rejected on report. Horace Walpole mentions a contemporary belief that this proposal was directed at Richard Rigby (Paymaster of the Forces), who had refused to give a vacant place at Chelsea Hospital to the brother of Thomas Gilbert's second wife.⁷⁵ This is clearly malicious as both his character and actions show



THOMAS GILBERT, MP, JP
(1720 — 1798)

that he was genuinely concerned with reforming the Civil List. When Burke introduced his economical reform bill in 1779, Gilbert 'expressed the warmest approbation of Mr Burke's propositions, and said that if he had not got the start of him, he proposed to do something of the same kind himself.'⁷⁶ However, the following year, he opposed as 'indelicate', Burke's attempt to reform the Civil List by Act of Parliament; 'rather wishing his Majesty would be pleased to make the necessary reformatations by his own authority.'⁷⁷

When questioned about his own place in the Household, Gilbert said that he had with the assistance of Earl Gower 'reformed such abuses in the office as fell under his inspection as comptroller, and had saved his Majesty £900 per annum.'⁷⁸ In 1781, he was asked by Sir Philip Jennings Clarke, if he intended to re-introduce his motion for a tax on places and he replied that 'he had not the most distant intention of reviving the Bill.'⁷⁹ By this time the main initiative for reform had passed elsewhere, but in 1782 he was commissioned by Shelburne to conduct an inquiry into the value of places and pensions.⁸⁰ As a result of his report, he was afterwards able to say that 'a great many salaries had been diminished, and many sinecure places entirely abolished',⁸¹ and amongst these was his own post as Comptroller of the Great Wardrobe.

Thomas Gilbert's most important parliamentary office was as Chairman of the Committee of Ways and Means; a committee of the whole House of Commons which sat to consider methods of raising supplies. His appointment followed a heated discussion in the Commons in 1784 with the Premier, William Pitt speaking in his favour and Fox speaking for the then existing Chairman. When the House chose Gilbert, it drew the acid comment from Fox that the Ministry was "not content with the ordinary disposition of emoluments of the Crown, they were grasping at the offices belonging to the House."⁸² The post carried an annual salary of £500 a year, but when Gilbert left the House in 1794, he still maintained the right to fix his successor's salary. When Gilbert died in 1798, 'Mr Hobart, who succeeded him in that situation, (received) an addition of £250 a year to his salary; the deceased, ever since his resignation, having had a rider on the emoluments of the office to that amount.'⁸³ Thomas Gilbert obviously carried on his work of reform, even after leaving the House.

One of Gilbert's contemporaries, Sir Gregory Page-Turner said in the Commons that Gilbert 'ought to have his name written in letters of gold, for the uncommon pains he had taken to assist the poor'.⁸⁴ It was almost certainly the main interest of his career and frequently it has been stressed at the expense of his other parliamentary interests.⁸⁵ Even before he entered parliament, he was

well aware of the evils of the Old Poor Law, still essentially an Elizabethan code which had been subject to some changes. His concern had much to do with his upbringing as the Gilberts had long been involved in what was termed 'voluntary charity' in the Cotton area. Apart from paying their Poor Rates, 'money had been given to the poor of Cotton by his ancestors'; and 'a distribution of bread and ale to the amount of 20 shillings (was) made each year' to the same people.⁸⁶ Such an awareness could only have been heightened by his work as 'one of his Majesty's Justices of the Peace, for the County of Stafford.'⁸⁷

The Poor Rate was viewed in the eighteenth century not in terms of the numbers who benefited from it, but essentially from the viewpoint of the money raised. In 1695 it was estimated that this figure was £665,302, which had risen to £1,720,316 by 1776.⁸⁸ This reflected an absolute rise in the number of recipients, and a relative one as the population had not increased by a similar proportion, while there appears to have been no rise in the amount spent per capita. On the contrary, a major preoccupation was the constant search for ways in which to reduce the cost of providing for the poor.⁸⁹

A popular device was the workhouse, pioneered by Bristol in 1697 and soon copied in other provincial towns. These developments led in 1723 to an Act which empowered parishes to acquire workhouses and to contract out their duty of providing for the poor. As a result of this legislation,

about 110 workhouses came into being, as well as 'entrepreneurs' who undertook to manage the new schemes. The result was inevitable. The 'entrepreneur' wished to make money and the parish wanted to spend as little as possible.⁹⁰ If a per capita basis was agreed upon, it would be the lowest possible sum; and then the 'entrepreneur' would maximise his profits by means of stringent and often inhumane economies. Where lump payments were the practice, he could by making the workhouse a place of terror, discourage people from entering it, or he might give them a small allowance to stay away.⁹¹

The horrors of the system caused great concern and the whole situation is epitomized by one informed observer and writer, John Scott:

'One thing is too publicly known to admit of denial, that those workhouses are scenes of filthiness and confusion; that old and young, sick and healthy, are promiscuously crowded into ill-contrived apartments, not of sufficient capacity to contain with convenience half the number of miserable beings condemned to such deplorable inhabitation, and that speedy death is almost ever to the aged and infirm, and often to the youthful and robust, the consequence of a removal from more salubrious air to such mansions of putridity.'⁹²

The workhouse system did provide savings to the rate-payers, but as Sir Frederic Eden observed in 1797, 'the way in which these workhouses, on their first establishment,

effected a reduction in parochial expenditure, was by deterring the poor from making application for relief.⁹³ So the problem tackled by Thomas Gilbert was to make the Poor Laws effective in providing relief to the poor, and at the same time introducing the economies necessary to popularise his scheme among rate-payers at large.

As early as 1765, only two years after he entered the House as Member for Newcastle-under-Lyme, he brought forward a Bill for remedying the distressed state of the power and the misuse of the funds raised for their relief. He proposed to divide every county into large districts composed of a whole hundred, or at least a great number of parishes. His Bill, after thorough investigation and considerable amendment, passed the House of Commons; then in the words of Sir Frederic Eden '(as Mr Gilbert informs us, from some circumstances unconnected with its merits) it was defeated by the Lords in a very full House on a division of 66 against 59.'⁹⁴ Undeterred, Thomas Gilbert continued with the sanction of Parliament, to make enquiries as a preparation for further attempts at reforming the Poor Laws. He published two pamphlets outlining his ideas in 1775;⁹⁵ and in 1776, he secured an Act by which overseers had to make returns in respect of how much money the poor rate raised and how it was spent. This provided valuable ammunition for future debates and after nearly twenty years of effort, he presented three Bills for the reform of the Poor Laws in 1781.⁹⁶

P L A N

F O R

The better Relief and Employment
of the Poor;

F O R

Enforcing and amending the Laws
respecting Houses of Correction,
and Vagrants;

A N D F O R

Improving the Police of this
Country.

T O G E T H E R W I T H

BILLS intended to be offered to
PARLIAMENT for those Purposes.

By THOMAS GILBERT, Esq.

L O N D O N :

Printed for G. WILKIE, St. Paul's Church-Yard,
MDCCLXXXI.

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L E T T E R

T O

THOMAS GILBERT, Esq;

O N H I S

I N T E N D E D R E F O R M

O F T H E

P O O R L A W S.

By A COUNTRY GENTLEMAN.



L O N D O N :

Printed for J. DEBRETT, in PICCADILLY; and
J. SEWELL, in CORNHILL.

M.DCC.LXXXVII.

THE TITLE PAGE FROM ONE OF THOMAS GILBERT'S PAMPHLETS AND THAT
FROM ONE WRITTEN IN REPLY TO HIS PROPOSALS.

The first of these dealt with Houses of Correction and empowered justices to inspect them and to make a report on them at the Michaelmas sessions, as well as requiring the keepers to make reports on the work performed in their Houses. The second, later to be known as the Gilbert Act, repealed in its first clause the part of the Law which allowed contracting for the care of the poor.⁹⁷ The Act also set up the machinery for combining parishes into Unions, permitting them to unite; to operate a single poorhouse; but with the provision that:-

'no person shall be sent to such poor house, or houses, except such as are become indigent by old age, sickness, or infirmities, and are unable to acquire a maintenance by their labour; and except for such orphan children as shall be sent thither by order of the guardians and such children as shall necessarily go with their mothers thither for maintenance.'

The person, 'able and willing to work', was not to be sent to the poorhouse, but to be given 'employment suited to his or her strength and capacity.' The guardian of the poor was also required to 'maintain' such people until suitable employment could be found for them.⁹⁸ The third Bill was designed to deal with rogues and vagabonds, but unlike the first two, this one was rejected.⁹⁹

The significance of Gilbert's Act of 1782 is that it reversed the Statute of 1722,¹⁰⁰ which authorized the

overseers to remove from the relief rolls any person who would not enter the workhouse. In keeping the able-bodied from the workhouse and in providing assistance for them during periods of unemployment, it opened the way for a system of aid to poor people in their own homes. Comparatively, few parishes took advantage of this new law; for in 1834 there were only sixty-seven Gilbert unions, combining 924 parishes, less than one fifteenth of the number of parishes in England and Wales.¹⁰¹ However, Gilbert had succeeded in removing the worst horrors of the workhouse system and made the first move away from such a system. In the words of de Schweinitz:-

'The nation now began to turn towards a program of outdoor relief that was to be the method of operation for the next half century, and the subject of discussion for many years thereafter.'¹⁰²

One important consideration remains and that is why Thomas Gilbert entered parliamentary life. The obvious reason would seem to be that as an employee of Earl Gower, he could be relied upon to vote in accordance with the faction line, but this represents a far too simplistic view. In fact, a study of his subsequent parliamentary career reveals that he was allowed considerable freedom regarding his actions within the House, although his vote could still be called upon in times of difficulty. A major reason is revealed by consideration of the date

when he was brought into Parliament, and to a lesser extent, by the borough that he was selected to represent.

Thomas Gilbert sat for Newcastle-under-Lyme from 1763 until 1768, taking his seat when the discussions about the projected Trent and Mersey Canal were reaching their climax. He had previously been instrumental in obtaining canal Acts for the Duke of Bridgewater in 1759, 1760 and 1762; so he was already familiar with the relevant parliamentary procedures.¹⁰³ His presence in the House of Commons, and more especially on the committees that met to consider such Bills, would have greatly facilitated their passage.¹⁰⁴ For as Sir Lewis Namier pointed out: 'in the eighteenth century, Parliamentary politics were transacted, to a disastrous extent in terms of jurisprudence.'¹⁰⁵ The rapidity with which Gilbert was able to establish himself in the promotion of these aims is indicated by his Chairing the parliamentary committee, to which the Trent and Mersey Canal Bill was referred in 1766.¹⁰⁶ His role as member for Newcastle-under-Lyme may also have been significant, as the Corporation were anxious to see the canal built; especially since the first proposals had included a branch canal from the main line at Stoke to Newcastle.¹⁰⁷

The significance of canals to estate development has been discussed in Chapters Three and Four, but Thomas Gilbert was also active in the promotion of turnpike roads. His obituary writer noted that he knew that:-

'the best interests of commerce, manufactures, and agriculture, are intimately connected with an easy and speedy communication, he zealously applied himself to the amendment of the roads, and although he did not succeed in his original plan of procuring a general act for their improvement yet he carried through the house many provincial bills which tended to make travelling in the counties of Northampton, Warwick, Stafford and Derby, the places to which he particularly directed his attention, infinitely more commodious and agreeable: indeed it is well known, that before his time, the highways were the worst in the Kingdom.'¹⁰⁸

These improvements obviously took time, as Lord Chancellor Thurlow was able to remark, after a visit to Cotton in 1782, that he found:-

'Dangerous roads, ill made and worst kept; and that within so few miles of Cotton, and in so few hours after I had been learning how to make and keep roads.'¹⁰⁹

Earlier in 1773, Gilbert had been successful in framing an Act, which consolidated the law relating to turnpikes and has subsequently come to be considered as 'a landmark in the history of English highway administration.'¹¹⁰

The prime motivation for this work can be deduced from the fact that most of his provincial bills for highway improvements are concerned with counties where his employers had estates. Earl Gower had extensive estates

in Staffordshire and the Duke of Bridgewater in Northamptonshire; and in the other counties they had lesser estates.

Thomas Gilbert's motives for taking a seat in Parliament were essentially concerned with his desire for social advancement; but also because he was 'a patriot, in the best sense of the word, for (he dedicated his life) to the service of his country.' He had as 'heir to a small estate endeavoured to improve (it) by the profession of law', but he must have realised quite early on that this ploy would not work as he had 'never made a very conspicuous figure, either in the Courts of Westminster, or on the circuit.'¹¹¹ Therefore, his advancement was to come through entering the employ of 'a noble family, that possessed great influence in his neighbourhood';¹¹² and through his connection he gradually improved his fortune and position in the local community. When Thomas Gilbert purchased a patent, from the College of Heralds, he was well aware that the ability to display a coat of arms was considered a mark of gentility.¹¹³ But to sit as a Member of Parliament was an indication of an even higher ranking in the class of gentry. Sir Lewis Namier pointed out that the 'Country Gentlemen' who sat in Parliament felt what 'mattered to them was not so much membership of the House, as the primacy in their own "Country" attested by their being chosen to represent their county or some respectable borough.'¹¹⁴

At that time, Newcastle-under-Lyme was "rotten" rather than "respectable", since the seats were very much the property of the Leveson-Gower family. But it would be wrong to think that they could introduce any person into one of the seats, as that person had to be at least 'a substantial country gentleman who had gained the respect of his neighbours.'¹¹⁵ An examination of the names of earlier Members for Newcastle-under-Lyme, reveals the names of old established local families, like Mainwaring, Sneyd and Crewe-Offley.¹¹⁶ In securing the seat, Thomas Gilbert had raised his family in a social sense, from the level of the 'Little Country Gentlemen',¹¹⁷ to that of the 'knights of the shire the consuls of the county republics.'¹¹⁸ This sudden upward movement can be demonstrated in another way. When Earl Gower raised his Regiment in 1745, members of the Crewe and Mainwaring families took 'Captain's Commissions and (undertook) to raise their Companies at their own expence'. This was expected of them since they were 'Gentlemen of Family and fortune in the County'; but Thomas Gilbert served as an Ensign,¹¹⁹ a rank dictated by his lower status among the local gentry. Indeed in 1745, the Gilberts could have been best described as 'Gentlemen farmers.'¹²⁰

Once in Parliament, origins and family background mattered little. Sir Walter Blackett, M.P., remarked in a parliamentary debate that 'Every man carries his

honour in his own hand. Origin is nothing, it shall never have any weight with me.'¹²¹ This was neither a doctrine or an empty phrase, for 'there was no place where men of minor rank and means could exert their personal strength and abilities more freely and to better advantage than in the House of Commons.'¹²² It should also be observed that had Gilbert not been brought into Parliament by the Leveson-Gower interest, then it is unlikely that he would have obtained a seat in any other way. He hardly had the resources to fight an election, nor the character as indicated by his poor performances as a barrister. So it would appear that the 'rotten' political system of the eighteenth century could be the indirect agent of good.

Sir Lewis Namier described the distinguishing characteristics of the 'Country Gentlemen' in Parliament as being: 'neither political acumen and experience, nor Parliamentary eloquence, but an independent character and station in life and indifference to office.'¹²³ Thomas Gilbert's obituary writer described him as 'an independent senator ... both in and out of office'; and indeed Namier's specification fits him well, as long as he is judged by the standards of the eighteenth century. He was independent in character and possessed of sufficient means not to have to chase office;¹²⁵ but nevertheless he was mindful of the desires of his sponsor, Earl Gower. Apart from his semi-sinecure post as Comptroller of the Great Wardrobe,

he neither sought nor accepted office. This office was given to him almost as soon as he entered the House in 1763 and as much as anything it was probably intended to offset his expenses. Members of Parliament did not receive any salary, and he had the expense of maintaining a town house, first at Garlick Hills¹²⁶ and later in Queen Street.¹²⁷ He also accepted places for his two sons. The Reverend Thomas Gilbert was 'one of the clerks extraordinary belonging to the Privy Council', and was able to exercise his duties by means of a deputy; and his other son, Richard, received a naval commission.¹²⁸ But all these 'benefits' were uncommonly moderate by the standards of the day; as was the fee he received for his enquiry into the value of places and pensions. The real character of the man emerges in his genuine concern to reduce places and pensions, a programme of reform which cost him his only 'semi-sinecure'.

Gilbert's concern for the poor was far reaching. The Quaker, Richard Reynolds, involved him in a scheme to build one of the earliest Sunday Schools, at Ketley;¹²⁹ an innovation that was copied at Worsley in the following year.¹³⁰ This was quite a radical step as a literate populace would be more difficult to control. Indeed, in his discussions with Sinclair, Gilbert's thoughts were extending to the 'inadequate representation of the people in parliament.'¹³¹ He would have been aware of the

'Wilkes and Liberty' movement, but also of the political dimension that underlay the Gordon Riots of 1780.¹³²

Against such a background, he launched his Poor Law reforms, but avoided the major issues that were to dominate the first half of the nineteenth century.

Chapter Six

ENTREPRENEURS

At the time of the elder Thomas's death in January 1741/42, the Gilbert family were already embarked on a programme of entrepreneurial endeavour. Like many men, of a similar kidney, Thomas was aware of the untapped resources that existed in the neighbourhood and the growing market demand for these resources. To his two sons he bequeathed his interests in the Cloughead Colliery; the Cauldon Low quarries; two smelting mills and a collection of lead and copper mines.¹

The capital requirements for such enterprises were not large, although sometimes they must have seemed so, considering the numerous small enterprises in which Thomas Gilbert was involved. External supplies of capital were not as important as personal or family funds, which could be scraped together to finance another enterprise. The Gilbert-Bill partnership in the Cloughead Colliery depended on inter-family co-operation, and this was to be continued by John and Thomas Gilbert, after their father's death in 1741/2.² The elder Thomas also mortgaged his land to finance his industrial enterprises; and then used the profit to redeem the mortgage or to buy more land. In his will it mentions 'the Land wch. was purchased of Barnets at £400 now in the possession of Tunicliff,' which was willed to his son, John.³ The same method of raising working capital was employed by John Gilbert, and with equal success. Matthew Boulton financed his

Soho works in a very similar way.⁴ He sold some of the property that he had inherited from his father, mortgaged the rest, and then did the same with the £28,000 worth of property that came to him through his marriage to an heiress, Anne Robinson.⁵

The example of previous enterprise by the forebears of entrepreneurs is worth stressing. John Wilkinson, the famous eighteenth century ironmaster was the son of Isaac Wilkinson, a potfounder, who exhibited a considerable degree of the entrepreneurial flair that was the hallmark of his son.⁶ George Stothert, the founder of the Bath firm that later became Stothert and Pitt, was himself the son of an ironmonger. His father, also called George Stothert, had worked as book-keeper, to a Manchester ironmonger called Bateman; better known because of his partnership with the north Staffordshire engineer, William Sherratt, in the firm of Bateman and Sherratt.⁷ Heaton also made this point when he remarked that:

'Josiah Wedgwood was at least the fifth generation of potters; the Midland ironmasters looked back on an ancestry of nail or lock makers, smelters or founders, brassworkers or ironmongers; and the builder of one of Yorkshire's early large factories was the eleventh generation of clothmakers.'⁸

The enterprise of forebears was often crucial in moulding the interests and character of the entrepreneurs who emerged during the Industrial Revolution, but this

observation does need to be qualified. For example, John and Nathaniel Philips, the sons of the John Philips, who had leased coalmines at Kingsley in 1721; embarked on linen tape weaving at Upper Tean, in 1747. They were showing the same entrepreneurial inclination as their father had done, but they were more astute in choosing an enterprise where the competition was limited, and the capital outlay more modest. The 'old loom house' cost them a mere £160, although there was also the cost of employing a Dutchman to show them how to construct 'swivel looms', and later he was consulted on the best way in which to improve them.⁹

In view of these opening statements, Professor Mathias's comments on the role of entrepreneurs seem particularly enlightening:-

'The entrepreneurs were not the long-lost cause of the industrial revolution. They sprang from economic opportunity as much as they created it. They depended everywhere upon a necessary creative environment. They joined the circle of other factors in economic growth as part cause and part effect, a dependent attribute and a creative part of industrial progress. But they are important. Latent resources can lie unused until "men of wit and resource" organize them for a market they have promoted.'¹⁰

Entrepreneurs had long been present in British society, but in many instances they were of such limited stature as to go almost unnoticed. Also, they were so intent on

improving their social status through the purchase of land that they soon disappeared among the ranks of the so called 'landed classes.' If John and Thomas Gilbert are compared with their father as entrepreneurs, then the differences that emerge are not ones of instinct or ability, but more of time, place and opportunity. For they began to work in the pattern of enterprise that he laid down; and then through their involvement with the Gower-Bridgewater interest, they became aware of the greater opportunities that existed for the exercise of their talents.

The family involvement with lead smelting was being developed by the elder Thomas Gilbert at the time of his death.¹¹ The lead ore that was raised from the mines could either go 'to the merchant or (the) smelter';¹² so the obvious way of making more money was to assume one of these roles. That of the merchant was less attractive, for it depended upon a network of contacts and also it might mean holding considerable stocks of ore or metal, which would tie up capital that could be employed elsewhere. On the other hand, a smelting mill could be set up at comparatively little cost. The site would be chosen as near to the mines as possible, bearing in mind: transport costs; the availability of a water-power site; and the ease of superintendence made possible by a spatially compact holding.

As Aikin stated: 'smelting furnaces are of two kinds, the hearth and the cupola.'¹³ The cupola was in fact

a low-arched reverberatory furnace with a fire at one end fuelled by coal and a low curved roof sloping down towards the other. A low wall separated the fire from the ore and the draught caused the flame to pass over the ore towards a flue at the far end which led to a chimney. This was the most efficient way of smelting, but it represented the most expensive option. Aikin wrote a description of the alternative:

'The hearth consists of large rough stones placed so as to form an oblong cavity about two feet wide and deep, and 14 long, into which fuel and ore are put in alternate layers; the heat is raised by means of a large pair of bellows worked by a water wheel. The fuel is wood and coal. The lead procured this way is very soft, pure and ductile, but a considerable quantity of metal remains in the slags. These are, therefore smelted over again with a more intense fire of coke; but the metal produced is inferior in quality to the former.'¹⁴

The smelting mill at Greenlowfield (near Alstonfield) was of the hearth type and work on building the mill had started sometime before October 1739. The principal partner was William Hall Walton, another 'yeoman', but one who was later to style himself 'gentleman'.¹⁵ His son, Hall Walton, 'gentleman', had been involved in leases of the Ribden, Thorswood and Ecton mines, but his involvement with the construction of the costly Apes Tor Sough at Ecton had contributed to his serious financial

difficulties.¹⁶ This caused him to sell his interest in the smelting mill to Paul Nightingale, a Derby grocer.¹⁷ The Gilberts were already involved by this stage¹⁸ and six months after the mill was conveyed to Nightingale, 'Thomas Gilbert of the Inner Temple' took it over for the remainder of the lease for £200.¹⁹ This meant that the ore being produced on the Burgoyne royalty at Ecton,²⁰ by the Gilberts, Robert Bill and others, could now be smelted in their own mill and so another source of income became available to the family. The degree of integration becomes more marked, when it is realised that the coal used in the smelting mill came from the Cloughead colliery, worked jointly by the Gilberts and the Bills.

The second smelting mill at Dimmings Dale, near Alton was also a venture that the elder Thomas Gilbert had been instrumental in launching.²¹ The Earl of Shrewsbury built the mill at his own expense, then leased it to the younger Thomas Gilbert and his father's partners in the Thorswood and Ribden mines, at a peppercorn rent of 1 shilling per annum.²² Presumably, the Earl's motive for this action was connected with his general desire to develop his estate.²³ The other partners were Anthony and Edward Hill, but on the death of Anthony Hill, John Gilbert increased his holding in the mill.²⁴ It was described as a 'smelting mill refinery and slag harth',²⁵ so it was of the same type as the Greenlowfield mill. The lead ore came from the mines in which the Gilberts

had interests, but the relative locations would suggest that the Alton mill would have primarily served the Thorswood and Ribden mines.

John and Thomas Gilbert enlarged the partnership, which was running the mill, in 1760.²⁶ At the same time certain changes had been made in the mining partnership operating the Ecton mine. The brothers agreed to divide their shares in the mill between their mining partners, namely: the Duke of Devonshire; four members of the Bill family; and almost certainly, Edward Coyney.²⁷ Before 1760, the Gilberts had only worked the Burgoyne mineral field at Ecton, in partnership with the Bills, Edward Coyney and probably others.²⁸ The new partnership was established to work the Chadwick mine, owned by the Duke of Devonshire. The Chadwick mine was worked for lead between 1761-1773, but the amount raised seems to have been modest. The Burgoyne mine also appears to have been still working in 1772, but accounts for both mines are missing.²⁹ The earlier operations at the Burgoyne mine, between 1737-44, made an estimated profit of at least £726; but this would be divided amongst the partners.³⁰

After 1773, the Gilbert brothers and their partners seem to have withdrawn from mining operations at Ecton. This meant that the smelting mill at Alton was no longer an economic proposition and it was abandoned. The mines at Thorswood and Ribden may also have become less profitable

during this period, and this would also have had an adverse effect on the fortunes of the Alton smelting mill. Another factor was the spread of the more efficient cupola furnace; one being erected at Ecton before 1767.³¹

The Gilberts involvement with the Ecton mines are of interest on two other counts. Firstly, within the mines worked by the Duke of Devonshire at Ecton, there was a boat level by the time of Sir Joseph Banks's visit in 1767.³² The link has already been mentioned between the Barker family, agents to the Duke of Devonshire, and John Gilbert in the Hillcar Sough project of 1766.³³ Therefore, it seems almost certain that John Gilbert advised on the Ecton boat level, a further example of his work as a consultant mining engineer. John Gilbert also brought James Brindley to Ecton, in March 1759 or 1760; and the most logical reason for this would be to advise on some form of pumping machinery.³⁴ In 1769, the mines were drained by 'a common Wem or engine', a horse-powered machine that raised water in barrels.³⁵ These were replaced in 1783 by a massive water-engine, like those employed at the Gilbert's Woodhead colliery and at Worsley.³⁶

By 1747, John and Thomas Gilbert had gained complete control of the Thorswood and Ribden mines, under a lease from the Earl of Shrewsbury.³⁷ They issued a prospectus in order to attract partners and this provides a valuable insight into the way capital was raised. The Gilbert

brothers proposed to keep one half of the shares (12 in number) and to sell the rest at 25 Guineas for one twenty-fourth share. This would give them an authorised share capital of £630, although it is clear that the capital was subscribed in yearly instalments. The partners were required to forward sums of money to get the mines operational and this amounted to £5-5s-0d, £10-10s-0d, £7-0s-0d, and £10-0s-0d in 1747, 1748, 1749 and 1754 respectively. The only figures available suggest that the mines were not profitable.³⁸

During 1748-49, the cost of working the mines came to £461 and the ore produced was valued at £402. From 1754 to 1757, the costs were £515 resulting in the production of lead and copper worth £321.³⁹ It seems unlikely that these losses were typical for the brothers surrendered the lease in 1763; and immediately took out a new lease, which bound them to spend £1,000 over seven years on trials for fresh deposits of ore. The mine was productive in the 1760s and 1770s, but again no figures are available.⁴⁰

A lease of the Thorswood mine in 1793 shows that the Gilberts had abandoned their interest in this mine, but in the same year, John Gilbert took out a lease of the Ribden mines. Following John Gilbert's death, his son, John, formed a partnership to run the mines. Again, twenty-four shares were to be offered, and the concern was to be run on the usual cost book system, deposits being made (on request) to cover operating costs. The

shareholders were: Thomas Patten of the Alton Wire Company (10 shares); John Gilbert, Junior (2 shares); Thomas Gilbert (2 shares); Charles Bill (2 shares); the Reverend John Bill (2 shares); Henry Yeoman (2 shares); George Smith (2 shares); William Bird (1 share); and Matthew Brindley (1 share). The family connections emerge once again in this partnership, but in a more limited way, as only nine of the twenty-four shares were held by John Gilbert, Junior, or his relatives.⁴¹

The Cloughead colliery appears to have been reaching the end of its useful life by 1755, and the two Gilbert brothers began to look for another colliery in which to invest. On the 18th May, 1759, they secured a lease of Mr Whitehall's mines 'on the south west side of the Churnet', in the Woodhead coal seam.⁴² The previous day, James Brindley had visited the colliery to advise on the construction of a water engine for pumping out the mines.⁴³ The Gilberts were to pay Whitehall a duty of an eighth on all coal raised and on this basis they worked the mine for three years.⁴⁴ Then in 1762, the brothers sub-let the mines to John Leigh, Thomas Hurst and John Bill, requiring a duty of a sixth on all coal raised. This meant in effect, that John and Thomas Gilbert received the profit on the sale of just over four tons, out of every one hundred tons, their return being equal to four and a quarter per cent, with no expenses.⁴⁵

A meeting of coal leaseholders and those actively concerned with mining in lands adjacent to the Gilberts,

was held at Cheadle on 2nd November 1762.⁴⁶ From this meeting a very large partnership was formed, made up of members of the Hurst, Leigh, Bill and Gilbert family. As all leases were to be submitted to Thomas Gilbert for scrutiny, it seems likely that he was the moving force behind the formation of this partnership. Three days after the meeting, John and Thomas Gilbert sub-leased their colliery within the partnership, of which Robert Hurst and Edward Leigh were to be the chief executives.⁴⁷ Such an arrangement would have suited the Gilberts very well, as at this time John was preoccupied with the Worsley project and Thomas was about to embark on his parliamentary career.

The arrangement worked well until 1777, when John Gilbert protested that he was not satisfied with the statement of accounts. He objected to a payment of £150 made between two of the partners, and insisted that the matter be submitted to counsel for an opinion.⁴⁸ The matter was eventually sent to a barrister, J. Mansfield, who found in favour of John Gilbert's partners.⁴⁹ Three years later, another meeting was held at the Star Inn and John Gilbert raised the matter again. He told the meeting that 'if they do not produce the books and accounts, a Bill of Equity ought to be filed for that purpose to oblige Mr Hurst, Mr Rupert Leigh and Mr Ed. Leigh to produce upon Oath or give the best account they can of the transactions.'⁵⁰ In such a climate of distrust, the partnership collapsed, which was probably not such a

disaster for the Gilbert brothers as their original lease had only five years to run. The episode does serve to illustrate the intransigent side to John Gilbert's character; a weakness inherited by his son, John, who showed the same blind determination in his dispute with Sir John Edensor Heathcote.⁵¹

John Gilbert also obtained a lease of all the coal mines in Farley and Cotton, from the Earl of Shrewsbury in 1767.⁵² His purpose in obtaining control of the small mines in this area and of opening others, was to secure a supply of cheap fuel for the limekilns at Cauldon Low, that Thomas and he were operating. By this time, the mine at Cloughead was worked out and an alternative supply of slack or poor quality coal was needed. Six years earlier, John Gilbert had obtained a lease from the Earl of Shrewsbury of all the limestone in 'Ribden Stones or Ribden flats', which he held in addition to his share in the Cauldon Low quarries.⁵³

The Act for the Caldron Canal reveals the names of the owners of the various limestone quarries. Thomas Gilbert, Henry Copestake, Robert Bill and William Wooliscroft were what might be termed 'semi-independent' operators, as they did not co-operate closely. On the other hand, John Gilbert, Richard Hill, George Smith and Sampson Whieldon, were all part of a concern known as the Caldron Lime Company. All of the quarry operators did make an

agreement with the Trent and Mersey Canal Company, to deliver to the Canal Company (on request) 'good and merchantable Limestone at 7d per Ton.'⁵⁴ The same proprietors were operating the quarries in 1794, when the Canal Company took between 2,000 to 5,000 tons per month.⁵⁵

The tonnage required for the year 1795 was estimated at about 40,000 tons.⁵⁶ This allows an estimate to be made of the figure, paid by the Canal Company to the proprietors, the amount being about £1,166. The quantity of stone taken from the individual quarries, to fulfil this order was left to the owners to decide amongst themselves. John Gilbert and his partners in the Caldon Lime Company usually supplied two-fifths; Thomas Gilbert one-fifth; and the other owners the remaining two-fifths.⁵⁷ The quarry owners also sold limestone that was carted away for use in the surrounding area, much as it had always been.

The Caldon Lime Company took over John Gilbert's lease of the coal mines in Farley and Cotton, concentrating especially on the poor, shaly coals mined near Froghall.⁵⁸ But the Company's interests were more extensive than this, for at the time that John Gilbert established the Caldon Lime Company, he was also organising another Company based at Cheddleton to burn the broken limestone. John

Gilbert and 'others' bought land at Cheddleton in 1778,⁵⁹ and subsequently his partners in the Cheddleton Lime Company are revealed to be the same people who comprised the Caldon Lime Company.⁶⁰ The Cheddleton Lime Company erected kilns at Cheddleton and Horsebridge, on the banks of the Caldon Canal.⁶¹ The company purchased slack from the nearby Shafferlong coalfield; and until 1786, they controlled the only limekilns between Cauldon Low and the Potteries.⁶² They also operated a boatyard at Cheddleton which constructed and maintained their own narrow boats, and offered the same facility to other boat-owners.⁶³ The concern remained profitable for many years, John Gilbert's place being taken by his son, John; whose executors drew £300 from the concern in 1815.⁶⁴

In all the enterprises so far mentioned, John and Thomas Gilbert were either continuing, or extending a pattern of activity that their father had laid down. He had been concerned to increase the family's land holding, and the quickest way to achieve this was by investment in extractive industries. The first extensions of the brother's interests came about through their involvement with Earl Gower and the Duke of Bridgewater. Their activities, with the exception of the pencil factory at Worsley, were not new in nature, but they did take the Gilbert brothers from the familiar surroundings of the Staffordshire moorlands.

The major venture within this category was Earl Gower and Company, a concern that was intended to develop the Earl's Lilleshall estate, and as such was described in Chapter Two. The financing of this enterprise was mainly left to Earl Gower, although the Gilbert brothers did provide a small proportion of the capital. The Earl safeguarded his income by leasing the workings to the brothers and by requiring them to sign a bond. Thomas does not seem to have been short of working capital; for he had the residue of his £10,000 windfall; the income from the Cotton estate; and an income from the fees he charged for his work as a solicitor and land agent.

John's income in the other hand was more modest and he had extensive commitments to a number of enterprises. Therefore, it is not surprising to find that John Gilbert's share of the working capital needed at Lilleshall was provided by Thomas, who required that:-

'Mr John Gilbert's 4th share in the works and also £2,000 capital stock in the Navigation from the Trent to the Mersey be assigned to (him) as Collateral security.'⁶⁵

The intricacies and shoestring nature of John's finances were stressed some five years later, when he requested Josiah Wedgwood to pay his 'Subscription to the Navigation for a wile'; his canal shares forming part of the collateral security for his Lilleshall investment.⁶⁶

At Worsley, the underground canal network also served certain coal mines at Farnworth, which John Gilbert purchased in 1774 and 1793.⁶⁷ These seem to have been a particularly good investment as in 1812, the younger John Gilbert received an annual income of £144 from this source.⁶⁸ The other enterprise established in the Worsley area was the pencil factory, which in itself was a natural extension from John Gilbert's interest in lead mining.⁶⁹ Curiously, it is the only known venture made by the family into the manufacturing sector of industry. John Gilbert's interest in such an enterprise can be traced back to 1767, when Josiah Wedgwood wrote to Thomas Bentley that: 'Mr John Gilbert has promised to get me a doz. of Good black lead pencils, & a lump of the same for shading with, you are to share in this valuable acquisition.'⁷⁰

But some eleven years elapsed before the pencil factory was established at Worsley; for in 1778, the Duke of Bridgewater allowed his carpenters at Worsley, to make 'an engine for pounding the Black lead'.⁷¹ Thomas Gilbert also appears to have been involved in this enterprise, as he wrote, in the same year, that he was 'glad to hear so good an account of our Black Lead.'⁷² This could mean that he was involved in the mining operations in Borrowdale, especially since it is stated that the Duke himself also had an interest in the graphite mine.⁷³ Presumably, supplies were drawn from the existing mines, although

in 1789, John Gilbert bought 'a moiety of a close' at Grange in Borrowdale.⁷⁴

The traditional way of making black lead pencils was to cut slips from blocks of graphite, which were then fitted into 'a groove made of the softest wood, as cedar, and another slip of wood glued over them.' Sometimes the pencils were not always what they seemed, for 'different sorts of the mineral (could be) fraudulently joined together in one pencil, the fore-part being commonly pretty good, and the rest of an inferior kind.' This was the traditional English way of producing pencils, but imported German pencils were made of finely powdered black lead blended with other substances, according to the hardness of the pencil required.⁷⁵ John Gilbert adopted the German method of production, which allowed pencils to be produced at competitive prices, but of a lower quality. The factory was in production by 1782.⁷⁶ An advertisement of 1815 gives quite a detailed picture of the scope of this enterprise at Worsley:-

'To Clean & Polish Stoves, Ovens, Grates &c.'

JOHN GILBERT & Co., Worsley, prepare BLACK LEAD POWDER, for cleaning & polishing stoves, ovens, grates &c, which with very little trouble, gives a higher polish than anything yet offered for the purpose.

N.B. Thin Black Lead Pencils are made from the purest genuine LEAD only and School Slates from the best materials.

Sold by Mr CHESTER and Mrs SMITH in Newcastle and in most other towns by STATIONERS, SILVERSMITHS &c. The powder in packets at 1s. 3d. and 2s. 6d. each.⁷⁷

The Earl of Carlisle and Company was an enterprise, possibly inspired by Earl Gower and Company; although the form of the partnership was by no means novel. The company was formed to work the lead mines on Alston Moor, in Cumberland; the first application for the lease being made in 1771.⁷⁸

In that same year, John Gilbert had been involved in another mining enterprise, under the adjacent, Middle Fell.⁷⁹

He also acted as adviser on the proposed sough, even before the Earl of Carlisle and Company obtained a lease of the mining field on 30th May 1778.⁸⁰ The previous year, John Gilbert had recommended that the sough:

'may serve as a navigable Canal, in order that it may be seen whether the expense of making the said canal will not be greatly different from that of making the said level of the size already begun.'⁸¹ The main sough became known as the Nent Force level, but as it soon struck basalt, progress was slow and expensive. After twenty years of heavy investment and little return, the surviving partners sold their interests to the London Lead Company.⁸²

John Taylor, mining entrepreneur and engineer⁸³ visited Alston Moor in 1823, to report on the mines. His report vindicates John Gilbert's scheme, stating that:-

'there were fair reasons to expect a different result,

the intersection of so large a tract of Mineral Country, and the exploring of deep beds of Lime Stone similar in many respects to that which has produced so large a proportion of the Lead raised at Aldstone Moor, appear to me to have warranted the undertaking, and to justify those who so long ago recommended it.'⁸⁴

Taylor's view would have been little consolation for the partners, who paid nearly £12 for every foot of the level cut through the basalt.⁸⁵ The Earl of Carlisle's partners in the enterprise were: the Duke of Bridgewater, Earl Gower (his father-in-law); John Gilbert; John Royds (John Gilbert's brother-in-law); Thomas, Robert and John Gilbert, Junior, (John's sons); Jonathan Hilton; Joseph Hilton; and John Cleaver.⁸⁶

All of the brothers other enterprises were linked with the Trent and Mersey Canal; and in the case of the firm of Worthington and Gilbert,⁸⁷ with the Duke of Bridgewater's canal. This is hardly surprising, as they fitted in with the 'new range of economic opportunity (that depended).... on transporting heavy raw materials across country.'⁸⁸ The first of these enterprises was tied up with the purchase of the Goldenhill estate in 1760, which highlights another involvement in the establishment of the various enterprises. This is the role played by the attorney as a financial intermediary, in touch with the hidden capital market which existed outside London.

Already, Thomas Gilbert's role in bringing together the Cheadle coalmasters partnership has been mentioned, and in the case of the Goldenhill purchase it is possible to see similar processes at work. Thomas Gilbert was in fact, a 'money-scrivening attorney, characterized as much by his familiarity with business practice and local affairs as by his knowledge of the law.'⁸⁹ Land sales at that time were mainly the concern of attorneys, in much the same way as property and land are still sold in Scotland today.⁹⁰ Therefore, the attorney was amongst the first to know of properties and land coming onto the market, and indeed they were in a position to arrange private sales. But attorneys also dominated the 'county mortgage market in the eighteenth century through their intimate knowledge of local society and their ability to tap reservoirs of savings in order to accommodate an increasing demand for loanable funds.'⁹¹ This connection was to be of particular use to John Gilbert in financing his numerous enterprises. As Samuel Johnson said of these attorneys: 'What is their reputation but an instrument of getting money.'⁹²

The Goldenhill estate was purchased in four equal shares by: Hugh Henshall; John Brindley; Robert Williamson; and John and Thomas Gilbert. It was then conveyed to Robert Hurst of Cheadle, who held it in trust for the four partners in the purchase.⁹³ The whole concern was then

operated as a kind of partnership, the partners receiving shares of the rents received and the income from the coal mines. The lands were not in fact, partitioned until 1786, when John Gilbert was consolidating the Clough Hall estate; but the coal mines were not divided and remained within the partnership arrangement.⁹⁴ James Brindley was not one of the partners in the purchase, although he might have contributed to his brother's share.⁹⁵ Samuel Smiles bases his statement that James Brindley was a partner, on an entry in Brindley's notebook. The entry is of most interest as it shows how the partnership raised some of the necessary capital through local connections:-

'Mr Joh. Gilbert	£ 81-0-0
Mr Joh. Gilbert	£ 20-0-0
" " "	£ 8-5-0
	<u>£109-5-0</u>
Mr Lanslet, Leek	£400-0-0
Mr Robert Barks, Ginders Ash.	£ 17-1-8
Mr William Allen	£ 20-0-0
	<u>£543-6-8</u>
Total is	

31st March 1760.⁹⁶

Smiles uses the above entry to show that 'amongst his townsmen and neighbours (Brindley) stood in good credit and repute.'⁹⁷ But as Robert Barks and William Allen were residents of the Cheadle area, the entry probably says more about Thomas Gilbert's reputation

as an attorney. The conveyance of the Goldenhill estate to Robert Hurst, in practice the chief executive of the Cheadle coalmasters partnership, and John Gilbert's wife's uncle, points towards the partnership being the brainchild of the Gilbert brothers.

Thomas Bentley in his pamphlet on Inland Navigation, drew the attention of the general public to an area of mineral wealth that was largely untouched:-

'From Northwich to Lawton there is a vast bed of rocksalt about forty yards thick, which (besides being purified & crystallized for home consumption and exportation as will be mentioned in it's proper place) might be made great use of in agriculture, and probably in Metalurgy, and several of the mechanic arts; if any method could be discovered of granting the liberty of using it with safety to the revenue.'⁹⁸

This saltfield was intersected by the Trent and Mersey Canal, the presence of which roused certain entrepreneurs to begin the search for salt and brine. The first successful borings were made at Lawton, just after the canal had opened; and these revealed the presence of the normal rock salt deposit at 120 feet, and a lower one at a depth of 150 feet.⁹⁹ This discovery stimulated the Northwich proprietors to bore deeper, something they had been reluctant to do in the past, due to the danger of flooding. John Gilbert organised a boring through 'the

sole of the Marston Top mine', near Northwich, in 1780 or 1781, and he hit the lower bed some 30 feet down.¹⁰⁰ After this discovery, all the new mines in the Winsford and Northwich area were sunk to the lower bed.¹⁰¹

When Sir Joseph Banks visited the Northwich rockpits in 1768, the workmen brought the salt down with 'Picks made very strong and Heavy sometimes in peices 2 or 3 tons weight.'¹⁰² John Gilbert is credited with an innovation which must have speeded production, for he was 'said to have been the first person who suggested the use of gun-powder in obtaining rock-salt.'¹⁰³ Although he was not the first person to commission a Boulton and Watt engine on the saltfield, he did realise the benefits that could be obtained from the employment of an engine. The partners in the Lawton saltworks erected a small engine, to pump brine in 1778,¹⁰⁴ and this could have been the engine that was later used to pump water on the Trent and Mersey Canal.¹⁰⁵ The Boulton and Watt engine erected at Marston for 'John Gilbert of Worsley and partners', was used for winding rock salt and for pumping brine.¹⁰⁶ Significantly, Edward Salmon of Hassall Hall, one of the partners in the Lawton saltworks,¹⁰⁷ also sat on the management committee of the Trent and Mersey Canal with John Gilbert.¹⁰⁸

In order to operate the Marston mine, John Gilbert brought together another partnership. The identity of his fellow partners is not known for sure, but this concern also owned seven narrow boats 'to take salt along the Trent

and Mersey Canal to Runcorn'.¹⁰⁹ John Gilbert, Cornelius Bourne (a Liverpool merchant), and Edward Mason (also of Liverpool), are recorded as the owners of these boats, and it is likely that they also comprised the partnership that ran the Marston mine. As a considerable quantity of the salt was refined in Liverpool, and a vast quantity exported through this port; it seems likely that John Gilbert would turn to the merchant community there, in search of partners.¹¹¹ He obtained his working capital for this venture by purchasing a number of houses and twenty-two acres of land at Marston, which he mortgaged to Lady Leicester, in 1782, for £1,000.¹¹²

In describing entrepreneurs, Miss Deane observed that:-
'It was natural enough for successful industrialists to build up the social prestige and creditworthiness, which they needed to help them finance their industrial ventures, by putting some of the profits into landed property.'¹¹³

These motives certainly ring true for John Gilbert, when he bought a moiety of the Clough Hall estate in 1782.¹¹⁴ But at the same time, he was well aware of the great mineral wealth underneath the estate; and at fifty-eight years of age he was also looking for an estate to which he could retire. As it was, the yeoman's farmhouse called Clough Hall was still standing when John Gilbert died, and it was left to his son to build the mansion that was

also known as Clough Hall.¹¹⁵ The Duke of Bridgewater is supposed to have lent John Gilbert the remainder of the sum needed to buy the estate,¹¹⁶ and this could have been one of the debts outstanding at the time of the Duke's death.¹¹⁷

Kidsgrove was also to be the scene of a dispute that was marked by the ruthless determination, which characterised some of the eighteenth and nineteenth century entrepreneurs.¹¹⁸ This dispute was between Sir John Edensor Heathcote and the younger, John Gilbert, although it is clear that the seeds of the dispute were sown during the lifetime of the elder John Gilbert. The elder John Gilbert had leased coal mines from Sir John Edensor Heathcote, at Brieryhurst, near Kidsgrove in 1792.¹¹⁹ Subsequently, Heathcote accused the Gilberts of breaking several of the covenants contained in the lease, namely: failing to weigh the coal fairly; not distinguishing how much coal was sold at the pit and how much at the canal; and taking stone and bricks from the premises.¹²⁰

The younger, John Gilbert was served with a writ of latitat, at Patricroft, near Barton-upon-Irwell, on 17th April 1797, and the matter was placed before the King's Bench.¹²¹

The case was found in favour of Heathcote and John Gilbert had to pay compensation. The decision filled Gilbert with anger and a desire for revenge, that is reminiscent of the monumental rages that sometimes took hold of John Wilkinson.

He was clearly in the wrong, but he had a legitimate complaint against Heathcote, who broke his covenant and opened the Woodshuts Colliery in competition with the Gilberts.¹²² One of John Gilbert's friends noted that he 'was in the habit repeatedly of expressing anger and dissatisfaction in reference to Sir John Edensor Heathcote and his Collieries.'

The animosity between the two flared up again in 1808. For in that year, John Gilbert gave notice of his intention to give up the colliery leases, but also of his requirement for Heathcote to keep an engine in operation to drain his other mines, as stipulated in the lease.¹²³

Heathcote responded to this with a series of allegations of misconduct and notice to quit. Then, two years later, Heathcote's miners strayed under the Clough Hall estate and John Gilbert was presented with his opportunity for revenge. The build up to the actual act was described by Gilbert's friend:-

'the anger and resentment of Mr. Gilbert would often lead him to revengeful or malicious expressions, and frequently going to a situation in the room wherein they were seated at the time, where he had a better opportunity of observing the motions and operations of a fire engine (which) Sir John erected contiguous to Mr. G.'s works'¹²⁴

This friend was also Gilbert's doctor and this explains the choice of words in the next section of the statement;

for Gilbert bade him:-

'to view the movements of Sir John's engine, pressing him to observe, as he phraz'd it, that old Bitch and with apparent exultation desired him to see how slow she moved and on such occasions would metaphorically observe that humans were afflicted with one incurable disease (which those of his friends' profession) could not cure, viz. the Dropsy. He (said that) he had more skill in this complaint than the Faculty. For although that dam'd old Bitch had already become dropsical and the disease was rapidly increasing, he would in the end radically cure her.'¹²⁵

The 'cure' involved John Gilbert's miners boring a hole from a lower level of his workings, into the level that Heathcote's miners had driven under the Clough Hall estate. This brought a vast quantity of water into Heathcote's Woodshut's colliery, which although his engine 'worked both Night and day, still it is not able to Lift out the said water.' This action on 5th October, 1811, effectively shut down Heathcote's Woodshuts colliery and Gilbert had acted within his rights.¹²⁶ Once again, Sir John Edensor Heathcote turned to the law,¹²⁷ but John Gilbert's death in September 1812, robbed him of any chance of obtaining satisfaction in the courts.¹²⁸ The matter was finally settled by arbitration in 1813, when John Gilbert's executors were keen to complete the sale of the Clough Hall estate and the impending law suit was delaying matters.¹²⁹

It could be argued that the sort of determination that is seen in its worst form in the dispute with Sir John Edensor Heathcote, was a necessary attribute of an entrepreneur. The business empire that was created by the Gilbert brothers, and continued in a more limited form by the younger, John Gilbert, could not have been created or sustained by anyone lacking a strong sense of purpose. At times, the tactics were underhanded and ruthless. The person capable of spreading the rumour that Hugh Henshall and Company were giving up the carrying business, when Worthington and Gilbert made their beginning, was a person who had advanced on his wits and not through advantage.¹³⁰ John Gilbert, John Gilbert, the younger and John Wilkinson, all came from the same mould and prospered through talent and application.

But among the other attributes needed by the successful business man and entrepreneur, was an eye for a good idea. Samuel Johnson said that 'the age is running mad after innovation; all the business of the world is to be done in a new way; men are to be hanged in a new way; Tyburn itself is not safe from the fury of innovation.'¹³¹ John Gilbert's success, like that of John Wilkinson, and even now it appears James Watt, was more to do with business technique than inventive genius.¹³² John Gilbert took the idea of the navigational level and used it successfully in a number of different enterprises. He took an interest

in inclined planes, the theory of which was readily available in the works of the lecturer, James Ferguson.¹³³ He introduced the 'Ginny system' to North Staffordshire. This meant that the coal was conveyed underground in boxes on wheeled carriages, hauled up the shaft in the boxes, then placed on carriages for the journey by tram-road to a canalside wharf. It was noted that 'each Waggon has one box (and) six waggons are brought from the pit by one Horse.'¹³⁴

But this search for a more efficient means of doing things was always tempered by the cost factor. The Gilbert brothers erected a water engine at Cheadle in 1759, as it was more economical to run than a steam engine and nearly as efficient. The same logic ensured that Lawton Saltworks made use of a water engine in 1800,¹³⁵ some twenty-two years after first employing a steam engine for brine pumping. At Kidsgrove, John Gilbert, the younger, erected a windmill in 1812, to grind the grain crops grown on the estate.¹³⁶ Yet a few miles away, a high-pressure Trevithick engine was being used for the same purpose.¹³⁷ The gap in terms of technology was immense, but in terms of efficiency, it was much smaller. This sort of practice highlights the most significant, single factor, that of 'frugality.' Another closely allied factor has been widely recognised, and Professor Crouzet noted it thus:- 'Enterprises increased their capital by ploughing back immediately, regularly and almost automatically the

greater part, or even the whole of their profits.

..... Thus most of the additional capital required for expansion was provided from (their) own resources, from the savings of the industrialists. The fact is so obvious as to be almost a cliché and the point is not worth labouring.¹³⁸

The motive of Thomas Gilbert (1688-1741/42) in participating in various mining and processing enterprises, was to increase the size and value of his estate. He mortgaged his existing lands to provide the money required for the various enterprises, then used the profits to redeem the mortgage and to buy more land. Eventually, the estate would reach a point where it provided a very comfortable and secure income through rents, and then the motivation for enterprise became limited. This can be demonstrated by reference to the Clough Hall estate, which in 1818, produced £735 in rents and £525 from the sale of coal.¹³⁹

The younger, John Gilbert had realised his father's ambition, just as his uncle, Thomas, had realised that of his father. Thomas Gilbert became involved in various enterprises, in order to consolidate his property holding, whereas John was working to acquire property. Another motivation for Thomas Gilbert's enterprise, in the first half of the eighteenth century, was to pay for Thomas's legal training.

His legal knowledge and connections were to be a vital part in the organisation and financing of the numerous enterprises. The link and the need continued after Thomas's death in 1798, for in the will of the younger, John Gilbert, there are two significant bequests. One for £5,000 made to James Baron, 'Attorney of Wigan'; and another of £1,000, to James Siddel, his clerk.¹⁴⁰

The two factors that enabled the Gilbert brothers to exceed the achievements of their father should be mentioned. One was the connection with the **Gower-Bridgewater** interest, which brought them numerous opportunities in a direct, or indirect way. The second was, that the brother lived in the 'Canal Age'; and indeed did as much as any other individuals to promote it. As Miss Deane noted the canals 'made a massive contribution to the first industrial revolution',¹⁴¹ and the results are too well known to need reiteration here.

The purpose of the Gilberts was to secure wealth, land and social position and their industrial endeavours did much to further this aim. The extent of their success can again be demonstrated by reference to the Clough Hall estate. By 1812, it was producing a yearly income of £1,260; and in the same year it was sold for £64,000.¹⁴² This was a far cry from the £300 that was produced by the Cotton estate in 1742.¹⁴³

Chapter Seven

EPILOGUE AND SUMMARY

EPILOGUE

John Gilbert died on 3rd August 1795 at Worsley, 'a gentleman of the strictest honour and integrity, and universally respected by all ranks of people.'¹ At the time of his death, his interests were widespread and so intricately structured that no immediate realisation of his assets was possible. His were long term investments and his will charged his two executors, John Gilbert (Junior) and Nathaniel Gould with the task of maintaining, or disposing of his holdings, so that payments could be made in accordance with the clauses of his will. His wife, Lydia, received all his household goods; a cash payment of £100; a yearly income of £400; and a further payment of £1,000, payable on twelve months notice. As John's eldest son, Thomas had died before his father, no provision was made for him in the will; but his daughter, Alice was to be given £600 on marrying, or on reaching the age of twenty-four. Curiously, no provision was made for her sister Lydia, or brother, John,² who at the time was managing his uncle's pottery in Burslem.³

The eldest surviving son, the Reverend Robert Gilbert, received a quarter share of: his father's land at Stanton, in Derbyshire; the graphite, copper and lead mines, in Cumberland, Westmorland, Staffordshire and Derbyshire; and the smelting mills in Cumberland. He was also to receive

a cash payment of £4,000, within three years of his father's death. The indications are that he sold most of these mining interests, some of them to his younger brother, John. A further £270 was paid out in small legacies to his associates and servants, including Robert Lonsdale ('my late servant') and Thomas Kent ('as a token of regard for him'). Both Lonsdale and Kent were in the employ of the Duke of Bridgewater. The residue and bulk of his estate was bequeathed to John Gilbert, Junior, including the Clough Hall estate.⁴

Thomas Gilbert died three years after his brother. He bequeathed the Cotton estate to his eldest son, the Reverend Thomas Gilbert and £2,500 to his other son's creditors. His widow was to receive household goods and £1,000 per annum, whilst her companion was given an annuity of £75. The only other beneficiaries were David Birds and Thomas Morris. They were to receive Thomas's shares in: 'all and every colliery, limeworks, lead mines and any other mines or minerals wherein he was concerned in conjunction with the Marquis of Stafford and the representatives of his late brother, John Gilbert, or with any other person.' Exactly what relationship Thomas Gilbert had with Thomas Morris is unknown; but David Birds was his nephew, and it was he who also received Thomas's shares in the Trent and Mersey, Shropshire and Shrewsbury Canals.⁵

The deaths of both John and Thomas Gilbert marked an important change in the employment and life style of the

Plate 15



CLOUGH HALL, c. 1895

Gilbert family. Firstly, they ceased to act as land agents or stewards and they started to employ such people. John Gilbert, Junior, fell out with the Duke of Bridgewater and left his employ before 1797.⁶ The probable reason for this was that the Duke disliked his more independent ways; and he 'had grown to expect unquestioning obedience to his every whim, at whatever cost to other people's feelings.'⁷ The Duke's will, described in 1803 as an 'extraordinary' one, was designed to continue his influence beyond death and one of the clauses states that:-⁸

'nothing herein before contained shall extend or be constructed to extend at Law or in Equity to confirm any Lease or Leases Granted by me to the late John Gilbert Esquire and continued to his son John Gilbert of a Farm called Worsley Hall Farm and a Mill and premises situated at Worsley Mills.'

Dr. Malet stated that John Gilbert, Junior was 'not up to carrying responsibilities similar to his father's, though he did manage to hold some of his father's firms and mining enterprises together.'⁹ An examination of his subsequent career shows that this is an unjust statement, for he launched and ran many enterprises in the more unfavourable economic climate of the early nineteenth century; and he realised his father's ambition of retiring to the Clough Hall estate. If he lacked anything it was the ability to be self-effacing, the quality which had endeared his father to the Duke of Bridgewater and secured his generous patronage.

The younger John Gilbert owned mines at Whiston, Farnworth, Goldenhill and Kidsgrove, but of these the Kidsgrove mines were the most important. He drew a profit of £525 from the Kidsgrove mines,¹⁰ compared with £144 from the Farnworth mines, in 1812.¹¹ A major business success was his securing of a contract with the limeburners at Frogghall, to supply them with slack.¹² He also had coking ovens at Kidsgrove, which by 1808 were unable to keep pace with the 'demand for coakes.'¹³ Considerable quantities of coal from his Kidsgrove mines went to the nearby pottery factories and Wedgwood and Byerley were among his customers.¹⁴

These interests in collieries were all inherited from his father, as was Marston saltworks and an interest in the canal carrying trade in salt. Later he purchased Newton Bank saltworks, in Middlewich, with the adjacent iron foundry.¹⁵ At the time of his death in 1812, he still held his father's interests in various Derbyshire lead mines; although by this time they were almost worthless. The one twelfth share in the Hill Carr Sough and Shining Sough lead mines produced a nominal profit of 13 shillings 10 $\frac{3}{4}$ pence in 1813; but for most years he had to bear an annual loss of £52. Three shares in the Cow Close lead mine, near Stanton also failed to produce a profit as the mine had become "wholly unproductive."¹⁶

By 1794, the younger John Gilbert had rented a 'potworks' in Burslem from a Mr Fletcher.¹⁷ This he worked until he

stopped production and sold off various 'valuable utensils, raw materials and moulds' in 1803.¹⁸ By the time of the sale he had purchased the pottery and subsequently he rented it out at £16 per annum.¹⁹ How closely he was associated with the management of the works is difficult to establish; but his nephew, also called John Gilbert, was the resident manager from 1796 until sometime after 1801.²⁰ Presumably, he was installed there to learn the ways of business, and the sale at the works in 1803, almost certainly marks the end of his association with the works.

One of the younger John Gilbert's most profitable involvements was with the trade in lime. Again, he inherited the basis of this interest from his father, namely a share in the Caldron Lime Company and the limekilns at Cheddleton and Horsebridge. But he also extended his interests by erecting two limekilns and a coalyard, just outside Stone in 1796.²¹ The limestone was brought by canal from Froghall Wharf and the coal sold from the yard came from the Kidsgrove collieries; by 1813, 'the greatest part of the town and neighbourhood of Stone (had) been for several years supplied with coals at this Wharf.'²² He also took over Newbold Astbury limeworks, to the north of Kidsgrove, in partnership with Robert Williamson.²³ Three years after this purchase, the limekilns were described as supplying 'a large district to the south-east of the county with this valuable article'; but during the early part of 1808, Gilbert and Williamson offered the limeworks on lease to anyone willing to work them.²⁴ The motivation for this development is

revealed in an advertisement concerning the Horsebridge and Cheddleton kilns, which had previously been put up for lease. The would be lessee was made aware of the need to 'superintend' the concern himself, 'which is the only reason that induces the proprietors to let them.'²⁵ The younger John Gilbert retained his enterprises, but increasingly rented them out for a good profit, like the £40 per annum he received for the Stone limekilns.²⁶

From 1800 onwards, the focus of the younger John Gilbert's enterprises was Kidsgrove where he built the impressive Clough Hall.²⁷ He consolidated his estate, but at the same time, he was looking for opportunities for investment further afield. Many of his investments were in land, including sizeable plots at Deansgate and Knot^t Hill in Manchester, bought in 1805. Other purchases of land were made in North Staffordshire at Biddulph and Stone. Two houses at Stone alone produced an annual rent of £65 and realised £1330 when sold by his trustees. In 1807, he bought a one tenth share in **an** hotel at Matlock Bath, then a rising spa town. Another purchase was a brewery at Prescott in Lancashire, secured through default on a loan made by John Gilbert and his business associate William Brett of Stone.²⁸

This association began in March 1802, when 'Mr William Brett of Stone, Grocer and John Gilbert, a gentleman of fortune and concerned in commercial pursuits, opened a

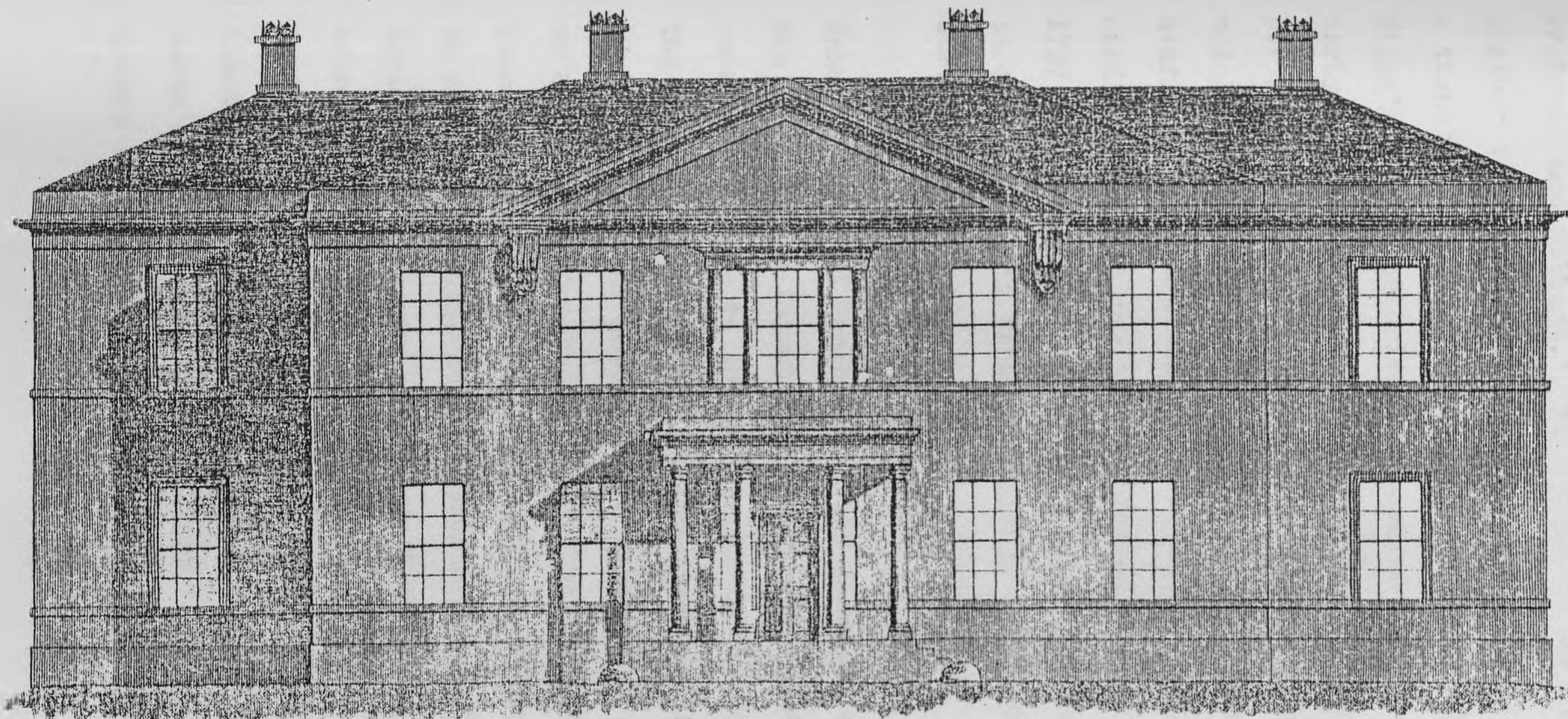


Plate 16

Elevation of
CLOUGH HALL

(1812)

bank at Stone as joint and equal partners under the firm of Brett and Gilbert.' Four years later they launched another bank at Cheadle, in partnership with John Higgs, a timber merchant, 'under the firm of Brett, Gilbert and Higgs'. This was quite a lucrative concern and in the early years the profit was said to have averaged £3,000 per year.²⁹ In 1800 there were about 370 country banks, which rose to 650 ten years later.³⁰ These two North Staffordshire banks had been established in the easy credit conditions, when the Bank of England was off gold, between 1797 and 1815.³¹ Such Banks were of particular importance as they helped to finance numerous industrial enterprises during this period.

John Gilbert had reached a point where he could not extend his profit from industrial enterprise without devoting more of his time to the supervision of such enterprises. The obvious solution was to lend some of his accumulated capital, with the actual business being transacted by Brett or Higgs. The two banks issued their own bank notes,³² creating credit for those who wished to borrow from them, so encouraging some local economic expansion. They were typical of the banks spawned by the wealth made in trade or manufacturing and 'often it was difficult to tell to what extent a man was a specialized banker'.³³ Thomas Kinnersley, who bought the Clough Hall estate after the death of the younger John Gilbert, was a Newcastle iron-monger as well as the owner of the Old Bank, Newcastle.

This fact was thrown in his face, when someone forged his One Pound banknotes and replaced his signature with that of 'T. Ironmonger'.

The depression that followed the end of the Napoleonic Wars created real problems for the country banks, who had involved themselves mainly with long-term loans.

The two banks had ceased to be profitable by 1814, when John Gilbert's executors discovered that the Stone branch had made a loss of £3,110 and Cheadle a modest profit of £50. In all the executors had to meet debts of £11,015 13s. 6d. owed to the bank, but in fact they were honouring the debts of their creditors who had been given credit in the form of banknotes. The two banks finally closed in August 1816, during the bank crisis of that year. Edward Trafford Nichols, who had taken John Gilbert's place as financial backer lost £22,000, 'brought on partly by bad debts owed to Brett and Gilbert.'³⁵

The younger John Gilbert's progressive withdrawal from trade and industry was brought on by the realisation that he no longer had to lead the almost itinerant life required of an entrepreneur with widely dispersed interests. The new Clough Hall was the realisation of his father's dream and a statement about his own future. By devoting so much time and effort to his mines in the Kidsgrove area, he laid the foundations of the modern town itself. Kidsgrove

was not his creation, in the sense that Etruria had been that of Josiah Wedgwood, but the degree of development in both cases was comparable. Etruria was described as 'a continuous street of about 120 workmen's dwellings adjacent, with an inn, and some houses of a better class, for farmers, clerks and others.'³⁶ At the time of the sale in 1812, the Clough Hall estate was comprised of over 300 acres with 'one hundred and twenty freehold Dwelling-houses for workmen.'³⁷ Like Wedgwood he was an employer of industrial labour, but at the same time a kind of squire figure.

Indeed, the younger John Gilbert played a very prominent part in the social life of this part of North Staffordshire. Some of his charitable works have already been mentioned,³⁸ but he also made contributions to a fund to purchase fire-engines for Burslem, Tunstall and Longport;³⁹ and he gave the highest individual annual subscription to the Dispensary and House of Recovery for the Staffordshire Potteries and Neighbourhood.⁴⁰ Apart from holding office as a Vice-President of the Newcastle-under-Lyme and Potteries Agricultural Society,⁴¹ he was one of the stewards for the Newcastle and Pottery Grand Musical Festival, along with Lord Granville Leveson-Gower and other local dignitaries.⁴² In addition he held a game licence, a further indication of an increasingly leisured existence.⁴³

Such a life-style, involved him in the greater delegation of work and he employed two relatives, David Birds and

Edmund Gould as his agents and assistants at Clough Hall.⁴⁴
 The Reverend Thomas Gilbert (John's cousin) did exactly the same at Cotton, employing David Birds, William Birds and Thomas Birds. William Birds was the resident agent at Cotton, although he was known as the 'Bailiff' and he occupied the 'Bailiff's House' there.⁴⁵ He also employed a Mr Walthall, possibly an attorney, who charged fees for doing his 'Business' at Cotton.⁴⁶ The younger John Gilbert even found time to engage in courtship, which resulted in his marriage to Elizabeth Horsefall, of the Parish of St. George, Hanover Square, London, in 1807.⁴⁷

This John Gilbert has also been labelled as 'rather bigoted',⁴⁸ and some accounts suggest that he carried out a campaign of religious persecution against the early Methodists in Kidsgrove. The original account is somewhat more restrained in its accusations:-⁴⁹

'as soon as God begun to work, the enemy marshalled all his forces to raise opposition, and Mr. Gilbert was their Generalissimo, and roared against them like a lion He always walked with a staff, at the lower end of which there was a small paddle; and one night when they were very lively, he broke suddenly in amongst them, and shouted that he would have no meetings, or something to the like (but) some of them were as courageous as he was, (and they) informed him that he had no right there, (as) they were not his premises, and

that he came among a peaceable people in a hostile manner, with an unlawful weapon in his hand, (they knew he had his paddle with him.) When he saw they were spirited men, and knowing the property did not belong to him, he left them, and never troubled them more.'

The writer continued to note that Gilbert's view of Methodism was in line with that of 'the great men of the land', who saw it as 'assuming a very serious character, and likely to produce mischievous effects in the nation, if not timely checked.'⁵⁰ The fact that the younger John Gilbert was a patriot could not be challenged. When the War with revolutionary France recommenced in 1803, numerous local landowners and manufacturers raised 'corps of infantry.'⁵¹ One such company was the Clough Hall Volunteer Infantry, who before attending a church-parade to celebrate the victory at Trafalgar; 'requested their worthy Commander (John Gilbert) to remit one day's pay to the Patriotic Fund ... for the relief of the sufferers in that ever memorable action.'⁵² Two prints in Clough Hall showed Lord Nelson at the battles of the Nile and Trafalgar,⁵³ and John Gilbert also named the most powerful steam engine at Kidsgrove, the Nelson engine.⁵⁴ His regard for this national hero was such that he was the most enthusiastic supporter of the plan to erect an obelisk on Mow Cop in his honour. The obelisk was to be made of limestone from

the Newbold Astbury limeworks, in which John Gilbert was a partner.⁵⁵

When John Gilbert died in September 1812, he was destined to be the last of the Gilbert family to display any entrepreneurial flair. Like his father, his interests were widespread and complicated and they could not be realised quickly. Three trustees were appointed to manage his interests; James Royds, Nathaniel Gould and David Birds.⁵⁶ As he left no children, his wife was the principal beneficiary under the terms of his will. She was to receive £2,000 at the time of his death and £6,000 for life; plus Clough Hall, provided she lived in it.⁵⁷ This she chose not to do and the bulk of the Clough Hall estate was sold to Thomas Kinnersley early in 1813, for £64,000.⁵⁸ He left a further £1,000 to his brother, the Reverend Robert Gilbert. His executors and trustees received cash gifts: James Royds (£500); Nathaniel Gould (£2,000) and David Birds (£2,000). Old business associates also benefited; the Wigan attorney, James Baron received £5,000; and his servant, James Siddel, the sum of £1,000. Alice Lander (née Gilbert) had £13,000 invested on her behalf; and her brother and sister-in-law, John and Sarah Gilbert, drew the interest from an investment of £25,000. Their children also had £1,000 held in trust for them.⁵⁹ Assuming an interest rate of five per cent, Alice Lander would have received an annual income of £650; and John and Sarah Gilbert, an annual income of £1,250.

Sarah Lander was the wife of George Lander, described as a Birmingham haberdasher in 1807;⁶⁰ then as a 'Gentleman, of Edgbaston' by 1821.⁶¹ Presumably, this rise in station came through his wife's newly found income, and later he became a Vice Consul for Spain and Portugal.⁶² Interestingly, his surviving son, a George Moseley Lander qualified and practiced as a solicitor.⁶³ John and Sarah Gilbert inherited an estate at Great Broughton, near Chester from Sarah's family around 1803.⁶⁴ They appear to have settled there and led a comfortable life, drawing a handsome income from the estate and the investments made under the terms of John Gilbert's will.

The Reverend Thomas Gilbert, although he inherited the Cotton estate, chose not to live there. His stepmother lived there until her death and then the house and estate were let to a Mr. Errington. An advertisement published in 1818, offered a lease of the hall and estate 'for any term of years, not exceeding fourteen',⁶⁵ so clearly the Reverend Thomas Gilbert had no intention of living there. He held the living at Little Gaddesden from 1796 until 1813;⁶⁶ and during this period he buried his patron, Francis, the third Duke of Bridgewater.⁶⁷ He was eventually evicted for non-residence, and subsequently he lived on the rents from the Cotton estate and his income from his clerkship with the Privy Council. How much he drew from the Cotton estate is not known, but his income from the Caldon Low quarries alone averaged £282 for the

STAFFORDSHIRE.

VALUABLE FREEHOLD ESTATE FOR SALE.

PARTICULARS OF THE VALUABLE AND DESIRABLE

FREEHOLD ESTATE,

COMPRISING

THE SUBSTANTIAL BRICK-BUILT FAMILY RESIDENCE OF

COTTON HALL,

COMMODIOUSLY PLANNED,

WITH A SUITE OF HANDSOME WELL-PROPORTIONED APARTMENTS,

A CAPITAL RANGE OF ALL REQUISITE

DOMESTIC OFFICES, COACH HOUSE, AND STABLING FOR TWELVE HORSES,

LARGE WALLED GARDEN, WELL STOCKED WITH FRUIT TREES,

VINERIES,

GARDENER'S HOUSE, ICE HOUSE, BATH HOUSE AND BATH, AGRICULTURAL BUILDINGS,

AND BAILIFF'S HOUSE.

THE ADVOWSON OF COTTON CHAPEL,

SITUATE WITHIN A MINUTE'S WALK OF THE HALL, SUBJECT TO THE LIFE OF THE PRESENT INCUMBENT,

TOGETHER WITH

338 ACRES OF MEADOW, PASTURE, ARABLE, AND WOODLANDS,

SUBDIVIDED INTO SUNDRY FARMS, WITH SUITABLE BUILDINGS,

AND PRESENTING IN THE WHOLE A PARK-LIKE APPEARANCE.

ABOUNDING WITH GAME, AND LYING CONTIGUOUS TO THE GAME PRESERVES OF THE EARL OF SHREWSBURY,

SITUATE IN THE PARISHES OF ALTON AND KINGSLEY,

A beautifully wooded, romantic, and healthful part of the Northern Division of the County of Stafford, one mile from Alton Towers, five miles from Cheadle, nine miles from Uttoxeter, Ashbourn, and Leek respectively, and possessing the great advantage of Canal Communication.

The projected line of the Churnet Valley Railway will pass near the Estate.

ALSO SEVERAL OTHER

FARMS, LANDS, AND OTHER HEREDITAMENTS,

SITUATE IN THE SEVERAL PARISHES OF

ROCESTER, ELLASTONE, CHEADLE, CHECKLEY, IPSTONES, AND CAULDON, IN THE COUNTY OF STAFFORD.

TO BE SOLD BY AUCTION,

BY

MESSRS. CAPES AND SMITH,

AT THE ROYAL OAK INN, CHEADLE, IN THE COUNTY OF STAFFORD,

ON TUESDAY THE 20th DAY OF AUGUST, 1844,

AT THREE O'CLOCK IN THE AFTERNOON,

In Lots described in the annexed Particulars, or in such other Lots as will be mentioned at the Sale, and subject to Conditions.

years 1837 to 1842.⁶⁸ The Reverend Thomas Gilbert died unmarried in Paris, in 1841;⁶⁹ and the Cotton estate passed to his nephew, another Thomas Gilbert, who outlived him by a mere two years.⁷⁰ His widow offered the hall and estate for sale by auction in 1844,⁷¹ and it was bought by the Earl of Shrewsbury. The Earl was a practising Catholic and two years later he offered the hall to Frederick William Faber and his fellow converts. Later the hall became a school and today it is incorporated in Cotton College, the oldest Catholic school in the country offering secondary education.⁷²

SUMMARY

Adam Smith in The Wealth of Nations observed that 'the uniform constant and uninterrupted effort of every man to better his condition,'⁷³ was the great motor of economic progress. This was true of the Gilbert family who over two centuries strove to improve their economic and social status. Initially, it was by means of the piecemeal acquisition of land, which enabled loans for mining enterprises to be raised 'either on the strength of their own lands or from their farming friends and neighbours.'⁷⁴ It was a two-way flow, as the purpose of their industrial ventures was to consolidate and add to their estates. Thomas Gilbert (1688-1741/2) would have resented being termed a 'yeoman', but he was typical of that group who did so much to develop industries and to bring about agricultural improvements. As C. Wilson noted:-⁷⁵

'Where industrial opportunities offered the yeomanry were a nursery of enterprise. Yeomen leased mines in Northumberland, set up forges in Shropshire, turned clothiers in Yorkshire and Devon, and styled themselves potters in Staffordshire.'

The income from the Cotton estate and from extractive industries could also be invested in another way. The writer of Thomas Gilbert's obituary describes how he inherited a small estate at Cotton and 'endeavoured to improve it by the profession of law.'⁷⁶ This statement

is rather misleading as it indicates that the choice was made by Thomas himself, whereas the original decision must have been made by his father, the elder Thomas. Thomas entered the Inner Temple in 1740⁷⁷ during his father's lifetime and it would have cost about £200 a year to keep him there.⁷⁸ As the Cotton estate was then worth about £300 per year, this represented a considerable investment of resources. But the rewards of a successful career in the law could be considerable. Sir Matthew Hale, Lord Chief Justice in the reign of Charles II owned Hales Hall (near Cheadle) and his granddaughter was still living there in the early part of the eighteenth century.⁷⁹

The path taken by Thomas Gilbert was a well-trodden route to social advancement, for 'even the bar, the highest rampart of social privilege in the professions, could be stormed by money and talent without birth.'⁸⁰ A prime example of advancement through the practice of law was that of Thomas Brereton, the son of an alehouse keeper, who married well and acquired an estate, and also sat for twenty-six years as a Member of Parliament for Liverpool.⁸¹ The example of Joseph Banks, another attorney who also became a Member of Parliament, has already been described; but like Thomas Gilbert, he founded 'a gentle family - too gentle indeed to succeed to the practice.'⁸² Business was the means to an end, but not an end in itself.

Archdeacon Joseph Plymley recorded the gradual departure of the yeomanry and lesser gentry from eighteenth century Shropshire, when he wrote: 'The number of gentlemen of small fortune living on their estates, has decreased: their descendants have been clergymen or attornies, either in the country, or shopkeepers in the town of their own county; or more probably in this county, emigrated to Birmingham, to Liverpool, to Manchester, or to London.'⁸³ The Gilberts were part of this movement, but again it was a two-way flow. 'Manufactures and commerce, the profession of arms and of the law', wrote Plymley, 'raise men of small fortunes to affluence; and their riches enable them to concentre the estates of others.'⁸⁴

The same motive is to be found in the work of John and Thomas Gilbert as land-agents, or stewards. Not only did this work provide them with a secure source of income, it also allowed them numerous opportunities for launching various business enterprises promising a considerable financial return. This connection also led to Thomas Gilbert's parliamentary career, which required a secure and sizeable income, but brought about an accelerated social ascent. The Gilbert brothers were intent on making money. But when a writer said of Josiah Wedgwood that: 'He was the maker of his own fortune, and (that) his country has been benefited in proportion not to be calculated',⁸⁵ then he could also have been describing John Gilbert and to a lesser extent, Thomas.

**CLOUGH HALL, MANSION, ESTATES
and COLLIERIES,**

PARTICULARS

Of the MAGNIFICENT MANSION HOUSE, called
CLOUGH HALL;

And sundry Valuable Freehold and Leasehold Estates; the HARECASTLE and other COLLIERIES, situated in the parishes of Audley, Woolstanton, and Norton-in-the-Moors, in the County of Stafford; and in the parish of Astbury, in the County of Chester;

CONSISTING OF

CLOUGH HALL,

Late the residence of JOHN GILBERT, Esqr, deceased,

Which is situated in the parish of Audley, with the Offices, Gardens, Pleasure Grounds, Woods and Plantations: Valuable Freehold and Leasehold Lands, Woods, a Mill, the Harecastle and other Collieries in hand, upwards of One Hundred and Twenty Freehold Houses, and sundry Freehold Farms and Lands let to Tenants, principally at Will;

WHICH WILL BE

SOLD by AUCTION,

By Henshaw & Smith,

AT THE

ROE BUCK INN,

In NEWCASTLE-under-LYME, in the County of Stafford;

On WEDNESDAY the 30th day of DECEMBER, 1812,

At THREE o'clock in the Afternoon,

In the SIX following LOTS;

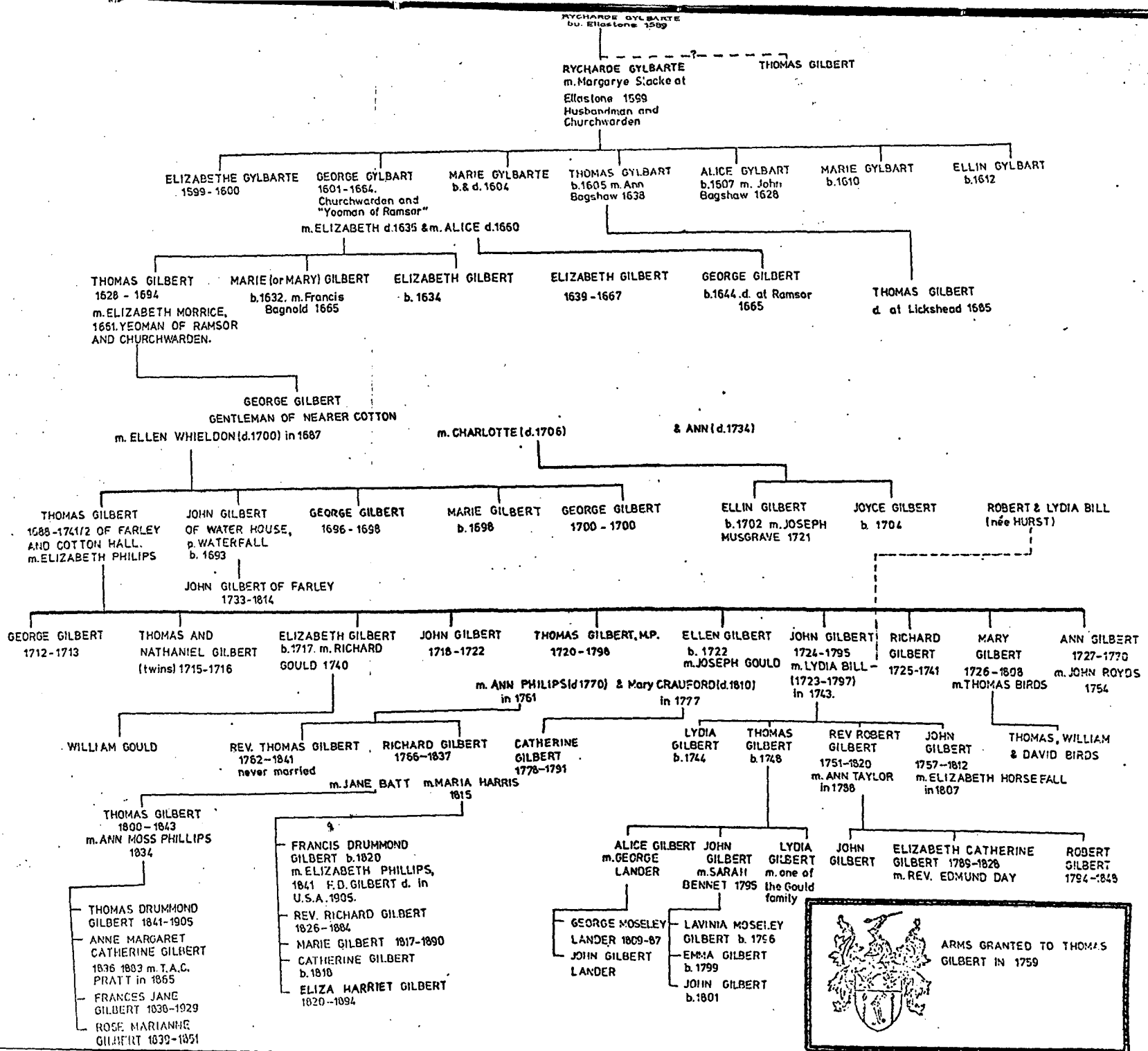
or in such other Lots as shall be then agreed upon.

The Estates may be viewed twenty-one days previous to the Sale upon application to Mr. EDMUND GOULD, at CLOUGH HALL, from whom particulars may be had; which may also be had at the Auctioneers', in Stafford; at the place of Sale; Lillyman's Hotel, Liverpool; Royal Hotel, Birmingham; King's Head Inn, Derby; Castle Inn, Tamworth; Bush Tavern, Bristol; White Hart Inn, Bath; George Inn, Newcastle-upon-Tyne; Swan Inn, Hanley; Red Bull, Lawton; Legs-of-Man, Burslem; or at the Offices of Messrs. Baron and Ditchfield, Wigan; Messrs. Milne, Serjeant, and Milne, Manchester; Robert Barbor, Esq. Fetter Lane, London; Messrs. Willis, Fairthorne, and Clarke, Warrford Court, London; and of Mr. VERNON, Solicitor, Stone, at whose Office plans of the Estates may be seen, and further particulars obtained.

Newcastle-under-Lyme:---From the Office of C. Chester.

1812.

Once fortunes had been secured, there was time for more relaxation and the adoption of a more comfortable way of life. John Gilbert's life-style had been frugal, but his son was able to enjoy a standard of living that was nothing short of luxurious.⁸⁶ When the Clough Hall estate sold for £64,000 in 1812, it provided a startling contrast with the few moorland farms that John Gilbert had inherited from his father in 1741/42. In addition to this estate, there were the other properties and enterprises that cannot be accurately valued. The younger John Gilbert's social standing was directly related to his wealth and by the time of his death he was the equal of any north Staffordshire gentleman. By 1812, the family were secure enough not to have to seek employment, as they could live very comfortably on rent receipts and the interest from investments.



CHAPTER ONE - REFERENCES AND NOTES - ANCESTORS

1. Refer to the Pedigree of the Family of Gilbert (of Cotton), which covers the period 1589-1900. Appendix 1.
2. Arthur Mee (Editor), The King's England: Staffordshire, Hodder and Stoughton, (nd), p.92.
3. Rev F.J.Wrottesley (Editor), Ellastone Parish Register, Part 1, (1538-1700), Staffordshire Parish Register Society, (1907), p.44.
4. Collections For a History of Staffordshire (1935), p.137.
5. Ellastone Register, p.96 'William Heath, of the World's end, blacksmith.'
6. Collections For a History of Staffordshire (1900), p.8.
7. D.M.Palliser, The Staffordshire Landscape, Hodder and Stoughton, London (1976), pp. 102-103.
8. see reference 3.
9. Peter Lead, 'The North Staffordshire Iron Industry, 1600-1800', Journal of the Historical Metallurgy Society, Volume II, Number 1 (1977), pp.2-3.
10. Ellastone Registers, pp.65 and 74.
11. Margaret Spufford, Contrasting Communities: English Villagers in the Sixteenth and Seventeenth Centuries, Cambridge University Press, London, (1974), p.72
12. Lorna Weatherill, The Pottery Trade and North Staffordshire, 1660-1760, Manchester University Press, (1971), pp.147-149.
13. Ellastone Registers, pp.67, 73, 58 and 62.
14. Ibid, pp.62 and 69.
15. Ibid, p.64. See also Arthur Mee, op.cit, pp.186-187.
16. John Aikin (sometimes Aiken), A Description of the Country From Thirty to Forty Miles Round Manchester, Manchester, (1795). Reprinted by David and Charles, Newton Abbot, (1968), p.183.
17. A type-script copy of this was lent to me by Mr Herbert Chester, of Froghall Road, Cheadle. It is also reproduced in R.M. and H.C.P.Larking, The Canal Pioneers, Goring-by-Sea, (c.1965), pp.32-33. Although the account bears the names of the Vicar and Church Wardens, it was most likely based on information provided by Frank H.Gilbert, c.1933.

18. Ellastone Registers, pp.55, 57, 60, 61, 67, 70, 73-75, 80 and 83.
19. W.E.Tate, The Parish Chest, Cambridge University Press, (1960), p.83.
20. Ibid, p.84.
21. Ellastone Registers, pp.106 and 128.
22. Ibid, pp.115-116, 118 and 127. In the introduction to this volume (page iii) it relates how Wootton Lodge was 'garrisoned for the King, but taken by storm in 1643 by Sir John Gell.'
23. D.H.Pennington and I.A.Roots, The Committee at Stafford, 1643-1645, Manchester University Press, (1957).
24. Public Record Office; S.P. 29/58/73.
25. Ellastone Registers, pp.113 and 122.
26. Quoted in an article in The Cottonian, Vol 49, Part 1 Number 104, Autumn 1960. The author states that the marriage settlement (dated 10th January 1661), between 'Thomas, son of George Gilbert, Yeoman of Ramsor, and Elizabeth Morrice, of Lockwood, Staffs,' was in the Salt Library at Stafford. However, it has not proved possible to trace this document among the collections of the William Salt Library, despite extensive searches.
27. Ellastone Registers, p.140 "George Gilbert of Ramsor, buried, 12th June 1664".
28. Ibid, pp.148 and 149.
29. See reference 26.
30. Ibid. The author of this article relates how a stone lintel in the cellar at Cotton Hall (now Cotton College) 'bears the inscription 'W M 1630 E M'. I would conjecture, but must make it clear, that it can only be conjecture, that W M and E M were the husband and wife who built the first house on the site.'
31. Will of Thomas Gilbert (1688-1741/2); Staffordshire Record Office: D260/B/2/2/37.
32. Like the document referred to in 26 (above), this document is reported by the same author to be in the collections at the William Salt Library, Stafford. But like the previous one it has also proved elusive. According to the article in The Cottonian, this document is dated 8th June 1687.

33. Ordnance Survey, Derby and Burton-upon-Trent, Sheet 128, 1:50,000 First Series, Southampton 1974. "Near Cotton" appears in grid square 0646.
34. The Alton parish registers are now in the County Record Office at Stafford: D1343. See also Ellastone Registers.
35. Alton parish registers, loc.cit. George Gilbert and Ellonora Whieldon, married December 1687 ('Ellin the wife of George Gilbert of Cotton was buried' in July 1700.) 'Ellin ye daughter of George Gilbert of Cotton and Charlotte his wife was baptised 17th December 1702.' Mrs Charlotte Gilbert was buried at Alton, 19th August 1706. 'Ann, the wife of (the late) George Gilbert was buried ye sixth day of May, 1734.'
36. This marriage was solemnized at Alton as noted in 35 (above). The Whieldon family were an old established family in the Ipstones and Kingsley area. They also had strong connections with the pottery industry during the eighteenth century. (See P.W.L.Adams, 'William Adams, 1736-1802', Transactions of the North Staffordshire Field Club, Volume LXXI, (1936-37), pp.23-25.) Sarah Whieldon, daughter of William Whieldon of Ipstones and Kingsley. Her first husband was Samuel Braddock, of Howard Park, Cheddleton who died in May 1734; and she married William Adams, who was a widower, on 15th July 1735. Thomas Whieldon, the famous Staffordshire potter and one time partner of Josiah Wedgwood was born in Stoke-upon-Trent in 1719. But he was the third son of Joseph Whieldon, who moved to Stoke-upon-Trent from Kingsley, about 1714.
37. Cloughead Colliery stood in what is known as Whieldon's Wood. See Ordnance Survey, Sheet SK04, 1:25,000 Chessington, 1951. Cloughead, Cloughead Wood and Whieldon's Wood appear in grid square 0248. For the exact location of the colliery see Herbert A.Chester, Cheadle : Coal Town, Cheadle, (1982), map on p.31.
- 'Coals to Alton mill', Staffordshire Record Office: D554, Bundle 55. 'For one year's Cloughead Rent (1749/1750) £7 10s,' Staffordshire Record Office: D554, Bundle 55.
38. Staffordshire Record Office: D239/M/400 (19th September 1721).
39. Thomas and Elizabeth Philips (daughter of Nathaniel Philips of the Heath House, in the parish of Checkley, Co Staffs) were married before 1712, when their first child was born. Staffordshire Record Office: D1343/6.

40. Staffordshire Record Office: D554, Bundle 141.
41. Ibid.
42. P.W.L.Adams, (Editor), Ellastone Parish Register, Volume II, Staffordshire Parish Register Society, Wolstanton, (1912), page 213. '1702/3 Jos White, Vicar; John Smith for Gilberts tenem(ent), Ramsor, Samuel Hudson, Churchwardens.'

The tithe records appear in the appendix to Robert Plant's, History of Cheadle, Cheadle, (1880).

43. Aikin, op.cit p 183.
44. Thomas Pape, The Ancient Corporation of Cheadle, reprinted in booklet form from Transactions of the North Staffordshire Field Club, Volume LXIV, (1929-30), pp.16-17.
45. Ibid, pp. 20, 21, 22 and 23.
46. Ibid, p.17. It is not possible to determine whether John Byrom was writing about the 1715 or the 1745 rebellion. In Aikin, op.cit, pp.212-217, there is a life of Byrom that reveals that he lived in Castlefield, Manchester. The Young Pretender was well received in Manchester in 1745 and so it seems more likely that it was inspired by the '45 rebellion. Nevertheless, its value as a comment on the contemporary attitude to the Jacobite cause remains undiminished.
47. Ibid, pp.13-15.
48. William Salt Library, Stafford: 68/5/49 - lease of mines at Upper Elkstone (5th December 1742), Lord Gower to Thomas Gilbert.
49. Thomas Pape, op.cit, pp.17-18, expressed the view that the second Earl Gower may have been one of the founders of the Hanley Venison Feast, having heard of the Cheadle Corporation from his father and uncle. However, a curt letter in the County Record Office at Stafford (D593/L/1/16) reveals that the Hanley Feast was modelled on a previously unrecorded 'Feast' at Leek. It was addressed to the second Earl Gower and reads as follows:-

'My Lord,

Your Lordships known goodness is an apology for this letter.

The Gentlemen of Hanley & Shelton intend to have an Annual Feast similar to that at Leek. The favour of a little venison will oblige them.

I am
My Lord
Your Lordships
Most Obed & Humbl Serv
Ephr Chatterley.

Hanley, 25 Sept 1784.'

Clearly, the pattern was that the Leek 'Feast' was modelled on the Cheadle Corporation; and in turn gave rise to that at Hanley in 1784. This is confirmed by the list given by Simeon Shaw, in History of the Staffordshire Potteries, Hanley, (1829), p.138; which lists three gentlemen from the Leek area who attended the first Hanley Feast in September 1784. This list also reveals that pottery manufacturers figured predominantly in the Hanley Corporation. In a very real sense these corporations encouraged contact between early industrialists and potential investors in industrial projects.

50. Herbert A.Chester, The Iron Valley, Cheadle (1979), p.68.
 51. Marie B.Rowlands, Masters and Men in the West Midland Metalware trades before the industrial revolution, Manchester, (1975), pp.73-74
Ellastone Registers, Volume I, p.iii.
 52. Herbert A.Chester, The Iron Valley, p.68.
 53. Robert K.Dent and Joseph Hill, Historic Staffordshire, (1896), p.265. Reprinted in 1975, by EP Publishing, Wakefield.
 54. Ibid, pp.264-265
 55. William Rees, Industry before the Industrial Revolution, (1968), pp.317-334.
- For the involvement of the Leveson, Chetwynd, Mainwaring, Gresley and Willoughby families in iron working enterprises, see Peter Lead, 'The North Staffordshire Iron Industry, 1600-1800', loc.cit, pp.1-7.
56. Eric Richards, The Leviathan of Wealth, London (1973), p. 5.

57. John A. Robey & Lindsey Porter, The Copper and Lead Mines of Ecton Hill, Staffordshire, Cheddleton, (1972), pp.17-18.
58. D.H. Pennington and I.A. Roots, op.cit, p.16.
59. R.A. Buchanan, Industrial Archaeology in Britain, Harmondsworth, (1972), p.87.
60. Robert Plot, The Natural History of Staffordshire, Oxford, (1686), p 165. Reprinted by E.J. Morten, Didsbury, (1973). Plot also relates how the ore produced was smelted at Ellastone.
61. H. Heckscher, 'The Place of Sweden in Modern Economic History,' Economic History Review, iv, p 12.
62. Staffordshire Record Office: D240/M/K/D. Plot, op.cit, p 166.
63. Staffordshire Record Office: D240/M/K/D
64. Staffordshire Record Office: D240/E/III/52
65. Ibid.
66. Ibid (Leases dated 8th and 13th December 1732) Duke of Chandos, 9th Baron, James Brydges (1673-1744) created Duke of Chandos in 1719. Known as the princely Chandos, he built a mansion at Canons, Edgware, Middlesex, at a cost of £250,000. This was the theme of Pope's epistle on bad taste.
67. Staffordshire Record Office: D240/M/K/D. Ann Bosville of Eccleshall to Robert Bill and Thomas Gilbert, lease dated 28th August 1730.
68. Ibid. Lease dated 12th December 1732.
69. See reference 63 (above).
70. Staffordshire Record Office: D554/Bundle 55. The full extent of Gilbert's interests are revealed in his will, Ibid, D239/M/400.
71. J.A. Robey and L. Porter, 'The Metalliferous Mines of the Weaver Hills, Staffordshire.' Bulletin Peak District Mines Historical Society, Volume 4, Part 6, (December 1971), p.420.
72. Staffordshire Record Office: D554/Bundle 55.
73. Ibid, D240/M/K/D. Lease dated 30th April 1741. Richard Fowler to Thomas Gilbert.

74. J.A.Robey and L.Porter, 'The Copper and Lead Mines of the Mixon Area, Staffordshire,' Bulletin Peak District Mines Historical Society, Volume 4, Number 4, (October 1970), p.260.
75. J.A.Robey and L.Porter, 'The Metalliferous Mines of the Weaver Hills, Staffordshire,' loc.cit, p.418.
76. J A Robey, 'Two Lead Smelting Mills in North Staffordshire', Bulletin Peak District Mines Historical Society, Volume 4, Number 3, (May 1970), p.218. One of the adventurers was Hall Walton, whose daughters married into the Bill family in 1757.
77. Staffordshire Record Office: D239/M/400.
78. Ibid, D554/Bundle 55.
79. A.Rees, B.D.(Editor), The Cyclopaedia, or Universal Dictionary, London, (1819), Volume XVI. The entry begins: 'GILBERT, JOHN, the son of Mr Thomas Gilbert, a gentleman possessing an estate of about £300 a year, was born in the year 1724.' Dr Hugh Torrens provided a photocopy of this entry from his copy of this volume.
80. H.J.Habakkuk, 'English Landownership, 1680-1740', Economic History Review, X (1939-1940).
81. Staffordshire Record Office: D239/M/400.
82. Ibid.
83. Rees, op.cit.
84. Aikin, op.cit, pp.182-183.
85. Rees, op.cit. See also W.K.V.Gale, Boulton, Watt and the Soho Undertakings, Museum of Science and Industry, Birmingham, (1968), p.3.
86. Wedgwood Papers, University of Keele: 9281-11.
87. M.W.Greenlade and J.G.Jenkins (Editors), A History of The County of Stafford, Volume II, Oxford University Press, (1967), p.267.
88. Marie B.Rowlands, Masters and Men in the West Midland Metalware trades before the industrial revolution, Manchester, (1975), pp.141-142.
89. Staffordshire Record Office: D1343/6. 'Mr Francis Bill of the Parish of St Botolph's, Aldersgate, London and Miss Dorothy Walton of this parish (Alton) were married 18 day of January 1757.'

Ibid, D554/Bundle 47. 'Francis Bill, Jeweller of the Hague, Holland. Dorothy Bill (wife) 26th August 1760.'

90. The following information was supplied by Dr. Alma Kuiper-Ruempol and comes from the City Archives in the Hague:
- (1058 f. 210) 28th June 1758. Francis Bill admitted as a citizen of the Hague.
- (N.A.4194-1104) Francis and Dorothy Bill made their last will. Estate less than f2000 - around about £182 at the then current rate of exchange.
- (N.A.4301-115 & 4266-272) Bought a house for f2550 at the Nieawe Veerkade, near to where the ships from Rotterdam docked.
- In Dr. Kuiper-Ruempol's letter (dated 24th January 1982) she relates how the couple lost a child on 27th February 1761.
91. Christopher Rowell, Tatton Park, published by the National Trust, London, (1978), p.50.
92. Hugh Malet, Bridgewater, The Canal Duke, 1736-1803, Manchester University Press, (1977), pp.57-58.
93. Rees, op.cit.
94. Norman W. Tindsley, (Editor), Kingsley Parish Registers, Staffordshire Parish Registers Society, Willenhall, (1968), p.175. '3rd January, 1743. Mr. John Gilbert and Ms. Lyda Bill, both of the parish of Alton.'
95. Staffordshire Record Office: D554/Bundle 47.
96. According a pedigree at the College of Arms, London, Volume X, page.208; Thomas Gilbert married Anne Philips, daughter of Richard Philips of Hall Green, in the Parish of Checkley, on 27th January 1762. The marriage took place at Christ Church, (?), Co.Surrey. This is confirmed by an entry in the Gentleman's Magazine, 1762, p.45. However, the Gentleman's Magazine, 1761, p.603 gives the date for the marriage as 24th December 1761.
97. Mrs Elizabeth Gilbert (nee Philips) was buried at Alton on 7th June 1729. (Staffordshire Record Office: D1343/6).
98. Gentleman's Magazine, 1761, p.603.
99. There is a copy of the Arms of Gilbert of Cotton in the William Salt Library, Stafford (109/33). It was presented to the Library in 1933 by F.H.Gilbert.
- See also:- W. Harry Rylands, (Editor), Publications of the Harleian Society, Volume LXVII (for the year MDCCCXVI), London, (1916), p.146.

LAND STEWARDS

Chapter Two - References and Notes

1. Sir Maurice Powicke, The Thirteenth Century, Oxford (second edition, 1962), p.323.
2. The steward, as the manager of the household, would move from one estate to another with his lord. Bailiffs were resident on the estates that they were responsible for.
3. Robert Plot, The Natural History of Staffordshire, Oxford (1686), p.211.
4. Herbert A Chester, The Iron Valley, Cheadle (1979), p.44.
5. Staffordshire Record Office: D554, Bundle 141.
6. The two standard works on agents or stewards are: Edward Hughes, 'The Eighteenth-Century Estate Agent', in Essays in British and Irish History, (edited by H. A. Cronne, T. W. Moody and D. B. Quinn), London (1949); and G. E. Mingay, 'The Eighteenth-Century Land Steward', in Land, Labour and Population in the Industrial Revolution, (edited by E. E. Jones and G. E. Mingay), London (1967). The two authors opted for one of the alternative titles, but clearly there was no significant difference.
7. The Register of the Manchester School. 'Thomas and Robert, sons of John Gilbert, steward to his Grace the Duke of Bridgewater, Worsley, Lancashire.'
8. Abraham Rees, The Cyclopaedia or Universal Dictionary, biographical article on 'John Gilbert'. Thomas Gilbert was 'then steward to the duke.'
9. Staffordshire Record Office: D593/F/3/2/50. William Bill was agent for the Trertham estate until September 1774.
10. Ibid., D593/L/1/16. Letter dated 16th August 1776.
11. Ibid., D593/L/1/16/a. Nathaniel Beard gave up the stewardship at Newcastle on 2nd August 1776. John Massey was another Mayor who became Earl Gower's steward (see: Ibid., D593/F/3/9/38). For a list of Mayors see J. Ingamells, Historical Records and Directory of Newcastle-under-Lyme, Newcastle-under-Lyme (1881), pp.77-81. Beard was Mayor in 1767; Fenton in 1770; and Massey in 1781.

12. G. E. Mingay, op. cit., p.7.
13. John Ward, History of the Borough of Stoke-upon-Trent, London (1843), p.194.
14. Staffordshire Record Office: D239/M/850. Last will of Edward Coyney of Alton Lodge.
15. Ibid., D1343/6.
16. Ibid., D554/Bundle 90.
17. See reference 9 (above).
18. Charles Bill (b. 1721); William Bill (b. 1726); Thomas Gilbert (b. 1720); and John Gilbert (b. 1720) - see Staffordshire Record Office: D1343/6. When Charles Bill took his oath as a Solicitor, Thomas Gilbert was one of the witnesses - see Staffordshire Record Office: D554/Bundle 148.
19. Staffordshire Record Office: D1343/6. '10th November 1754. Mr Michael Barbor of the Parish of Stone and Miss Elizabeth Bill of this parish were married.' The spelling of the surname is unusual. A Thomas Barbor was Mayor of Newcastle-under-Lyme in 1791, see J. Ingamells, op. cit., p.80.
20. William Salt Library, Stafford: William Salt Manuscript No. 522. 'Engign Barbor arrived from Flanders last night and sets out for Chester tomorrow he seems a very alert, diligent young man and has seen a good deal of service.' Barbors were also members of the Cheadle Corporation at the same time as John, Lord Gower.
21. The second Earl Gower became the Marquis of Stafford in 1786. Mr Barbor returned deeds to John Farey, after they had been executed by the Marquis of Stafford (19th June 1797; see Bedfordshire Record Office: R3/1954.)
22. Staffordshire Record Office: D593/L/1/16. (Letter dated 31st March 1803.) The Duke of Bridgewater died on 8th March 1803.
23. Staffordshire Record Office: D554/Bundle 47.
24. See Gilbert family tree.
25. Staffordshire Record Office: D593/C/23/4. David Birds also worked for the younger John Gilbert at Clough Hall - see Wedgwood Papers, University of Keele: 9676-52.

26. William Salt Library, Stafford: 93/1/22/41.
27. John Farey, 'Land Steward', in Abraham Rees, The Cyclopaedia or Universal Dictionary, London (1819).
28. See Chapter Three.
29. Hugh Malet, Bridgewater: The Canal Duke, 1736-1803, Manchester (1977) pp.135-136.
30. Ibid., pp.134-135. Robert Gilbert was not John Gilbert's eldest son as Dr. Malet states. Thomas Gilbert was the eldest son, and about thirty years of age at this time, which would have been the right sort of age for an agent to be appointed.
31. Rees, op. cit., 'John Gilbert'.
32. Tablet in Settrington church.
33. Malet, op. cit., p.145.
34. Canon Howard Senar, Little Gaddesden Parish Church, Little Gaddesden (1980), p.18. The Reverend Thomas Gilbert was incumbent of Little Gaddesden from 1796 until 1813, when he was deprived for non-residence.
35. Robert Landsdale to James Loch (21st December 1843), quoted by Malet, op. cit., p.161.
36. Mrs Lydia Gilbert (John Gilbert's widow) died at Barton-upon-Irwell on 22nd November 1797 - see Staffordshire Record Office: D554/Bundle 182. In her will, dated 28th September 1796, she is described as 'late of Worsley'. The Duke's will clearly states that none of the leases granted to the Gilberts are to be renewed. Chapter Four includes suggestions as to why the relationship soured.
For Lydia Gilbert's will, see DFI.167 (p.233), County Record Office, Chester.
37. Staffordshire Record Office: D593/C/23/4. .
38. Based on Professor Mingay's figures, op. cit., p.1.
39. Malet, op. cit., p 138. But see Staffordshire Record Office: D593/C/23/4.
40. For Farey's correspondence as steward at Woburn, see Bedfordshire Record Office: R3/1416 to R3/1954. This account appears in Rees, op. cit., 'Land Steward'. I am grateful to Dr. Hugh Torrens for drawing my attention to the Farey Correspondence.

41. J. Lawrence, The Modern Land Steward (1801). Farey drew heavily from this source for his article on the 'Land Steward'.
42. Robert Robson, The Attorney in Eighteenth Century England, Cambridge (1959), pp.84-103.
43. Hugh Malet, Bridgewater: The Canal Duke, 1736-1803.
44. Farey, op. cit., 'Land Steward'.
45. According to Professor Chaloner, People and Industries, London (1963), p.34, John Gilbert may have been in the Duke's service by 1753, which would have made him twenty-nine.
46. Farey, op. cit., 'Land Steward'.
47. Ibid.
48. W. A. Speck, Stability and Strife, London (1977), p.41.
49. Farey, op. cit., 'Land Steward'.
50. Staffordshire Advertiser, 25th January 1806.
51. Staffordshire Record Office: D593/L/1/15/5. The Society was founded at a meeting at the Red Lion, Newcastle-under-Lyme on 6th August 1800.
52. S. A. Broadbridge (Editor), Journal of an Excursion to Wales, & c by Joseph Banks, pp.70-71, (unpublished manuscript for a book.) I wish to record my thanks to the late Stan Broadbridge for allowing me to make a copy of this manuscript in 1976.

It should be noted that the Duke only owned a portion of this 6,000 acres, something like 5-600 acres.
53. Broadbridge, op. cit., p.72.
54. Ibid.
55. Ibid.
56. Ibid.
57. Ibid., p.92.
58. Herbert A. Chester, Cheadle: Coal Town, Cheadle (1981), pp.27-29.
59. John Aikin, A Description of the Country from Thirty to Forty Miles Round Manchester, Manchester (1795), pp.318-320.

60. Rees, op. cit., 'Lancashire'. Presumably this was human sewage. In the nineteenth century, sewage was brought out of Manchester by train to be dumped on the mosses as manure. (Information from Visitors Centre, Risley Moss, Warrington.)
61. Aikin, op. cit., pp.320-321.
62. Ibid., p.320.
63. Ibid., pp.321-324.
64. Farey, op. cit., 'Land Steward'.
65. See A. W. Richeson, English Land Measuring to 1800, Cambridge, Massachusetts (1966), pp.142-188.
66. Malet, op. cit., p.45.
67. Farey left Woburn, when the Duke died in 1802. He wrote to Arthur Young, asking for his help in obtaining the lease of 'an improvable farm from 250 to 500 acres.' (Correspondence of Arthur Young - British Museum, Add. MSS. 35128, Fol. 498.) See also 'John Farey' in Dictionary of National Biography.
68. Nicknamed 'Strata Smith' by his contemporaries, as he elucidated the succession of the rock groups or strata of England. See J. F. Kirkaldy, General Principles of Geology, London (fifth edition, 1971), pp.15-16.
69. The complex geology of the Worsley area is well described by E. R. Hassal and J. P. Trickett, 'The Duke of Bridgewater's Underground Canals,' The Mining Engineer, No. 37 (October 1963), pp.45-57. Borings are mentioned on p.54.
70. Information supplied by the late W. Howard Williams, of Wellington, Shropshire.
71. Gentleman's Magazine, (1821), p.381.
72. Monthly Magazine, (1821), pp.468-469. It is also worth noting that John Gilbert's (1724-1795) nephew, Robert Bill (1754-1827) was described as 'an ingenious mechanic and inventor' (see Dictionary of National Biography, 'Robert Bill').
73. Gentleman's Magazine, (1821), p.381.
74. John Farey, op. cit., 'Land Steward'.

75. See Chapter Three.
76. Birmingham Reference Library, Boulton and Watt Papers:- Box 5 (XIII), Parcel F & G; Box 7, Parcel V; Box 4, Parcel G; and Box 2, Parcel G. The drawings date from 1789.
77. Marston Saltworks, producing rock-salt, were near Northwich. For further details see Professor W. H. Chaloner, 'The Cheshire Activities of Matthew Boulton and James Watt, of Soho, near Birmingham, 1776-1817', in Transactions of the Lancashire and Cheshire Antiquarian Society, Vol. LXI (1949), pp.126-131.
78. Catalogue of Engines, Boulton and Watt Collection, Birmingham Reference Library. This engine delivered to Donnington Wood (Shropshire) in 1779 was for pumping out the coal mines there.
79. Boulton and Watt Papers, Birmingham Reference Library.
80. Patent Number 730 (dated 1758), Patent Office, Orpington, Kent.
81. Broadbridge, op. cit., p.79. Aikin, op. cit., p.114.
82. Brindley's Notebooks: 'For Arle Gower Trantham - 30 June 1758 - Inspating the pump $\frac{1}{2}$ day; - ~~fabracting~~ pump - 5 days; - about this pump and stop cock - 1 day'.
83. Brindley's Notebooks: 'Cheadle 1759 - Mobile Water Engin.'
84. Aikin, op. cit., p.114.
85. Rees, op. cit., 'John Gilbert'. 'Mr G.; who, being acquainted with Mr Brindley as a neighbour, and knowing him to be a very ingenious and excellent mill-wright, engaged his assistance in the conduct and completion of this arduous undertaking, and introduced him to the duke for this purpose.'
86. J. and W. H. Rankine, Biography of William Symington, pp.55-56. This letter was written in 1786 by one of Symington's friends. The white ore was lead-ore from the mines at Wanlockhead, where Symington worked and carried out his early experiments.
87. See also G. Downs-Rose and W. S. Harvey, William Symington, London (1980).
88. Charles Hadfield, The Canals of the West Midlands, Newton Abbot (second edition, 1969), p.192 (photograph) and pp.241-242 (account).

89. Malet, op. cit., p.151.
90. See Chapter Three.
91. Lady Farrar, Letters of Josiah Wedgwood, Vol. II, p.151. (Letter dated 21st June 1773)
92. John Ward, op. cit., pp 351-352. No date is given for the incident, but 'the noble Marquess never forgot this signal service, and the presentation of the living of Stone to Mr M. was the consequence' According to Norman A. Cope, A History and Guide to Stone Parish Church, Gloucester (1967), p.10, John Middleton was incumbent of Stone from 1765 to 1802.
93. Frank Mullineux, 'The Duke of Bridgewater's Underground Canals at Worsley', Transactions of the Lancashire and Cheshire Antiquarian Society, Vol. 71 (1961), p.158.
94. City Museum and Art Gallery, Stoke-on-Trent; Enoch Wood's Scrapbook (1790-1836), p.175. John Gilbert gave £15 to this fund, in 1795.
95. Staffordshire Advertiser, 13th February 1795.
96. A similar scheme was launched amongst the Shropshire ironmasters in 1796 - see Arthur Raistrick, Quakers in Science and Industry, Newton Abbot (1968 reprint) p 144. Professor Rude lists the 'peak' years for food riots as being 1766, 1795 and 1800. (George Rude, Paris and London in the 18th Century, London (1970), p. 24).
97. Cheltenham Chronicle and Gloucestershire General Advertiser, 1st October 1812.
98. Staffordshire Record Office: D593/F/4/3.
99. Ibid., D593/F/3/5/53 and D593/F/3/7/1.
100. Ibid., 593/F/3/7/1.
101. Ibid., D593/F/3/2/69.
102. Quoted in Malet, op. cit., p.94.
103. Ibid., p.38.
104. Ibid.
105. Ibid., pp.95 and 138.

106. William Salt Library: 93/13/41.
107. Wedgwood Papers, University of Keele: 11-9515. Francis Adams is also mentioned in connection with the Shrewsbury-Gilbert exchange, in 1779 - see: Staffordshire Record Office, D239/M/1730.
108. Rev. F. J. Wrottesley, (Editor), Rocester Parish Register, Vol. II, Denstone (1909), p 189. 'Buried 16th October 1798. Mr Francis Adams, who died at or near the seat of the Duke of Bridgewater.'
109. Staffordshire Advertiser, 12th January 1799.
110. Ibid.
111. Sir L. B. Namier, The Structure of Politics at the Accession of George III, London (1929), p.53.
112. Staffordshire Advertiser, 12th January 1799.
113. Herbert A. Chester, Cheadle: Coal Town, pp.23-24.
114. Robert Robson, op. cit., p.71.
115. Herbert A. Chester, op. cit., pp.23-24.
116. Staffordshire Record Office: D239/M/400 and D239/M/402.
117. Sir Joseph Banks (1743-1820), later President of the Royal Society was the grandson of the attorney; and the son of the Joseph Banks who granted the lease of the Kingsley mines to John Philips. As part of the tour he made between 1767-68, (Sir) Joseph Banks came to Cheadle and Kingsley; and during his stay he visited the Ecton copper mines. He set out from Kingsley 'for Worsley with Mr (John) Gilbert... (to) see the Duke of Bridgewater's navigation'; and later he visited Lilleshall with 'the two Mr Gilberts.' (Broadbridge, op. cit.)
118. Hughes, op. cit., p.193.
119. Malet, op. cit., p.27.
120. Northamptonshire Record Office: EB 1459.
121. Ibid., EB 1461.
122. Staffordshire Record Office: D593/C/23/4.
123. Ibid. This is also the opinion of Frank Mullineux, letter dated 3rd January 1978.

124. Anon., Alton Towers, North Staffordshire, England, Ashbourne (1980), p.3. Also - Staffordshire Record Office: D239/M/850.
125. Mingay, op. cit., p.10.
126. Staffordshire Record Office: D593/F/4/3.
127. Robson, op. cit., p.85.
128. See Chapter Three.
129. Staffordshire Record Office: D593/M/1/5 (dated 28th September 1768).
130. Trevor D. Ford, 'The Speedwell Mine', Derbyshire Countryside, (April-May 1960), pp.20, 21, 47 and 55. Ford gives the credit for the Worsley idea to Brindley and implies that John Gilbert 'copied' Brindley's work there. Ralph Oakden had dealings in land with John Gilbert, in the Caldron and Alton areas, in 1775. (William Salt Library, Stafford: 93/23/41.) He also purchased part of the 'Old Railroad' (1778 line) at Caldron Low in 1785. (Staffordshire Record Office: D554/Bundles 84-89.)
131. Rees, op. cit., 'John Gilbert'. John Gilbert is also credited with being 'the first person who suggested the use of gun-powder in obtaining rock-salt.' Presumably, this was at Marston c.1781.
132. Trevor D. Ford and J. H. Rieuwerts (Editors), Lead Mining in The Peak District, Bakewell (second edition, 1975), p.84.
133. Malet, op. cit., p 134. Somerset Record Office: DD/WG/BOX 15/5 (Waldegrave MSS.)
134. Barrie Trinder, The Industrial Revolution in Shropshire, Chichester (1973), pp.207-208.
135. Eric Richards, 'The Industrial Face of a Great Estate: Trentham and Lilleshall, 1780-1860', Economic History Review, Volume XXVII, No. 3 (August 1974), p.415. Earl Gower did not himself actually organize large scale capitalist enterprise as Professor Richards seems to suggest. But he gave that opportunity to others and insisted on being consulted about policy.
136. Staffordshire Record Office: D593/B/2/7/22/1-2.

137. William Salt Library, Stafford: 93/7/41.
138. Richards, op. cit., p.415.
139. William Salt Library, Stafford: 93/20/41 (a, b, c.)
140. J. A. Robey, 'Two Lead Smelting Mills in North Staffordshire', Bulletin Peak District Mines Historical Society, Vol. 4, No. 3 (May 1970), p.90.
141. Staffordshire Record Office: D554/Bundles 91 and 154.
142. L. F. Helsby, A. J. Rushton and D. R. Legge, 'Water Mills of the Moddershall Valley,' Journal of the Staffordshire Industrial Archaeology Society, Vol. 4 (1973), p.25.
143. Staffordshire Record Office: D593/C/23/4.
144. Malet, op. cit., p.134.
145. See Chapter Four.
146. Rees, op. cit., 'James Brindley'.
147. Samuel Smiles, Lives of the Engineers, Vol. I, London (1862), p.403. Smiles discounts the statements of two informed sources about this application as "untrue", basing his argument on an examination of Brindley's notebooks.
148. See Chapter Three.

THE DUKE'S AND THE EARL'S CANALS

Chapter Three - References and Notes

1. Charles Hadfield, The Canal Age, Newton Abbot (1968), pp.1-4.
2. Ibid, p.166.
3. Ibid, pp.3-4.
4. For example a letter written from Burslem in 1767, which describes the work on the Harecastle tunnel. 'Gentlemen come to view our Eighth Wonder of the World - the subterraneous Navigation which is cutting by the great Mr Brindley who handles Rocks as easily as you would Plumb-Pyes and makes the four elements subservient to his will.' (Aris's Birmingham Gazette, 14th September 1767).
5. Hadfield, The Canal Age, p.168.
6. Hugh Malet, Bridgewater : The Canal Duke, 1736-1803, Manchester (1977), pp.14-16. See also note 16.
7. J Aikin, A Description of the Country from thirty to forty miles round Manchester, London (1795), p.116. See also:- Frank Mullineux, The Duke of Bridgewater's Canal, Eccles (1959), p.9.
8. Quite a detailed account of the opening appeared in the Manchester Mercury, 21st July 1761.
9. Charles Hadfield, British Canals : An Illustrated History; fifth edition, Newton Abbot (1974), pp.29-30
10. Hadfield, The Canal Age, p.7.
11. Hadfield, British Canals: An Illustrated History, p.30. Joseph Priestley states: 'John Eyes, of Liverpool, was the original engineer to the undertaking.' Joseph Priestley, Historical Account of the Navigable Rivers, Canals and Railways, of Great Britain, London (1831), p.561.
12. Aikin, op.cit, pp.106-109. Priestley, op.cit, pp.389 and 666.
13. Daniel Defoe, A Tour through the Whole Island of Great Britain, first published 1724-6. Edited version by Pat Rogers, Harmondsworth, (1971), p.542.
14. Aikin, op.cit, p.117. Aikin relates how the survey was undertaken by 'Mr Taylor of Manchester and Mr Eyes of Liverpool.' John Eyes was also involved with the Sankey Navigation (later known as the St Helens Canal) see note 11.

15. Hadfield, British Canals : An Illustrated History, p.30.
16. The first attempt to write a balanced account of the development of the Bridgewater Canal system was made by Frank Mullineux, in his booklet The Duke of Bridgewater's Canal, published in 1959. The first modern biography of the Duke of Bridgewater was Hugh Malet's, The Canal Duke, Dawlish (1961). This book was substantially revised and expanded, with the benefit of access to the Sutherland archives and appeared as: Bridgewater : The Canal Duke, 1736-1803, Manchester (1977). This last work added a forceful drip to help weather the persistent stone of Smiles' legend; and succeeded in reducing the famous canal triumvirate of the Duke of Bridgewater, John Gilbert and James Brindley from three to two and a half.
17. Samuel Smiles, Lives of The Engineers, Vol. I, London (1862). Smiles devotes pages 305 to 476 to a detailed description of Brindley's life and works. The durability of the legend can be judged from the fact that eminent scholars like Dr Jacob Bronowski could write in 1973 that: 'The Duke of Bridgewater then got him (Brindley) to build a canal to carry coal from the Duke's pits at Worsley to the rising town of Manchester. It was a prodigious design' Bronowski compounds his error by adding: 'Brindley went on to connect Manchester with Liverpool in an even bolder manner.' See J Bronowski, The Ascent of Man, London (1973), p.262.
18. John Farey, (1766-1826), author of Agriculture and Minerals of Derbyshire; and a contributor to Rees's Cyclopaedia, including the article on canals. He should not be confused with his son, also John Farey, (1791-1851), who contributed illustrations to the Cyclopaedia from the age of fourteen and went on to write the engineering classic: A Treatise on the Steam Engine.
19. Abraham Rees, The Cyclopaedia or Universal Dictionary, Vol. XVI. The biographical article on John Gilbert was first noted by Frank Mullineux, in The Duke of Bridgewater's Canal, p.10.
- Another clue to John Gilbert's reluctance can be inferred from the fact that by the early 1770s, the Duke of Bridgewater was already being heralded as the 'father of canal navigations'. See Malet, op cit, p.124.
20. This letter (dated 2nd May) is reproduced in its entirety by Smiles, op.cit, p.403. Mrs Williamson (Mrs Anne Brindley married Robert Williamson in 1775) made appeals to the Duke from 1772 to 1803. For a pedigree of Brindley and Williamson see:

John Ward, History of the Borough of Stoke-upon-Trent, London, 1843, p.177.

21. Katherine Euphemia, Lady Farrer, (Editor), Letters of Josiah Wedgwood, Vol.II, (1771-1780) pp.319-320 and 377. These volumes were originally printed for private circulation, between 1903-1906; and were reprinted in 1973 by E.J.Morten (Publishers) of Diösbury and the Trustees of the Wedgwood Museum. (All pagination refers to the 1973 edition.) Thomas Bentley was Josiah Wedgwood's partner.
 22. Note the gratuitous payment made in 1774.
 23. Robert Gilbert, son of John and Lydia Gilbert was baptised at Alton on 19th April 1751.
 24. W.H.Chaloner, People and Industries, London (1963) p.34.
 25. Staffordshire Record Office: D1343/6. Genealogical extracts from the Alton Parish Registers.
- Mr John Royds of the Parish of Rochdale in the County of Lancashire and Miss Ann Gilbert of this parish (28th September 1754).
- Mr Edmund Smith of the Parish of Rochdale in the County of Lancashire and Miss Penelope Bill of this parish (23rd September 1755).
26. For information on these early Welsh navigational levels see Stephen Hughes, 'The Development of British Navigational Levels', Journal of the Railway and Canal Historical Society, Volume XXVII, No.2 (July 1981), p.2. For further information on John Rotton see: J.A.Robey, 'Copper Smelting in Derbyshire', Bulletin of the Peak District Mines Historical Society, Volume 4, Part 5, (June 1971), pp.348-349.
 27. Rees, "John Gilbert" article, in his Cyclopaedia, loc.cit.
 28. The first useful stretch of the Sankey Navigation opened on 4th November 1757.
 29. Rees, "John Gilbert" article, loc.cit.
 30. Hughes, op.cit, p.2.
 31. M.J.T.Lewis, Early Wooden Railways, London (1970) p.322. Patent Number 653 (9th February 1750): Machine for carrying coals from the coal walls to the bottom of the shaft, and from the mouth of the shaft to the heaps, and for other purposes. Michael

Meinzies took out a further Patent (Number 762), dated 20th May 1761: for working mines of coal. Patent Office.

32. Malet, op.cit, p.43.
33. Ibid, pp.45-46.
34. Act 33 Geo II C.2. Malet, op.cit, pp.45-48.
35. The article on John Gilbert in Rees, states that 'in June, 1757, he removed with his family to Worsley.' Hugh Malet states that John Gilbert's family arrived in June 1759 and that work on the navigation had begun some three months earlier (Malet, p.51). Malet's date for the arrival of the family is almost certainly correct as John's eldest sons, Thomas and Robert entered Manchester Grammar School on 1st July 1759. (Information supplied by Mr Ian Bailey, Manchester Grammar School, 13th February 1979.)
36. Act 32 Geo II C.2. A clause limited his sales of coal at Salford to a price of 4d a cwt for forty years; but in fact the Duke fixed his price at 3½d a cwt until mounting debts forced him to raise his prices. (Malet, pp.49 and 81.)
37. Act 33 Geo II C.2.
38. Brindley's notebooks. They are not in the main diaries but memoranda books. They range from 1754 to 1763 but cover only sections of that period. Those ranging from August 1754 to February 1758 are in the Birmingham Reference Library; and those covering the period March 1759 to October 1763 are at the Institution of Civil Engineers.
39. Brindley's notebooks. Under a heading 'Mr Gilbert' (to whom the account would be submitted) 'July 1st (1759) at Worsley Hall 6 days.'
40. Malet, op.cit, p.57.
41. This 'engine' is the subject of a short entry in one of Brindley's notebooks 'Cheadle 1759 - Mobile Water Engin - May 17 1 day.' Herbert Chester has confirmed my siting of this 'engine' at the Woodhead Colliery; and the site of one of the earliest shafts is still known as 'Engine Pit' by the farmer. Dr Boucher in James Brindley : Engineer 1716-1772, Norwich (1968), p.44, seems to think that the Cheadle engine was a steam engine. He also gives the impression that Brindley employed steam engines

during the construction of the Harecastle tunnel (p.85), but this is also incorrect. This particular idea can be traced back to the late L.T.C.Rolt, who misinterpreted the following extract from a letter written from Burslem (8th September 1767): 'he (Brindley has a pump, which is worked by water, and a stove, the fire of which sucks through a pipe the damps (gases) that would annoy the men, who are cutting towards the centre of the hill.'

42. Aikin, op.cit, p.143.

43. Information from Hugh Malet, 5th June 1980

44. S.R.Broadbridge (Editor), Journal of an Excursion to Wales & C : Begun August ye 13th 1767, Ended January ye 29th 1768 by Joseph Banks, p.42. This is an unpublished manuscript for a book, which the late Mr.Broadbridge allowed me to copy in 1976.

John Gilbert was given a special payment of £150 for extra work on canal hills (Malet, op.cit, p.61); at a time when his salary stood at £200 per annum (C.R.O.Northants, E.B.1459, Day Book).

45. Broadbridge manuscript, p.84.

46. Ibid, pp.80-81.

47. Lady Farrar, Letters of Josiah Wedgwood, Volume II, p.151. (Letter dated 21st June 1733.)

48. Quoted in Charles Hadfield, The Canals of the East Midlands, Newton Abbot (1969) pp.18-19.

49. Malet, op.cit, pp.65-66, gives a full account of this episode.

50. Manchester Mercury, 21st July 1761.

51. Ibid.

52. Annual Register, 1763. 'At Barnton bridge he has erected a navigable canal in the air; for it is as high as the tree-tops. Whilst I was surveying it with a mixture of wonder and delight, four barges passed me in the space of about three minutes, two of them being chained together, and dragged by two horses, who went on the terras of the canal, whereon, I must own, I durst hardly venture to walk, as I almost trembled to behold the large river Irwell underneath me

53. Malet, op.cit, pp.72-76.

54. Brindley's Notebook: 13th November 1763. Thomas Gilbert (John's eldest son) was fifteen years old at this time and apparently already helping his father. It was he who helped his father with the construction of the canal to Runcorn and not John (junior) as Hugh Malet states. (Malet, p.126). It also seems more likely that it was Thomas who was apprenticed to Matthew Boulton for a time.
55. Malet, op.cit, p.98.
56. Lady Farrar, The Letters of Josiah Wedgwood, Vol II, p.199.
57. Hugh Malet devotes a full chapter to this dispute in his book.
58. Charles Hadfield and Gordon Biddle, The Canals of North West England, Vol.I, Newton Abbot (1970) p.34.
59. Quoted in Hadfield and Biddle, op.cit, p.34.
60. Malet, op.cit, pp.133-137.
61. Broadbridge, op.cit, p.92.
62. County Record Office, Stafford: D593/I/1/33 - an 'Agreement for cutting Lilleshall Abbey to Pave Coal Works Canal.'
63. Barrie Trinder, The Industrial Revolution in Shropshire, Chichester (1973), p.126.
64. Broadbridge, op.cit, p.63.
65. W.K.V.Gale and C.R.Nicholls, The Lilleshall Company Ltd: A history 1764-1964, Ashbourne (1979), p.19. The tub boats on this branch were fitted with containers - see Charles Hadfield, The Canals of The West Midlands, Newton Abbot (2nd edition, 1969) p.41.
66. Rees, op.cit, article on Canals.
67. Trinder, op.cit, p.126. There is a picture of a train of tub boats on the Shrewsbury Canal in Charles Hadfield's, The Canals of the West Midlands (facing page 33).
68. The remains of a wooden tub boat are featured in a photograph in Waterways World, June 1978, p.46. A replica of a Shropshire tub boat was constructed (in wood) in 1977 and a photograph of its launching is to be found in Waterways World, May 1977, p.31.

69. An iron tub boat which belonged to the Lilleshall Company (No.749) is preserved at the Ironbridge Gorge Museum.
70. Hadfield, The Canals of the West Midlands, pp.155-157.
71. Quoted in Malet, *op.cit.*, p.138. Coal sales were restricted by the crippling parliamentary limitation on the price the Duke could ask. The income from the Worsley mines, crippled by flooding, stood at £122 in 1743. (Malet, *op.cit.*, p.27).
72. Aikin, *op.cit.*, p.381. Aikin describes 'the convenience of carriage by the Duke of Bridgewater's canal from Worsley to Manchester, which divides Trafford Moss into two unequal parts, and shoots a considerable way into Chat Moss, seems to render the improvement of these lands particularly eligible.'
- Sir Joseph Banks described how waste was dumped into a pool to create useful land alongside the Donnington Wood Canal. (Broadbridge, *op.cit.*, p.92.)
73. Malet, *op.cit.*, p.138.
74. County Record Office, Northampton: EB 1461 (dated 1786).
75. County Record Office, Stafford: D593/C/23/4 (dated 10th June 1802). The other main sources of income were the Duke's Shropshire estates £17,500 per annum and dividends on Government Bonds and Securities, which yielded £27,400 per annum.
76. County Record Office, Northampton: EB 1461 (dated 1803).
77. Malet, *op.cit.*, p.156.
78. Rees, "Land Steward" article by John Farey, in Cyclopaedia, *loc.cit.*
79. See note 44.
80. For a brief description of the origins of these canals see Charles Hadfield, The Canals of the West Midlands, Newton Abbot, second edition (1969), pp.40 and 47.

THE GRAND TRUNK AND OTHER PUBLIC CANALS

Chapter Four - References and Notes

1. Act: 10 Will. III c.26.
M.W.Greenslade and J.G.Jenkins, The Victoria History of the County of Stafford, Vol. II, London (1967), p.285.
2. Commons' Journals, XXX, pp. 720-1. The navigation of the river was said to be inadequate and to be a 'monopoly in the hands of a few persons' who have injured the trade.
3. Sir Richard Whitworth, Advantages of Inland Navigation, (1766). Reprinted in J. Phillips, A General History of Inland Navigation, London (fifth edition 1805), p.145.
4. Ibid, p.133.
5. Jean Lindsay, The Trent and Mersey Canal, Newton Abbot (1979), p.15.
6. Act: 6 Geo. III c. 96. (14th May 1766).
7. John Aikin, A Description of the Country from thirty to forty miles round Manchester, London (1795), p.117.
8. Jean Lindsay, op.cit, p.15.
9. Collected Reports of John Smeaton, Vol. I, p.13. The reports are preserved in the Library of the Royal Society, London and the report on the Trent and Mersey (from Longbridge, near Burslem to Wilden), includes three schedules of landowners involved.
10. Charles Hadfield, The Canal Age, Newton Abbot (1968) p.4. Charles Hadfield, British Canals, Newton Abbot (fifth edition, 1974), p.46.
11. Brindley's notebook contains the note (dated 15th February 1758):- 'Surveying the Nevegation from Long brigg to Kinges Milles or inspection. Charges born work 12 days $\frac{1}{2}$.' This appears to have been little more than a very general survey to determine the lie of the land. A further entry (dated 17th February) reads 'about the nevegation 3 days.' Brindley was also working on a steam engine at Fenton at this time.
12. A document in the William Salt Library at Stafford explodes another of the Smiles' myths. A note in one of Brindley's notebooks appears to suggest that Brindley bought a share in the Goldenhill estate with the Gilberts and others. However, this document (ref. 93/23/41) shows that the estate was conveyed

to Robert Hurst of Cheadle (John Gilbert's wife's uncle) in trust for John and Thomas Gilbert ($\frac{1}{4}$ share); Hugh Henshall ($\frac{1}{2}$ share); Robert Williamson ($\frac{1}{4}$ share) and John Brindley ($\frac{1}{4}$ share). It is likely that James Brindley may have contributed to the share purchased by either John Brindley or Hugh Henshall.

13. Brindley Notebooks, 10th May 1760 'Bgnn to leavel from Hare Castle - 4 days.' At this time the proposal was obviously to extend the canal from Longport into the southern flank of Harecastle Hill, so the coal could be exploited in the same manner as that employed at Worsley.
14. See Katherine Eufemia Farrer, Correspondence of Josiah Wedgwood, Vol. I (1762-1770) and Vol. III, pp.227-312, printed for private circulation only (1906), reprinted Didsbury, 1973. Although the original letters have been consulted in the Library, in the University of Keele, reference will be made to this printed source where possible as this is more readily available to the reader.
15. I have been unable to trace a copy of this pamphlet and it does not appear amongst the list of Thomas Gilbert's pamphlets held by the British Library.
16. K. E. Farrer, Correspondence of Josiah Wedgwood, Vol. I. pp.19-23.
17. Letter Samuel Garbett to Josiah Wedgwood (dated 18th April 1765), Wedgwood Papers, University of Keele. In 1763, Earl Gower was recommended for the post of Southern Secretary by Lord Bute; and in the same year he became Lord Chamberlain of the household. (D.N.B., p.1027)
18. K.E. Farrer, Correspondence of Josiah Wedgwood, Vol. I, p 37. See also page 41 - 'it is proposed to carry it beyond Burton to Wilden in order to keep clear of their locks and shallows.'
19. Ibid., Vol. III, p 228.
20. Ibid., p 229.
21. The 'Burslemites' were a small group of Burslem potters with Wedgwood as their leader, who were determined to have a canal to the River Trent.

Wedgwood frequently refers to Thomas Gilbert as 'Councillor Gilbert', a reminder of his training and work as a barrister.

22. For a portrait of Thomas Bentley, see Peter Lead, The Trent and Mersey Canal, Ashbourne (1980), p.16.
23. This presumably refers to the Duke of Bridgewater's offer to meet all the costs of obtaining an Act of Parliament. K.E. Farrer, Correspondence of Josiah Wedgwood, Vol. III, pp.230-231 - Wedgwood felt that it should be done 'by a number of Gentlemen, Tradesmen &c along the Canal than to have one individual who hath no other connection with it to subscribe the whole.'
24. This subscription list is included among the Wedgwood Papers at Keele; ref. 24153-32 and 24154-32. The Whieldon - Wedgwood connection is further detailed in Lead, Trent and Mersey Canal, caption 2.
25. T.S. Willan, The Navigation of the River Weaver in the Eighteenth Century, Manchester (1951), p.90. Richard Wedgwood (born 1701) was Josiah Wedgwood's father-in-law. See Barbara and Hensleigh Wedgwood, The Wedgwood Circle, 1730-1897, London, (1980), they provide considerable information on this individual, who had made a considerable fortune as a cheese-factor and employed part of it as a banker. He did not subsequently subscribe to the Trent and Mersey, but his son John had ~~either~~ 10 shares (worth £2,000) or 8 shares (worth £1600). The problem arises as the subscription list (Staffordshire Record Office: D593/T/1/35) lists two John Wedgwood's, one Josiah's brother and the other his brother-in-law.
26. The surveys were carried out by Hugh Henshall and Robert Pownall. Levels were taken of the country between Winsford and Harecastle Hill by both Middlewich and Nantwich. The survey of an alternate route from Harecastle, through Middlewich to Northwich was paid for by the canal promoters. See T. S. Willan, op. cit., p.90.
27. K. E. Farrer, Correspondence of Josiah Wedgwood, Vol. III, p.238.
28. Ibid, Vol. III, p.248.
29. T. S. Willan, op. cit., p.91.
30. K. E. Farrer, Correspondence of Josiah Wedgwood, Vol. I, pp.69-70.
31. T. S. Willan, op. cit., p 203.
32. K. E. Farrer, Correspondence of Josiah Wedgwood, Vol. I, p.70.
33. Ibid., p.73 (13th December 1765).

34. Ibid., pp.72-73.
35. Eliza Meteyard, The Life of Josiah Wedgwood from his private correspondence and family papers, London (1865), Vol. I, p.431.
36. For more on Whitworth and his scheme, part of which he constructed at his own expense see R. J. Dean, 'Sir Richard Whitworth and Inland Navigation,' Journal of the Railway and Canal Historical Society, Volume XXVII, No. 4 (March 1982), pp.42-46. This scheme would have suited Earl Gower's Shropshire interests very well as one branch was to go to the River Tern and would have passed within only four miles of the Donnington Wood Canal.
37. In April 1765, Wedgwood wrote that Whitworth 'bears no great character amongst the Gentⁿ here, but rather a laughable one.' (K. E. Farrer, Correspondence of Josiah Wedgwood, Vol. III, p.235.) This is very unfair, but Whitworth was certainly eccentric. Mr F. Stitt, the County Archivist for Staffordshire pointed out that one of Stebbing Shaw's drawings of Whitworth's house, Batchacre Grange shows a fully rigged man o'war at anchor on the pool below the house.
38. Jean Lindsay, op. cit., p.26. For another view of the meeting see D593/V/3/6, County Record Office, Stafford.
39. Journal House of Commons, XXX, p.453. Thomas Gilbert sat in the Gower interest for Newcastle-under-Lyme from 1763-1768.
40. K. E. Farrer, Correspondence of Josiah Wedgwood, Vol. I, p.80.
41. Journal of House of Lords, XXXI, p.350. Journal House of Commons XXX, p.649.
42. 6. Geo. III c. 96, Royal Assent 14th May 1766. Copy in Hanley Reference Library.
43. Aris's Birmingham Gazette, 28th May 1766.
44. County Record Office, Stafford: D593/T/1/35.
45. Wedgwood Papers, University of Keele: 9281-11. John Gilbert adds insult to injury in the same letter when he continued 'I forgot when I was at Burslem to pay for the wair, I had from you sometime since.'

46. 6. Geo. III c. 96.
47. K. E. Farrar, Correspondence of Josiah Wedgwood, Vol. I, pp.85-7.
48. Staffordshire Record Office: D554, Bundle 162. For business dealings of Edward Salmon and John Gilbert see William Salt Library, Stafford: HM 37/19.
49. K. E. Farrar, Correspondence of Josiah Wedgwood, Vol. I, p.134.
50. Ibid., p.197.
51. Ibid., pp.214-215.
52. John Thomas, The Rise of The Staffordshire Potteries, Bath (1971), pp.87-88.
53. William Salt Library, Stafford: HM 37/19 (Committee Meeting, 8th November 1774). 'Ordered that Mr Wedgwood, the late Treasurer - all accounts settled - the balance paid - the vouchers delivered up and the securities on his part return'd.'
54. The accounts for the Canal Company for the year ending 25th June 1785 include the following item 'Paid for a Silver Tureen presented to Thomas Gilbert, Esq. £105.' (William Salt Library, Stafford: HM 37/19.) This presentation was almost certainly made when Thomas Gilbert resigned as Chairman.
- I am grateful to Arnold Gibson, M. A., for drawing my attention to this reference.
55. For further details on Hugh Henshall and Company see Peter Lead, The Trent and Mersey Canal, p.12.
56. Pamphlet in the Wedgwood Papers at Keele, prepared by order of the Canal Committee 24th-25th February 1785, entitled A Statement of Facts respecting some Differences that have arisen betwixt His Grace the Duke of Bridgewater and The Proprietors from the Trent to the Mersey.
57. Jean Lindsay, op. cit., p.89.
58. Ibid.
59. William Salt Library, Stafford: HM 37/37. Letter from Richard Levitt (who held one share worth £200) to Edward Sneyd (whose shareholding was worth £2000).
60. Information from Charles Hadfield, author with A. W. Skempton, of William Jessop, Engineer, Newton Abbot (1979).

61. Josiah Wedgwood's Commonplace Book, Vol. 1, pp.241-7 (E39/28408).
62. Josiah Wedgwood died at Etruria Hall on 3rd January 1795. His obituary notice, extracted from the Gentleman's Magazine, for January of that year, is repeated in Aikin, op. cit., pp.535-537. It describes him as 'the proposer of the Grand Trunk Canal, and the chief agent in obtaining the Act of Parliament for making it.' Thomas Gilbert subsequently gave his support to the Company in its fight against the Commercial Canal scheme.
63. See Peter Lead, The Caldron Canal and Tramroads, Tarrant Hinton (1979), p.3.
64. Public Record Office; Banks' Letters, Kew: B.C.1.30. Letter written from Bishton.
65. Wedgwood Papers, University of Keele: 18438-25.
66. Barrie Trinder, The Hay Inclined Plane, Ironbridge (1973), pp.2-3.
67. W. A. McCutcheon, The Canals of the North of Ireland, Dawlish (1965), pp.69-74.
Reports of the late John Smeaton, F.R.S., London (1812), Vol. ii, p.279.
68. Wedgwood Papers, University of Keele.
69. Caldron Canal Act: 16 Geo. III c.32: Royal Assent 13th May 1776.
70. Herbert A. Chester, Cheadle : Coal Town, Cheadle (1981), pp.33-39.
71. County Record Office, Stafford: D554, Bundle 162.
72. County Record Office, Stafford: D239/M/1212 and D239/M/1217.
73. County Record Office, Stafford: D554, Bundle 162.
74. For the opening date see Peter Lead, 'The Caldron Canal 1778-1978', Cherry Eye, Caldron Canal Society, no. 3, (Winter 1976-1977), pp.3-5. A condensed version of this appears in Jean Lindsay's, The Trent and Mersey Canal, p.58.
75. County Record Office, Stafford: D239/M/2139 & D239/M/2238.

76. County Record Office, Stafford: D239/M/2139.
77. William Salt Library, Stafford: HM 37/19.
78. Act: 16 Geo. III c. 32.
79. M. J. T. Lewis, Early Wooden Railways, London (1970), p.285.
80. William Salt Library, Stafford: HM 37/19 (dated 9th January 1780).
81. John Farey, in Rees' Cyclopaedia, article entitled 'Canals'.
82. Act 23 Geo. III c. 33. Royal Assent 17th April 1783.
83. William Salt Library, Stafford: HM 37/19.
84. Farey, op. cit.
85. William Salt Library, Stafford: HM 37/19.
86. Charles Hadfield, The Canals of the West Midlands, Newton Abbot (second edition 1969), pp 151-152.
87. H. M. Rathbone, Letters of Richard Reynolds, (1852) p.265.
88. Ibid., pp 93-94.
89. Barrie Trinder, The Tar Tunnel, Ironbridge (1973), p.3.
90. Arthur Raistrick, Dynasty of Ironfounders, Newton Abbot (1970), p.185.
91. R. M. and H. C. P. Larking, The Canal Pioneers, Goring-by-Sea (not dated), p.27. (R. M. Larking is a descendant of John Gilbert, 1724-1795.)
92. Ibid., p.27.
93. Charles Hadfield, The Canals of the West Midlands, pp.152-159.
94. J. Plymley, The Agriculture of Shropshire, (1803) pp.290-9.
95. 33 Geo. III c. 113. Royal Assent 3rd June 1793.
96. The first cast iron aqueduct to come into service was the one of the Derby Canal, at Holmes, in Derby which was opened in February 1796. A month later Telford's aqueduct at Longdon was completed.

97. Waterways News, No. 100, (May 1980), p.4. For a complete life of Josiah Clowes, see Evening Sentinel, 30th June 1978, p.14.
98. The three partners in Earl Gower and Company, the Marquess of Stafford (Earl Gower's title from 1786), John and Thomas Gilbert, between them subscribed £5,000. (Charles Hadfield, The Canals of the West Midlands, p.160.)
99. *Ibid.*, pp.159-160.
100. John Farey, General View of the Agriculture and Minerals of Derbyshire, Vol. III, London (1817), pp.304, 329-330, and 392-3. Copy in the Local History Library, Derby. (The canal was intended for '40 Ton boats'.)
101. County Record Office, Stafford: D554, Bundle 162.
102. Hanley Reference Library: SP 138.6.
103. Staffordshire Advertiser, 25th June 1796.
104. Staffordshire Advertiser, 8th October 1796.
105. For a more complete account of the Commercial, Leek and Uttoxeter Canals, see Peter Lead, The Caldon Canal and Tramroads, pp.19-21 and 22-40.
106. Charles Hadfield, The Canal Age, pp.42-44.
107. Manchester Mercury, 4th May 1762.
108. Charles Hadfield and Gordon Biddle, The Canals of North-West England, Vol. II, p.263.
109. County Record Office, Stafford: D1343/6.
110. Pedigree registered at the College of Herald's (1886): John Royds (1729-1799) and his eldest son, John Royds (1755-1823). A Patent (No. 1564) was granted to one of these individuals in 1786, for 'machines for roving, slubbing, and spinning woollen, worsted, and linen yarn.' (Patent Office.)
111. Rochdale Canal Minute Book, Rochdale Canal Company, Manchester.
112. Birmingham Reference Library, Boulton and Watt Papers: Box 4, Parcel G. John Gilbert (Junior's) letter is dated 4th June 1791 and a reply was despatched on 7th June 1791.

113. Rochdale Canal Minute Book.
114. Ibid.
115. Ibid.
116. 34 Geo. III c. 98. Royal Assent 4th April 1794.
117. County Record Office, Stafford: D593/C/23/4.
The estrangement was complete before 28th January 1803.
118. County Record Office, Stafford: D260/M/E/428.
119. Letter from G Bowyer, himself an old boatman to William Jack (17th July 1960). I am grateful to Bill Jack for allowing me to transcribe this letter.
120. This photograph is included in Peter Lead, Trent and Mersey Canal, photograph and caption number 20.
121. County Record Office, Stafford: D260/M/E/428.
122. Photographic copy of the sale notice (dated 1826) in Hanley Reference Library: SP 867.
123. W. K. V. Gale and C. R. Nicholls, The Lilleshall Company Limited: a history, 1764-1964, Ashbourne (1979), p.26.
124. William Salt Library, Stafford: 93/23/41.
125. County Record Office, Stafford: D239/M/1703. Clough Hall Sale Catalogue (1812).
126. Wedgwood Papers, University of Keele: 29912-49.
127. J Bolton, 'Stone - Canal Town', Waterways World, March 1982, p.49. Also William Salt Library, Stafford: 93/23/41.
128. William Marshall, The Review and Abstract of the County Reports to the Board of Agriculture From the several Agricultural Departments of England: Western Division, York, (1818), p.141. This is contained in Holland's report compiled in 1808. This is a very early reference to iron boats on canals and the earliest known instance of their use on the Trent and Mersey Canal. For further information on such boats see: Philip Weaver, 'Iron Boats on the Canals,' Journal of the Railway and Canal Historical Society, Volume XXIV, No. 3, (November 1978), pp.97-99.

For the Forebridge kilns see: Staffordshire Advertiser, 7th and 21st March 1812. The proprietor of these works was James Gilbert, 'Engineer', who later did work on the proposed canal from the Duke of Bridgewater's Canal to Stockport. He was not related to the Gilberts of Cotton or Worsley.

129. Wedgwood Papers, University of Keele: 9679-52. This letter is written by John Gilbert (Junior) himself.
130. John Farey, Agriculture and Minerals of Derbyshire, p.436.
131. County Record Office, Stafford: QR/UBI. Norman Cope also supplied me with a transcript of a draft copy of this list which was accompanied by a covering letter from William Robinson, Chief Agent to the Trent and Mersey Canal Society at Stone.
132. County Record Office, Stafford: D239/M/2146.
133. County Record Office, Stafford: D239/M/2140.
134. Harry Hanson, The Canal Boatmen, 1760-1914, Manchester (1975), p.17.
135. T. S. Willan, p.131.
136. For a picture of such chutes, see Peter Lead, Trent and Mersey Canal, picture 13.
137. T. S. Willan, p.131.
138. Ibid.
139. Wedgwood Papers, University of Keele: 9671-52.
140. County Record Office, Stafford: QR/UBI.
141. Wedgwood Papers, University of Keele: 9672-52
142. Ibid., 9679-52.
143. Charles Hadfield and Gordon Biddle, op. cit., p.26(n).
144. Laurent's Map of Manchester (1793), Central Reference Library, Manchester.
145. Thomas Kent's General Account with his Grace the Duke of Bridgewater for the Year 1791 (MS Chetham Library). Thomas Kent was the Duke's Chief accountant for the Worsley estate and the Bridgewater Canal.

146. William Salt Library, Stafford: 93/23/41.
147. Ibid.
148. Harry Hanson, op. cit., p 29.
149. Robert Nicholls, Ten Generations of A Potting Family, London (1931), pp.104-105.
150. Letter from Helen F. Ladd, Reference and Information Librarian, City Library, Worcester (dated 27th February 1979).
151. Freight (including coal) was being delivered to the Bartington area of Cheshire by 1793. (Information from Hugh Malet.)
152. Lime was dug at Clayton Griffith during the seventeenth century (Stafford Record Office: D593/Trentham Building Accounts) and also at Madeley (Robert Plot, The Natural History of Staffordshire, Oxford (1686), pp.152-3. For Hemheath limekilns see; Staffordshire Record Office: D593/M/16/1/1.
153. The Trent and Mersey Canal passed through and under (by means of the Harecastle tunnel) the Clough Hall estate.
154. John Phillips, A General History of Inland Navigation, Foreign and Domestic; containing a Complete Account of the Canal already executed in England with Considerations on those Proposed, (fifth edition), London (1805), p.vi.
155. Aikin, op. cit., p.536.
156. V. I. Tomlinson, 'Salford activities connected with the Bridgewater Canal', Transaction of the Lancashire and Cheshire Antiquarian Society, Vol. 66 (1956), p.86. Tomlinson is in fact quoting F. H. Egerton, who was often in the Duke's company prior to his death in 1803.
157. Staffordshire Advertiser, 12th January 1799.
158. William Salt Library, Stafford: Salt Deeds: 93/13/41 Lead, Trent and Mersey Canal, p.7.

Chapter Five - References and Notes

THOMAS GILBERT, M.P.

1. Thomas Pape, The Ancient Corporation of Cheadle, reprinted in a booklet from the Transactions of the North Staffordshire Field Club, Volume LXIV, (1929-30), p.16.
2. J. P. Kenyon, The Stuarts, London (1958) p.159.
3. Ibid., p.207.
4. Basil Williams, The Whig Supremacy, Oxford, p.159.
5. The nobility were emerging as the most powerful political group in the nation and James II was actively depriving them of real political power, especially in withholding Lord Lieutenancies from them.
6. Thomas Pape, The Ancient Corporation of Cheadle, p.16.
7. Ibid., p.17.
8. William Salt Library, Stafford: William Salt Manuscripts, Numbers 520-522.
9. John B. Owen, The Eighteenth Century, London (1974) pp.113-114.
10. S. M. Hardy and R. C. Baily, 'The downfall of the Gower interest in the Staffordshire Boroughs, 1800-30', in Collections for a History of Staffordshire, (1950-51), p.267.
11. J. Ingamells, Historical Records and Directory of Newcastle-under-Lyme, Newcastle-under-Lyme (1881) pp.73-74.
12. Thomas Pape, op. cit., pp 14-15. See also Thomas Pape, Newcastle-under-Lyme, from the Restoration to 1760, Keele (1973), pp.168-170 and 269-286.
13. Thomas Pape, Newcastle-under-Lyme, from the Restoration to 1760, pp.168-170.
14. Ibid.
15. G. H. White (Editor), The Complete Peerage, London (1959), p.310. The marriage was said to have been brought about by 'the intrigues of Lord Sandwich.' George Waldegrave (later the fourth Earl Waldegrave) sat for Newcastle-under-Lyme from 1774 until 1780).

16. Hardy and Baily, op. cit., p.267.
17. Dictionary of National Biography, p.1032. The position of Lord Lieutenant of Staffordshire remained in the Leveson-Gower family until 1801.
18. Basil Williams, op. cit., p.250 and 471.
19. J. D. Fleeman (Editor), Boswell's Life of Johnson, Oxford (1970), p.212. Johnson's Dictionary was published in 1755, the year that the first Earl Gower died.
20. Basil Williams, op. cit., p.471.
21. Letter dated 13th October 1745. William Salt Manuscript: Number 521, loc. cit. The Royal Army had been defeated by the Jacobite Army at Prestonpans on 21st September, and by the end of October the victorious Jacobite army was ready to push on into England.
22. Ibid.
23. Letter dated 19th November 1745. William Salt Manuscript: Number 522, loc. cit. J. Stockdale, writing in The Lichfield Mercury Magazine (c.1970), quotes Thomas Gilbert as saying "How I hated dressing up like a pompous ass and giving orders to soldiers like surfs." (Copy in William Salt Library.)
24. Katherine Tomasson and Francis Buist, Battles of the '45, London, (second edition, 1967), pp.181-182.
25. Dictionary of National Biography, p.1032.
26. Ibid., p.1027. Sir Lewis Namier, The Structure of Politics At The Accession of George III, London (1929), p.304; describes Bishop's Castle as being 'the one notoriously corrupt borough in Shropshire where the voters took money even from strangers in disregard of inherited ties of allegiance' and 'the representation frequently included distinguished outsiders.'
27. Dictionary of National Biography, p.1027.
28. Basil Williams, op. cit., p.342.
29. Dictionary of National Biography, p.1027, and Basil Williams, op. cit., p.471. Here Williams confuses Granville Leveson-Gower with his father as his christian name is given as John.

30. Dictionary of National Biography, p.1027. According to Dr. Owen, such posts carried with them membership of the Cabinet Council, the forerunner of the modern Cabinet. (See J. B. Owen, The Eighteenth Century, p.97.)
31. Lord Edmund FitzMaurice, Life of Shelburne, Vol. I, pp.187-8.
32. D. A. Winstanley, Lord Chatham and the Whig Opposition, Cambridge (1912), p.66.
33. Ibid.
34. Dictionary of National Biography, p.1027.
35. Ibid.
36. London Gazette, 1778, No. 11865.
37. General John Burgoyne, M.P., surrendered his army to the American, General Gates at Saratoga in 1777. The French eager to regain some of the territories which had been lost in 1763, took this as a sign of British weakness and so entered the war on the side of the American rebels (1778). Burgoyne subsequently defended himself in Parliament and then moved over to join the Opposition.
38. This happened in November 1779. See J. S. Watson, The Reign of George III, Oxford, p.213.
39. Dictionary of National Biography, p.1028.
40. Thomas Pakenham, The Year of Liberty, London (1969) p.243.
41. Dictionary of National Biography, p.1028.
42. Winstanley, op. cit., pp.198-199.
43. Watson, op. cit., p.267.
44. Gower was appointed on 24th November 1784. Dictionary of National Biography, p.1028.
45. Hardy and Baily, op. cit., p.267. 'He procured for this Tory family of the liberal school the expected marquessate in 1786.'
46. See Chapter One, Ancestors, which includes information on the disruption caused to mining operations in North-east Staffordshire during the Civil War.

47. Tomasson and Buist, op. cit., p.90.
48. The full story of this prolonged struggle is to be found in 'The Struggle for the Lichfield Interest, 1747-68, by Ann Kettle, in Collections for a History of Staffordshire, Vol. 6, pp.115-135.
49. Staffordshire Record Office: D593/F/3/12/4/4.
50. Ann Kettle, op. cit., p.135.
51. Staffordshire Advertiser, 12th January 1799.
52. Hardy and Baily, op. cit., p.300. Eric Richards, The Leviation of Wealth, London (1973) p.xi.
53. Dictionary of National Biography, p.1025.
54. Sir **Lewis** Namier and John Brooke, The History of Parliament: The House of Commons, 1754-1790, London (1964), p.499. See also Ingamells, op. cit., p.74.
55. A prime example was William Leveson-Gower, see Sir Louis Namier, The Structure of Politics, pp.286 and 524.
56. J. B. Owen, The Eighteenth Century, p.107.
57. This section on the composition of the House of Commons is very closely based on pages 105-108 of J. B. Owen's The Eighteenth Century. The original version of this description is to be found in John B. Owen, The Pattern of Politics in Eighteenth Century England, published by the Historical Association, London (1962).
58. Abergavenny MSS, cited in Namier and Brooke, op. cit., p.500.
59. Namier and Brooke, op. cit., p.500.
60. Ibid.
61. Sir John Sinclair, (1754-1835), first President of the Board of Agriculture. See: Reverend John Sinclair, Memoirs of the Life and Works of Sir John Sinclair, Bart., Vol. 1, London (1837), pp.78-81.
62. Namier and Brooke, op. cit., p.501.
63. Rev. John Sinclair, op. cit., pp.79-80. Gilbert was writing from Lilleshall, letter dated 2nd January 1782.
64. Ibid., p.81.

65. Namier and Brooke, op. cit., p.500.
66. Watson, op. cit., pp.269-270.
67. Namier and Brooke, op. cit., p.500.
68. Ibid.
69. Dictionary of National Biography, pp.1215-1216 and Namier and Brooke, op. cit., p.500.
70. Alan Valentine, The British Establishment, Vol.I, University of Oklahoma Press (1970), pp.360-361.
71. Ibid., p.360. See also Staffordshire Advertiser, 12th January 1799.
72. Rev. John Sinclair, op. cit., p.79.
73. Namier and Brooke, op. cit., p.500.
74. Ibid.
75. Dictionary of National Biography, p.1215.
76. Namier and Brooke, op. cit., p.500.
77. Ibid.
78. Ibid.
79. Ibid.
80. Ibid., p.501. Gilbert was paid a fee of £700 for this work.
81. Ibid.
82. Gentlemen's Magazine, May 1784, p.460.
83. Gentlemen's Magazine, May 1798, p.1090.
84. 9th May 1787, quoted in Namier and Brooke, op. cit., pp.500-501.
85. This impression comes across very strongly when reading the account of his life in The Dictionary of National Biography.
86. Staffordshire Record Office: D1343/6 (Cotton Charity).
87. Staffordshire Advertiser, 12th January 1799.
88. A. G. L. Rogers (Editor), The State of the Poor by Sir Frederic Morton Eden, London (1928), p.72. This famous work first appeared in 1797.

89. W. A. Speck, Stability and Strife, London (1977), p.77.
90. Ibid., pp.77-78.
91. Karl de Schweinitz, England's Road to Social Security, London (1943), pp.66-67.
92. John Scott, Observations on the Present State of the Parochial and Vagrant Poor (1773), quoted by de Schweinitz, op. cit., p.66.
93. Frederic Morton Eden, The State of the Poor, London (1797), p.283.
94. A. G. L. Rogers, op. cit., p.72.
95. For a full list of Thomas Gilbert's pamphlets see the British Museum Catalogue (1965). The two relevant pamphlets were: A Bill intended to be offered to Parliament, for the better relief and employment of the poor within England, London (1775), and Observations upon the Orders and Resolutions of the House of Commons with respect to the Poor, Vagrants, and Houses of Correction, London (1775). These pamphlets, like many of his other publications, gave rise to a host of pamphlets written as observations and objections on his schemes. (See British Museum Catalogue, p.926.)
96. A. G. L. Rogers, op. cit., pp.72-73. His ideas were also set out in a pamphlet entitled A Plan for the better relief and employment of the poor, for enforcing and amending the laws respecting Houses of Correction and Vagrants; and for improving the Police With Bills intended to be offered to Parliament, London (1781).
97. 22 Geo. III, cap. 83.
98. Ibid.
99. A. G. L. Rogers, op. cit., pp.73-74.
100. 9 Geo. I, cap. 7.
101. de Schweinitz, op. cit., p.68.
102. Ibid., p.68.
103. See Chapter Three.
104. Hugh Malet, Bridgewater: The Canal Duke, 1736-1803, Manchester (1977), pp.59-60. The Duke's first and second Bills 'went to a committee of forty-one Members and all M.P.s for Lancashire, Cheshire, Staffordshire and Yorkshirë, following much the same pattern as the duke's first Act.'

105. Namier, op. cit., p.54. He goes on to relate how 'When the repeal of the Stamp Act came before Parliament much attention was paid to abstract rights, and the discussion consequently turned at least as much on legal matters and precedents as on policy.' Small wonder then that Thomas Gilbert's first recorded speech was made during this debate.
106. Charles Hadfield, The Canals of the West Midlands, (second edition), Newton Abbot, (1969), p.26.
107. This proposed branch was not constructed until a separate canal company obtained an Act (35 Geo.III, cap. 87, Royal Assent 2nd June, 1795) and the Newcastle-under-Lyme Canal was subsequently built.
108. Staffordshire Advertiser, 12th January 1799.
109. Staffordshire Record Office: D868/10/26. Lord Chancellor Thurlow to Earl Gower.
110. Namier and Brooke, op. cit., p.500.
111. Staffordshire Advertiser, 12th January 1799.
112. Ibid.
113. W. A. Speck, op. cit., p.37. See also Chapter One, Note 99.
114. Namier, op. cit., pp.7-8.
115. Ibid., p.8. See also W. A. Speck, op. cit., p.37, who points out that Members of Parliament had to possess real estate with an annual value of £300, under the Property Qualifications Act of 1711.
116. Ingamells, op. cit., pp.73-74.
117. See Chapter One.
118. Namier, op. cit., p.8.
119. William Salt Library, Stafford. William Salt Manuscripts: 521.
120. W. A. Speck, op. cit., p.41.
121. Namier, op. cit., pp.15-16.
122. Ibid., p.16.
123. Ibid., p.9.
124. Staffordshire Advertiser, 12th January 1799.

125. See text of Chapter One and Note 98.
126. Thomas Gilbert sent orders to Wedgwood from his house at Garlick Hills, between 1763 and 1764. (Wedgwood Papers, University of Keele: 22750-30 to 22753-30.)
- A plan of London (1746) by John Rocques, reveals that Garlick Hill(s), lay a little to the north east of Queen Hithe Dock in the City of London, (photocopy and note supplied by Chris Ellmers, Senior Assistant Keeper, The Museum of London, 8th January, 1981). Mr Ellmers adds in his letter that: 'A street still exists there with the same place-name.'
127. Malet, op. cit., p.127. Thomas Gilbert was living in Queen Street by 1775.
128. Staffordshire Advertiser, 12th January 1799. Also Sir Norman Chester, The English Administrative System, 1780-1870, Oxford, (1981), p 43. Thomas Gilbert's post with the Privy Council was doubtless gained through influence, but this was not the case with naval commissions. See E. Hughes, 'The Professions in the Eighteenth Century', Durham University Journal, Vol. X/iv (1952), p.52. Hughes writes that 'The senior service from its very nature had always been more of a profession than the army and never contaminated by purchase.' However, he describes how captains could take a number of boys as "middies", usually 'recommended by a friend and on a personal basis.' However, these individuals had to come up to standard and pass the examination before being commissioned.
129. Hannah May Rathbone, Letters of Richard Reynolds, with a Memoir of his life, London, (1852), pp.264-265. This is a letter dated 25th June 1786 and Reynold's begins by thanking Thomas Gilbert for a copy of his latest pamphlet on Poor Law reform.
130. Malet, op. cit., p.83. John Gilbert was requested 'to order the ground to be set out for the Hindley Sunday School Houses'. (August 1787).
131. Reverend John Sinclair, op. cit., p.81.
132. See George Rude, Paris and London in the 18th Century, London (1970), Part Three, pp.222-267 (Wilkes and Liberty); and pp.268-292 (The Gordon Riots).

Chapter Six - References and Notes

ENTREPRENEURS

1. See Chapter One.
2. Staffordshire Record Office: D554, Bundle 55.
3. Ibid: D260/B/2/2/37.
4. W. K. V. Gale, Boulton, Watt and the Soho Undertakings, Birmingham (1968), pp 3-4.
5. H. W. Dickinson and R. Jenkins, James Watt and the Steam Engine, London (1927), p 25.
6. W. H. Chaloner, 'Isaac Wilkinson, Potfounder'; in Studies in the Industrial Revolution presented to T. S. Ashton, Edited by L. S. Pressnell, London (1960), pp 23-51.
7. Hugh Torrens, The Evolution of a Family Firm: Stothert and Pitt of Bath, Bath (1978), pp 1-22.
8. Herbert Heaton, 'Financing the Industrial Revolution', originally published in the Bulletin of the Business Historical Society, Vol. XI, No. 1, (February 1937). Reprinted in Francois Crouzet, Capital Formation in the Industrial Revolution, London (1972), p 89.
9. Robert Sherlock, Industrial Archaeology of Staffordshire, Newton Abbot (1976), pp 59-60.
10. Peter Mathias, The First Industrial Nation, London (1969), p 151.
11. Staffordshire Record Office: D260/B/2/2/37.
12. J. Aikin, A Description of the Country from thirty to forty miles round Manchester, London (1795), pp 79-80.
13. Ibid.
14. Ibid.
15. Staffordshire Record Office: D240/M/K/D/63.
16. John A. Robey and Lindsey Porter, The Copper and Lead Mines of Ecton Hill, Staffordshire, Cheddleton (1972), p 19.
17. Staffordshire Record Office: D240/M/K/D/63.
18. Ibid: D260/B/2/2/37.

19. Ibid: D240/M/K/D/63.
20. Robey and Porter, The Copper and Lead Mines of Ecton Hill, Staffordshire, pp 38-39.
21. Staffordshire Record Office: D260/B/2/2/37.
22. Staffordshire Record Office: D240/M/E/III/45.
23. At the time of Thomas Gilbert's death in 1741/42, there were even proposals to make a rabbit 'burrough ... on Alton Common', and a partnership was envisaged to facilitate this.
24. Staffordshire Record Office: D240/E/III/52.
25. Ibid: D240/M/E/III/45.
26. Ibid: D554/Bundle 57.
27. Ibid: D239/M/850.
28. Robey and Porter, The Copper and Lead Mines of Ecton Hill, Staffordshire, pp 24-25.
29. Ibid.
30. Ibid., p 78.
31. Ibid., p 68.
32. S. A. Broadbridge (Editor), Journal of an Excursion to Wales &c. by Joseph Banks, (unpublished manuscript), pp 61-62. The boat level was also known as the Apes Tor Sough.
33. See Chapter Two.
34. Brindley's Notebook, 'On Wednesday Night - 7 Mar. Mr Brindley to be at J. Gilbert to go to Ecton the next morning.' (NOT IN BRINDLEY'S HANDWRITING.)
35. William Efford, Gentleman's Magazine, February 1769, p 61.
36. Robey and Porter, The Copper and Lead Mines of Ecton Hill, Staffordshire, p 28.
37. J. A. Robey and L. Porter, 'The Metalliferous Mines of the Weaver Hills, Staffordshire', Bulletin of the Peak District Mines Historical Society, Vol. 4, Part 6 (December 1971), p 420.
38. Ibid., p 421.
39. Ibid.
40. Ibid.

41. Staffordshire Record Office: D554: Bundle 142.
42. Staffordshire Record Office: D1229/D/1/1.
43. Brindley's Notebook.
44. Staffordshire Record Office: D1229/D/1/1.
45. Ibid.
46. Herbert A. Chester, Cheadle: Coal Town, Cheadle (1981), pp 35-36.
47. Robert Hurst was Mrs Lydia Gilbert's (John's wife) uncle. The Goldenhill estate was conveyed to him in 1760, after it had been purchased by the partnership which included the two Gilbert brothers.
48. Staffordshire Record Office: D1229/D/1/1.
49. Ibid.
50. Ibid.
51. This dispute is described later in this Chapter.
52. Staffordshire Record Office: D240/K/Bundle D.
53. Ibid. D240/K/Bundle D.
54. 16. Geo. III c. 32. R.A. 13th May 1776.
55. Staffordshire Record Office: D554/Bundle 84.
56. Ibid.
57. 16. Geo. III c. 32 R.A. 13th May 1776.
58. John Farey, Agriculture and Minerals of Derbyshire, Vol. III, pp 435-436, London (1817). See also William Salt Library, Stafford: 93/23/41 - 'Whiston $\frac{1}{4}$ share of coal mines under a farm in the occupation of Thomas Smith.'
59. William Salt Library: 93/23/41.
60. Staffordshire Record Office: D239/M/2139.
61. See also - Staffordshire Advertiser, 24th March 1804. This mentions 'four very valuable LIME KILNS in the possession of messrs. Gilbert & Co.'
62. The first limekilns at Froghall basin were not erected until 1786, at a cost of £312-12s.-4d. (William Salt Library: HM/37/19.)

63. Staffordshire Record Office: D239/M/2146.
64. Ibid. D239/M/2143.
65. William Salt Library: 93/7/41.
66. University of Keele, Wedgwood Papers: 9281-11.
67. William Salt Library: 93/23/41.
68. Ibid.
69. Graphite was formerly mistaken for lead, hence its alternative names 'plumbago' or 'black lead'. Graphite is used in the so-called 'lead' pencils.
70. Katherine Euphemia Farrar, The Letters of Josiah Wedgwood, Vol. 1, p 191.
71. Hugh Malet, Bridgewater: The Canal Duke, 1736-1803, Manchester (1977), p 134.
72. Ibid., p 135.
73. R. M. & H. C. P. Larking, The Canal Pioneers, Goring-by-Sea, (1967), p 21.
74. William Salt Library, 93/23/41.
75. Abraham Rees, The Cyclopaedia or Universal Dictionary of Arts, Sciences and Literature, Vol. XX, 'Black Lead', London (1819).
76. Manchester Mercury, 16th July 1782.
77. Staffordshire Advertiser, 18th February 1815.
78. W. Wallace, Alston Moor, Its Pastoral People: Its Mines and Miners, Newcastle (1890), p 124.
79. Paul N. Wilson, 'The Nent Force Level', Trans. Cumberland and Westmorland A. & A. Soc., Vol LXIII, n.s., (1963).
80. W. Wallace, op. cit., p 124.
81. Paul N. Wilson, op. cit.
82. W. Wallace, op. cit., p 125.
83. There are numerous similarities between the career of John Taylor (1779-1863) and John Gilbert. For a full account of his life see: John Taylor, mining entrepreneur and engineer, 1779-1863, by Roger Burt, Hartington (1977).

84. Roger Burt, op. cit., p 35.
85. W. Wallace, op. cit., p 23.
86. Ibid.
87. See Chapter Four.
88. Phyllis Deane, The First Industrial Revolution, Cambridge (1965), p 121.
89. B. L. Anderson, 'The Attorney and the Early Capital Market in Lancashire', in Francois Crouzet, Capital Formation in the Industrial Revolution, London (1972), p 228.
90. Information from Mr A. R. Muir, C. A., F. B. I. N.
91. B. L. Anderson, op. cit., p 228.
92. R. W. Chapman (Editor), Boswell, Life of Johnson, London (1970), p 1078.
93. William Salt Library: 93/23/41.
94. Ibid.
95. Samuel Smiles, Lives of the Engineers, Vol. I, London (1862), pp 350-351. Repeated by numerous later writers, including Dr. C. T. G. Boucher, in James Brindley: Engineer, Norwich (1968), pp 18 and 86.
96. Brindley's Notebook.
97. Smiles, op. cit., p 351.
98. Katherine Euphemia Farrar, The Letters of Josiah Wedgwood, Vol. III, p 294.
99. W. H. Chaloner, 'Salt in Cheshire, 1600-1870', Transactions of the Lancashire and Cheshire Antiquarian Society, Vol. 71 (1961), p 71.
100. Ibid.
101. Ibid.
102. S. A. Broadbridge, op. cit., p 85.
103. Rees, op. cit., 'John Gilbert'.
104. W. H. Chaloner, 'The Cheshire Activities of Matthew Boulton and James Watt, of Soho, near Birmingham, 1776-1817', in Transactions of the Lancashire and Cheshire Antiquarian Society, Vol. LXI (1949), pp 122-124.

105. Staffordshire Advertiser, 28th March 1818.
106. Boulton and Watt Engine Book, Birmingham Central Reference Library.
107. W. H. Chaloner, 'The Cheshire Activities of Matthew Boulton and James Watt ', p 122.
108. William Salt Library: HM/37/19.
109. Boat Register (1795), Cheshire County Record Office.
110. Ibid.
111. Aikin, op. cit., p 429.
112. William Salt Library: 93/23/41.
113. Deane, op. cit., p 49.
114. Staffordshire Record Office: D260/M/T/4.
115. John Ward, History of the Borough of Stoke-upon-Trent, London (1843), p 129.
116. Malet, op. cit., p 141.
117. Staffordshire Record Office: D593/C/23/4.
118. A. N. Palmer, 'John Wilkinson and the old Bersham iron works', Transactions of the Cymmrodorion Society (1897-8), pp 27-28. John Wilkinson and his brother William are described as two 'clever, determined, and most intractable men'; who during the course of a dispute, hired rival gangs of men to remove, or smash the machinery contained in the Bersham ironworks, which they worked as partners.
119. Newcastle-under-Lyme Museum: Document Number 8454.
120. Heathcote Papers (in possession of the family in Yorkshire). I am grateful to Mr David Dyble for allowing me to see those documents which relate to the dispute between Sir John Edensor Heathcote and the Gilberts.
121. Ibid.
122. Ibid. The mine was opened c. 1800.
123. Ibid.
124. Ibid.
125. Ibid.
126. Ibid.

127. Ibid.
128. Staffordshire Advertiser, 19th September 1812.
'On Thursday morning, the 10th inst. at Cheltenham,
John Gilbert, Esq., of Clough Hall in this county.'
129. William Salt Library: 44/66/41.
130. See Chapter Four.
131. R. W. Chapman, op. cit., p 1211.
132. A recently discovered document shows that James Watt went to some trouble to suppress evidence of earlier experimental work that could have been used to challenge his patent. (Information from Dr H. S. Torrens who is to cite the document and other evidence in a forthcoming article.)
133. Gentleman's Magazine, Volume 47 (1777), pp 14-15.
134. Heathcote Papers. The system had been introduced by 1797 and remained in use in the area until the early twentieth century. See caption and picture 23, Peter Lead, The Trent and Mersey Canal, Ashbourne (1980).
135. Staffordshire Advertiser, 7th June 1800. 'The brine..... is raised from two pits contiguous to the pans by a water engine at a very trifling expence.'
136. Ibid., 7th November 1812.
137. Peter Lead and Hugh Torrens, 'The Introduction of the Trevithick Steam Engine to North Staffordshire', in Journal of the Trevithick Society, No. 8 (1981), p 27.
138. Francois Crouzet, 'Capital Formation in Great Britain during the Industrial Revolution'; in his book Capital Formation in the Industrial Revolution, p 188.
139. William Salt Library: 93/23/41.
140. Ibid.
141. Deane, op. cit., pp 75-80.
142. William Salt Library: 93/23/41.
143. See Chapter One.

EPILOGUE AND SUMMARY

Chapter Seven - References and Notes

1. Manchester Mercury, 4th August 1795.
2. Public Record Office: S. PROB. 11/1266; IP/149.
3. P. W. L. Adams (Editor), Burslem Parish Register, Part II, (1761-1809), Wolstanton (1913), pp.495, 515 and 526.
4. Public Record Office: S. PROB. 11/1266; IP/149.
5. William Salt Library, Stafford: 93/13/41. Thomas Gilbert drew up his will on 16th March 1797 and died at Cotton, on 18th December 1798.
6. Cheshire Record Office: DFI/167.
7. Hugh Malet, Bridgewater, The Canal Duke, 1736-1803, Manchester (1977), p. 144.
8. Staffordshire Record Office: D593/C/23/4.
9. Malet, op. cit., p.146.
10. William Salt Library: 93/23/41.
11. Ibid.
12. University of Keele, Wedgwood Papers: 9679-52.
13. Ibid., 9676-52.
14. Ibid. (In 1790, Josiah Wedgwood took into partnership his three sons, John, Josiah and Thomas, and his nephew Thomas Byerley. Later the firm was known as Josiah Wedgwood, Sons and Byerley.)
15. William Salt Library, Stafford: 93/23/41. This purchase was made after 1807.
16. Ibid.
17. City of Stoke-on-Trent Museum and Art Gallery, Enoch Wood's Scrapbook (1794-1836), p.12.
18. Ibid., p.73.
19. William Salt Library, Stafford: 93/23/41.
20. P. W. L. Adams, op. cit., pp.495, 515 and 526.

21. Information from the 1796 Inclosure Act for Stone, provided by Norman A. Cope.
22. William Salt Library, Stafford: 93/29/41/C.
23. This Robert Williamson was the son of the Robert Williamson, who had participated in the purchase of the Goldenhill estate in 1760 with John and Thomas Gilbert. His mother was the widow of James Brindley, who remarried following the engineer's death.
24. William Marshall, The Review and Abstract of the County Reports to the Board of Agriculture - from the Several Agricultural Departments of England: Western Division, York (1818), p.140. See also Staffordshire Advertiser, 13th February 1808.
25. Staffordshire Advertiser, 24th March 1804.
26. William Salt Library, Stafford: 93/23/41.
27. John Ward, History of the Borough of Stoke-upon-Trent, London (1843), p.129. See also Particulars of Clough Hall estate (1812), Staffordshire Record Office: D239/M/1703-1705.
28. William Salt Library: 93/24/41. In the Staffordshire Advertiser, 30th March 1822, William Brett is described as a 'Grocer, Dealer and Chapman of Stone.'
29. William Salt Library: 93/24/41.
30. Peter Mathias, The First Industrial Nation, London (1969) p.169.
31. Ibid.
32. William Salt Library: 93/24/41.
33. Mathias, op. cit., p.170.
34. Staffordshire Advertiser, 24th October 1810.
35. William Salt Library: 93/24/41.
36. Ward, op. cit., p.443.
37. Staffordshire Advertiser, 24th October 1810.
38. See Chapter Two.
39. Enoch Wood's Scrapbook, loc. cit., p.53 (1799)

40. *Ibid.*, p.92 (1806).
41. Staffordshire Advertiser, 25th January 1806.
42. Staffordshire Advertiser, 29th September 1810.
43. *Ibid.*
44. Wedgwood Papers, University of Keele: 9675-52.
See also: Staffordshire Advertiser, 24th October 1812.
45. William Salt Library: 93/21/41 and 93/29/41. See also: County Record Office, Stafford: D554/27a, and Staffordshire Advertiser, 22nd August 1818.
46. William Salt Library: 93/29/41.
47. The following extract from the register of the Parish of St. George, Hanover Square was provided by the Rector W. M. Atkins (20th February 1981): 'John Gilbert, Esq., of the Parish of Woolstanton in the County of Stafford, Bl., and Elizabeth Horsefall of this Parish, Widow. 2nd May 1807.'
48. Malet, *op. cit.*, p.145.
49. Richard Timmis, Some Account of the Rise and Progress of Wesleyan Methodism in Kidsgrove, (1842), p.21. Copy in local pamphlets, Vol. 32, Hanley Reference Library. The story was taken by Henry Wedgwood and elaborated. In Wedgwood's account John Gilbert 'instead of using words used a large staff which he carried to walk with, having at the lower end a small paddle with which he enforced his logic.' He is also described as having beaten and abused some of the worshippers on one occasion, and of having entered the meeting (described by Timmis) with 'eight or ten rough colliers', who with him had to be 'put out of the house'. (Henry Wedgwood, 'Up and Down the County - XXVIII - Kidsgrove', Evening Sentinel, 16th and 20th December 1879. Wedgwood's account is repeated by Norman Roche in A Short History of Kidsgrove, (type-script), Kidsgrove Library.

The terrible weapon described by Wedgwood was in fact an agricultural implement and not an unusual item to be carried by someone with an active interest in agriculture. Two entries in: The Cyclopaedia, or Universal Dictionary, edited by Abraham Rees (1819), confirm this:

'Paddle - staff. In Agriculture, an implement used by ploughmen to free the share from stubble, earth, clay, & c. which would impede its action.'

'Staff, plough paddle. A term sometimes applied to the small staff carried in the body of the plough, which is shod with iron and employed for cleaning away the adhesive earth matter that hangs about the mould-board and other parts of common ploughs.'

50. Timmis, op. cit., p.21.
51. Ward, op. cit., p.59.
52. Staffordshire Advertiser, 7th December 1805.
53. Staffordshire Record Office: D239/W/1705.
54. Heathcote Papers (with family in Yorkshire). This engine was erected by John Rose at Clough Hall, between 1804-05, the parts being supplied by the Coalbrookdale Company. (Shrewsbury Public Library: MSS 336 and 337.)
55. Staffordshire Advertiser, 7th December 1805.
56. William Salt Library: 93/20/41. James Royds of Rochdale; Nathaniel Gould of Salford and David Birds of Clough Hall. They were all John Gilbert's cousins.
57. Ibid.
58. Ibid. The Foxholes estate (at Audley) was not included in the estate bought by Kinnersley, who put down a deposit of £10,000.
59. Ibid.
60. Ibid.
61. From registers of the School of King Edward the Sixth, Birmingham; cited in H. C. P. and R. M. Larking, The Canal Pioneers, p. 2.
62. Ibid, p.1.
63. Ibid.
64. Staffordshire Advertiser, 30th May 1795. 'Monday was married Mr Gilbert of Burslem to Miss Bennet of Great Broughton, near Chester.'
65. Staffordshire Advertiser, 22nd August 1818.
66. Canon Howard Senar, Little Gaddesden Parish Church, Little Gaddesden (1980), p.18.

67. Letter from Howard Senar (4th January 1982). 'I have checked the registers to establish who officiated at the (burial) service. I think that it was almost certainly the Rev. Thomas Gilbert. He did not at that time sign individually that he had officiated, but the entry is in his writing as far as one can judge.'
68. Staffordshire Record Office: D554/27a.
69. Foster's Alumi. Oxon, Vol. II, p.523.
70. Staffordshire Record Office: D1343/6. 'Thomas Gilbert died on the Isle of Man, 16th June 1843.'
71. Staffordshire Record Office: D554/27a.
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81. Ibid., p.347.
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84. Ibid.
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86. Staffordshire Record Office: D239/M/1705. Catalogue of furniture at Clough Hall.

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