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THE DUDLEY ESTATE:
ITS RISE AND DECLINE
BETWEEN 1774 AND 1947.

T. J. RAYBOULD

Presented as a Thesis for the Degree of Ph.D.
in the University of Kent, July, 1970.

**CONTAINS
PULLOUTS**

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The Following Abbreviations are Used in the Footnotes

B.H.P.L. Brierley Hill Public Library
B.R.L. Birmingham Reference Library
D.P.L. Dudley Public Library
Ec.H.R. Economic History Review
I.C.E.H. International Conference of Economic History
P.R.O. Public Record Office
S.C.R.O. Staffordshire County Record Office
T.N.S. Transactions of the Newcomen Society
V.C.H. Victoria County History
W.S.L. William Salt Library, Stafford
W.P.L. Wolverhampton Public Library.

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Portfolio

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Preface

As a result of national and local agricultural and industrial trends during the latter half of the eighteenth century, the potential income from the Dudley estate in south Staffordshire and north Worcestershire was increased, because of its location in relation to the emerging Black Country, its mineral wealth, and the lordship of various local manors which Lord Dudley inherited. This potential, particularly from mineral development, was exploited to the full by the second viscount, 1774-88, who pursued a vigorous policy of enclosure, transport improvements, granting industrial leases, and mineral enterprise. This first period of development witnessed the rapid expansion of a wide variety of economic interests by the estate and a considerable increase in industrial, mineral, cottage, and land rents as the Dudley estate established a predominant position in the local economy before 1800. By 1833, the profits from early expansion were declining through inefficient management and an absence of long-term planning.

This year was a major turning point because of the directives for the establishment of the Dudley trust, 1833-45, contained in the Will of the first earl, who died in 1833. Every sector of estate enterprise was reorganised and expanded. Agricultural properties were improved, rents and farm units rationalised, and specific leases were introduced. In order to take advantage of the expansion of the local iron trade, several new leased ironworks were established and the estate began to manufacture pig iron on its own account. Mineral enterprise expanded more than any other sector: reserves were exploited to the full by lessees and by the estate, which remained unusual in the extent to which it exploited its own minerals. Considerable capital was invested

in the iron and mineral industries, and in further transport improvements: notably railways and canals. Estate profits were also invested in government stocks and the purchase of landed property. As a result, the Dudley estate was more than doubled in area by the purchase of valuable agricultural and sporting estates in Wales, Worcestershire, and Scotland. Complementary to this expansion in the scale and range of estate interests was the radical reorganisation of management and administration, undertaken by the trustees with the appointment of professional agents, and the introduction of modern business practices.

The last phase of development, 1845-1947, was a period of unprecedented prosperity for the estate, despite the decline in the local economy after 1860 and the pressures and restrictions placed upon the aristocratic landed interest from the 1870s onwards. Income from the iron and mineral trades in particular rose to a peak, in spite of the collapse in the wrought iron trade. As the local economy became transformed and diversified by 1900, the estate also adapted to change but, instead of developing an entrepreneurial role in new industries, the estate reduced its own activities and gradually became a supplier of capital after 1897. Ultimately, it reacted to other trends and pressures by a total restructuring of estate interests in 1926, and began the systematic disposal of landed property. This, together with the nationalisation of coal and steel, finally severed the close, traditional link between the Dudley estate and local industry.

Throughout the period 1774-1947, the estate played a beneficial and constructive role which served the interests of the area as a whole. Economically, the estate facilitated and helped maintain the prosperity of the area and, as

benevolent employers of labour and, on occasions, as spokesmen for social reform, the Lords Dudley were a force for the good. In general, the development of the estate reflects the changing fortunes of the area and the landed aristocracy: in particular, because of its predominant position, the development of the area reflects the history of the Dudley estate during this period.

INTRODUCTION

An examination of the activities and economic fortunes of a great estate presents the historian with many challenging problems. He must attempt to establish the relationship between estate development and regional and national trends, as the full value of specialised research can only be seen when put in broader perspective. At the same time, comparisons and points of particular significance must be made. Where the estate is that of a landed aristocrat, as in the case of the Dudley estate, changes in the social and political status of the landed interest are also important. The Dudley estate developed a wide range of economic activities apart from agriculture, such as extensive mining and quarrying, the manufacture of bricks, pig iron and finished iron goods, and also constructed its own canal and railway systems. Interpretation of the evidence relating to such diverse fields presents the additional problem to the historian of commenting on the extent to which general technological developments are reflected in the activities of this particular estate. An attempt has been made to take account of all these problems in this investigation of the Dudley estate.

This particular estate claims attention on a number of counts. During the eighteenth century, the Ward family, Viscounts Dudley and Ward, possessed extensive mineral-bearing estates in the manors of Dudley, Kingswinford, Rowley Regis, Sedgley, and Tipton. All were

situated within the emerging industrial area of the Black Country in south Staffordshire and north Worcestershire. Their mineral lands, together with rights enjoyed as lords of the manor, placed the Ward family in a position of great potential wealth by 1774. Inevitably, the family fortunes became closely linked to those of the Black Country in general and to the iron trade in particular.

An examination of the documentary evidence suggests four main themes of study. On the accession to the title of John, Second Viscount Dudley and Ward 1774¹, the estates were relatively undeveloped. By 1833, a rapid expansion of the number and scale of estate activities had taken place but profitability and efficiency were limited. This period is the first field of study when factors making for expansion are examined against the national background of enclosure, transport improvements, technological advances in the iron trade, and the increasing application of steam power. The second phase of development began in 1833 when, on the death of John William, Fourth Viscount and First Earl of Dudley, the estate was held in trust until 1845. A dramatic increase occurred in the number and scale of estate economic enterprises which laid the foundation for the continuing high profitability of the Dudley estate down to the twentieth century. Capital investments in general, together with the purchase of extensive estates in other parts of the country, under the terms of the trust, are also examined.

In common with other mineral landowners, the Dudleys were faced with the problems of establishing administrative efficiency, maintaining financial stability, and finding suitably qualified agents. These problems, magnified by the complexity, scale and variety of their economic enterprise, were not solved on the Dudley estate until the

¹ See Appendix 1 for the Ward family, 1740-1947.

period 1833-1845 and are examined in the third section of the work. Close attention to the appointment of agents, systems of management, and improved business control were the concern of the trustees, and their contribution to the fortunes of the Dudley estate in this respect was complementary to their success in extending the economic activities of the estate. The final section traces the fortunes of the Dudley estate in the period 1845-1947, during which the Black Country attained its peak prosperity before adverse comparative costs brought about changes in the economic structure of the area after 1870, and resulted in the relatively rapid decline of traditional industries and the development of a more diverse economy. The response of the Dudley estate to these changes is examined together with the impact of mounting pressures on the landed interest by the early years of the twentieth century which, in this case, produced a reduction in economic activities and the break-up of the estate culminating in the sale of the Dudley's family seat at Himley in 1947.

Some aspects of the preliminary research have been included in articles published in 'Business History'² and 'The Economic History Review'³. In the first article, themes considered include types of agent, systems of accounts, the extent to which the Lords Dudley involved themselves directly in management, and an analysis of general business organisation and efficiency in the period 1774-1833. The second article examines the expansion and organisation of mineral enterprise on the estates between 1774 and 1845.

² T. J. Raybould, 'Systems of Management and Administration on the Dudley Estates, 1774-1833', Business History (1968), 1-11.

³ T. J. Raybould, 'The Development and Organization of Lord Dudley's Mineral Estates, 1774-1845', Ec.H.R.XXI (1968), 529-544.

These themes are further developed in Section I, Chapter 2, for the period 1774-1833 and are continued in Sections II, III, and IV when the development of the Dudley estate between 1833 and 1947 is considered. For Chapter 2, I have also drawn on my M.A. thesis⁴ when discussing enclosure and transport improvements in all of the local manors. Such data and information used here which relates to Kingswinford manor is taken from the thesis.

Documentary sources are extensive and are mainly located at the County Record Office in Stafford and at Dudley Public Library - the bulk of the following text is based on these primary sources. The Hatherton Collection at Stafford is particularly valuable as a source of information on the period of the trust, 1833-1845⁵. At Dudley, documents deposited by the late Earl of Dudley provide a comprehensive record of the family estates over the last two-hundred years. These consist of two main collections - one fully catalogued and the other, deposited in 1965, which is uncatalogued. Because of the nature of the estate's economic activities, surviving documents relate, in the main, to industrial and mineral developments. However, there is ample evidence of the development of the landed properties except for the period 1850-1920. In general, the documentary sources are most prolific for the 1830s and 1840s when the papers of the Earl of Dudley are supplemented by the very extensive deposit in the Hatherton papers at Stafford. After 1850, the records are less continuous as many documents were lost or destroyed after the sale of Himley Hall in 1947, before the transfer of the remaining papers to Dudley Public Library.

⁴ T. J. Raybould, 'The Kingswinford Estate of Lord Dudley: Its Development and Organisation Between 1774 and 1833' (unpublished M.A. thesis, Birmingham University, 1966).

⁵ E. J. Littleton (created Lord Hatherton, 1835) was a trustee.

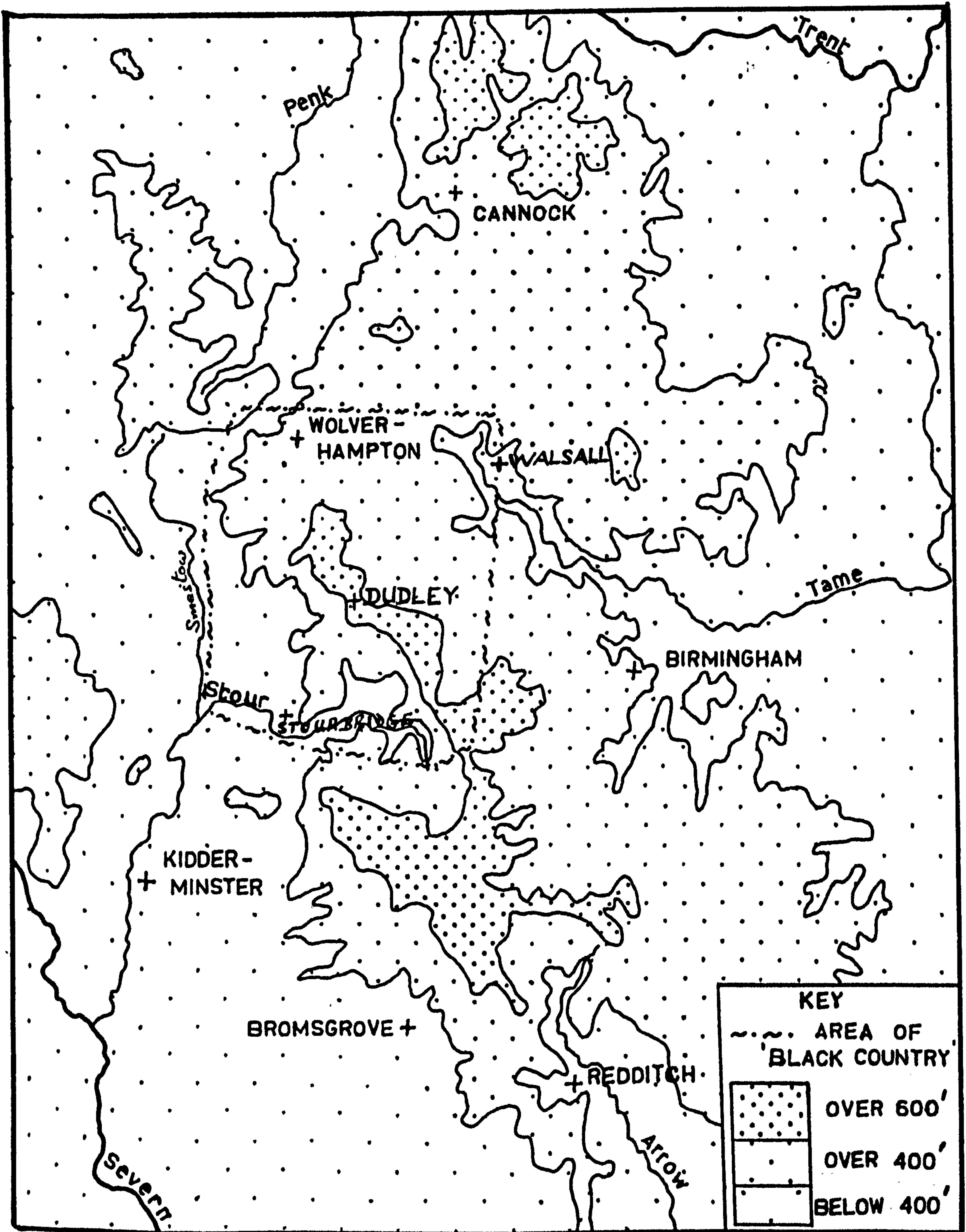
I would like to express my appreciation of the help given me by Mr. F. Stitt the County Archivist and his Staff, and by Mr. J. Hoyle the Dudley Borough Librarian and his Staff, particularly in allowing me access to those recent additions to the Dudley Collection which are as yet uncatalogued. I am also indebted to Mr. G. Chatham, Publicity Manager at Round Oak Steel Works, and to Mr. W. H. B. Hatton, Managing Director of the works from 1936 to 1950 for information and material relating to this enterprise. My thanks are due, finally, to Prof. G. E. Mingay of the University of Kent for the advice and encouragement he has given me during my research.

SECTION I

LIMITED PROFITABILITY AND EFFICIENCY:

THE PERIOD OF EARLY EXPANSION, 1774-1833

MAP I RELIEF AND DRAINAGE



1:253440

Chapter 1: The Dudley Estate in Its Regional Setting, 1774

A. Location, Geology and Physical Characteristics of the Region

'Coal stands not beside but entirely above all other commodities. It is the material source of the energy of the country - the universal aid - ¹ the factor in everything we do.'

The abundant presence of coal brought the area known as the Black Country into existence in the years between 1760 and 1830. Its exact boundaries are controversial, but a reasonable definition is that the Black Country consisted of those areas where iron production became concentrated in relation to the thick or thirty-foot seam of coal which, as it outcropped or lay at shallow depths up to 400 feet below the surface, resulted in extensive working of the seam almost to exhaustion by the mid-nineteenth century. Such an area would include parts of the modern towns of Dudley, Tipton, Wednesbury, Darlaston, Bilston, Sedgley, and Brierley Hill. In addition, minerals lying deeper were also worked in districts around the periphery of this nucleus of the Black Country, such as Stourbridge, Kingswinford, Himley, Wolverhampton, Walsall, West Bromwich, Oldbury, and Rowley Regis, where related trades evolved because of the concentration of pig and wrought iron production in the older central areas. The area as a whole lies approximately ten miles due west of Birmingham².

¹ W. J. Jevons, 'The Coal Question', London, 1865, as quoted by D. Spring, "The Earls of Durham and the Great Northern Coalfield, 1830-1880", Canadian Historical Review, XXXIII (1952), 237.

² See Map 1: also, Yates' map of Staffordshire bound in separate portfolio.

At the end of the eighteenth century, the Dudley estate lay mainly in the western half of the Black Country area and was concentrated in Dudley, Sedgley, and Brierley Hill. Contemporary sources refer rather to the manors of Dudley, Sedgley, Kingswinford, and Himley. These manorial boundaries cut across modern town divisions and, to avoid confusion, modern names and boundaries are used in the text except where specific manorial issues are being discussed. Dudley Castle had been the home of the Dudleys until the development of Himley Hall as the main family seat after the Civil War. Himley lies approximately 6 miles from Dudley on the far western edge of the general Black Country area.

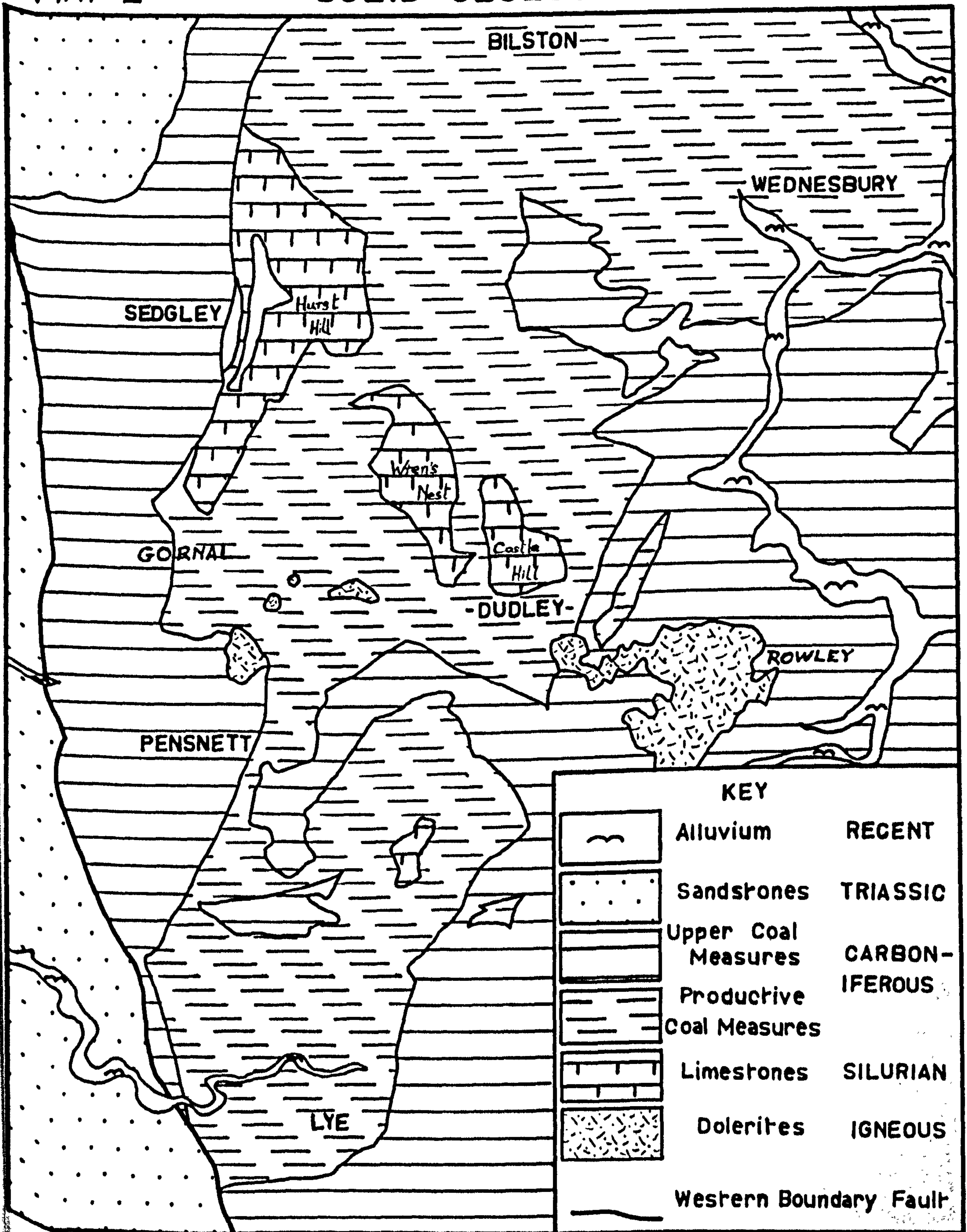
The south Staffordshire coalfield³, which is small and clearly defined, contains a number of peculiar features. It is bounded in the west by the Western Boundary Fault running roughly north-south through Wolverhampton, Himley, Kingswinford, and Stourbridge. To the east, coal lies at a shallow depth or outcrops but plunges to much greater depths below the sandstone measures to the west⁴. To the south it is bounded by a fault running west-east between Stourbridge and Halesowen. The field terminates in the east along the Eastern Boundary Fault which runs roughly in a north-easterly direction through Halesowen, Oldbury, and West Bromwich to Walsall while the northern boundary is defined by the Bentley Faults between Walsall and Wolverhampton. The coalfield itself falls into two divisions lying to the north or south of the Russell's Hall Fault which runs in an

³ This excludes the Cannock area which lies to the north of the Bentley Faults and was developed later than the traditional Black Country areas.

⁴ See Map 2. The coalfield runs roughly in a north-south direction over a distance of approximately 15 miles: its width increases from 5 miles in the south to 8 miles in the north. This earlier nucleus covered an area within a radius of 3 miles of Dudley Castle.

MAP 2

SOLID GEOLOGY



1:63360

easterly direction from Gornal to Rowley Regis⁵. In the northern section the thick coal outcrops along a line from Dudley through Gornal, Coseley, Bilston, and Darlaston to Wednesbury and rarely lies more than 400 feet from the surface.

'In no other area of Great Britain has so great a volume of coal been available at so shallow a depth.'⁶

South of the fault, the thick coal outcrops along a shorter line in the Level area of Brierley Hill and, because of minor faults, lies somewhat deeper between 500 feet and 800 feet. The thick coal north of the Russell's Hall Fault was intensively exploited after 1760 and was largely exhausted in Tipton and Wednesbury by 1830 when the southern part was brought into more intensive production⁷.

Organisation of mineral enterprise and techniques of extraction were particularly influenced by the advantages and problems⁸ created by the presence of the thirty-foot seam.

In addition to the thick coal, which actually consists of about 14 layers interspersed with thin strata of clay and ironstone, there are eight other seams of coal⁹. Thicker seams of clay and ironstone lie between the coal measures below the thick coal. The main ironstone seam, known as gubbins ironstone, lies directly under the thirty-foot coal. At a greater depth lies the valuable fireclay used extensively in the refractory industries of the Stourbridge area where it lies at a relatively shallow depth. As a result of this geological formation, various grades of coal, clay and ironstone could be raised from the same shaft. The thirty-foot coal was a high-grade coal used in the production of good quality iron. Heathen coal was particularly suitable for

⁵ See Map 5.

⁶ A. J. Taylor, chapter in Victoria History of the County of Stafford, London (1967), I, p.69.

⁷ See Section IV Chapter 3. Thinner and deeper seams were then worked in the older area.

⁸ These are examined in Section I, Chapter 2, Part D.

⁹ see Chart 1, p.9.

Chart 1. The Main Mineral Seams in Order of Depth

Brooch Coal ...	2' 9" - 3' 6" thick
Flying Reed Coal	2' - 3'
Thick Coal ...	18' - 30'
White Ironstone	1'
Gubbins Ironstone	4'
Brick Clay	
Heathen Coal ...	3' 6" - 5'
Fireclay	
Sulphur or Stinking Coal	4' - 6'
New Mine Coal ...	4' - 6'
Fireclay Coal ...	4'
Bottom Coal ...	2' - 12'
Singing Coal ...	2' - 4'

Most of the coal seams rest on a layer of clay and several ironstone seams are interspersed between the above. Extensive limestone outcrops occur at Sedgley and Wren's Nest in Dudley. These were worked to provide lime for building and agricultural purposes. This limestone was also used as a flux in the smelting of local iron ore.

coking and iron-smelting while brooch coal, because of its quick-burning qualities, was particularly in demand as a domestic fuel.

The ridge which divides the Black Country along a line running from the north-west to the south-east consisting of Sedgley Beacon, Hurst Hill, Wren's Nest and Dudley Castle Hill, contains extensive outcrops of Silurian limestone¹⁰. These were all worked for limestone which, after burning, was used for building and agriculture. With the development of mineral smelting of iron ore in the area, increasing quantities were used as flux for the furnaces. The richest deposits were at the Wren's Nest where two beds, the Upper and Lower Wenlock Limestone, outcrop at a steep angle on both sides of the hill. The core of the hill consists of

¹⁰ See Map 2.

older rocks - Wenlock Shale, while the Upper Limestone, 25 feet thick, is separated from the Lower Limestone by a layer of impure limestone and shale known as the Nodular Beds. Too impure for industrial use, this was left as a ridge between the two worked bands of limestone although some parts were quarried during the early part of this century¹¹.

The last major natural feature of the area was its lack of water communications. No navigable rivers flow through or within easy reach of the Black Country as it lies on the watershed between the Bristol Channel and the North Sea. Its rivers and streams, the Smestow, Stour, and Tame, do flow into the Severn and Trent but were not navigable¹², even in the eighteenth century. The hilly nature of the district and its numerous streams did provide ample water power for industry but, by the same token, full development of the area was only possible after canals linked it to the navigable rivers, although canal construction and maintenance proved to be expensive and difficult. Whereas the northern coal-field was able to use the Tyne, Wear and Tees to reach the ports of Newcastle and Sunderland, Black Country pits had no such advantages in the search for wider markets.

This survey of the natural features of the area serves to indicate the potential wealth of the Black Country, particularly after the beginning of increased economic activity in the iron and mineral trades towards the end of the eighteenth century. The Dudley estate possessed land containing all of these minerals, much of it concentrated south and west of the Dudley-Sedgley ridge, including all of the limestone outcrops at Dudley Castle and the Wren's Nest. Factors combined after 1774 to ensure that the estate derived considerable benefit from this advantageous position.

¹¹ See Section IV, Chapter 3.

¹² See Map 1.

B. The Economic Development of the Region and Estate Before 1774

While it would be erroneous to assert that industrial activity developed in the Black Country only during the eighteenth century, there is little doubt that the continuous, systematic, and intensive exploitation of the Dudley estate¹³ began only after 1774. That there was a tradition of industry - including the iron trade - in the area as a whole, has been fully established by Prof. W. H. B. Court¹⁴. As early as 1600, the Black Country district had economic links with older developed areas and local manufacturers used coal and iron from Shropshire and the Warwickshire coal-field. Agriculture was predominant but a growing number of trades existed in addition to the usual rural crafts. Quarter Sessions records for the early seventeenth century indicate that iron slitting, lock-making, and nailing were extensively developed with nailers outnumbering all other trades¹⁵. A degree of local specialisation was also apparent with lorimers at Walsall and lockmakers at Willenhall. Ironmongers were active in the Birmingham and Black Country area as early as the mid-sixteenth century, supplying iron to local craftsmen and buying their finished products. Nevertheless, older market towns such as Coventry, Lichfield, and Bridgnorth still dominated the west midlands. Birmingham, with a population of 2,000 in 1600, was the only area where inhabitants were divorced from the soil while the villages and townships of the Black Country area represented 'a countryside becoming industrialised'¹⁶.

Immigration into the district, particularly heavy in

¹³ See Section 1, Chapter 1, Part C.

¹⁴ W. H. B. Court, The Rise of the Midland Industries, 1600-1838, (1938).

¹⁵ Ibid., p. 26

¹⁶ Ibid., p. 22.

the early nineteenth century, became a factor of increasing significance after 1600, together with the concentration of population and industry in specific areas. It has been calculated¹⁷ that in 1600, the population per square mile was 100 in Worcestershire, 82 in Warwickshire, and 74 in Staffordshire. Corresponding figures for 1700 were 141, 112, and 111. This demonstrates a considerable increase in the total population but does not fully reflect the fact that much of the increase would be concentrated in Birmingham and the Black Country rather than throughout the three counties.

Perhaps the major impetus to the development of the Black Country was the introduction of the blast furnace into the area. Medieval bloomeries, producing bar iron forged directly from a bloom on the anvil, had been established where charcoal and iron ore existed with water power to drive the bellows. Production of pig iron by blast furnace required considerable quantities of fuel and this was readily available in the wooded district north and west of Birmingham, together with ironstone. The separation of processes in iron production also required water power for the bellows and the tilt hammer of the forge - this, too, was available on the slopes of the plateau between Wolverhampton and Birmingham. The first blast furnace to be erected in the Black Country area was at West Bromwich in 1561¹⁸. As other furnaces were erected and the quantity of iron to be re-heated and worked at the forge increased, there was a corresponding rise in the consumption and output of coal. By 1665, there were relatively few open pits and shafts had been sunk to a depth of 120 feet. Production

¹⁷ Ibid.

¹⁸ W. K. V. Gale, The Coneygre Story (1954), p. 4.

was from 25,000 to 70,000 tons of coal a year in the area between Wolverhampton and Birmingham¹⁹. The whole of Staffordshire was producing 150,000 tons of coal and ironstone annually by 1720 and

'fully two-thirds of this must have come from the pits of South Staffordshire.'²⁰

It is likely that the iron trade of south Staffordshire produced only half of the total of 4,000 tons of pig iron consumed annually in the area by 1717 when the total English output was 17,350 tons²¹. These figures reflect the growth of the coal and iron trade in the area: inevitably such developments influenced the Dudley estate.

Coal and ironstone deposits had been worked for many years on the estate. An inquisition taken on the death of Roger de Somery²² (Baron Dudley) in December, 1272, records

'four coal-pits of sea-cole (quattor putei de carbone maris),²³

in the manor of Kingswinford. Another inquisition of 1291 states that

'there are iron mines worth yearly £8 the mines of sea coal are worth yearly 26s. 8d.'²⁴

¹⁹ A. J. Taylor, chapter in Victoria History of the County of Stafford II (1967), p. 73.

²⁰ Ibid.

²¹ G. R. Morton and M. Le Guillou 'The Rise and Fall of the South Staffordshire Pig Iron Industry', The British Foundryman (July, 1967), p. 271.

²² The Ward family was the fifth to hold the Barony of Dudley. After the Norman Conquest, William Fitz-Angulf received over 80 manors in the midlands and south which together constituted the Barony of Dudley. c. 1100 he was succeeded in the title by Fulk Paganel. In 1190, John de Somery assumed the title by marriage which passed to John de Sutton in 1322, again by marriage. Edward Lord Dudley, the last of the Sutton Dudleys, died in 1643 and his estates passed to Frances, his grand-daughter. Her husband, Humble Ward, was created Baron Ward in 1644 and their descendants held the estate and the title of Lord Viscount Dudley and Ward in 1774.

²³ G. Chandler and I. C. Hannah, Dudley As It Was and As It

The Will of Edward, Lord Dudley in 1586 reflects the early involvement of the family in the local iron trade:

'I wyll and bequeathe my hoole yron workes, with all my owre (ore) fytt for to mainteyne the same and underwoodes for the thoroughe mainteyninge of the same which I doe gyve and bequeathe unto Mary ladie Dudley my wyfe.'²⁵

The reference to "owre" may imply that a blast furnace existed at this time, although it has been suggested that the first blast furnaces in this part of the midlands were at Gornal Wood (c. 1595) and Halesowen (1602-5)²⁶. Edward, Lord Dudley, who succeeded his father in 1586, built the Gornal Wood furnace and also owned Cradley furnace in 1610²⁷. It was during his lifetime that the industrial interests of the Dudley estate first achieved national prominence through the activities of his illegitimate son Dud Dudley. His book, 'Metallum Martis', published in 1665²⁸, reviewed his attempts to smelt iron ore with coal. This was part of an abortive effort to secure a renewal of a royal patent first issued to him in 1621:

Is To-day (1949), p. 20.

²⁴ Ibid. p. 21.

²⁵ Ibid. p. 85.

²⁶ C. H. R. Schubert, The History of the British Iron and Steel Industry (1957), p. 181. Gornal Wood is located between Dudley and Himley: Halesowen lies between Stourbridge and Birmingham.

²⁷ G. R. Morton and M. D. G. Wanklyn, 'Dud Dudley - A New Appraisal', Journal of West Midlands Regional Studies, I, (1967), p. 49.

²⁸ Dud Dudley, Metallum Martis: or, Iron made with Pit Coak, Sea Coale, and with the same Fuell to Melt and Fire Imperfect Mettals and Refine perfect Mettals (1665)

'... I (was) fetched from Oxford, then of Bayliol Colledge, Anno 1619, to look and manage 3 Iron Works of my Fathers, 1 Furnace, and 2 Forges, in the Chase of Pensnet, in Worcestershire, but Wood and Charcole growing then scant, and Pit-coles, in great quantities abounding near the Furnace, and to attempt by my new invention, the making of Iron with Pit-cole ... I found such success at first tryal animated me, for at my tryal or blast, I made Iron to profit with Pit-cole ...'²⁹

James I granted Dud Dudley a patent in 1621 to make iron with pit coal - this was renewed in 1638. The opposition of local charcoal iron manufacturers and the destruction of family property during the Civil War prevented Dudley from developing an established market for his iron³⁰. After Charles II declined to renew the patent, the secrets of his invention went with Dud Dudley into obscurity. It was not until 200 years later that the Dudley estate again manufactured iron on its own account³¹.

Mineral enterprise continued to flourish as indicated by the rent rolls of 1701. Out of a total income of £5014 4s. 4d., no less than £2191 16s. 10½d. was derived from minerals:

'Coalworks, Knowle Hill, Netherton (Dudley)	£858	1s.	9½d.
" The Paddock (Coneygre)	443	0	3
" New Park (Parkhead, Dudley?)	540	14	10
Ironstone Mines	100	0	0
Limeworks (Dudley)	250	0	0
Land and Chief Rents, Himley, Swindon and Kingswinford	403	19	10½
Hall and Lands, Himley	74	0	0
Castle and Lands, Dudley	1607	0	1
Manor Admittances, Rowley Regis	12	0	0
Manor Small Tenements and Cottages,			
Kingswinford (60)	16	0	0
Dudley Foreign (40)	6	10	0
Rowley Regis (23)	3	10	0

²⁹ Ibid. Pensnet Chase was in the Manors of Kingswinford and Dudley.

³⁰ Ibid., pp. 30-2 for an account of the price and quantities of iron made.

³¹ See Section II, Chapter 2, Part C.

'Tolls of Market and Fairs, Dudley	4	0	0
Manor Fees, Kingswinford	213	7	6
Woodlands, Gornal	80	0	0
" Baggeridge	200	0	0
" Pensnett Chase	200	0	0
	<hr/>		
	£5014	4s.4d.	³²

The exact location of the mines is uncertain but all would probably be on the line of the thick coal outcrop around the Dudley ridge. On coming of age in June, 1725, Lord Dudley took possession of a considerable amount of annuities, stock and other investments:

'Southsea Capital	£6080
Southsea Annuities	£6080
Lottery Orders, 1714	340
Queen's Lottery	2610
Civil List	1,000
Bank Stock	2,000
Bank Annuities	1,000
Million Bank	2,000
	<hr/>
	£21,110 ³³

This apparently healthy state of affairs had been largely occasioned by the judicious choice, in 1628, of Humble Ward as husband of Frances, heir to the Dudley estate. Ward was the son of William Ward, a wealthy London goldsmith and jeweller to Queen Henrietta Maria. His wealth undoubtedly assisted the Dudley estate to recover from the ravages of the Civil War in the area³⁴. If the eighteenth century was to end with the Dudley estate enjoying a rapid increase in wealth, the rent rolls for 1701 indicate that the century began with the estate already in possession of considerable capital and in receipt of a regular income from a variety of sources.

Further evidence of existing mineral enterprise in the

³² W.S.L. 417/37 Rent Roll of Lord Dudley and Ward, 1701.

³³ Ibid.

³⁴ Ward succeeded to the estate in 1643.

early years of the century is provided by a Chancery Suit of 1740³⁵. One deposition shows that three steam engines existed on the Dudley estate in 1731,

'one at Tipton (Coneygre), one at Dudley Wood (Netherton?), and one at the Parke (Parkhead, Dudley?)'³⁶.

Another records that

'the late William, Lord Dudley and Ward kept several collieries, one at Tipton upon which two fire engines for the drawing of water were employed, and one other at the Park near Dudley and another at Dudley Wood ... upon each of which a fire engine was employed. The said first mentioned fire engine ... cost ... £450 ... the other engine at Tipton ... £700 and the engine at the Park ... £500 and the engine at Dudley Wood ... £700.'³⁷

The engine erected near Dudley Castle in 1712 has been described as the first successful Newcomen engine³⁸: this was the engine erected at Coneygre Colliery by Lord Dudley. Drainage problems were considerable in the area because of the nature of the thirty-foot seam and the accompanying clay measures. Four steam engines by 1740 would represent a considerable proportion of the total number of Newcomen

³⁵ J. S. Allen, 'The 1712 and Other Newcomen Engines of the Earls of Dudley', Transactions of the Newcomen Society, XXXVII (1964-5).

After the death, unmarried, of Edward, Lord Dudley and Ward in 1731 he was succeeded by his uncle, William, who also died, unmarried in 1740. The two baronies separated, that of Ward going to John Ward of Sedgley, male heir of Humble, first Lord Ward and that of Dudley passing to Ferdinando Dudley Lea of Halesowen, nephew of the late Lord Dudley and Ward. Difficulties occurred over division of the estate and legal opinion was taken as to whether or not a steam engine was personal estate.

³⁶ P.R.O. C12/1436/12 as quoted in Allen op. cit.
See Map 4.

³⁷ Ibid.

³⁸ L. T. C. Rolt, Thomas Newcomen: the Prehistory of the Steam Engine (1963), pp. 58-60.

engines erected in this area. Prof. J. R. Harris³⁹ has estimated that 11 Newcomen engines were built by 1716 and 50 more in the period 1716-1733. Three of these were at work near Wolverhampton in 1733 (these would all be on the Dudley estate) and four more were constructed in the area by 1781. Towards the end of the eighteenth century, a number of factors combined to produce a considerable expansion in the existing mineral and industrial activities of the Dudley estates.

C. Factors for Expansion

Economic trends were moving undeniably in favour of the landed interest by the late 1760s because of rising population and industrialisation⁴⁰. In addition to the general economic situation, a number of specific developments influenced the Dudley estate at this time. Of particular importance was the technological advance by 1735 in the successful mineral smelting of iron ore at the Coalbrookdale Works of Abraham Darby. Coke-smelted pig iron released the iron trade from dependence on a dwindling supply of charcoal and resulted in increased output and a concentration of blast furnaces on the coalfields. The process was introduced into the Black Country area by John Wilkinson who constructed the Bradley Ironworks at Bilston in 1766⁴¹. Because of the shortage of good furnace coke, Wilkinson also used local thick coal to charge his furnaces and improved the quality of pig iron by the use of a steam blast engine⁴². The problem

³⁹ J. R. Harris, 'The Employment of Steam Power in the Eighteenth Century', History, LII (June, 1967).

⁴⁰ G. E. Mingay, 'The Large Estate in the Eighteenth Century', International Conference of Economic History (1960), p. 377.

⁴¹ Wilkinson had used the coke-smelting process at his ironworks, formerly owned by Abraham Darby, at Broseley and Bersham in Shropshire and Denbighshire.

of converting pig into good malleable iron was not effectively solved until 1783 when Cort's patent consolidated a number of existing processes into one continuous operation which provided the basis for the British wrought iron industry in general and resulted in its concentration on the Black Country coalfield in particular⁴³. Of particular importance was the fact that, whereas it had been necessary to use charcoal in the conversion of coke-smelted pig to the malleable form, Cort's process enabled the cheaper fuel, coal, to be used. His success reduced production costs and increased the demand for mineral-smelted pig iron by manufacturers of iron and finished goods. Improvements in the application of steam power also influenced developments in the area after the installation of the first Watt engine at Bloomfield (Tipton) and the perfection of the rotative principle in 1782-4.

Transport improvements, especially in the form of canal construction, opened up the area after 1766. The Staffordshire and Worcestershire Canal, cut by Brindley between 1766 and 1772 to link the Rivers Severn and Trent, was intended primarily to serve the interests of the Potteries but a branch was cut from Aldersley, near Wolverhampton, through Bilston and Tipton to Birmingham. For the first time, the coal trade of the area could seek wider markets. Much of the land was still unenclosed commons and waste in the manors of

⁴² G. R. Morton and M. le Guilbu, op. cit.

⁴³ G. R. Morton and N. Mutton, 'The Transition to Cort's Puddling Process', Journal of the Iron and Steel Institute, 205 (July, 1967).

By this process, pig iron was heated, then forged or rolled, re-heated in a balling or puddling furnace for decarburization, and finally consolidated in a rolling process. The problem of removing impurities from pig iron had not existed when wrought iron had been produced directly from ore in the bloomery process.

Dudley, Sedgley, Kingswinford, and Rowley Regis.

Exploitation would create or intensify problems of mineral rights and boundaries: these were clarified by a number of parliamentary bills of enclosure.

These factors - general economic trends, technological advances, and transport improvements - would all have influenced the economic development of the Dudley estate in the long run but they assumed a greater and more immediate significance because of the policies of John, Second Viscount Dudley and Ward who succeeded to the title in 1774⁴⁴. He introduced all the local bills of enclosure into parliament, and was directly responsible for two of the three additional canals which were to provide the basic transport system of the Black Country until the mid-nineteenth century.

Regional and national economic trends were undoubtedly developing to the advantage of the Dudley estate because of its geographical situation, but, it was the established tradition of mineral enterprise, the availability of capital from a variety of sources, and, above all, the initiative of the second viscount, which enabled the estate to achieve a considerably greater expansion of economic interests and wealth out of these circumstances in the years after 1774.

⁴⁴ For a detailed analysis of the second viscount's policies, see Section I, Chapter 2, Parts A and B.

Chapter 2. Development and Organisation
of the Estate, 1774-1833

A. The Effects of Enclosure

The Lords Dudley derived two particular advantages from the enclosure of local commons and waste. Their estates were considerably increased in area and particular rights, reserved to them by a number of the enclosure acts, contributed directly to the expansion of mineral and industrial enterprise. A further result of local enclosures was the extension of agricultural activity on the estates.

An analysis of the various acts and awards indicates that, with the exception of the Rowley Regis award, Lord Dudley received considerable areas of land¹, especially in the manor of Kingswinford. In 1774, out of a total of 7,315 acres in this manor, 3,028 acres were unenclosed waste and commons. Enclosure bills were successfully introduced by John, Second Viscount Dudley and Ward, in 1776² and 1784³. It has been suggested that in bad periods, landlords initiated improvements to keep farms tenanted, and, in good ones, they promoted enclosures in order to push up rents⁴. Lord Dudley's main motive in introducing enclosure bills for Pensnett Chase, Dudley Wood, and Rowley Regis was probably to secure the most favourable conditions for mineral and industrial enterprise⁵.

¹ See Chart 2.

² D.P.L. 21/3. Printed copies of original documents. Lord Dudley was lord of the manor in every case except Wombourn (Lord Wrottesley).

³ B.H.P.L. H3.1, Ashwood Hay Enclosure Act, 1776 and Award 1777. B.H.P.L. H3.1, Pensnett Chase Enclosure Act, 1784 and Award, 1786.

⁴ Mingay, op. cit., p. 379. ⁵ See below.

In the case of the Ashwood Hay Enclosure Bill, Lord Dudley's motives were partly to exploit the area by agricultural leases, but also, to prevent the restoration of the status quo on the expiration in 1776 of an agreement made in 1685 whereby the area concerned had been arranged in consolidated holdings:

'Which ... Agreement ... about the year one thousand six hundred and eighty-five parcelled out among the Parties interested therein for a term of ninety-one Years ... will expire on or about the fifth of April, one thousand seven hundred and seventy-six when the same, whether open and intermixed, or enclosed and held in severalty, are to revert to their former State, and be enjoyed accordingly.'⁶

Chart 2. Allotments to Lord Dudley by
Local Enclosure Acts and Awards, 1776-1807

<u>Manor</u>	<u>Act</u>	<u>Area</u>	<u>Award</u>	<u>Total Area</u>	<u>Area Allotted to Lord Dudley</u>	
Ashwood Hay, Kingswinford	1776	1,400 acres	1777	1,594	638 acres	(40.2 per cent)
Pensnett Chase, K'winford	1784	1,300	1787	1,433	679	(47.3 per cent)
Dudley Wood, Dudley	1784	1,000	1786	1,000	434	(43 per cent)
Wombourn and Swindon, Wombourn	1796	1,500	1807	1,500	451	(30 per cent)
Rowley Regis	1799	200	1807	200	16	(8 per cent)

Lord Dudley was lord of the manor in each case except Wombourne. In general, the awards included a larger area than the estimate given in the act and the area allocated to Lord Dudley is expressed as a percentage of the area affected by the actual award. Lord Dudley received in each case considerably more than one-tenth of the waste which was often the manorial allotment. See W. E. Tate, 'The Cost of Parliamentary Enclosure in England', Econ. Hist. Rev. II (1952-3).

The enclosure of Wombourn and Swindon was primarily to facilitate agricultural development. For much of the eighteenth century it was more usual to enclose commons and wastes by agreement⁷ than by parliamentary act: this procedure was also more frequent in areas where one or only a few landowners were dominant. The need for haste, in the case of Ashwood Hay, in order to give the force of law to the existing enclosures by agreement due to expire in 1776, and the desire to secure particular rights - particularly in the mineral-bearing areas, probably explain the procedure of enclosure by private bill resorted to by Lord Dudley.

The rights of the lord of the manor were clearly stated in each case and various allotments were made for loss of such rights. In the case of Ashwood Hay⁸, Lord Dudley was:

'entitled to the soil of the said Commons, Waste Lands and Commonable Places, and to the Royalties within the said Manor and Parish (of Kingswinford) ... and ... also Right of Coney or Rabbit Warren ...'⁹

For loss or infringement of these rights he was to receive:

'... one full Sixteenth Part ... (Quantity and Quality considered), of the said Commons ... as ... Compensation for his Right to the Soil ...'¹⁰

Although the preamble to the act states the area to be enclosed as

'containing ... one thousand four hundred acres'¹¹
the award involved 1,594 acres¹². The commissioners made

⁶ D.P.L. 21/3, Ashwood Hay Enclosure Act, p. 1.

⁷ R. A. C. Parker, 'Enclosures in the Eighteenth Century', Historical Association, p. 8.

⁸ See Chart 3. The award covered most of Kingswinford manor lying west of the Wolverhampton to Stourbridge turnpike as far as the manor boundaries on the Stour and Smestow streams. See Map 5.

⁹ Ashwood Hay Enclosure Act, p. 2.

¹⁰ Ibid. p. 8.

¹¹ Ibid. p. 1.

¹² Ashwood Hay Enclosure Award, sheet 5.

an

'award ... unto ... Lord Dudley ... one full Sixteenth Part ... (Quantity and Quality considered)¹³ ... containing 77 Acres 0 Roods and 23 Perches ...'

for loss of soil. As this was far less than one sixteenth of the total area it suggests that it was land of a superior 'quality'. For loss of Coney Warren Lord Dudley was to be compensated by:-

'... such Plots (Quantity and Quality and Situation considered) as shall ... amount to the ... yearly Value of one hundred and twenty Pounds.'¹⁴

Valuation was based on the average rent of the previous twenty years¹⁵. This accounted for the largest of all the allotments made to him and contained

'... 245 Acres 1 Rood and 6 Perches ... Quantity, Quality and Situation considered'¹⁶.

The area was divided into two large blocks of land. In addition, Lord Dudley was also compensated for loss of common rights as an owner of land in the area to be enclosed:

'... which said four ... plots ... containing 72 Acres 0 Roods and 16 Perches ... are in full Satisfaction of all Right of Common belonging to ... Lord Dudley ... as Owner of lands ... in ... the said Commons ...'¹⁷

The last allotment for loss of rights, 33 acres 0 roods and 6 perches, was made in connection with an estate leased to John Keelinge at the time of the award¹⁸.

Apart from land received in compensation for loss of lord's rights and right of common, the Dudley estate also

¹³ Ibid. ¹⁴ Ashwood Hay Enclosure Act, p. 9.

¹⁵ Ibid., p. 6.

¹⁶ Ashwood Hay Enclosure Award, sheet 5.

¹⁷ Ibid.

¹⁸ Ibid., sheet 21.

benefited from a provision of the act which entitled occupants of copyhold or customary lands, who were themselves receiving allotments for loss of common rights, to be enfranchised and become freeholders. This provision was not uncommon in parliamentary bills of enclosure. Lord Dudley's permission was required and compensation must be made to him as lord of the manor for loss of rights: any costs arising out of enfranchisement had to be borne by those seeking the freehold of their allotments:

'... all or any of the Copyhold or Customary Messuages, Lands, Tenements or Hereditaments ... and all or any of the Allotments of the said Commons ... shall with the Consent and Approbation of the said John, Lord Viscount Dudley and Ward ... be enfranchised and become Freehold; in consideration whereof the ... Commissioners ... shall assign ... unto the said ... Lord Dudley ... such Proportions, Shares or Parts of the said Allotments ... or ... Ancient Freehold or Copyhold ... Lands ... as shall ... be Equivalent ... to the respective Fines or Sums of Money agreed to be paid for such Enfranchisement, and a Compensation to the said ... Lord Dudley ... for all his Rights, Claims, Rents, Fines, Services and Customs ... (and) ... Costs ... attending such Enfranchisement and the making such Allotments to the Lord of the Manor ... shall be paid ... by ... the said Copyholders.'¹⁹

No less than 45 copyholders availed themselves of this right and each application is listed in a schedule attached to the award. The first item in this schedule demonstrates the standard form of agreement reached between Lord Dudley and his copyholders:

'... which said Copyhold Estate (of Richard Aynsworth) is subject to an Annual Chief Rent of Three Pence (the estate amounted to 3 acres 2 roods and 3 perches) ... is to become Freehold at and for the Fine of £12 13s. 9d. ... 3 Roods and 31 Perches, part of the Allotment ... in the said Commons ... in respect of the said Copyhold Estate is allotted ... to Lord Dudley as a full Equivalent to the said Fine.'²⁰

¹⁹ Ashwood Hay Enclosure Act, p. 15.

²⁰ Ashwood Hay Enclosure Award, Second Schedule, sheet 1.

Although each copyholder seeking enfranchisement compensated Lord Dudley with a small unit of land, the total effect was the creation of two large composite areas not a pattern of small isolated plots²¹. Large contiguous units would obviously have a greater value for the estate.

Copyhold land totalling 1,002 acres 1 rood and 6 perches was enfranchised for a total fine of £3,372 3s. 8d.: the loss of annual income to Lord Dudley from chief rents was £5 17s. 3¼d. In addition he lost a heriot and a sum of £2 5s. 0d. on 16 copyhold estates when the occupant held the office of beadle, reeve or forester. Against this loss of revenue must be set the fact that Lord Dudley was awarded 210 acres and 25 perches of land equivalent in value to the total fine of £3,372 3s. 8d. The real financial value of copyhold estates was intermittent - when the manor court levied a substantial fine on the admission of the heir - plus the nominal annual chief rent. This income was far outweighed by the advantage to Lord Dudley of adding over 210 acres to his personal estate from which he could derive a regular rental of much greater value. As a result of the Ashwood Hay Enclosure Award, his estate was increased by a total of 638 acres²².

The purpose of the act was clearly stated in the preamble:

'... the said Commons ... are capable of great Improvements, and the same would if divided and inclosed, so as to be converted into Tillage, be of great Advantage to the several persons interested therein, and of Public Utility.'²³

In order to achieve this end more efficiently, Lord Dudley was entitled to let the land awarded to him on agricultural leases up to a period of 21 years. Lessees must develop

²¹ Ashwood Hay Enclosure Map, 1777. Copy with schedule of allotments in the possession of Messrs. Johnson, Poole and Bloomer, Mining Engineers, Dudley.

²² See Chart 3.

²³ Ashwood Hay Enclosure Act, p. 2.

the property in an efficient manner in order to increase its profitability and enable Lord Dudley to increase rents:

'... lessees therein (shall) be obliged to spend and consume on the Premises in an Husband-like Manner ... so as the best and most improved yearly Rent ... be ... made payable thereon ...'²⁴

In spite of this provision agricultural property on the estates was inadequately exploited in the period before 1833²⁵.

The general structure, content, and features of the Ashwood Hay Enclosure Act and Award are typical of all the local enclosure measures introduced into parliament by the Lords Dudley in the period 1774-1807²⁶. All were stated to have as their purpose the improvement of agriculture. In every case, Lord Dudley, as lord of the manor, received similar allotments for loss of manorial rights and right of common. His right to compensation when copyholders applied for the freehold of their property was granted in the case of the enclosure acts for Ashwood Hay, Pensnett Chase, and Rowley Regis. With the possible exception of the Rowley Regis act and award, every measure was particularly favourable to Lord Dudley in terms of the generous size of allotments made to him, their location²⁷, compensation by land in lieu of fines in the event of enfranchisement, and rights accorded to him which had a particular significance for mineral and industrial enterprise²⁸. Lord Dudley no doubt determined the content of each parliamentary bill and his interests may have been sympathetically viewed by the commissioners who came from the midlands area²⁹. In every case, the secretary to the

²⁴ Ibid., p. 21

²⁵ See below.

²⁶ See Charts 4, 5 and 6 for allotments made to Lord Dudley by other local awards.

²⁷ Land utilisation before 1833 is considered elsewhere in this chapter and in Section II, Chapters 1, 2 and 3.

²⁸ See below.

²⁹ The commissioners were - for Ashwood Hay - Samuel Wyatt of

Chart 3. Allotments to the Dudley Estate in Kingswinford
by the Ashwood Hay Enclosure Award, 1777

The Act of 1776 proposed to enclose 1,400 acres

The Award of 1777 included

a total of 1,594 acres 0 roods 31 perches

Land allotted to road

construction 74 acres 2 roods 38 perches

<u>Allotments to Lord Dudley</u>	<u>Acres</u>	<u>Roods</u>	<u>Perches</u>
(a) for loss of soil rights ($\frac{1}{7}$ of total)	77	0	23
(b) for loss of coney warren (value			
£120 p.a.)	67	1	5
ditto	178	0	1
(c) for loss of common rights	72	0	16
ditto	33	0	6
ditto (Lady Dudley)	0	1	18
(d) for enfranchisement of copyhold land	210	0	25
Total allotted to the Dudley estate	638	0	14

Item (d) was in lieu of a total fine of £3,372 3s. 8d. paid by copyholders for enfranchisement.

Total copyhold land enfranchised 1,002 1 6

Allotments made in 1777 included in this total 103 0 27

Total copyhold held of the lord of the manor before enclosure 899 0 19

Total annual chief rent paid by copyholders before enclosure .. £5 17s. 3 $\frac{1}{2}$ d.

The area covered by this award is west of the coalfield boundary and consisted of agricultural areas. It was bounded roughly by the Wolverhampton to Stourbridge turnpike and the Smestow and Stour streams. See Map 5.

Burton, Edward Palmer of Coleshill, Harry Court of Stourbridge and Thomas Hanson of Birmingham: for Pensnett Chase - as above: for Wombourne and Swindon - John Bishton of Kilsall, Salop, William Callow of Tardebigge (Birmingham) and Harry Court: for Rowley Regis - John Bishton and William Roberts of Dudley.

commissioners was either Richard Mee or Thomas Brettell of Summerhill in Kingswinford; both were agents of Lord Dudley and stewards of Kingswinford manor.

Chart 4. Allotments to Lord Dudley by the Pensnett Chase
Enclosure Award, 1786

The Act of 1784 proposed to enclose 1,300 acres

The Award of 1786 included

a total of 1,433 acres 3 roods 38 perches
of which 83 acres 0 roods 0 perches
were allotted to road construction.

<u>Allotments to Lord Dudley</u>	<u>Acres</u>	<u>Roods</u>	<u>Perches</u>
(a) for loss of soil rights ($\frac{1}{2}$ of total)	56	3	34
ditto	55	1	19
(b) for loss of free and coneywarren	161	1	4
(c) for loss of common rights	174	0	23
(d) for enfranchisement of copyhold land (minus the land restored to J. Foster)	255	2	33
	23	3	17
Total allotted to the Dudley estate	679	2	16

Item (d) was in lieu of a total fine of £2,479 15s. 8d. paid by copyholders for enfranchisement.

The total of copyhold land enfranchised

1,205 1 5

Allotments made in 1786 included

in this total 31 0 0

Total copyhold held of the lord of the manor before enclosure ..

1,174 1 5

Total annual chief rent paid by

copyholders before enclosure .. £5 1s. 7d.

The area covered by this award was approximately 4 miles south-west of Dudley and included the rich mineral-bearing land bounded by the Wolverhampton to Stourbridge turnpike, the Kingswinford to Dudley turnpike and the River Stour.

See Maps 2 and 5.

Chart 5. Allotments to Lord Dudley by the Dudley Enclosure Award, 1786

The Act of 1784 proposed to enclose 1,000 acres

The Award of 1786 included about 1,000 acres

<u>Allotments to Lord Dudley</u>	<u>Acres</u>	<u>Roods</u>	<u>Perches</u>
(a) Manorial allotments (7)	52	0	17
(b) For loss of rabbit warren (4)	58	1	34
(c) As impropietor of tithes (4)	218	0	25
(d) As owner of certain "Burgage Houses, Messuages' etc. (8)	85	1	13
(e) To Lord Dudley in fee (2)	10	1	35
	<u>434</u>	<u>2</u>	<u>4</u>

There was no right of enfranchisement to copyholders.

The area affected by this award lay approximately 2 miles south of Dudley between Netherton and Stourbridge where coal, clay, and ironstone measures outcropped or lay at shallow depths. See Maps 2 and 5.

It is evident that the local enclosures greatly increased the area of the Dudley estates and provided scope for a variety of economic enterprise. There is, however, little doubt that the awards concerning Pensnett Chase, Dudley, and Rowley Regis were intended to create conditions particularly advantageous to the Dudley estate in the development of mineral and industrial enterprise. It was not uncommon for enclosure bills to have an industrial motive but those measures with which Lord Dudley was concerned were particularly explicit in detail and valuable to the lord of the manor. An analysis of the Pensnett Chase Act and Award³⁰ - the most profitable for the estate in the long run - will serve to

³⁰ See Chart 4 for details of allotments made to Lord Dudley.

Chart 6. Allotments to Lord Dudley by the Wombourne and Swindon Enclosure Award, 1807 and the Rowley Regis Enclosure Award, 1807

Wombourne and Swindon

The Act of 1796 proposed to enclose 1,500 acres
The Award was made in 1807.

<u>Allotments to Lord Dudley</u>	<u>Acres</u>	<u>Roods</u>	<u>Perches</u>
(a) Manorial allotments (2)	138	1	34
(b) For loss of rabbit warren (2)	172	3	31
(c) As an owner of land	140		
	451	1	25

There was no right of enfranchisement to copyholders. The area covered by this award lay about 6 miles west of Dudley in the agricultural areas west of the coalfield boundary.

Rowley Regis

The Act of 1799 proposed to enclose 200 acres
The Award was made in 1807.

<u>Allotments to Lord Dudley</u>	<u>Acres</u>	<u>Roods</u>	<u>Perches</u>
(a) Manorial allotments for loss of soil (5)	10		
(b) As proprietor of tithes (9)	4		
(c) For cost of ring fencing the above (8)	2		
	16		

The right of enfranchisement was granted to copyholders and Lord Dudley received compensation. A total of 20 copyholders paid a total fine of £800 to Lord Dudley rather than give up land to him, probably because of mineral deposits. Average chief rents lost were about 3d. per annum on a total of 5/-. The area covered by this award lay about 3 miles south-east of Dudley and included mineral-bearing land. See Map 5.

illustrate this feature.

The stated purpose of the act was, nevertheless, similar to the other local measures:

'... the said ... Lands ... afford very little profit or Advantage, but are capable of great Improvements and ... would, if divided and inclosed, so as to be converted into Tillage, be of great Advantage to the

'several Persons interested therein, and of Public Utility ...'³¹

But, the sections of the act relating to mineral and industrial enterprise, together with the fact that many of the allotments made to Lord Dudley were located along the thick coal measure and on the line of the Stourbridge and Dudley Canals³² indicate another purpose. As already indicated, minerals had been exploited in Kingswinford Manor for many years and nothing in the act was allowed to

'... prejudice ... the Right ... of the Lord ... of the Manor ... or his ... Lessees, in and to all Mines of Coal, Ironstone, Limestone, Glass House Pot Clay, Fire Brick Clay, and all other Mines whatsoever ... in or under the said Commons ... he and they ... may ... have, hold, enjoy, raise, get, take, and carry away all such Mines and Minerals ... as fully ... as before the passing of this Act ... to use all Pits already sunk ... and all Gins, Engines and Buildings thereon erected'³³.

Lord Dudley was also entitled

'to get Clay for making and burning of Bricks, Tiles Gutters ... for the Use of any Colliery or Coal Work now open, or ... to be opened ...'³⁴

Several brickworks and tile manufactories developed on estate property after 1784 and most of Lord Dudley's collieries had brick-kilns at the pit-head³⁵. The act also reflects the spread of mineral smelting into the area as Lord Dudley was entitled to:

'... make, burn, and convert ... Coal, as ... the Lord of the said Manor ... shall think proper, into Cokes, and also to burn and convert all such Limestone into Lime in and upon the said Lands ...'³⁶

³¹ D.P.L. 21/3, Pensnett Chase Enclosure Act, p. 1.

³² See Section I, Chapter 2, Part B for Lord Dudley's part in the construction of these canals between 1776 and 1782.

³³ Pensnett Chase Enclosure Act, pp. 13-14.

³⁴ Ibid., p. 14.

³⁵ See Section I, Chapter 2, Part C ii.

³⁶ Pensnett Chase Enclosure Act, p. 14.

In particular, provision was made for more intensive mineral exploitation in the future by Lord Dudley who was given the right to work the minerals under the whole area of commons and waste covered by the award no matter who owned the surface. He could:

'... bore, dig and delve for ... Mines ... and build Fire Engines ... for drawing ... up the Water ... and any Gins or other Engines for drawing or getting ... Minerals ... and to lay such Coal, Ironstone and other ... Minerals ... and the Rubbish, Earth and Spoil upon the said Lands.'³⁷

The improvement and extension of transport facilities was also provided for as Lord Dudley was entitled to:

'... make and use all convenient Ways, Roads and Railways in, upon and over the said Lands ... for the use of any such Colliery or Mines ... together with full and free Liberty, Power, and Authority to or for him to do all other reasonable ... Acts ... for the discovery, getting, working, converting, fetching, carrying away, selling and disposing of the said Mines and Minerals ... without Interruption ... and without paying or making Satisfaction to any Person ... for the Damage to be done ... in the said Lands ... doing as little Damage thereby as may be.'³⁸

This right of access to minerals without the obligation of making compensation for surface damage was to involve the Dudley estate in periodic legal actions down to the twentieth century³⁹ In one other respect, the act was beneficial to Lord Dudley as lord of the manor. Much of the area was heavily wooded - timber would be at a premium for fencing off allotments, building construction, mineral railways, and pit supports. Under the terms of the act, he was entitled:

'... within the Space of Twelve Calendar Months next after ... the said Award, (to) fell and cut down all

³⁷ Ibid.

³⁸ Ibid.

³⁹ See Below

'Timber Trees or other Trees ... growing ... upon the said Commons ...'⁴⁰

Profits from the sale of Timber were considerable after 1784 and Lord Dudley established a timber-yard at Round Oak on the banks of the Dudley Canal⁴¹. This site was later developed into the New Level Iron Works and Round Oak Steel Works⁴². Lord Dudley took advantage of his right to all timber in the area of the award as the Parish Survey of 1822⁴³ reveals that all remaining woodland within the manor was on his property.

Of the 679 acres allotted to Lord Dudley in 1786, approximately 452 acres consisted of woodland. The overall pattern of distribution and the large size of individual allotments resulted in the allocation of a consolidated block of land to the Dudley estate. In addition to extensive woodlands, this block contained considerable deposits of coal, clay, and ironstone including the seam of thick coal at shallow depths. Moreover, the Dudley and Stourbridge Canals passed through the property roughly following the line of the thick coal outcrop. The close correlation between the location of the allotments to Lord Dudley, their mineral wealth, and the existing canal system, suggests that he was well aware of the potential value of this area although in comparison with Ashwood Hay, it was less valuable at the time of enclosure⁴⁴.

⁴⁰ Pensnett Chase Enclosure Act, p. 16.

⁴¹ See below ⁴² See Section II, Chapter 2.

⁴³ B.H.P.L. H13.1, W. Fowler, Survey of Kingswinford, 1822.

⁴⁴ By the Pensnett Chase Enclosure Award, 1,205 acres were enfranchised for a fine of £2,479 15s. 8d. in lieu of which Lord Dudley received land amounting to 255 acres 2 roods and 33 perches. This compares with 1,002 acres of Ashwood Hay enfranchised for a fine of £3,372 in 1777 in lieu of which Lord Dudley received 210 acres. The latter area was agricultural whereas Pensnett Chase was largely scrub-covered and relatively undeveloped as an agricultural area.

M. E. Beresford has written that of 53 enclosures examined by him, half took more than four years to complete and eight of these took twice as long⁴⁵. The fact that the Ashwood Hay, Pensnett Chase, and Dudley Enclosure Awards were completed within two years of the respective acts suggests possible pressure from the second viscount to hasten the process in order that he might exploit the agricultural and mineral potential of the area without delay.

The potential value to Lord Dudley of the mineral rights allocated to him under the area enclosed by the Pensnett Chase Award is obvious. Similar rights were awarded by the Dudley Enclosure Award in 1786 and the Rowley Regis Award in 1807 which also contain clauses granting the same comprehensive mineral and industrial rights to Lord Dudley as lord of the manor. These rights were more extensive than those granted to other local lords of the manor in mineral-bearing areas. Prof. A. J. Taylor has pointed out the variety of custom with regard to mineral rights in Staffordshire manors⁴⁶ and that, by the seventeenth century, custom had accorded to the copyholder rights which case law was subsequently to confirm for the generality of lease tenants in England - that if the property in coal belonged to the lord, the possession was in the copyholder. In effect, lord and tenant could impose a veto on working the coal beneath copyhold land⁴⁷. Nevertheless, there was no dispute over the lord's right to coal under commons and waste and virtually every eighteenth or nineteenth century enclosure merely underlined existing custom. There was, however, variation in provision of compensation for damage caused by mining.

The West Bromwich Enclosure Act of 1801 conceded the

⁴⁵ M. W. Beresford, 'Commissioners of Enclosure', *Econ.Hist. Rev.* (1946), as quoted by R. A. C. Parker, Historical Association (1960), p. 8.

⁴⁶ A. J. Taylor, Victoria History of the County of Stafford, II, p.94. ⁴⁷ *Ibid.*, p. 96.

lord's right to mine - but not within 40 yards of any dwelling house existing at that time or erected in future on the commons and wastes covered by the act⁴⁸. The lord was also required to restore land to its condition prior to mining operations. Similar obligations were imposed on the lord by the Cannock Enclosure Award in 1868: land must be restored to agricultural use and, in addition, pits had to be filled in and compensation paid to surface owners at the rate of £2 per acre plus compensation for damage to buildings and crops. Restrictions on the lord's right to minerals in the case of enclosures involving Lord Dudley were small by comparison - he was only required to do

'as little Damage'⁴⁹

to land as possible. Where damage resulted to property, compensation was to be paid, not by Lord Dudley, but by a charge on all owners and occupiers of allotments, based upon the annual value of the property:

'... great Damage may be done to some of the ... Allotments ... by reason of searching for and working the said Mines and Minerals ... by ... Lord Dudley ... the Proprietors of the several other Allotments to be made should ... pay a proportionable Part of such Damage ... when Lord Dudley ... or any other Person ... shall suffer any damage ... to his ... Allotment ... Damage shall be borne and paid by the Owners or Occupiers of all the Allotments ... according to the respective Yearly Rents or Values.'⁵⁰

This freed the lord of the manor from paying costly bills and provided a virtually unworkable arrangement for compensation.

Numerous legal actions resulted, however, down to the twentieth century as tenants of estate property and owners of surface lands tried to secure adequate compensation from the Dudley estate for damage caused by mining activities in the

⁴⁸ Ibid.

⁴⁹ See above.

⁵⁰ Pensnett Chase Enclosure Act, p. 15.

area of the three enclosure awards for Pensnett Chase, Dudley, and Rowley Regis. In the period 1894-1905, a major dispute occurred in the Quarry Bank area of Brierley Hill when the Property Owners' Association was formed by Albert Shaw, a local solicitor, to secure compensation for damage. The Earl of Dudley's legal position was clear and, although not liable, he offered to pay a measure of compensation:

'Lord Dudley is so protected by the Pensnett Chase Enclosure Act that so far he has escaped the payment of compensation, though in a few cases he has doled out small gifts to the sufferers - £5 for example to widow Priest who sustained a loss of £200; a gift of £10 to Mr. Tristram whose property was damaged to the extent of £700 and so on. At Amblecote (Brierley Hill) the position is still worse for the cottagers who are what is called 'tenants at will', and can be cleared out under an agreement, by which they have accepted whatever risks may be involved in the working of the mines.'⁵¹

The Property Owners' Association attempted to raise money to buy the coal beneath their properties and a number of plots and the underlying minerals were purchased after the dispute had produced an acrimonious debate in the national press. Such publicity attracted the attention of the English Land Restoration League which sent a representative, George Palmer, to Brierley Hill in September, 1897. In public meetings he proclaimed that the League wanted to restore the land - their rightful inheritance - to the English people. Palmer did not dispute the landowners' legal right to the use of the land but condemned such 'landlordism' as was then being practised by Lord Penrhyn in Wales and by the Earl of Dudley:

'A landlord's Parliament gave the Earl Dudley the powers he was using, and a working-man's Parliament must take them away.'⁵²

Legal opinion was still being sought by the Dudley estate in 1915 when a full definition of copyhold and freehold

⁵¹ B.H.P.L. The Morning Leader and County Express, Nov. 1902.

⁵² Ibid., 18 Sept. 1897.

rights was given⁵³. In the case of base copyhold, the lord was entitled to two years' rent or the value of the property when it changed hands: on enfranchisement, a sum in excess of two fines was paid to the lord. Under base copyhold, the tenant was unable to work mines - except for his own consumption - without the lord's licence. With regard to free copyhold, the lord's rights were more restricted. He was entitled to a small annual chief rent which was compounded for at about 25 years purchase on enfranchisement but had no right to minerals. Counsel advised that the lord had no right to minerals in Kingswinford manor unless the copyhold property had been included in the Pensnett Chase Enclosure Award - in which case, the mineral rights of the Dudleys were clearly established. Minerals could be worked under all copyhold excluded from the award without licence from the lord. The lack of base copyhold customs in Kingswinford may well explain why Lord Dudley was so keen to secure, by parliamentary legislation, the mineral rights and the right of access under the whole area enclosed by the award. Without this provision, minerals under their property could be worked by all existing free copyholders. In Sedgley and Rowley Regis manors, counsel established that the lord had a one-third interest in base copyholds there.

Apart from disputes over mineral rights, right of access, and compensation, legal proceedings also occurred over interpretation of the word 'minerals' as used in the Pensnett Chase Award. A typical case was in March, 1876, when a landowner, Hale, attempted to work the marl under his property, claiming that the previous owner had done so - without payment of royalty to the Dudley estate - as the word 'marl' was not used in the Pensnett Chase Enclosure Act⁵⁴. Local solicitors

⁵³ D.P.L. 12/1, W. F. Taylor to Sir Gilbert H. Claughton, 16 Feb. 1915. Claughton was agent to the estate.

⁵⁴ D.P.L. 12/d, Clulow (representing Hale) to E. F. Smith (the Earl's mineral agent), 13 March 1876.

consulted by the estate, advised that the bed of marl lying immediately under the surface clay at Commonside (between Dudley and Brierley Hill) belonged to the Earl of Dudley. Marl was defined as

'a superior kind of clay when ground up to Brick Clay'⁵⁵. In the act, all mines and minerals were reserved to the lord except

'common Brick Clay, Common Free Stone and Rubble or Rotch Stone';

these were

'expressly excepted in favour of the Surface Owner. Marl is not mentioned'⁵⁶.

Eventually, E. F. Smith decided to accept the advice to

'let the matter remain in its present form'⁵⁷ and Hale was allowed to work the marl without payment of royalty.

There is no doubt that, despite intermittent legal disputes, the local enclosure acts enabled the Dudley estate to derive great profits from mineral and industrial enterprise down to the twentieth century⁵⁸. This situation resulted from the great increase in the area of the estate, the natural mineral wealth of particular areas, and the inclusion in the acts of conditions favourable to Lord Dudley. Can the same be said of agricultural enterprise - did the Dudley estate take advantage of the market situation and utilise agricultural land so as to derive increasing profits from supplying the rapidly expanding urban population in the Black Country? In spite of the stated common purpose of local enclosures - improvement of agriculture - the evidence suggests the opposite: that, in the long run, far from exploiting its opportunities,

⁵⁵ Ibid. Bourne and Owen to E. F. Smith, 2 March 1876.

⁵⁶ Ibid.

⁵⁷ Ibid. W. Jeffries to E. F. Smith, 29 August 1876.

⁵⁸ See Sections II and IV.

the Dudley estate neglected agricultural enterprise and allowed the condition of property to deteriorate between the 1780s and 1833.

In the early years of this period, the second viscount and his successor did pursue policies of an enlightened, but inconsistent, nature. In general, the majority of farm leases in England do not appear to have contained improvement clauses⁵⁹ but some attempt was made on the Dudley estate in the 1780s to maintain and improve the quality of the land and the value of the property. Most leases were granted for a period of 21 years with covenants for the tenant to repair buildings, use manure, cover the land at regular intervals, and not to sow flax, hemp, wood, potatoes or any other seeds, crops or plants not producing manure⁶⁰. The tenant also had to clover down all lands sown with 'lent grain' in the last year of the term - the lessor paying for seeds and sowing. In the case of newly enclosed land, a different set of conditions was established. Leases were

'for the term of one whole year and so on from year to year as long as both parties shall please'⁶¹

and were terminable by six months' notice on either side. At their own expense, lessees had to

'stock, make up hedges and fill in pits now on the land, level and convert and make the said Lands ploughable and as capable of bearing herbage and tillage as may be from the present impoverished state of the land'⁶².

Lessees had to

'cultivate and employ the said lands in a regular course of husbandry (and) consume as much Hay, Straw, Fodder, dung, muck, manure soil and compost that shall arise or be made thereupon'⁶³.

⁵⁹ G. E. Mingay, The Landed Estate in the Eighteenth Century, p.90.

⁶⁰ D.P.L. 23/6, abstract of a farm lease, 20 Aug. 1783. This is typical of leases granted for established properties on the Dudley estate before 1815.

⁶¹ D.P.L. 19/27, Lord Dudley with James Moor, Benjamin Skidmore and John Aston: Booty Colliers: Articles for renting New Inclosures at Pensnett, 27 Feb. 1790.

After three successive crops the lessee had to

plough down the same with clover and grass seeds not less than ten Pounds of cover seeds to an acre and not plough or break up the same during the two next succeeding years'⁶⁴.

Finally, he had to plant hedges and maintain ditches. Between 1789 and 1804, about 42 such leases of newly-enclosed land were granted - in some cases, two successive crops was the limit. This was a sound lease from the landowner's point of view: perhaps the only weakness was the absence of any reference to the maintenance of buildings on these new properties. Lack of this provision may explain the dilapidated condition of farm buildings by 1833⁶⁵. In respect of the annual lease - for recently enclosed land - the Dudley estate reflected new trends when short leases and even annual leases⁶⁶ were granted at the end of the eighteenth century to take advantage of increasing food prices. However, there are some peculiar features contained in the Dudley estate's leases for newly-enclosed land. It was more usual to grant long leases for such land to encourage tenants to develop the property. Moreover, the Dudley leases refer to two or three successive crops when the agreement ran

'for the term of one whole year'

only. Several small farm properties were leased by 'Butty Colliers' such as Moore, Skidmore and Aston, which suggests that there might be some connection between farm produce and payment of the miners by butty colliers. The terms of the

⁶¹ (cont.) The rent was £6 6s. Od. for a property of 14 acres. 'Butty' refers to butty colliers, middlemen employed in working mines in the Black Country. See Part C below.

⁶² Ibid. ⁶³ Ibid. ⁶⁴ Ibid.

⁶⁵ See below and Section II, Chapter 1.

⁶⁶ F. M. L. Thompson, English Landed Society in the Nineteenth Century, pp. 229-230.

Dudley leases granted to tenants of recently enclosed land were so favourable to Lord Dudley that strong incentives must have existed to attract lessees. Moreover, in the 1790s, the view developed that the best farming resulted from rack-renting whereby the owner provided the fixed capital and the tenant the working capital - while annual renewal enabled the owner to benefit from increased values by rent increases. However, it was not until after 1815 that the yearly tenancy 'became and remained the typical tenancy'⁶⁷.

Corn mills were also leased with improving clauses. One such example concerned a water corn mill in Belbroughton leased in 1802 for a term of 25 years at £50 per annum for four years and £54 10s. for the remainder. Within three years, at least £300 had to be spent on rebuilding the mill, £150 of which was to be allowed by Lord Dudley⁶⁸. The tenant had to grind corn for the neighbourhood at 5d. a bushel

'or such other fair and reasonable market price as shall be ... paid in the Neighbourhood'⁶⁹.

In one final respect the Dudley estate pursued policies of a progressive nature similar to other landed estates of the period. An act of parliament in 1798 entitled landowners to purchase redemption of land tax and approximately one-third of all land was subsequently redeemed. The third viscount decided to 'exonerate' his property from land tax and, under a contract dated 30 April 1799⁷⁰, purchased the land tax for most, but not all, of his properties in Kingswinford, Rowley Regis, Sedgley, and Tipton. Certificates attached to the contract show the form of agreement for each property:

⁶⁷ Ibid., p. 231.

⁶⁸ D.P.L. 19/27, Lord Dudley to Mr. George Campion, Lease of Mill Lands and Hereditaments at Wildmoor in Belbroughton, Lady Day, 1802.

⁶⁹ Ibid.

⁷⁰ D.P.L. 6/A, Statement of Properties on which Land Tax was purchased by Lord Dudley and Ward in Staffordshire, 30 April 1799.

'Land Tax Register Office, Lincoln's Inn.
I do hereby certify that the Contract undermentioned hath been registered at my Office, by which the Estate specified therein hath been exonerated from the under-mentioned Land Tax charged thereon, from 24 June 1799.'⁷¹

The fact that such expense was incurred at this time, together with considerable capital expenditure on mineral enterprise between 1799 and 1802⁷², suggests that the Dudley estate was in a very liquid state at the turn of the century.

The apparently enlightened policies pursued by the Dudley estate in respect of agricultural properties between 1774 and 1800, were not persisted with. A report⁷³ on the state of such properties made in 1824 reveals a policy of neglect and inefficient management. Roberts observed that

'The Estate possesses, in an eminent degree, peculiar advantages resulting from its locality, which affords a most favourable opportunity for the disposal of every description of Agricultural produce, and places the generality of it under the denomination of accommodation land, and consequently increases its value.'⁷⁴

The disposition of property was condemned:

'no consistent and convenient disposal of the Farms has ever been made, and that proper and judicious continuity of lands which is so necessary to enable a tenant to cultivate them efficiently, appears, except in a few cases, never to have been thought of.'⁷⁵

It is evident that the opportunity to lease farms of reasonable size, which enclosure had presented, had been ignored and that the policies of the second and third viscounts had been at fault in this respect although progressive in other considerations. To overcome this deficiency, Roberts advised that

⁷¹ Ibid.

⁷² Eleven steam engines were purchased in this period. See Part D below.

⁷³ D.P.L. 32/6, Report and Observations on Lord Dudley's Agricultural Property: John R. Roberts, 1 Dec. 1824.

⁷⁴ Ibid.

⁷⁵ Ibid.

every opportunity should be taken on the death or change of tenants to consolidate and re-distribute property. Inferior, unproductive land should be planted with trees. The arrangement of farm houses and buildings was generally inconvenient and most were in a dilapidated state:

'... indeed the want of repair and improvement is so great that before anything be undertaken ... some persons should go over the whole and make a specification and estimate of what is necessary to be done ... that the expenditure for such purposes may be nearly ascertained. Plans of the Estate and a general Map thereof would be most convenient.'⁷⁶

His final comment was to suggest a revaluation of rents so as to give to the landlord

'his full share of the produce of the soil, and to the tenant that remuneration which his labour, risk and capital employed, entitle him to'⁷⁷.

This valuation (p. 45) relates only to agricultural property on the Dudley estate and excludes all cottage, mineral and industrial property. The overall decrease of approximately 3.3 per cent was marginal and it seems doubtful that the tenantry would adopt a more vigorous approach on the strength of this alone. Systematic planning and improvement could only be achieved by an enlightened policy pursued over a period of time by the chief land agent. This was not forthcoming and similar criticisms were to be levelled at the condition of agriculture on the estate by James Loch after 1833⁷⁸. It is probable that not even those reductions recommended by Roberts were fully implemented. Agricultural rents due from Kingswinford in 1825 were £3,211 17s. 0d.⁷⁹

⁷⁶ Ibid.

⁷⁷ Ibid.

⁷⁸ Loch was accountant to the Dudley Trust, 1833-45. See Section II, Chapter 1 for agricultural policy during this period.

⁷⁹ See Appendix 9.

<u>Parishes</u>	<u>Quantity</u>	<u>Present Annual Rent</u>	<u>Proposed Rent</u>	<u>Increase</u>	<u>Decrease</u>
	Acres Rds Perches	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Himley	589 1 33	1,193 18 3	1,167 10 6	26 15 6	53 3 3
Wombourn	619 3 25	642 9 0	612 9 0	-	30 0 0
Kingswinford	1,373 3 34	3,242 18 6	3,136 0 2	43 0 0	149 18 4
Sedgley	2,233 2 14	4,402 14 10	4,201 2 6	13 0 0	214 12 4
Wolverhampton and Penn	140 0 7	193 1 10	186 13 0	-	6 8 10
Rowley	585 3 26	1,066 6 5	1,015 15 0	1 7 6	51 18 11
Tipton	182 0 27	362 7 11	363 0 0	7 0 0	6 7 11
Dudley	921 1 19	3,592 14 0	3,542 11 0	5 0 0	55 3 0
Belbroughton	=	<u>101 15 0</u>	<u>101 15 0</u>	-	-
Total	6,646 1 25	14,798 5 9	14,326 16 2	96 3 0	567 12 7

Total Decrease 471 9 7

A situation of this nature raises the question: what total rents were derived from Lord Dudley's agricultural properties throughout the period 1774-1833 and how far did the movements of rents correspond to agricultural rents elsewhere? The earliest available evidence of total rents is the six months ending at Michaelmas, 1797 when a sum of £3,082 11s. 4d. was received. Assuming that all available land was let by then and the number of properties remained constant, little change occurred before Lady Day, 1811 when receipts totalled £4,739 1s. 1½d. for the half-year. A considerable increase, probably from land enclosed in the 1770s and 1780s, occurred at this time as £8,045 16s. 7½d. was received for the half-year ending at Michaelmas, 1811. This total gradually increased to £8,726 5s. 7d. for the half-year ending at Lady Day 1814 when the trend was reversed - receipts by Michaelmas, 1814 were £8,408 19s. 6d. and £6,325 13s. 4d. at Lady Day, 1816⁸⁰. Roberts' survey indicates a slight recovery by 1824 when receipts for the whole year were £14,798 5s. 9d. The last available rental for the period ending in 1833 shows that great rents for that year were £17,896 15s. 11d.⁸¹

There is no evidence to suggest that the dramatic increase in total rents for 1811 resulted from an extension of estate property. It may be that marginal land was brought into use as the increased rent coincides with a sharp increase in expenditure on farm stock and grain by John Bradley - land agent to Lord Dudley.

⁸⁰ D.P.L. 32/6, John Bradley in Account With Lord Dudley, 1797-1816. Subsequently referred to as Bradley's Accounts.

⁸¹ S.C.R.O. D260/M/F/5/19/11, Francis Downing in Account With the Trustees of the Late Earl of Dudley.

<u>Half-year</u>	<u>Cattle</u> (sheep, horses, fat cows, bullocks)			<u>Grain</u> (barley, oats, beans)			<u>Hay and Straw</u>		
	£	s.	d.	£	s.	d.	£	s.	d.
Dec.-June 1800	142	12	6	-			327	15	6
Dec.-June 1811	490	16	0	437	18	6	295	13	0
Dec.-June 1812	1143	12	0	910	9	0	101	6	8
Dec.-June 1813	777	2	0	843	15	4	-		
June-Dec. 1813	580	0	0	609	7	11	192	16	0
Dec.-June 1814	1271	10	6	592	12	9	716	11	2½
June-Dec. 1814	95	1	6	357	3	9	325	18	0
Dec.-June 1816	405	18	0	319	16	10	439	5	6

82

The significance of this expenditure is not clear: it may be that Lord Dudley was using his capital to stock new farms on marginal land. However, as many of the purchases concern hay, straw, barley, oats and beans, it is possible that cattle, sheep and pigs were being fattened at the Home Farm and in Himley Park to supply meat to the Black Country towns. Expenditure on these items and on the purchase of stock was also higher in the first half than the latter half of the year. The details of expenditure for the first half of 1811 are:

	£	s.	d.
<u>Cattle:</u> 20 Feb. To Thos. Kettle 13 fat cows for the Poor	298	0	0
7 May To do. Bal. on Cattle bo. and sold	192	16	0
	<u>490</u>	16	0
<u>Hay and Straw:</u>			
6 April To James Turner for a Rick of Hay	159	18	0
8 May To Benj. Beddard for 8 Thrave of Straw	4	16	0
15 June To the Rev. J. Bradley for a Rick of Hay	84		
21 June To John Smith for 94 Thrave of Straw	46	19	0
	<u>295</u>	13	0

	£	s.	d.	
	295	13	0	
Grain: Flour	11	11	0	
Barley (at 6/6 a bag)	121	14	0	
Oats and Beans (oats at 4/11 a bag; beans at 24/3 a bag)	<u>304</u>	<u>13</u>	<u>6</u>	83
	437	18	6	

Regular purchases were also made 'for the poor' and these reflect the conditions and food prices of the war period:

'5 April, 1800	To Jos.	2 fat Cows for	£ 23	2	6	
		the Poor				
20 Feb. 1811	To Thos. Kettle	13 fat Cows	298	0	0	
		for the Poor				
6 Feb. 1812	To Thos. Kettle	15 fat Cows	305	4	6	
		for the Poor, 9772 lbs.				
		at 7½d. Stamp 3/-				
4 April 1813	To Thos. Kettle	15 fat Cows	371	5	0	
		and Bullocks for the Poor				
		9905 lbs. at 9d. Stamp 3/9				
7 Jan. 1812	To John Wilson	for 43 St. of	20	0	8'	84
		Rye for the Poor				

Allowances to tenants for repairs follow a similar pattern showing a sharp increase in 1812. Between 1798 and 1811, total allowances averaged approximately £80 each half-year. This sum increased to £210 16s. 1d. for the six months ending in December, 1812 and £559 10s. 11d. by June, 1813. By June, 1816, the total was £132 3s. 0d. for the half-year. The evidence of Bradley's accounts suggests a more vigorous agricultural policy in the last years of the war accompanied by a sharp increase in total rents for 1811 - in that year, his own annual salary was raised from £250 to £315.

Roberts' survey demonstrates that this policy of improvement had lapsed by 1824 and, according to trends in Bradley's accounts, perhaps as early as 1814. The 1824 report also indicated the need to remove the inequality in rents and

83 Ibid. A thrave usually consisted of '2 stooks containing 12 sheaves'. Oxford Dictionary.

84 Ibid.

this makes it difficult to calculate average rents per acre. The discrepancy between rents for newly-enclosed land and established properties is a further complication. In 1783, the average rent for established properties was between 22/- and 27/- per acre and, for newly-enclosed land, approximately 12/- to 16/-. A valuation of certain farms in the latter category indicates an increase from 18/- to 22/- per acre in 1800:

'Richard Lee, Wall Heath Farm. 68 Acres 3 Roods and 15 Perches. Old Rent £63. Mr. Court's Valuation £80 6s. 2d. Future Rent £76.'⁸⁵

During this period of war-time shortages and rising food prices, rack-renting would have been more usual - in the circumstances, this was not a large increase. By 1824, the average rent was 41/- per acre for all types of property: this was too high and Roberts' survey reconsidered a valuation.

On the basis of these figures, Lord Dudley's estate does not reflect typical movements of agricultural rents in this period. Prof. F. M. L. Thompson⁸⁶ concludes that between 1790 and 1816, average rents increased by approximately 100 per cent, while Prof. G. E. Mingay⁸⁷ has shown that, as enclosure was an investment from the landowner's point of view, rents on newly-enclosed land were increased, in extreme cases, by as much as 300-400 per cent - the increase depending on the extent to which farming efficiency was improved. In the case of the Dudley estate, the evidence suggests that increases on established farms fell, short of 100 per cent even over the longer period 1783-1824. Rents on newly-enclosed land did increase throughout the period but even

⁸⁵ D.P.L. 620/20, Lord Dudley's Great Rental, 1800.

⁸⁶ F. M. L. Thompson, 'English Great Estates in the Nineteenth Century', International Conference of Economic History (1960), p. 393.

⁸⁷ G. E. Mingay, *op. cit.*, p. 381.

these did not rise by 300 per cent. It is evident that neither the farming improvements nor the rent increases initiated by the second viscount were persisted with, in spite of the fact that local conditions and war-time shortages provided excellent opportunities for profitable agricultural enterprise.

In the period immediately following the enclosure awards for Ashwood Hay and Pensnett Chase, the second viscount made extensive use of rights⁸⁸ granted to him to remove all timber from areas covered by the awards. After twelve months he was only entitled to timber on allotments made to him. Considerable areas⁸⁹ of timber had been allotted to the Dudley estate and these too were being exploited by the second viscount to take advantage of the demand created by the need to fence new enclosures, building construction, and mining operations. A chancery case in 1788⁹⁰ indicates that the second viscount had even sanctioned the removal of timber from the parkland surrounding Himley Hall and a restraining injunction was sought by his half-brother. Giving evidence, Joseph Nicklin, employed on the estate at the time of the first viscount's death, stated that

'in 1774, there were great quantities of very fine and valuable Oak Timber growing in ... the Estates and ... since then Timber had been felled to the amount of Twelve Thousand Pounds and upwards ... for Pale Timber ... and working the Mines.'⁹¹

Much of this timber had been felled in the Level Woods and Merry Hill Coppice - both in Kingswinford. In April, 1788, further quantities of timber were marked and valued for sale:

'Lord Dudley has lately marked trees in vistas, walks

88 See above.

89 See above.

90 D.P.L. 5/10, papers relating to a chancery case, 1788: Honourable William Ward, Complainant (heir to the estate) versus John, Lord Viscount Dudley and Ward, Defendant.

91 Ibid.

' and rides at

Himley Park - 240 oaks at £1050 and upwards

Baggarage Wood (Sedgley) - oaks and ash at £1350

High Arcole Wood (Brierley Hill) - oaks and ash at £390

Others - oaks and ash at £160.'⁹²

William Ward was successful and an injunction was granted forbidding Lord Dudley to fell any timber in Himley Park necessary for its protection, or of ornamental value, on pain of a £10,000 fine. He was also restrained from felling immature trees anywhere on the estate. Nevertheless, the timber-yard established by the second viscount on the Dudley Canal, continued to flourish and regular profits were received from the sale of timber. When he succeeded to the title and estate, William Ward was far less solicitous in preserving and protecting the interests of the estate⁹³.

Kingswinford was the most heavily wooded area of the Dudley estate at the time of the enclosures. Of the 679 acres allotted to Lord Dudley in 1786, no less than 452 acres consisted of mature woodland concentrated on the slopes of Brierley Hill in Archall Coppice, 37 acres, Brierley Hill and Level Woods, 141 acres, and Saltwells Wood, 129 acres. In spite of regular sales of timber, 251 acres remained in 1822⁹⁴ and Lord Dudley owned practically all the timber remaining in the manor as a whole - about 306 acres. The line of the Dudley Canal passed through the wooded allotments and Lord Dudley established a timber-yard⁹⁵ at Archall Coppice. In addition to the £12,000 of timber sold between 1774 and 1788, one customer alone purchased timber in 1788, valued at £2,000:

⁹² Ibid. Nicklin's evidence.

⁹³ See Part C below.

⁹⁴ B.H.P.L. 13/1, W. Fowler, Map and Survey of Kingswinford, 1822.

⁹⁵ This came to be known as Round Oak Store Yard and, by 1822, it consisted of an 'iron foundry, saw mill, boring mill, steam engine manufactory, carpenters shop, pattern rooms etc.' Fowler, op. cit., item 1,501.

'17th February, 1789. Received of Mr. Joseph Cox on account of Timber sold him last year. £800.
16th January, 1790. Received of Joseph Cox on account of timber sold him by Lord Dudley in 1788. £1200.'⁹⁶

Finished timber was sold for fencing at the rate of 3½d. per 'rail'⁹⁷ - this price gives some indication of the vast quantity of timber which must have been sold by the second viscount. The same customer purchased 58 tons of bark in 1797 at £5 per ton⁹⁸. Timber was also sold to pits owned and worked by the Dudley estate: the mineral agent, Edward Cockshutt, purchased timber worth £622 7s. 1½d. between October, 1788 and January, 1790⁹⁹. The iron and timber-yard at Round Oak continued to flourish and became the most efficient of estate enterprises by 1833:

'We consider the Iron and Timber Yard a useful and necessary establishment - at this place all new Engines are made and the old ones repaired - it appears to be under well-regulated management.'¹⁰⁰

However, at the end of this early period of development, opinion was divided as to the future policy with regard to timber. The auditor to the Dudley Trust, James Loch, considered that future profit from timber sales would decrease and he advocated that all remaining timber should be felled at once:

'... the extensive workings of the Mines both on the Trust Estates and on the adjoining lands have materially affected the Oak Timber ... it should be cut down for

⁹⁶ W.S.L. 20/39, Executor's Account of the Estate of Lord Dudley, 1791.

⁹⁷ D.P.L. 609/20, Lord Dudley's Great Rental, 1790.

⁹⁸ John Bradley's Accounts, 1797.

⁹⁹ Great Rental, 1790.

¹⁰⁰ S.C.R.O. D.260/M/F/5/19/2, p. 11. Report by Messrs. Smith and Liddell on the Mines etc. at Dudley, 1836.
See Section II, Chapter 3.

'the effect of the smoke renders the timber more brittle and less valuable and by preventing the Bark from running the profit from that source is also lost.'¹⁰¹

This in itself reflects the extent of industrial development over the period 1774-1833 and indicates that timber sales constituted a regular source of income throughout. Brittle timber would be unsuitable for use in the mines or for construction work generally.

In the light of subsequent developments, it seems no mere coincidence that large tracts of woodland were allotted to Lord Dudley by the enclosure awards. The advantages given to the Dudley estate in this respect correspond to other aspects of the enclosures - contiguous allotments of land rich in agricultural and mineral potential, extensive compensation for loss of various rights, particular rights reserved to the lord of the manor with regard to the working of minerals in general, and the exploitation of timber throughout the area of the awards. The second viscount was responsible for this situation and proceeded to exploit his estate to the full. Mineral enterprise remained profitable, in spite of inefficiency, throughout the period 1774-1833 while agricultural properties, after early progressive expansion, became less efficient after 1815 in terms of rents and the general condition of properties. Timber enterprise alone remained profitable and efficient. Nevertheless, there can be no doubt of the motives and value to the estate of the enclosing policy initiated by the second viscount after 1774.

B. Improvements in Transport

The absence of good, natural systems of communications has already been considered when discussing the geographical

¹⁰¹ S.C.R.O. D260/M/F/5/19/14, p. 26. Second Report on the Trust Accounts by James Loch, 1835. See Section II, Chapter I.

and physical characteristics of the Black Country. Transport improvements were particularly essential to this area because of the lack of navigable rivers and the nature of local economic enterprise which required the movement of heavy goods and materials. It is probable that the condition of most eighteenth-century roads restricted the profitable movement of coal to a distance of between ten and fifteen miles¹⁰². At the beginning of the period 1774-1833, local communications were not only unsatisfactory in respect of gaining access to wider markets, but also for the movement of goods within the area. John, Second Viscount Dudley and Ward, was responsible for much of the improvement which occurred after 1774 in terms of road and canal construction.

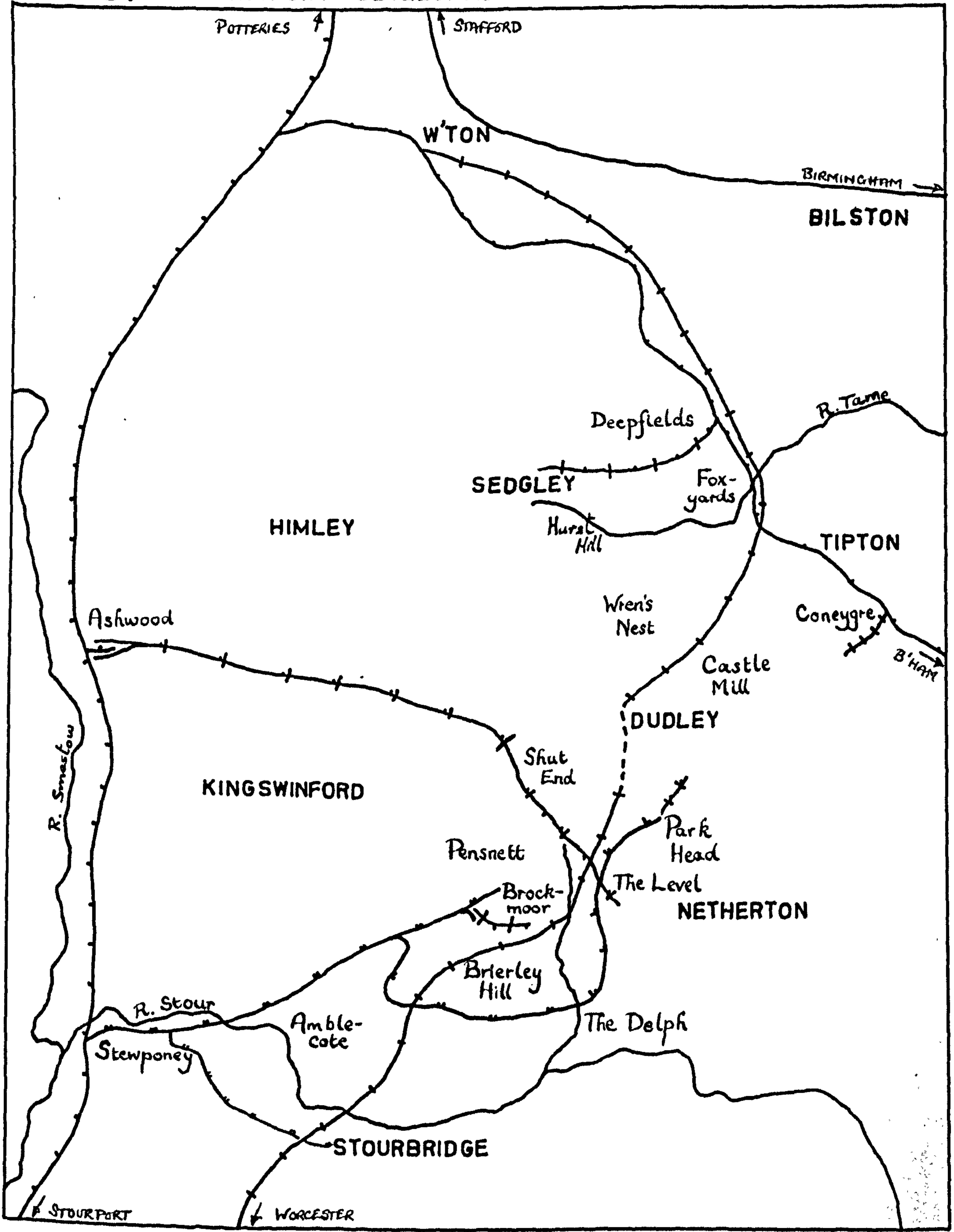
All of the local enclosure acts with which he was concerned provided for the construction and maintenance of new roads which linked up many areas of the Black Country with the new turnpike roads. In 1777, the Ashwood Hay award allotted 74 acres for road construction and a further 83 acres were set aside for this purpose in 1786 by the Pensnett Chase award. All of these roads were constructed within Kingswinford manor and their location and line were precisely defined. The second viscount also encouraged the construction and improvement of turnpikes throughout the Black Country. By 1779¹⁰³, the total of money advanced on turnpike securities was £6,200 at 5 per cent annual interest. Many of these turnpikes crossed the area from Stourbridge to Dudley, Wolverhampton to Birmingham, Wednesbury to Dudley, and Wombourn to Bilston¹⁰⁴. Such road improvements provided better communications within the region and gave access to the larger markets in Birmingham and Wolverhampton. However,

102 Court, op. cit., p. 164.

103 D.P.L. 610/20, Lord Dudley's Rental, 1779.

104 See Map 5. This does not show the numerous roads constructed under local enclosure acts.

MAP 3. TRANSPORT DEVELOPMENT 1766 - 1850. RAILWAYS.



SCALE 1:80000

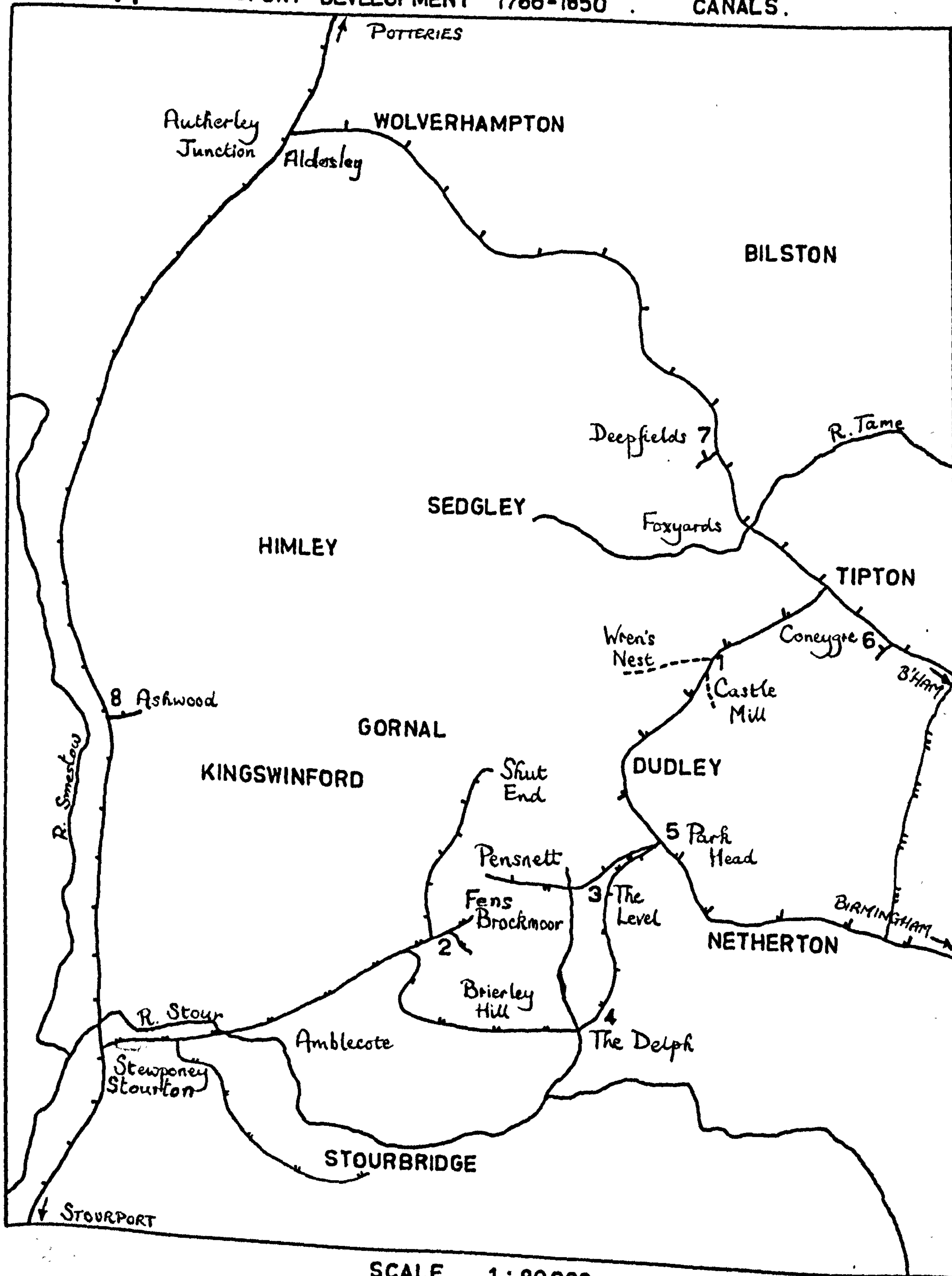
it was the cutting of canals which enabled the Black Country and the Dudley estate to fully exploit their economic potential.

Ultimately, by the middle of the nineteenth century, the proliferation of branches and cuts from the main through canals provided a unique system of cheap regional transport. Many collieries, blast furnaces, foundries, iron manufactories and other enterprises had their own wharves which made it possible for the movement of raw materials and finished products within the area. From the earliest period of canal construction, the Dudley estate possessed numerous wharves and branches. It was again the second viscount who was responsible for the construction of many local canals which, although intended to benefit his own estate, were of considerable and lasting value to the region as a whole.

Nevertheless, the first canal cut through this part of the west midlands was not intended to serve the interests of the Dudley estate, but the pottery districts of north Staffordshire. This was Brindley's Staffordshire and Worcestershire Canal cut between 1766 and 1772 to link the rivers Severn and Trent¹⁰⁵. From the Severn at Stourport, it followed the Stour and Smestow valleys along the western boundary of Kingswinford manor to Wolverhampton where it turned north towards the Potteries. A branch was cut from Aldersley (Autherley) on the outskirts of Wolverhampton, to Birmingham. This passed to the east of the Dudley-Sedgley ridge through the mineral districts of Wolverhampton, Bilston, Tipton, and Oldbury and introduced canal communications into the Black Country for the first time. However, these two canals were only of limited value to the Dudley estate as they did not cross those areas where the bulk of Lord Dudley's property and minerals were concentrated. To remedy this

¹⁰⁵ See Map 4.

MAP 4. TRANSPORT DEVELOPMENT 1766-1850 . CANALS.



SCALE 1:80000

KEY TO MAPS 3 and 4.

MAP 3.

	STAFFORDSHIRE AND WORCESTERSHIRE CANAL	1766-1772
	BIRMINGHAM CANAL	1766-1772
	STOURBRIDGE AND PENSNETT CANAL	1776-1782
	DUDLEY CANAL	1776-1778
DUDLEY ESTATE MINERAL RAILWAYS.		
	FROM BROCKMOOR COLLIERY	1797
	FROM PARK HEAD COLLIERY	1790
	FROM LIMESTONE QUARRIES	
	FROM CONEGRE COLLIERY	
	LORD DUDLEY'S STEAM - KINGSWINFORD - RAILWAY	1827-1829
	THE LEVEL EXTENSION	1845
	LONDON & NORTH WESTERN RAILWAY	1838-1839
	OXFORD WORCESTER & WOLVERHAMPTON RAILWAY	1845-1854

MAP 4.

	STAFFORDSHIRE AND WORCESTERSHIRE CANAL	1766-1772
	BIRMINGHAM CANAL	1766-1772
	STOURBRIDGE AND PENSNETT CANAL	1776-1782
	DUDLEY CANAL	1776-1778
	NETHERTON CANAL	1785-1792
	DUDLEY CASTLE CANAL TUNNEL	1785-1790
	LORD WARD'S BRANCH	1839-1840
	STOURBRIDGE EXTENSION CANAL	1837-1840
	NETHERTON CANAL TUNNEL	1855-1858
DUDLEY ESTATE WHARVES.		
1.	1775	CASTLE MILL. TUNNEL AND PRIVATE CUT. LORD DUDLEY'S LIME - STONE QUARRIES TO BIRMINGHAM CANAL
2.	1784	BROCKMOOR. TO SERVE BROCKMOOR COLLIERY
3.	1784	THE LEVEL. LORD DUDLEY'S STOREYARD
4.	1784	THE DELPH. TO SERVE THE OLD LEVEL IRONWORKS
5.	1790	PARK HEAD. ON MINERAL RAILWAY FROM PARK HEAD COLLIERY TO DUDLEY CANAL
6.	1797	CONEGRE. ON MINERAL RAILWAY FROM CONEGRE TO THE BIRMINGHAM CANAL
7.	1797	DEEPFIELDS. ON MINERAL RAILWAY FROM LORD DUDLEY'S LIME - STONE QUARRIES AT SEDGLEY TO BIRMINGHAM CANAL
8.	1827	ASHWOOD. ON STEAM RAILWAY FROM LORD DUDLEY'S SHUT END COLLIERIES TO STAFFORDSHIRE AND WORCESTERSHIRE CANAL

situation, the second viscount introduced a bill which petitioned parliament for the right to cut a canal from the Staffordshire and Worcestershire Canal at Stourton (Stewponey) to Stourbridge with two branches across Pensnett Chase. These together formed the Stourbridge Navigation¹⁰⁶.

Lord Dudley was the main proposer of the bill and additional support came from glass manufacturers in the Stourbridge area. The potential value of the canal for Lord Dudley's mineral interests - especially the two cuts across Pensnett Chase - is indicated by two of the petitions submitted by coal-masters in opposition to the proposal. These petitioners worked minerals along the line of the Birmingham Canal in Bilston and Wolverhampton. The first petition was made to parliament by:

'... the principal Coal Masters and Owners of Mines in the neighbourhood of Wolverhampton ... having been induced to pay heavy fines to the late Right Honourable Lord Viscount Dudley and Ward and other Lords of Manors for licence to get coal and other Mines under Copyhold Estates, and ... with large Sums of Money to Erect Fire Engines and Gins and to sink deep Pitts at the expence of Thirty-six thousand Pounds and upwards and have supplied with coal at a very easy and cheap Rate not only parts of ... Staffordshire but also the Counties of Worcester, Gloucester and Warwickshire ... find that ... Lord Dudley and others have presented a Petition ... for leave to bring in a Bill for making a Canal from ... Stourbridge to unite with the ... Staffordshire and Worcestershire Canal Navigation at ... Stourton ... and also two Collateral Cuts to places where Collieries now are or are intended to be Established as by the Execution of such places they will lose all prospect of reaping any fruit of their Labour ... do therefore ... Humbly Intreat this Honourable House ... not (to) suffer the said intended Cut.'¹⁰⁷

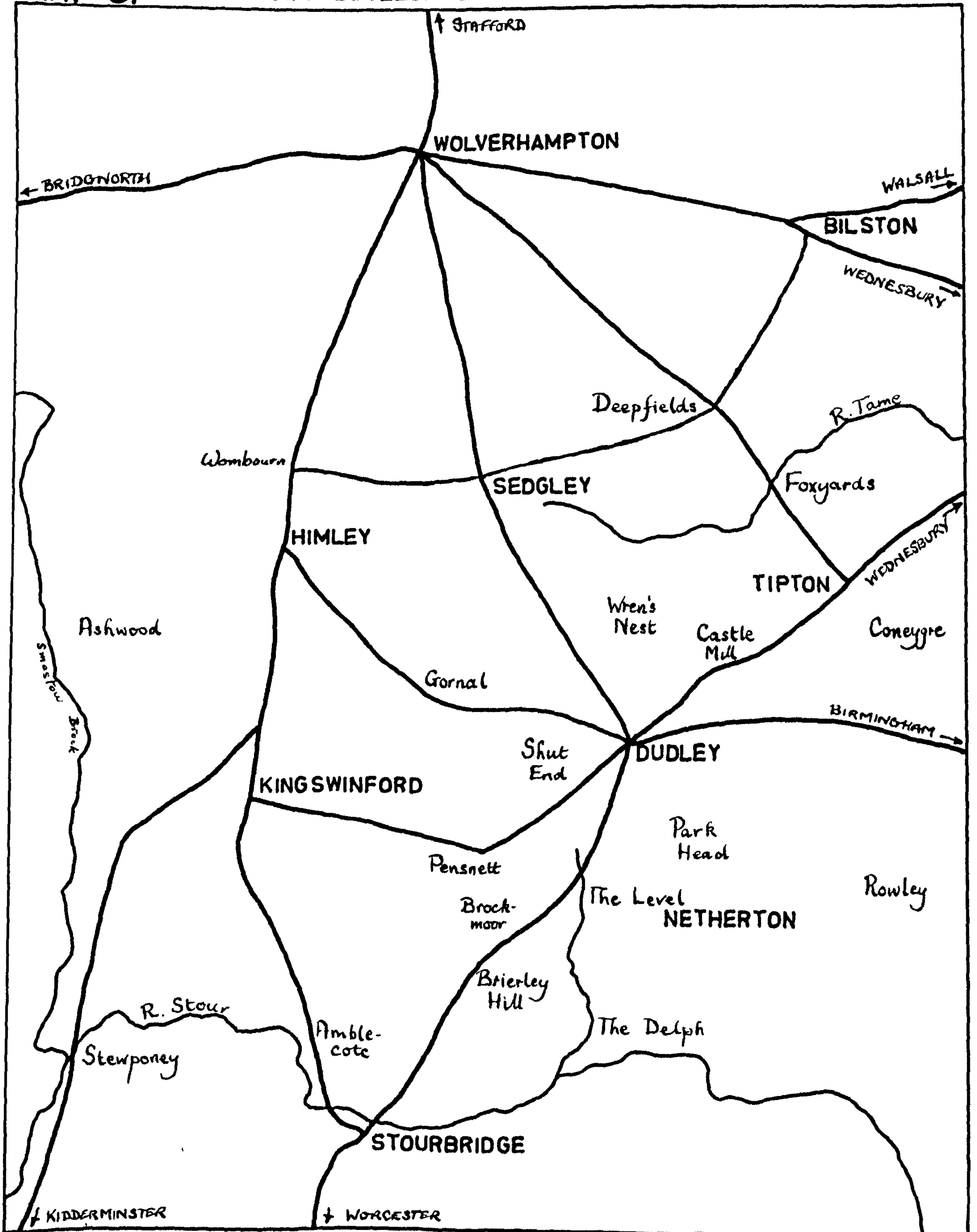
A second petition alleged that

'if the present Bill should pass it will (in a great measure) stop the working of many Collierys near to

106 Ibid.

107 S.C.R.O. D1778/v/708. Petition of Thomas Tomkys, Richard Pearsall and Henry Penn against the Stourbridge Canal.

MAP 5. TRANSPORT DEVELOPMENT 1766 - 1850 . ROADS IN 1800 .



SCALE 1:80000

'Bilston ...',¹⁰⁸

It was the development of minerals under Pensnett Chase where collieries 'are intended to be Established' which worried coal-masters along the Birmingham Canal. As coal mined west of Dudley along the Stourbridge Canal would be unable to compete in the Birmingham market because of extra transport costs, it is likely that the petitioners feared the loss of markets in Worcestershire and Gloucestershire along the line of the Severn. The Stourbridge Canal joined the Staffordshire and Worcestershire Canal 13 miles nearer to Stourport than the Birmingham Canal. At the second reading of the bill, 17 petitions were produced in its favour and 10 against¹⁰⁹: the bill was passed by 61 votes to 21 on 4 March, 1776.

From the junction of the two canals at Stourton' (Stewponey), the Stourbridge Canal was cut through agricultural areas along the banks of the Stour to the centre of Stourbridge. However, the two collateral cuts,

'one from a place called the Fens upon Pensnett Chase ... and the other from the Black Delph, upon the said Chase, to join the first collateral cut at the Lays, in the Parish of Kingswinford'¹¹⁰

were to prove far more profitable in the long run for the area and the Dudley estate than the cut to Stourbridge itself. The cut across Pensnett Chase required 20 locks in seven and a half miles to raise it to the level of the Fens which provided a natural water supply, and it terminated at the point where the thick coal outcropped. This outcrop was followed by the second cut around the southern slopes of Brierley Hill to the Delph. Under the Pensnett Chase Enclosure Award, the second viscount was allotted extensive

108 Ibid. Petition of W. Lane.

109 B.R.L. Aris's Birmingham Gazette, 26 Feb. 1776.

110 B.H.P.L. H15.2, Stourbridge Canal Act, 1776, p. 731.
(This book contains copies of various local canal acts.)
See Map 4.

areas of land along the line of the two cuts.

Lord Dudley's close connection with the Stourbridge Canal Act is not only indicated by the circumstances under which the bill was introduced but also in the beneficial implications for the Dudley estate of certain clauses within the act. The usual rates to be charged were:

'Sixpence for every Ton of Iron, Ironstone, Coal, Timber, Stone and other Goods ... which shall ... pass through any One or more of the Locks ... on the said Canal.'¹¹¹

However, Lord Dudley's main colliery in the area at this time was at the Level - on the line of the proposed Dudley Canal¹¹². Accordingly, coal mined on the banks of the Dudley Canal was to be transported at reduced rates:

'... Threepence upon each and every Ton of Coals which shall be ... carried ... upon the said Collateral Cuts, and which shall have passed through any of the locks ... upon the intended Dudley Canal.'¹¹³

Nine locks raised the Stourbridge Canal to the 442-foot level of the Dudley Canal at the Delph - without preferential rates, coal transported along the former canal would be at a disadvantage when competing for markets along the Staffordshire and Worcestershire Canal. Lime and limestone were also to be conveyed at reduced rates on the Stourbridge Canal at

'not ... more than One-third Part of the Rates ... mentioned.'¹¹⁴.

Lord Dudley virtually monopolised the supply of lime and limestone in the area from his quarries at Dudley Castle and the Wren's Nest. As the demand for lime and limestone grew with the development of agriculture and blast furnaces, this was a particularly valuable clause for the Dudley estate. A further advantage afforded by the terms of the act was that:

¹¹¹ Ibid., p. 778.

¹¹² See below. The Dudley Canal joined the Stourbridge Canal nearby at the Delph.

¹¹³ Stourbridge Canal Act, p. 781 ¹¹⁴ Ibid., p. 779.

'Owners ... of Coal-Mines, Ironstone, Limestone, or other Mines, lying within the Distance of One Thousand Yards from the ... Canal ... (may) ... make ... Railways ... or ... Roads to convey ... their ... Minerals to the said Canal ... over the Land ... of other ... Persons.'¹¹⁵

Between 1776 and 1833, the Dudley estate took full advantage of this provision - together with the clause in the Pensnett Chase Enclosure Act granting the right to construct railways - to establish wharves, cuts, and mineral railways throughout the estate¹¹⁶ so as to link collieries, timber yards, and iron works with the main canal. The family connection with the canal remained all through this early period and the list of proprietors included the second viscount, his half-brother William (future Lord Ward) and the Lady Viscountess Dowager Dudley and Ward¹¹⁷. Dividends on 13 shares remained a regular source of estate income:

£45 10s. Od. for the half year ending in June, 1788¹¹⁸, and £52 for the half year ending in July, 1832¹¹⁹.

Concurrent with the Stourbridge Canal Bill was a second proposal to

'to make a navigable canal ... from the Great and Little Ox Leasow at Netherton in the Parish of Dudley, to the Black Delph.'¹²⁰

This was the Dudley Canal Bill, sponsored primarily by Lord Dudley and Thomas Foley, to link the end of the Stourbridge Canal at the Delph with

'an estate of Thomas Talbot Foley Esq. called Netherton.'¹²¹

115 Ibid., p. 799

116 See Maps 3 and 4. Railways are considered below.

117 Stourbridge Canal Act, Copy, p. 732.

118 D.P.L. 608/20, Lord Dudley's Rental, 1788.

119 S.C.R.O. D260/M/F/5/19/1, Estate Accounts, 1833.

120 B.R.L. Aris's Birmingham Gazette, 26 Feb. 1776.

121 B.H.P.L. H.15/2, Dudley Canal Act, Copy, p. 77.

Where the Dudley Canal passed through Kingswinford, it lay entirely across Lord Dudley's property including the Level Colliery. There is little doubt that the line of this canal was determined by the outcrop of thick coal, shown on the plan¹²², and the intentions of Lord Dudley to develop this area of Dudley and Kingswinford manors. By the enclosure awards for Pensnett Chase and Dudley (1786), he was allotted extensive property on both banks of the Dudley Canal including the line of the thick coal outcrop, Archill Coppice, and Brierley Hill Coppice. Between the completion of the canal (1778) and 1833, a considerable proportion of the Dudley estate's industrial enterprise developed along the line of this canal from the Delph in Brierley Hill, to Park Head in Dudley.

The last of the local canals with which the second viscount was concerned was the Dudley Castle Canal Tunnel - on the occasion of the safe passage of this bill through parliament, the Dudley Canal Company recorded its thanks to Lord Dudley for his

'unremitted Attention to the Interests of this Company and for his very powerful and successful Exertion in Parliament in support of the Extension of this Canal'¹²³.

Considerable energy and influence must have been exerted in order to overcome the resistance of the Birmingham Canal Company to any link which would expose its monopoly of the Birmingham market to competition from pits west of the Dudley-Northfield ridge. The Dudley Castle canal tunnel, constructed 1785-92, linked the Dudley and Stourbridge Canals at Park Head with the Birmingham Canal at Tipton Green by a tunnel, just over one and a half miles in length, which passed

¹²² Ibid. A Plan for a Navigable Canal from Netherton to the Black Delph.

¹²³ Dudley Canal Proprietors' Minute Book, 5 Sept. 1775, as quoted by C. Hadfield, op. cit., p. 77.

directly under the town of Dudley. This provided a much shorter connection between the area west of Dudley and the older industrial Black Country region in Tipton, Bilston, and Wednesbury than the longer route via the Stourbridge Canal to Stourton and the Staffordshire and Worcestershire Canal to its junction with the Birmingham Canal at Aldersley¹²⁴. It is possible that, in order to prevent such a link, the powerful Birmingham Canal Company secured a clause in the Stourbridge Canal Act whereby:

'... the Company of Proprietors ... or the said John, Lord Viscount Dudley and Ward ... are ... restrained from extending, at any Time, the Canal hereby authorized to be made ... to any Place ... within the Distance of One Mile and an Half of the Birmingham Canal Navigation ...'¹²⁵

It seems reasonable to conclude that, in the light of this restriction, the subsequent pattern of local canal construction was part of a planned sequence of development as in the case of the local enclosures with which the second viscount was concerned. No such restriction exists in the Dudley Canal Act and the construction of this, together with the Dudley tunnel, in effect established a link between the Stourbridge and Birmingham Canals. In fact, the tunnel was driven to Castle Mill to link with a private cut made by Lord Dudley between 1775-8 from the Birmingham Canal at Tipton Green to his underground limestone quarries on the Tipton side of Dudley Castle hill. This private cut was sold to the Dudley Castle Canal Tunnel Company.

However, the cost of the operation had been underestimated. The original act passed in 1785 empowered the company to raise £27,000. A further act in 1790 allowed the company to raise additional sums

¹²⁴ See Map 4.

¹²⁵ Stourbridge Canal Act, Copy, p. 739.

'not exceeding Ten Thousand Pounds'¹²⁶.

Extensive loans were made by the Dudley estate to finance the tunnel and these reflect Lord Dudley's awareness of its potential value to his estate. A total of £4,500 was loaned on which annual interest of £202 10s. Od. was still being paid in 1833¹²⁷. The link with the Birmingham Canal not only connected the Black Country on both sides of the Dudley ridge with Birmingham, but also, via the Fazeley and Coventry Canals completed in 1790, with the trunk canal routes from the Trent and Mersey Canal to London. Markets along these distant canals were exploited by Lord Dudley's collieries after 1798¹²⁸.

The final expansion of local canals west of Dudley occurred between 1793 and 1798 when the Netherton Canal was constructed, roughly parallel to the Birmingham Canal, but on the western side of the Dudley-Northfield ridge. This extension was proposed by the Dudley Canal Company to effect a link, via the Lappal Tunnel cut beneath the ridge, with the Worcester and Birmingham Canal at Selly Oak. The latter canal was begun in 1793 and provided a much shorter link between Birmingham and the River Severn than the older route along the Birmingham and the Staffordshire and Worcestershire Canals.

The Dudley estate played a significant part in the pattern of local canal development both in terms of the sequence and timing of events and the route taken by many of the canals.

¹²⁶ B.H.P.L. 15/2, An Act for Effectually Carrying into Execution, Two Acts of the Sixteenth and Twenty-fifth Years of His Present Majesty, 1790, Copy.

¹²⁷ S.C.R.O. D260/M/F/5/19/3, Account Showing Interest, Dividends, Rents etc. received from June 30th, 1832 to December 31st, 1833.

¹²⁸ See Part C below.

Their benefit to the region is undoubted but they also held a special significance for the Dudley estate in particular. In the light of events between 1774 and 1788, it is probably true to say that developments in enclosures and canal construction¹²⁹ must be seen as part of a coherent plan evolved by the foresight, initiative and capital of the second viscount in order to exploit the opportunities provided by national and regional economic trends.

Under the terms of the Stourbridge Canal Act, landowners were entitled to make railways or roads up to a distance of 1,000 yards to convey minerals to the canal. A similar provision was included in the Pensnett Chase Enclosure Act entitling the lord of the manor to

'make and use all convenient Ways, Roads and Railways in, upon and over the said Lands ... for the use of any ... Mines ...'¹³⁰

Where the limitations of capital availability and surface conditions inhibited canal construction, numerous horse mineral railways were laid down by the Dudley estate to facilitate the movement of minerals to canal wharves¹³¹. This system could be used all the year round and was far more satisfactory than road or animal transport.

One of the many reforms introduced by Charles Beaumont¹³² between 1797-8 was the construction of mineral railways at

¹²⁹ Of the canal acts passed 1758-1802, 90 out of 165 had as their motive the exploitation of the coal trade, T. S. Ashton, An Economic History of England in the Eighteenth Century, p. 74.

¹³⁰ Pensnett Chase Enclosure Act, p. 14. See Part A above.

¹³¹ See Map 3. This shows only the main mineral railways and canal wharves constructed by the estate. A network of small mineral railways existed around the main collieries and ironworks.

¹³² See Part C below for Beaumont's progressive development of estate mineral enterprise.

Brockmoor in Brierley Hill and Coneygre in Tipton. After the enclosure of Pensnett Chase, a large colliery had been developed by the estate at Brockmoor. Beaumont criticised the existing facilities for movement of minerals down to Lord Dudley's wharf on the Stourbridge Canal at Brockmoor:

'I shall ... give you a just idea of the State of his Lordship's Coal Concerns at present - leading $1\frac{1}{2}$ ton on a Coal Waggon with five horses downhill, no office at a Wharf for nine different Mines (at Brockmoor) and letting the Coals go from the Brockmoor Wharf without weighing or gauging.'¹³³

He had already directed¹³⁴ Aston, an agent of Lord Dudley 'to discover where cast metal railings (are) to be bought best and cheapest'

in order to construct a 'waggon way' there as soon as plans 'which I have wrote for' arrived from Newcastle. A letter written in September, 1797 throws some light on the capital costs of the proposed railway and the conservative attitude to change adopted by many of Lord Dudley's agents:

'I am told his Lordship is advised that the Waggon Way laying at Brockmoor is an act of Insanity and only throwing away £1,000. Mr. Honeybourne (an estate official) says if it had been done at the commencement of the Work (c.1782-5) it would have saved £20,000 by this Time ... The way at Brockmoor (c.600 yards) will not exceed £500 and will reduce the leading 4d. per Ton - breceage of Coals £3 at least weekly - keeping roads - leaving Engine Slack - with the great advantage in permitting a much greater quantity being led and Vended.'¹³⁵

This is a clear statement of the advantages of transporting minerals by railway rather than by road. Fewer horses would be needed, track maintenance would be less than the upkeep of roads, and, most important of all, the even running surface would reduce the quantities of small, broken coal or slack produced by existing uneven road surfaces. Profit was less on coal in this condition and there was a limited market for it.

¹³³P.R.O. C/110/170, p. 3, Beaumont to Jeans (Lord Dudley's London agent), 22 June 1797. See Map 4.

¹³⁴Ibid. Beaumont to Jeans, 10 June 1797.

This railway was completed together with another of similar length at Coneygre in Tipton which linked Lord Dudley's collieries with his wharf on the Birmingham Canal. Metal plates were generally used at this time in the Black Country and it is probable that Beaumont introduced iron rails into the area for the first time¹³⁶. Two other railways were laid down shortly after 1798. One at Park Head, Dudley, linked a complex of estate mines to the Dudley Canal near its junction with the Dudley Castle Canal tunnel. The other linked Lord Dudley's limestone quarries at Sedgley with the Birmingham Canal at Deepfields - a distance of nearly one mile¹³⁷. All of these railways ran downhill from the slopes of the Dudley ridge to the new canals. By 1833, numerous other railways were added as the scale of estate enterprise increased - most of them terminated at Lord Dudley's canal wharves at Brockmoor, the Level, the Delph, Park Head, Coneygre, Castle Mill or Deepfields¹³⁸.

The final improvement in local systems of transport and communications was the introduction of steam railways into the Black Country by the construction of the London and North Western Railway, 1838-9, and the Oxford, Worcester and Wolverhampton Railway, 1845-54¹³⁹. It is evident that the first line was of only marginal value to the Black Country in general as it passed too far to the north east and bypassed the main centres of iron and mineral production in Tipton, Dudley, and Wolverhampton. The second line did pass

135 Ibid. Beaumont to Jeans, 11 Sept. 1797.

136 Rails were first used in the Tyne coal-field in the 1790s. Beaumont had experience in this area and introduced many ideas into the Black Country which had been common practice for many years in the Northumberland collieries.

137 See Maps 3 and 4. ¹³⁸ Ibid.

139 Ibid. See Section II, Chapter 4, Part C for a full discussion of railway development after 1833. See Map 3.

through the heart of the Black Country but terminated at Wolverhampton. Main line steam railways arrived comparatively late in the Black Country, but a steam railway had been constructed and operated by the Dudley estate since 1829. With the exhaustion of the thick coal outcrops and shallow seams, the thick coal was mined at greater depths in areas of the Black Country which had been relatively undeveloped before the 1830s.

One such area was the Shut End district of Kingswinford manor where Lord Dudley owned extensive property. This area was being more extensively worked for minerals during the 1820s and a steam railway was constructed by the Dudley estate between 1827 and 1829 to link the Shut End collieries and ironworks to the Staffordshire and Worcestershire Canal at Ashwood¹⁴⁰. No canal existed at this time in the area - the nearest being the Stourbridge Canal at Brockmoor. It is significant that a steam railway was constructed rather than a canal extension - either to Ashwood or Brockmoor. This not only speeded up the movement of traffic to the Staffordshire and Worcestershire Canal but made Lord Dudley independent of the slow and relatively expensive Stourbridge Canal. The potential value of this link and the Shut End area in general is indicated by the fact that the Staffordshire and Worcestershire Canal Company offered to build the link either as a canal or a railway¹⁴¹. Lord Dudley declined this offer and also defeated an attempt by the Stourbridge Canal Company to cut an extension to Shut End in 1829¹⁴².

However, as early as 1825, the idea to construct a steam railway link was conceived neither by Lord Dudley nor by his

¹⁴⁰ See Map 3.

¹⁴¹ Hadfield, op. cit., p. 132.

¹⁴² Ibid., p. 103. This extension was later cut, 1836-40. See Section II, Chapter 4, Part B.

agents but by a Stourbridge ironmaster, James Foster, who was constructing blast furnaces and forges at Shut End to exploit leases of minerals which he had secured. As the line of the railway would cross considerable areas of Lord Dudley's land, Foster was in no position to contest Lord Dudley's decision to construct the line himself. In Foster's original proposal, he offered to

'make the Rail Road and maintain it in Repair at his own expence ... and allow his Lordship ... the free use and enjoyment of the same for the conveyance of any Mines and Minerals that may be raised at his Lordship's Collieries free of any charge.'¹⁴³

On the other hand,

'if Lord Dudley prefers making a Rail Road at his own expence,'¹⁴⁴

James Foster would pay him 1½d. per ton per mile. Neither Foster nor Lord Dudley were in a position to construct the line without crossing the land of a third party - this was a plot leased by Foster from John Hodgetts Foley. Should Lord Dudley construct the line, Foster intended to build the section over Foley's land and charge Lord Dudley 1½d. per ton per mile. Foster estimated that the construction costs, excluding the value of land, would be £2,000 per mile taking account of 'Iron Rails, Stocks and Chains and Earthworks'¹⁴⁵. In addition to mines leased by Foster from Foley, extensive colliery operations were being undertaken by Mr. Gibbons near Oak Farm and Shut End House. These, together with minerals carried from Lord Dudley's pits, would ensure a regular income for the rail road at 1½d. per ton per mile. Significantly he also raised the possibility of extending the rail road

'to Park Head (so that) the Mines of that extensive district would come down to the Stafford and Worcester

¹⁴³ D.P.L. 10/L, Mr. Foster's Proposals for a Railroad, 24 Feb. 1825.

¹⁴⁴ Ibid.

¹⁴⁵ Ibid.

'Canal on cheaper and better terms for delivery at Stourport, than their present route of the Dudley and Stourbridge Canals.'¹⁴⁶

Such an extension was made to the original line, but not until much later in the nineteenth century¹⁴⁷.

It was almost two years later that Foster and Lord Dudley concluded an agreement¹⁴⁸ to construct the rail road. Lord Dudley drove a hard bargain - not only did he construct the line from the canal to land at Shut End adjoining lands belonging to John Hodgetts Foley and leased to Mr. James Foster for the conveyance of coal, limestone, ironstone and other materials - but also, the rates charged were 3d. per ton per mile for these commodities transported to and used on Foster's lease. For all materials conveyed and not used in Foster's works, the rate was 7d. per ton. This would apply mainly to iron and minerals sold by Foster and conveyed to the Staffordshire and Worcestershire Canal. These rates were to apply for a period of 59 years - the unexpired term of Foster's lease - and a minimum of freight charges amounting to at least £400 per annum must be paid by Foster. A small section of the line, about 440 yards, was to be constructed by Lord Dudley over Foley's land leased to Richard Lee of Wall Heath, at a rent of £20 per annum. Foster was allowed to construct a branch over Foley's land to his ironworks at Shut End. Should Lord Dudley decide to extend the rail road 'to his Collieries at Park Head or Dudley Wood or to his Limestone Works near Dudley'¹⁴⁹,

Foster was entitled to use the extension

'so as to render it convenient to Mr. Foster to make and effect a communication with any Mines or Ironworks belonging to him near to such extended line.'

146 Ibid. ¹⁴⁷ See Section II, Chapter 4, Part C.

148 D.P.L. 10/L, Terms and Conditions of a Proposed Railway from the Staffordshire and Worcestershire Canal to Shut End, 17 Jan. 1827.

149 Ibid.

The final commitment was for Foster to make and maintain at his own expense a

'proper and commodious Canal or Basin in Flotheridge Meadow to communicate with the Staffordshire and Worcestershire Canal and Lord Dudley and his Lessees to pay $\frac{3}{4}$ d. per ton on goods navigating the basin'¹⁵⁰.

It was not until the 1880s that the whole line of the railway came under the sole ownership of Lord Dudley on the termination of Foster's leases.

A number of particular engineering problems had to be tackled. The canal basin was 750 yards long

'parallel to which the railroad is continued on both sides, affording the means of loading 60 boats at the same time.'¹⁵¹

Trucks were hauled up a gradient from the canal level by a stationary winding-engine and a second stationary engine was required to haul the trucks up the slopes of Pensnett Chase to Shut End. On the level stretch in between, a steam locomotive, the Agenoria¹⁵² (goddess of courage and industry), linked the two inclines. This was constructed by James Foster's foundry at Stourbridge and the line-engineer was John Rastrick. The contemporary description of the opening of the railway illustrates the wide public interest shown:

'This undertaking, the work of the Earl of Dudley and James Foster, Esq. of Stourbridge, is ... $3\frac{1}{8}$ miles (long). Commencing at the above-named coalfield, Shutt-end, with an inclined plane 1000 yards in length ... a lofty embankment is carried - parallel to the village of Kingswinford, crossing the turnpike road from Stourbridge to Wolverhampton by a bridge ... over the high road from Summer Hill to Swindon by another similar bridge ... it arrives at the head of a second inclined plane. Passing this ... a basin occurs ... formed so as to meet the

150 Ibid.

151 B.H.P.L. County Express, 7 Jan. 1905, reprint of an article in the Mechanic's Magazine, 20 June, 1829.

152 The Agenoria, a beam engine type of locomotive, is now in the Railway Museum at York.

'descended carriages ... On 3rd June, 1829, this new and interesting branch of road was opened.'¹⁵³

There is little doubt that the eventual capital cost was greater than the £2,000 per mile suggested by Foster in his original proposal. In 1833, a capital sum of £12,037 8s. 9d.¹⁵⁴ remained to be met before the undertaking would show a clear profit over capital outlay. The scale and expense of this undertaking reflects both the need to meet extending market demands and the fact that the existing canal links were inadequate to move the volume of materials concerned. A broader gauge, 4 feet 8½ inches, was used than for the earlier mineral railways: this later became the standard gauge for steam locomotives. Each coal waggon carried between three and four tons and up to eight waggons werehauled at a time. From this relatively small beginning, the Kingswinford Railway was extended later in the nineteenth century to provide a private communications system for the Dudley estate consisting of over 30 miles of track - and linked to through railway routes at three points¹⁵⁵. Regular profits were made by the railway from the outset, especially from the carriage of goods and materials for John Bradley's Iron Works at Shut End after he took over Foster's undertaking there.

¹⁵³ W. Scott, Stourbridge and its Vicinity (1832), p. 364.

¹⁵⁴ S.C.R.O.D260/M/F/5/19/3, Estate Accounts.

¹⁵⁵ See Section II, Chapter 4, Part C.

Kingswinford Railway

Dr.			Cr.				
From 31st March to 31st December, 1834							
	£	s.	d.		£	s.	d.
Estate for rent of land	56	11	6	Bradley and Co. Carriage	813	16	7
Foley do.	20	0	0				
Poor Rates	4	3	4				
Church Rates ..	2	1	8				
2 Years Rent passing over the Turnpike Road	1	0	0				
Balance carried down	<u>730</u>	<u>0</u>	<u>1</u>				
	813	16	7		<u>813</u>	<u>16</u>	<u>7</u>
				Balance brought down	730	16	7

Throughout the period 1774-1833, canals provided the most satisfactory form of transport in the Black Country and at least six-sevenths of all goods were conveyed by canal as late as 1845¹⁵⁶. The Dudley estate was in no small way responsible for early canal construction in the district, as in the case of road improvements. This work, initiated by the second viscount after 1774, together with his enclosing policy, provided the area in general, and the estate in particular, with two of the essential pre-requisites for economic expansion in the last years of the eighteenth century. In this respect, the advantageous line taken by local canals, together with particular clauses in the acts favourable to Lord Dudley, as in the case of the enclosure acts, further underline the systematic approach to estate development and regional exploitation taken by the second viscount.

¹⁵⁶ D.P.L. 625, Minutes of Evidence Taken before the Select Committee on the Oxford, Worcester and Wolverhampton Railway, 1845, p. 574.

C. The Development of Mineral and Industrial Enterprise

i. Agents

The scale and variety of economic enterprise, which developed on the Dudley estate after 1774, magnified the problem of establishing managerial efficiency which faced landowners at this time¹⁵⁷. From the commencement of the period, managerial functions were limited to specific areas of estate enterprise including minerals. The mineral agent who undertook the organisation and development of industrial and mineral enterprise during the period of expansion initiated by the second viscount after 1774, was Edward Cockshutt, a local landowner. He was ultimately dismissed in 1797 - for incompetence - and this phase of rapid but inefficient expansion was followed by an attempt to secure rationalisation and efficiency. This attempt, 1797-9, although short-lived, was successfully effected by Charles Beaumont. After he was dismissed by Lord Dudley for his radical measures, mineral and industrial enterprise on the estate continued to benefit from Beaumont's activities, and profitability was maintained for much of the period down to 1826 under the management of Charles Roberts. However, inefficiency and falling profits returned by 1833 when the mineral agent, Francis Downing, was strongly criticised by the trustees.

Prof. S. Pollard has shown that salaries of leading managers such as James Watt and Joseph Stainton were between £350 and £400 per annum for the period 1750-1800¹⁵⁸. Cockshutt's salary in 1788 was £200. This was comparatively high and reflects the scope of his responsibilities. However, the evidence suggests that he was inefficient and it is

¹⁵⁷ General systems of administration on the Dudley estate are considered in Part D below.

¹⁵⁸ S. Pollard, The Genesis of Modern Management (1965), p. 142.

likely that, between 1774 and 1788, policy decisions would have been made by the second viscount himself. A particular example of Cockshutt's lethargy is the fact that the ground bailiff of the Coneygre Colliery reported to him in September, 1794, that there had been a considerable increase in water pumped from the pits. Subsequent investigation showed the cause to be an inundation of water through levels driven into Lord Dudley's workings from a neighbouring colliery owned and worked by John Hateley and Richard Jesson. A steam engine had recently been erected by Lord Dudley, valued at £2,500, and the added volume of water was increasing working costs:

'we learn from your Thurling into his Lordship's Colliery at Coneygre that we are materially injured.'¹⁵⁹
An agreement¹⁶⁰ on the apportionment of costs was finally reached in February, 1797. This episode may have occasioned Cockshutt's dismissal which occurred in February, 1797.

He was replaced by Charles Beaumont, a distinguished mining engineer from Newcastle-upon-Tyne¹⁶¹. The purpose of

¹⁵⁹ D.P.L. 12/L, Edward Cockshutt to John Hateley, 10 Jan. 1795.

¹⁶⁰ Ibid. Articles of Agreement between John Hateley, Coalmaster of Etingshall and Richard Jesson, Gent. of Walsall, and Lord Dudley, 15 Feb. 1797. The engine was to work 12 hours a day drawing water from Lord Dudley's colliery for 7 hours (192,150 gallons) and from Messrs. Hateley and Jessons' colliery for 5 hours (137,250 gallons). Expenses per week were £3 - including wages, wear and coal: these were shared by the two parties.

¹⁶¹ C. Beaumont, 'A Treatise on the Coal Trade' (1789), reviewed in the Gentleman's Magazine, Vol. LIX, No. 2 (1789). This contains proposals to reorganise the coal trade in Newcastle and on a national basis.

his employment was to secure

'the best which can with Equity be done for his Lordship's Concerns ... saving all the Coal possible ... raising the greatest quantity and on the lowest terms ... and Simplifying a Work of such Vast Extension so as to prevent imposition without immediate discovery and above all to secure a Vend which would produce an Immense Revenue.'¹⁶²

By implication, this situation had not been achieved by Cockshutt. Beaumont's correspondence on mineral matters was all addressed to the Reverend Thomas Jeans of Paddington. Jeans, a personal friend of the third viscount and tutor to his son, had been invited by Lord Dudley to 'superintend my concerns'¹⁶³ early in 1797 and acted as his London agent. In addition to the usual fixed salary and allowances - in this case,

'Two hundred pounds ... home, Coal, horse and Journeying,'¹⁶⁴

Beaumont negotiated a further payment based on results - that is, increased profitability:

'I perfectly agree with you in thinking three hundred pounds a fair proportion on the plan of Contracting.'¹⁶⁵

Prof. S. Pollard¹⁶⁶ has indicated the growing professional and managerial importance of the coal-viewers from the Tyne and Wear areas during the late eighteenth century, although it was unusual for landowners in the midlands to employ these skilled supervisors. Beaumont was dismissed in 1798 after his progressive proposals antagonised a number of Lord Dudley's agents¹⁶⁷ and he was replaced as principal mineral agent by Charles Roberts, one of Lord Dudley's local mineral

¹⁶² P.R.O. C110/170, Beaumont to Jeans, 11 Sept. 1797, p. 4.

¹⁶³ Ibid. Lord Dudley to Jeans, 10 Dec. 1797.

¹⁶⁴ Ibid. Beaumont to Jeans, 22 June 1797.

¹⁶⁵ Ibid. Beaumont to Jeans, 7 Aug. 1797. This figure was based on contracts arranged by Beaumont for the sale of 400,000 tons of coal annually.

¹⁶⁶ S. Pollard, op. cit., pp. 128-142.

¹⁶⁷ Beaumont's reorganisation of the pits is discussed in

agents. There is no indication as to whether or not Roberts was a professionally trained mining engineer - in view of subsequent developments, it is unlikely that he was.

It is evident that a permanent staff of officials and agents existed by this time and they were collectively referred to as the Mines Department. A detailed list of the staff of this department survives for 1804¹⁶⁸. These men had the responsibility for the management, organisation, and supervision of all forms of mineral and industrial enterprise on the estates and it is probable that the department was set up in this form by Charles Beaumont. In the 1830s the department moved into offices at The Priory, Dudley: before this, it is likely that Lord Dudley's mineral affairs were administered from offices at the Round Oak store-yard. Until 1826, these sectors of the Dudley estate remained relatively efficient and profitable. However, after 1826 when Francis Downing succeeded Roberts as principal mineral agent, mineral enterprise declined and the inefficient management which Beaumont had eradicated returned to the Dudley pits. Downing, designated as an office clerk in 1804, came from a local landowning family, and lacked the professional knowledge required by a principal mineral agent. His errors of judgment were revealed in a report¹⁶⁹ on the collieries submitted to the trustees in 1836 by two mining engineers who considered that

'working preparations were not up to their proper standard but have been retrograding.'¹⁷⁰

Downing's salary was £500 per annum to which he added a further £500 as principal land agent after 1826.

detail in Part D v below.

168 See Chart 7.

169 See Part D v below.

170 S.C.R.O. D260/M/F/5/19/2, p. 55. Report on the Mines by Smith and Liddell, 1836, subsequently referred to as Mines Report, 1836.

Chart 7. The Staff Employed by the Mines Department,
November, 1804

Charles Roberts	Principal Mine Agent
George Rhodes	Travelling Clerk
Richard Bissell	Superintendent of the Works
Francis Downing	Office Clerk
Samuel Chavasse	Office Clerk
William Robinson	Engineer and Carpenter
Edward Jones	Ground Bailiff
James Price	Ground Bailiff
Samuel Hartshorne	Ground Bailiff
Edward Robinson	Bailiff
Edward Wilmot	Bailiff
John Witt	Bailiff. Weighing Machine Keeper (Coal) at Brierley Hill
John Shakspear	Bailiff
George Johnson	Bailiff
Richard Adie	Bailiff
Simeon Bissell	Bailiff
Richard Bissell Junior	Bailiff
Benjamin Bissell	Gauger of Boats
Samuel Lister	Engineer
Joseph Fereday	Weighing Machine Keeper (Coal)
Joseph Robinson	Weighing Machine Keeper (Coal)
James Holcroft	Bailiff
John Wall	Weighing Machine Man
John Pearce	Weighing Machine Man
Edward Harley	Weighing Machine Man
Joseph Parson	Superintendent of the Lime Works
John Collins	Bailiff
Richard Rhodes	Weighing Machine Keeper (Lime)
John Johnson	Weighing Machine Man (Limestone)

Chart 7 (continued)

Thomas Fellows	Ground Bailiff
John Whick	Weighing Machine Keeper (Lime)
Richard Collins	Weighing Machine Keeper (Lime)
Thomas Wainwright	Gauger of Boats.

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The report observed that the only way to secure efficient control:

'is to place the responsibility of this Department on a professional Mine Engineer who is well acquainted with every locality, has a thorough knowledge from long experience in thick and thin Coal mining, and in working and getting all kinds of Ironstone, Limestone etc. ... and who shall regularly record the underground Surveys.

'The constant visits of such Engineer to the different Mines would not only be a relief to the present Bailiffs ... in difficult and intricate cases ... but be a wholesome check (on) ... those ... disposed to relax in them.'¹⁷¹

It is evident that, except for the years 1797-8, the problems of securing managerial efficiency and high profitability were not solved by the Dudley estate in the early period of industrial and mineral expansion down to 1833. These problems were successfully tackled by the trustees between 1833 and 1845¹⁷² when the advice offered in the report on the mines was fully implemented. It was not unusual for mineral land-owners to engage professional men to report on their mineral enterprise. John Buddle, hired in 1835 to examine the condition of the Lambton (Lord Durham) collieries, found the management, unlike that in the Dudley collieries, 'conducted in all its details both above and below ground with judgement

¹⁷¹ Ibid., p. 59.

¹⁷² See Section III, Chapter 2.

and economy.¹⁷³

ii. The Clay Measures

The existence of extensive deposits of brick-clay and fire-clay has already been referred to¹⁷⁴. As the various minerals - coal, ironstone, and clay - were intermixed, all could be raised from the same shaft. Brick-kilns, glass works, and pottery manufactories had all existed in the area between Dudley and Stourbridge for many years before 1774. The manufacture of glass had been introduced into the Stourbridge area by Huguenot immigrants at the beginning of the seventeenth century. Brick-clay lay close to the surface and was extensively exploited after 1774 as the demand for bricks increased for houses and for use in the pits.

Brick-kilns were constructed at pits owned and worked by the Dudley estate. The two main sources were Lord Dudley's New Brockmoor Colliery and his store-yard at Round Oak. In 1833, the wages bill for workmen employed in manufacturing bricks at the store-yard was £620 3s. 8d.¹⁷⁵ The clay measures were only directly exploited by the Dudley estate for the manufacture of bricks - as a branch of mineral enterprise. Bricks, pottery, and glass were not manufactured by the estate for commercial sale although numerous lessees produced such goods throughout the Dudley estate. A royalty of 1/- per thousand bricks was charged by Lord Dudley and the sum paid by one lessee in 1788 gives some indication of the extent of brick manufacture in this area:

'1788 November 5th. Received North and Homer,
Royalty of 1/- per thousand on making 360,000 Bricks
... in the year 1788. £18 0s. 0d.'¹⁷⁶

¹⁷³ D. Spring, 'The Earls of Durham and the Great Northern Coalfield, 1830-1880', Canadian Historical Review, XXXIII (1952), p. 241.

¹⁷⁴ See Chapter 1, Part A above. ¹⁷⁵ Mines Report, 1836, p. 4.

¹⁷⁶ W.S.L. 20/39, Executor's Account, 1788.

Isaac Badger occupied property of Lord Dudley in Brierley Hill and, apart from manufacturing bricks - 87,636 between 1788 and 1790 for a royalty of £43 12s. Od.¹⁷⁷ - he also made 'plain tiles' at 2/- per thousand, 'ridge tiles' at 2/6 per thousand, and 'paving tiles' at 2/6 per thousand in 1796¹⁷⁸. These rates of royalty remained constant throughout the period 1774-1833. Fire-clay royalties were higher as this was a far more valuable commodity than common brick-clay. In 1801, Lord Dudley was listed as one of the principal proprietors of fire-clay in Amblecote and Kingswinford:

'They gather about 4,000 tons a year, of which Mr. Waldron gets 2,500 tons. This clay sells at Stourport for 34/- a ton.'¹⁷⁹

No detailed evidence of Lord Dudley's profit from this source survives.

Glass manufacturing developed on estate property in Amblecote and the Brettell Lane and Wordsley districts of Kingswinford manor:

'Broad-glass (has been) ... manufactured here for several generations ... Chrystal glass has long been made here but the art of cutting and engraving it was not long since brought from Germany to London and from London hither.

'This manufactory is considerably increased of late years ... Persons ... employed in and about Stourbridge in the manufacturing of glass are 520.'¹⁸⁰

Three glass works were in operation by 1790 but two of them turned to the manufacture of pottery-ware after 1797 - probably reflecting the reduced demand for luxuries during the war. One of these glass works was established in

177 D.P.L. 614/20, Lord Dudley's Great Rental, 1791.

178 D.P.L. 32/6, Bradley's Accounts, 1796-1817.

179 Reverend Stebbing-Shaw, The History and Antiquities of Staffordshire (1801), II.

180 Ibid., p. 237.

Brettell Lane by Samuel Edge. In 1779 he paid £43 rent, £2 2s. Od. for clay and £4 4s. Od. for slip clay - this seems to have been a fixed royalty, unlike the royalty on bricks. In 1825, the rental on this property had increased to £75. The second glass works also operated in Brettell Lane beside the Stourbridge Canal and was established by William Seager, after 1774. The rent on this property in 1789¹⁸¹ was £13 for 'glasshouse and buildings', £20 in 1797 and, in 1825¹⁸², £60 for 'House, buildings and Glasshouse used as a Potwork.'

One property remained a glass works throughout the period before 1833 - this was occupied by the Grazebrook family at Audenham Bank (Wordsley) under a lease granted for 21 years in 1783¹⁸³. By the terms of the lease, the glass house with furnaces, millhouse, warehouses and buildings were rented at £53 per annum and maintenance and repairs were undertaken by the lessee at her own cost. The same family probably took out a lease of Lord Dudley's land at the Delph in 1796¹⁸⁴ to supply clay to the Audenham Bank glass works. Under the terms of the lease, 30 acres were occupied at a rent of £32 per annum with the right to

'erect Engines etc. to mine Glasshouse Clay at 9/- per ton Royalty, Pot Clay, 5/- per ton, Offal Clay, 2/6 per ton, Potters Clay, 2/-.'¹⁸⁵

A ton was defined as 24 cwts. at 120 lbs. Further royalties were agreed at

'1,000 of Quarries, Cress, and Gutters made from Common Surface Brick Clay, 2/6, and for each 1,000 Bricks or Tiles, 1/6.'¹⁸⁶

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- 181 D.P.L. 609/20, Lord Dudley's Great Rental, 1789-1790.
182 D.P.L. 613/20, Lord Dudley's Great Rental, 1825.
183 D.P.L. 2/13, Lord Dudley to Mrs. Sarah Grazebrook. Lease of Land and Glass House at Audnam Bank, 20 Sept. 1783.
184 D.P.L. 10/26, Lord Dudley to Messrs. Grazebrook. Lease of Buildings, Lands, and Clay Mines at the Delph, 6 Feb. 1796.
185 Ibid. 186 Ibid.

In default, Lord Dudley could re-enter and sell the stock and machinery to recover the debt. His agents were entitled to enter weekly or from 'time to time' to 'weigh the quantities and inspect the books' and a minimum royalty of £500 per annum had to be paid. One concession allowed the lessee to raise brooch coal, without payment of royalty, to work the engine. This mineral lease was very sound in that it clearly established a range of royalties appropriate to the respective value of the various clays worked, from common brick-clay to the most valuable refractory glasshouse clay, and in so far as it provided for regular inspection by Lord Dudley's agents and guaranteed a minimum royalty from the property as an incentive to the lessees. If all mineral leases had taken this form why should Edward Cockshutt be accused of inefficiency? The evidence suggests that the main weakness of business management lay in the quality and effectiveness of lesser agents and bailiffs in the employ of Lord Dudley although coal enterprise in particular was far less efficiently administered¹⁸⁷.

There is also evidence to suggest that the form of this lease - where it was particularly efficient in safeguarding Lord Dudley's interests, was unusual and that in other respects this lease also had serious flaws. In 1804 the principal mineral agent, Charles Roberts, recorded some observations¹⁸⁸ on this particular lease. He noted that there was a minimum rent of £500 and that

'if they do not get so much clay one year as the royalties fixed ... they can make good the deficiency the succeeding year'

which was 'not so with other Lessees'¹⁸⁹.

Whether or not this refers to the fact that other lessees

187 See Part C v below.

188 D.P.L. 6/A, Mr. Roberts' Observations on Messrs. Grazebrooks' Clay Mine Lease, 7 Nov. 1804.

189 Ibid.

did not have to pay a minimum rent or were not entitled to carry the deficiency into the following year, is not clear. He criticised the fact that the lessees

'use the storehouses and conveniences in housing their own clay and also shipping the same without paying any consideration whatsoever.'¹⁹⁰

However, the lessees were claiming that there was 'no best clay' and wished to have the lease altered. Other weaknesses of the lease were that the lessees

'have power granted to make Levels but are not bound to keep them in repair.'¹⁹¹

This would render it more difficult and costly for Lord Dudley or subsequent lessees to make underground workings safe for further mining operations. It is evident that Roberts was attempting to continue the policy of increasing the efficiency of mineral enterprise begun by Beaumont. Messrs. Grazebrook probably supplied the glass works at Audenham Bank throughout this period - by 1825, the annual rent of this glass works had increased to £148.

Potteries too were established throughout the southern parts of the estate. These were more numerous than the glass works leases and required less capital to construct. Royalties charged on pottery-ware were probably the same as those levied on Isaac Badger's enterprise and on such articles made by Messrs. Grazebrook at the Delph. One pottery lease demonstrates another source of income to Lord Dudley from the exploitation of clay measures by lessees. A farm in the Thorns district of Pensnett Chase, vacated in 1779, was occupied by J. Onions and W. Stimson

'who agree to establish a pottery there, repair the buildings (being allowed materials for the house) and take all their coals from Lord Dudley's works and to pay £2 2s. Od. per annum for what clay they get off the Common for this work.'¹⁹²

190 Ibid.

191 Ibid.

192 D.P.L. 610/20, Lord Dudley's Rental, 1779.

The 'common' would be Pensnett Chase - as yet, unenclosed. The sale of coal to pottery, glass, and brick works on the estate would no doubt afford Lord Dudley a considerable source of income as a great deal of coal was needed for firing the kilns. In this case, the colliery referred to was probably Lord Dudley's Level Colliery. Whether or not all lessees were compelled to purchase Lord Dudley's coal is not clear, but it seems unlikely that other sources would be tolerated.

A regular income from exploitation of the clays was enjoyed by the Dudley estates throughout the period 1774-1833. This took a variety of forms including ground rent, specific royalties for the various clays calculated on the quantity extracted, royalties for different types of manufactured articles, and from the sale of coal to the manufacturers. A further advantage was gained by Lord Dudley when all clay, except common brick-clay, was reserved to him under all areas enclosed after 1774, whether or not he owned the surface. However, the Dudley estate did not manufacture glass or pottery-ware in spite of the development of such enterprises on the estate. Large numbers of bricks were made at collieries owned and worked by the estate, but this activity was essentially an aspect of estate mineral enterprise as the bricks were used in pits worked by the estate. The income derived from the exploitation of the clays was only a small proportion of the total estate revenue: receipts from agricultural properties, ironworks and mines were always considerably higher. This limited involvement of the Dudley estate in the glass and pottery trade is probably also explained by the fact that, unlike the limestone, iron, and coal trades, the Lords Dudley did not represent the largest local interest.

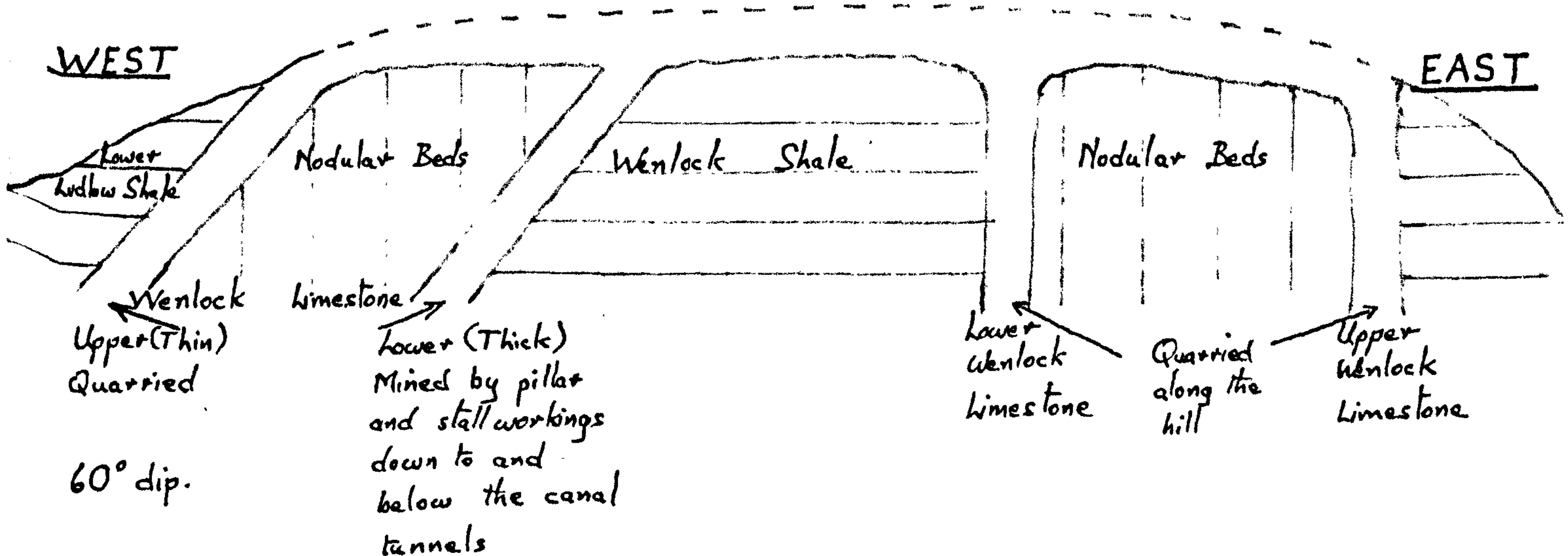
iii. The Limestone Measures

As the regional economy developed, the deposits of limestone¹⁹³ at Dudley Castle Hill, Wren's Nest, and Sedgley were more intensively exploited as a source of lime for agricultural purposes and for limestone as a flux in the blast furnaces: the right of ownership gave the Dudley estate a virtual monopoly in the local supply of these commodities. Particular geological features of the limestone outcrops have already been noted - the angle of dip along the western side of Wren's Nest hill was 60° and was practically vertical on the eastern or Tipton side. These characteristics determined the mining techniques resorted to. The two vertical beds of upper and lower Wenlock Limestone were quarried along the line of the hill. On the western slopes, the upper bed was quarried and the lower bed was mined by a pillar and stall method whereby the limestone was followed downwards into the ground leaving pillars of stone to support the inclined roof. This bed was worked downwards until the working reached the level of the canal tunnels driven into the limestone from the Castle Mill Basin on the Dudley Castle Canal Tunnel.¹⁹⁴ By 1836, several working levels had been driven below the level of the canal tunnel. Ironmasters preferred the upper bed as its qualities provided a more satisfactory flux: both beds of limestone could, however, be used for agricultural or industrial purposes.

193 See Map 2.

194 See Map 4.

A section through Wren's Nest Hill



The major lessee in 1795 was Charles Norton and a dispute arose when he sub-contracted part of the workings to Messrs. Fereday, Mallen, and Turton:

'Lord Dudley is very much surprized to find that Contracts are understood to have been entered into by Mr. Norton ... respecting part of his Limeworks without his knowledge as it is expressly provided by Mr. Norton's Articles that no such Contracts shall be made without his Consent.'¹⁹⁵

Cockshutt replied that no limestone would be removed until Lord Dudley had seen the agreements and that he expected Norton to increase the profitability of the limestone works:

'all ... he has done and the mode he proposes to proceed in gives satisfaction and the Works will improve.'¹⁹⁶

The extent of the market for Lord Dudley's minerals is indicated by Cockshutt's assurance that in spite of problems created by

¹⁹⁵ D.P.L. 6/K, Thomas Brettell to Edward Cockshutt, 27 April 1795.

¹⁹⁶ Ibid. Cockshutt to Brettell, 1 May 1795.

'settling with the Men ... I shall go to Stourport next week to receive the Coal Accounts and Collect the Limestone Accounts as fast as lies within my power.'¹⁹⁷

It is probable that the estate had worked all the limestone mines and quarries before 1795 rather than lease them but, because of falling profits and technical difficulties, Lord Dudley decided to lease some of the workings:

'I am sorry to see that the net profits gradually decline and that his Lordship will be disappointed in his expectation of their produce of £3,000 a quarter. There is a very great devaluation indeed in the Lime Account but this Mr. Norton's Contract will in future remedy.'¹⁹⁸

Norton circularised the local market in a bid to increase the sale of limestone:

'Wren's Nest Hill Limeworks. Chas Norton begs leave to acquaint the public that there will be a regular supply of Lime at 3/6 per Quarter of nine Winchester Bushells and to prevent Impositions, each Quarter shall weigh 800 weight at six score to the hundred to be weighed at the Machine erected at the Works and to be paid for on delivery or at the end of every 3 Months.

'None but good prime Limestone will be permitted to be burnt in future and not more than 2d. per quarter will be permitted to be taken by the Lime men for Loading.'¹⁹⁹

This implies that before Norton took out his lease, practices such as short weight, poor quality limestone - perhaps from the nodular beds, and high loading charges existed. The whole episode provides further evidence of Cockshutt's weak management of affairs.

A number of limestone leases were concluded between 1796 and 1800 in addition to the arrangement with Norton. All of them were sound²⁰⁰ and designed to produce a considerable

¹⁹⁷ Ibid.

¹⁹⁸ Ibid. Brettell to Cockshutt, 23 May 1795. In 1794, quarries on the western side of Wren's Nest sold £1,232 15s. 11d. of limestone and in 1795, a total of £2,130 14s. 1d.

¹⁹⁹ Ibid. Statement by Chas. Norton. Quarter here probably refers to a quarter of a ton: a Winchester Bushel was c.77 lbs.

income for Lord Dudley and efficient exploitation of the mines and quarries. One lease²⁰¹, for seven years, provided for the opening and working of a limestone quarry at Hurst Hill, Sedgley. At least £1,000 had to be spent on the construction of railways, kilns and drainage levels and the business was to be conducted

'in a proper and workmanlike manner under the direction and control of the said Viscount or his Agents.'²⁰²

A minimum of 20,000 tons of limestone was to be raised each year and to produce a minimum royalty of £1,000. Royalties were charged at the rate of 1/- per ton of limestone

'to be sold ... for the supply of the Land Sale only' and 2/- for limestone sold

'for the use of any Iron Furnace or Foundry or for the supply of the Water sale.'²⁰³ It is not clear

why this distinction should be made between limestone sold in the immediate vicinity (land sale) and more distant markets along the canals (water sale). Perhaps this was an attempt by Lord Dudley either to dominate limestone sales along the canals - by quarries still worked directly by the estate - because prices would be higher in areas away from the limestone deposits, or, it may be that he wished to encourage iron production by furnaces in the vicinity leased from the estate and from which he would also draw a royalty on the amount of iron produced. The lessees had to construct a weighing machine, keep and present accounts every quarter, and purchase all coal and slack from the nearest colliery belonging to Lord Dudley.

200 They were not concluded by Cockshutt but by Charles Beaumont - or modelled on his leases after his dismissal in 1798.

201 D.P.L. 12/L, Articles of Agreement between Lord Dudley and Messrs. Jenkins and Mallen, 1798.

202 Ibid. A ton was defined as 21 cwts. of 120 lbs.

203 Ibid.

The local demand for limestone, as a flux, was increasing rapidly and this lease opened up an area where no quarries or mines existed at the time. In 1788, there were six mineral blast furnaces in south Staffordshire. This total increased to 14 in 1796, 42 in 1806, and 84 by 1823.²⁰⁴ Messrs. Jenkins and Mallen were obviously satisfied with their arrangements with Lord Dudley because, in 1800, they took over the quarries worked by Charles Norton at the Wren's Nest Hill²⁰⁵. This lease contained similar conditions to the first arrangement. It ran for six years and a minimum of 20,000 tons had to be raised

'to answer the demand and supply of the Land Sale and no part of such Quantity to be sold or conveyed by Water.'²⁰⁶

There was a fixed royalty of 2/- per ton: this would produce a minimum of £2,000 a year for Lord Dudley. These quarries ran from the northern end of the hill along the western (Dudley) and the eastern (Tipton) slopes. Apparently, Lord Dudley's agents made some attempt to control the areas supplied and the market prices charged by the various limestone lessees. In this case, not only were the lessees to abstain from selling along the canals, but were bound to supply the

'land sale on the western side of Wren's Nest Hill as an open public work, as now used'.

Lime burnt at the kilns was to be sold at between 7/9 and 8/9 per ton and limestone sold at a price not exceeding 4/3 per ton to any iron furnace 'erected upon the said Viscount's Estate.' The usual safeguards, as introduced by Beaumont, were included: Lord Dudley's agents could inspect the accounts and weights at any time and the works had to be

²⁰⁴ See Appendix 5.

²⁰⁵ D.P.L. 6/K, Articles of Agreement between Lord Dudley and John Jenkins and James Mallen of Sedgley, Lime Merchants. 1800.

²⁰⁶ Ibid.

carried on in a 'workmanlike manner.' At the end of the contract, Lord Dudley could purchase

'all the working Tools and Implements ... at a fair Valuation ... they (the lessees) having purchased the same of Chas. Norton the late Contractor who formerly purchased the same of the said Viscount.'

Lord Dudley would pay and allow for any new railways or 'other erections' constructed during the lease. One final restriction was a clause which allowed the lessees to quarry only 'the outside working Strata ... not the middle Stratum of Limestone'. This meant that the upper limestone measures would be worked first on both sides of the hill leaving the lower measures intact. If the lower measures were worked in an area where the upper limestone measures remained intact, subsidence could fracture the line of deposit and make the subsequent working of the upper strata both dangerous and expensive.

The last lease granted at this time was a new arrangement with Norton, Fereday, and Turton in 1800 to work all the quarries and mines worked at that time by Norton. These were the workings originally developed by Lord Dudley after 1775 from Castle Mill and extended after 1786 by canal tunnels into the eastern side of Castle Hill and along the line of the lower limestone measure towards the southern end of Wren's Nest Hill. The 1800 lease was the most extensive granted by the Dudley estate and covered all quarries at Shirt's Mill Tunnel (Castle Mill), Mons Hill Tunnel (at the northern end of Wren's Nest) and the two northern strata at Wren's Nest Hill. It was a particularly difficult undertaking because

'using all existing railways, wharfs, canals, cuts, aqueducts, levels, kilns etc,'

the lessees had to extend the canal tunnels already cut from

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²⁰⁷ D.P.L. 6/A, Articles of Agreement between Lord Dudley and Charles Norton of Birmingham, Samuel Fereday and William Turton, Lime Merchants of Sedgley, 24 March 1800.

the Dudley Canal Tunnel at Castle Mill into the eastern side of Castle Hill and towards the Wren's Nest Hill, and work the limestone deposits along the northern slopes of the hill. This involved working the lower deposit by pillar and stall down to the canal level (about 300 feet), extending the canal, and quarrying the upper deposit at the same time. Safeguards were included in the lease to ensure the efficiency of the operations:

'Levels and Cuts must be made in a workmanlike manner so as to convey Boats and other Vessells from the face of the Work with full lading ... (and) ... at the end of the Lease to yield up all Cuts or Canals in ... a perfect navigable state and brought up to within 30 yards of the face of the Work.'

From the junction of Lord Dudley's private canal tunnels with the Dudley Canal Tunnel at Castle Mill, materials could be transported, direct from the working face, along the Birmingham Canal complex or, via the Dudley Canal Tunnel, along the Stourbridge Canal system. It is significant that these particular lessees were allowed to 'dispose of all the Limestone ... by Water Sale only' This provides further evidence that Lord Dudley used his monopoly to prevent a free market in the distribution of limestone to local markets. A minimum of 45,000 tons was to be sold yearly at a royalty of 2/- per ton: this would produce an income of at least £4,500 for Lord Dudley. The price of limestone was not to exceed 4/3 a ton 'into the boats' and the lessees had to raise amounts over 45,000 tons to supply iron furnaces on Lord Dudley's estate at Kingswinford, Dudley, and Sedgley which Lord Dudley was

'under contract to supply at the present price of 4/6 into the Boats or Waggon's'.

Lime was to be sold at 9/4 per ton. The lease was to run for two years only, probably to allow Lord Dudley to amend it, if necessary, in response to market conditions and prices.

All of these leases appear to be sound and designed to secure a guaranteed income for Lord Dudley and to safeguard his interests generally. Some of the limestone workings remained under the direct management of the estate. The leases alone would produce a minimum of £7,500 per annum in royalties on 85,000 tons of limestone. This sum compares favourably with the sales from auarries on the western side of Wren's Nest of £1,232 15s. 11d. in 1794 and £2,130 14s. 1d. in 1795 and reflects both the growing demand for limestone by the south Staffordshire ironmasters and the efficiency of the response made by the Dudley estate after 1798 to take advantage of the situation. Over the years, the scale and complexity of the workings increased. The canal tunnel to Wren's Nest cut the hill in an east-west direction and, eventually, an underground basin 210 feet long and 25 feet wide was constructed 300 feet below the surface. Limestone was brought to this basin along railways running to the northern and southern sides of the canal, and following the line of the upper and the lower seams, both above and below the level of the canal itself.

The accounts survive for Lord Dudley's Hurst Hill Lime Works in Sedgley for September 1826²⁰⁸. These indicate that various rates were paid for different areas of the mines and quarries worked and that contractors worked sections of the undertaking employing their own men. Costs of materials for the works and for the railway connecting them with Lord Dudley's wharf on the Birmingham Canal at Deepfield, Coseley, are also included.

²⁰⁸ D.P.L. 6/A. Account of Payments at Lord Dudley's Hurst Hill Lime Works for September 1826 by Josiah Rhodes, Bailiff.

	Tons	Cwts.		£	s.	d.
' John Cumpston getting at the New Work	1151	10	of lime- stone at 1/11	110	7	0
Joseph Baker getting at New Shaft Quarry	612		" at 2/-	61	4	0
Samuel Astley and Co. Setting in Kilns, finding Slack and Burning Lime	611		" at 1/7	48	7	5
Samuel Astley and Co. Delivering	477	3	of lime at 6d.	10	18	7
John Cumpston for drawing to Canal	1151	10	of lime- stone at 4d.	19	3	10
Joseph Sutton Loading into Boats	1151	10	" " " 1½d.	7	3	11
John Insull for working the Engine and finding materials 5 weeks at £1 12 0 per week:				8	0	0
Josiah Clarke 25 days at the railroad at 3/- per day				3	15	0
Lord Dudley's gift to the Box				4	12	3
Various including - Josiah Rhodes a quarter of a year's salary				20	0	0
S. Barford 4 Ticket Books, 300 leaves in each at 7/-				1	8	0
Mary Wilkes 20 lbs. of sorted plate rails at 3½d.					5	10
				£306	15	0

Limestone and lime would be sold directly by Lord Dudley - the expenses above represent one month's working costs. Assuming that the selling price of limestone was the same as in 1800 - approximately 4/6 per ton and 9/4 per ton for limestone, the total income from 1151 tons of limestone would be c. £356 9s. and c. £220 10s. from 477 tons of lime. This would produce a net profit of £273 4s. for the month of September.

However, limestone enterprise, as in the case of agriculture and collieries, became less profitable and was inefficiently managed by 1833. In their report²⁰⁹ on Lord

²⁰⁹ S.C.R.O. D 260/M/F/5/19/2, Report by Messrs. Smith and

Dudley's mines presented in 1836, Smith and Liddell provided a detailed account of the state of the limestone workings after 50 years of intensive exploitation. In general, the quarries and mines 'fully manned, would supply almost unlimited demand.' Many lay idle in 1836. Parts of the Wren's Nest workings had been carelessly engineered so that the roof had fallen in blocking the access between various stalls (areas worked between the supporting pillars or ribs) and the canal tunnel so

'cutting off the supply of stone and destroying the communication for ever between the wall of Stone and the place of export.'²¹⁰

By 1836, workings extended several hundred yards from the line where the canal cut the southern end of Wren's Nest Hill - but at varying levels: some workings were above canal level, others along the same level, and there were deeper workings 3 levels below the canal. By 1836 the canal tunnel extended a distance of 714 yards from its junction with the Dudley Tunnel at Castle Mill. Railways brought stone from the faces to the pit which raised stone to the level of the canal - in the case of deeper workings: railways also operated in the stalls at canal level whilst above this level, stone was

'either cast down into the Stalls below which are on a level with the Canal or drawn to the Surface up some of the Shafts.'²¹¹

Horizontal levels were also driven between the upper and lower seams at intervals to provide access for miners and railway communication. All water above canal level was fed into the canal tunnels by a series of adits while steam engines pumped water from the lower workings into the canal. This arrangement served the dual purpose of draining the mines and maintaining the water level in the Dudley Tunnel

Liddell on the Mines, etc. at Dudley, 1836. Subsequently referred to as Mines Report, 1836.

²¹⁰ Ibid., p. 18.

²¹¹ Ibid.

where it cut through the watershed of the Sedgley-Dudley ridge. Similar arrangements for pumping, transport, and complicated levels of working existed in the mines under Dudley Castle Hill although, in this case, the tunnel and wharves cut from the through Dudley Tunnel were less extensive than those cut under the Wren's Nest Hill. The most valuable stall being worked in 1836 was at canal level in the upper seam at the Wren's Nest: it already extended to 400 yards and was expected to run for 530 yards eventually. A total of 16 stalls were being worked at the Wren's Nest and a further 4 at Hurst Hill, Sedgley - the latter were connected by the railway to the Birmingham Canal at Deepfields.

It is evident that although the scale of existing operations was considerable, the limestone mines were not working to full capacity and were inefficiently managed:

'We observed in our survey much inconvenience and some loss by a perseverance in the old System of Rail Roads (probably plates) still practised throughout the Limestone Quarries where the gradual introduction of rails of more modern construction, and Wagons of better gear would enable the Workman to convey the Stone from the respective forefields (working faces) to the pit Shafts or Canal Boats ... with greater facility, and render unnecessary the present loss of level in working the Stalls which we presume has been done by the Workman to relieve themselves in propelling the loaded Waggon over these defective roads by manual labour.'²¹²

Good limestone was obviously being left in the workings as the miners maintained a gradient on the railways to assist them in pushing high-g geared trucks along a plate track. The full height of many of the stalls was as much as 50 feet: the dangers of working a weak rock like limestone, together with damage to the eyes from limestone dust, and the extent of the workings, made the life of the limestone miner more strenuous and hazardous than that of the collier. In defence of his management of affairs, Francis Downing, the chief

mineral agent, submitted his own observations on the mines report to the trustees. On the matter of the railways in the limestone mines he claimed that

'the Railways now in use are proved by experience to be best suited to the purposes they are used for and much less expensive than the modern construction here referred to.'²¹³

This was typical of his casual and conservative approach to the problems of mineral enterprise.

Further evidence of this attitude is provided by the report's criticism of marketing arrangements in 1836 which were considered inadequate to meet growing competition from other limestone owners:

'We candidly acknowledge our inability to suggest any plan to re-establish the Limestone trade in its former prosperous condition. The present depression ... is principally occasioned by the great competition to which it is now enjoyed from the introduction into this district of the Mountain Limestone from Caldor-low in the Northern part of Staffordshire, the Walsall Quarries now very extensive, the Sedgley Beacon Stone Pits, and from the recent discovery of Limestone at Dudley Port (Tipton) ... on the banks of the Birmingham Canal, where the Upper bed of Stone only is worked which is generally considered by Iron Masters preferable to the Lower Bed, as a flux in smelting Iron Ore.'²¹⁴

The inference was plain - in spite of the emergence of rival suppliers of limestone, Lord Dudley possessed extensive quantities of upper limestone, connected with the local canal system and situated much closer to local markets than many of the rival sources referred to. The depression in Lord Dudley's share of the trade was principally due to bad management which continued to assume a monopolistic position in the limestone trade whereby

'both beds of Stone are worked ... and each Customer is required to take such Stone as may fall to his Lot,

²¹³ S.C.R.O. D260/M/F/5/19/4, Downing's Comments on the Mines Report, May 1836.

²¹⁴ Mines Report, 1836, p. 22.

'whether the quality is suitable to his purposes or not.'

Two-thirds of the limestone sold by the Dudley estates in 1836 was from the lower seams and some ironmasters working furnaces on the estate west of Dudley were purchasing limestone

'conveyed from Dudley Port, past a part of the Limestone Works of the Trustees (at Castle Mill).'

The report recommended an increase in working the upper beds of limestone and that it should be guaranteed that ironmasters would receive only the best quality of stone. This would increase the market for Lord Dudley's limestone and allow him to increase the price of his limestone from 4/6 per ton to 5/- per ton - the price charged for upper limestone at the Dudley Port quarries, since

'we know no reason why the same price should not be obtained ... for stone of the same quality in the same Market.'

The report observed that

'we are informed that the Limestone Quarries were let on a former occasion by the predecessor of the late Earl, and that, at the expiration of the leases, much injury was done to them and that it cost great trouble and expense to place them in good order and condition again, but we attribute this either to defective Leases or to the neglect of the Mine Agents.'

Downing's rejoinder was that

'it is very easy for a person who has not been accustomed to deal with Mine lessees to write such a futile sentence as this.'²¹⁵

It is not clear at what point the estate had begun to work the limestone quarries and mines again, but it may have been as early as 1808 when all the leases discussed above had expired. Nevertheless, in spite of managerial deficiencies, the limestone workings sold lime and limestone worth £13,509 9s. in 1834: but, as working costs amounted to £11,356 the net profit would be far less than that enjoyed by the third

²¹⁵ Downing's Comments on the Mines Report.

viscount in the 1790s. It was the efforts of the trustees which revived and expanded the enterprise and profitability of the limestone workings after 1833, as in the case of all the other economic interests of the Dudley estate.

iv. The Iron Trade

Early developments in the south Staffordshire iron trade have already²¹⁶ been considered. With the introduction of the coke-smelting of iron, the steam blast engine, and Cort's puddling process, there was a phenomenal expansion²¹⁷ in the output and scale of the iron industry in the area which, in 1788, produced 4,500 tons of pig iron from six blast furnaces and 216,000 tons from 95 blast furnaces in 1827. Such developments closely influenced the policies of the Dudley estate during the early phase of development between 1774 and 1833 because of its extensive deposits of coal, ironstone, and limestone. Nevertheless, the fortunes of the iron trade varied considerably over the period and, because of the close link between the iron and mineral trades, a depression in the demand for iron immediately reacted on the employment and wages of the miners. Prof. T. S. Ashton²¹⁸ has shown that the price of pig iron remained steady to 1796 as output increased to meet the growing demand but, after 1800, new furnaces were erected when the Armed Neutrality of the North halted exports of Swedish iron to Britain. After the war, capacity exceeded demand and, apart from 1818, the iron trade remained depressed until 1822 when a more buoyant phase began. This was followed by a depression between 1825 and 1830. In general, the development of the iron trade on

²¹⁶ See Chapter 1, Part C.

²¹⁷ See Appendix 5.

²¹⁸ T. S. Ashton, Iron and Steel in the Industrial Revolution (1951), pp. 146-156.

the Dudley estate closely reflects these trends. The average price of pig iron in south Staffordshire was £6 5s. 0d. per ton between 1801 and 1810, £5 4s. 0d. per ton in the period 1810 to 1820, £4 9s. 0d. per ton from 1820 to 1830, and £3 per ton in 1832²¹⁹. By 1833, increased demand produced a reversal of the trend and the price of iron rose to £5 10s. 0d. However, this recovery was not reflected in the fortunes of the Dudley estate²²⁰. Finished or bar iron fetched £18 per ton in 1815 and £8 per ton by 1833. Another factor which influenced the demand for Lord Dudley's minerals was technological advance - which reduced the quantity of coal needed to make one ton of pig iron from 10 tons of coal in 1800 to 4 tons in 1840, and 58 cwts. by 1871²²¹. So long as the Black Country iron trade continued to expand, the demand for coal would not necessarily decrease: this factor became more significant with the contraction of the local iron trade after 1860. Over the period 1774-1833, the productive capacity of local blast furnaces increased from about 750 tons per annum in 1796 to approximately 2,275 tons per furnace in 1827²²². All of these factors need to be taken into account when assessing the state of the Black Country iron trade during this period.

One of the oldest ironworks on the Dudley estate was at Cradley on the banks of the Stour. This was leased²²³ to Messrs. Crofts on 1 February 1774 for a term of 20 years, at an annual rent of £210, under an agreement which did not place rigorous obligations on the lessees. The latter were free to take all the limestone they required from Lord Dudley's estate

219 W. White, Directory of Staffordshire (Sheffield, 1834), p. 51

220 See below.

221 G. R. Morton and M. Le Guillou, 'The Rise and Fall of the South Staffordshire Pig Iron Industry', The British Foundryman, July 1967.

222 S. Timmins, Report on the Iron Trade of South Staffordshire (1865), p. 7.

at Coneygre and the Old Park, and were allowed to take timber for maintenance free 'from the rough'²²⁴. However, the works had to be maintained in good order and the lessee was entitled to

'purchase timber from Lord Dudley's woods for converting into Cole Wood ... and to pay the Lessor 11s. 6d. a Cord.'²²⁵

At this time there was no coke furnace on the Dudley estate and as Lord Dudley agreed not to sell 'cordwood' to any other furnace or forge, it is evident that charcoal, still the main source of fuel in local furnaces, was in short supply. By 1788, all the six blast furnaces at work in Staffordshire were using the new coke-smelting technique.

The available evidence in the Dudley papers suggests that many of the new furnaces constructed in the Black Country after Wilkinson successfully introduced the new coke-smelting method into the area at his Bradley furnace in 1766, were on the Dudley estate.

	<u>No. of furnaces in south Staffordshire</u>	<u>Furnaces leased from the Dudley estate</u>	<u>Total Output</u>
1788	6	3	4,500 tons
1796	14	5	13,210 tons
1806	42	12	49,000 tons

There may have been additional furnace leases but no evidence survives. The first coke furnace on the estate was probably erected by Messrs. Parker at Tipton Green on the Birmingham Canal in 1783²²⁶. They undertook to purchase all their

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- 223 D.P.L. 15/8, Lord Dudley to Richard Croft of Stourbridge, Ironmaster, and William Croft of Wombourn, Ironmaster, 1 Feb. 1774. Lease of Cradley Forge and Cradley Furnace in Rowley and Cradley together with Cradley Slitting Mills or New Mills and Pools and Workmen's Houses.
- 224 Ibid. This area was not yet enclosed.
- 225 Ibid. A cord was usually 128 cubic feet.
- 226 D.P.L. 23/6, Lord Dudley to G. J. A. and B. Parker: Lease of Land in Tipton near Tipton Green to Manufacture Pig, Cast Iron and Other Branches of Iron Manufactory, 1783.

ironstone, coal, and limestone from the lessor and to transport it at their own expense. A scale of prices was established for the different types and qualities of minerals.

'Large ordinary coal	- 3/-	a ton of 20 cwts. at 120 lbs.
Lumps	- 2/6	
Slack	- 1/6	
Limestone	- 4/-	
Lime	- 3/-	a quarter of 8 Winchester Bushels.'

As defined here, both the ton and the quarter weights differed from those contained in the limestone leases discussed above and this underlines the lack of standard weights in the local mineral trades at this time and makes it difficult to calculate production costs. Ironstone purchased from Lord Dudley's pits was to be measured in

'blooms of 35 cwts at 120 lbs per cwt. If the ironstone has lain on the (pit) bank for more than 1 month, the Bloom shall contain 33 cwts.'²²⁷

This use of the term 'bloom' - more usually applied to lumps of iron worked in the old bloomery process of iron-smelting, refers to the practice of piling ironstone into heaps on the surface which were 2 feet high and covered an area of 12 square feet. These heaps were estimated to contain about two tons of ore²²⁸. Lones stated that this term, a crude form of measurement, was in use during the period 1776-1808. Oxidisation would account for loss of weight when the ironstone was exposed to the atmosphere over a period of weeks - this probably explains the variable definition if a ton of the ironstone had been 'on the bank' for longer than one month. Lord Dudley's income from the lease was drawn only from the sale of raw materials and a small ground rent of £3 per annum: there was no attempt yet to levy a royalty on the amount of iron produced. This ironworks later became known as the

²²⁷ Ibid.

²²⁸ T. E. Lones, A History of Mining in the Black Country (1898), p. 28. 'Each acre of good mine yields c. 1,000-1,200 blooms.'

Tipton Furnaces - two existed by 1784.

It was at the Level on the banks of the Dudley Canal in Kingswinford that the largest concentration of ironworks developed on the Dudley estate before 1833. These works were known as the Old and the New Level Iron Works. There is some doubt over the construction date of the Old Level Iron Works but not over the first lessee:

'The first blast furnace at the Old Level was put up by Mr. Croft, a Shropshire man, and was built of stone. It was a small furnace, charged at the top in the old-fashioned way, the coke, limestone and iron mine being carried up by hand in buckets.'²²⁹

The Kingswinford rental for 1779²³⁰ records that Messrs. Crofts occupied premises at an annual rent of £210: another entry for 1789 describes this property:

'Messrs. Gibbons for late Messrs. Crofts' Forges, Mill and Lands in Kingswinford and Rowley, £210.'²³¹

Messrs. Gibbons did take over the Crofts' leases, but these entries may refer to the Cradley forge and furnace which, as they lay on both banks of the Stour, would be in both Kingswinford and Rowley. However, a lease²³² of 1800 refers to the lease of land at the Old Level in 1784 to William and Richard Croft and it is likely that the Old Level furnace was constructed at that time by Messrs. Crofts - this too was occupied by Messrs. Gibbons in 1789²³³ at a ground rent of £6, by which time a mill and a forge had been added to the ironworks.

In 1800, Messrs. Gibbons took out another lease of estate

²²⁹ B.H.P.L. County Advertiser, 21 Feb. 1914. Article by J. W. Clulow based upon a manuscript of his father.

²³⁰ D.P:L. 610/20, Lord Dudley's Rental, 1779.

²³¹ D.P.L. 609/20, Lord Dudley's Rental, 1789.

²³² D.P.L. 20/1, Lord Dudley to Thomas, William and Benjamin Gibbons. Lease of Lands and Mines at the Level, 25 March 1800.

²³³ Lord Dudley's Rental, 1789.

property situated a short distance along the canal towards Dudley, and began to erect the New Level Iron Works. They undertook to construct

'a substantial furnace, foundry and ironworks with all necessary buildings for the manufacturing of ironstone into pig iron and castings'²³⁴

within 18 months. Messrs. Gibbons had taken over the Old Level Iron Works in 1788 and obviously wished to expand their enterprise in the same area: this lease entitled them to adjacent lands and the underlying minerals at an annual ground rent of £47. The new furnace, forge and mill was to be erected at a capital cost of at least £1,500 and the lessees were allowed to mine the coal and ironstone under their property on payment of royalty to Lord Dudley. This is a far more precise lease than that granted to Messrs. Parker in 1783 and reflects the growing importance of iron manufacture in the area and the response of the second viscount to the circumstances of the time. By 1806, two additional furnaces had been erected at the New Level Iron Works and a fourth one was added in 1815. Benjamin Gibbons occupied the works in 1825 when the three furnaces in blast each produced 40 tons of iron per week. The Gibbons family continued to occupy the Old Level furnace but Messrs. Izens and Co. worked the mill and forge after 1806.

An account²³⁵ for 1834 indicates the sources of estate income from the Old Level Iron Works:

²³⁴ D.P.L. 20/1, Gibbons' Lease.

²³⁵ Mines Report, 1836, p. 39: Accounts for the period 31 March - 31 Dec. 1834.

Dr.	Old Level Iron Works			Cr.			
	£	s.	d.				
Estate half a year's rent of land	50	13	0	Gibbons and Co. interest on repairs	44	3	0
Repairs at Mill and Forge	605	14	6	3 and $\frac{1}{2}$ Years rent of Mill and Forge	506	5	0
Store Yard	141	17	8	$\frac{1}{2}$ Years rent of Ditto	346	8	0
Bal. carried down	328	10	10	Izons and Co. $\frac{1}{2}$ Years rent of Iron Furnaces and Premises	230	0	0
	<u>1126</u>	<u>16</u>	<u>0</u>		<u>1126</u>	<u>16</u>	<u>0</u>
				Bal. brought down	328	10	0

The rent derived from Gibbons and Co. for the mill and forge was probably a royalty based on production: the revival in the Black Country iron trade after 1833 is reflected in the higher rent for the last six months of 1834. A royalty on production was received from the New Level Iron Works - Izons and Co. probably worked the Old Level furnace on a similar basis. Repairs had been carried out by the estate and materials had been purchased from Lord Dudley's store yard at Round Oak - the credit item suggests that the tenant was called upon to offset the costs. The account²³⁶ for the New Level Iron Works. (The Level Four Furnaces) gives more detailed information concerning the basis on which royalties were calculated.

236 Ibid.

undertook to erect a furnace within three years and requested the

'privilege of getting the Ribs and Pillars of Thick Coal found in Sinking for the Ironstone paying 1/1 a ton royalty.'

They also requested that the 'time rent' should not be changed for three years. Thomas Brettell, the land agent, saw no objection to the proposed royalty but felt that with regard to the question of rent,

'His Lordship would not approve of so great a latitude being allowed.'

This lease was probably inadequately drawn up and left too many loopholes for the lessees to avoid their obligations. By 1800, no doubt influenced by Beaumont's work in securing clear, specific, and binding mineral leases, the conditions under which new blast furnaces could be erected were more clearly stated. A lease²³⁸ granted to Messrs. Attwood in 1800 reflects this trend. In some respects it resembles the early lease granted to Messrs. Parker in 1783 - in terms of the royalties charged for various minerals and the use of the term 'bloom' to define crude ironstone. However, the 1800 lease stated the royalty per bloom at 3/- and defined it as '35 cwts in weight or 36 cubic feet'. Lones'²³⁹ definition suggested a measurement of 24 cubic feet. As in the case of the Level furnace, £1,500 was to be invested in construction costs, for a

'furnace . . . fire engine (blast) and other necessary buildings'²⁴⁰

In addition to these points which were in common with earlier leases, there were conditions and clauses inserted to achieve greater efficiency and profitability. Quarterly accounts had

²³⁸ D.P.L. 12/L, Lord Dudley to Messrs. Attwood. Lease of Lands and Mines at Netherton, Lady Day, 1800.

²³⁹ Lones, op. cit.

²⁴⁰ Lease to Messrs. Attwood, 1800.

to be presented in writing: no more than 5,000 tons of heathen coal per annum could be extracted under royalty by the lessees - additional supplies of coal had to be purchased from the lessor's adjacent Bumble Hole Colliery in Netherton. A minimum rent of £225 would be charged on ironstone used

'in case Messrs. Attwood shall not get 1500 Blooms of ironstone per annum'

for each of the two furnaces. All limestone, and any additional minerals used, had to be purchased from Lord Dudley:

'notwithstanding the above, lessees must purchase from Lord Dudley 6 tons of coal for every ton of pig iron they make.'

The final condition obligated the lessees to purchase all tiles and bricks used in construction work from Messrs. T. W. and M. Grazebrook. As the latter were lessees of Lord Dudley who paid him a royalty on production, this, together with the other conditions ensured a variety of sources of revenue for Lord Dudley from this enterprise. The last surviving lease from this period refers to a furnace constructed in Dudley by Messrs. Parker in 1800²⁴¹. During the 1820s there was a 50% increase in the number of blast furnaces erected in south Staffordshire. However, these were mainly in Tipton and Bilston - because of deficient management, Lord Dudley's estate did not participate in this expansion. The main period of development in the iron trade on the estate was much earlier, between 1774 and 1800.

Throughout the period 1774-1833, other leases were granted to manufacturers of iron goods, many of which concerned traditional branches of the iron trade which had been carried on in the Black Country for many generations, such as the manufacture of scythes, blades, and nails. Such a lease was

²⁴¹ D.P.L. 20/1, Lord Dudley to Messrs. Parker. Lease of Land and Mines in Dudley, Kingswinford, and Sedgley.

granted to Messrs. Parkes in 1784 to construct a
'water corn mill and blade mill',²⁴²

on land in Himley Wood at a rent of £15 per annum.² Numerous foundries and forges were also constructed on estate property by lessees including two which reflect the influence of the expansion of steam power. Both of these were in Brierley Hill and were known as 'boiler manufactories'.

By 1833, the organisation of the iron trade on the Dudley estate had become inefficient, as in the case of agriculture and the limestone quarries, and profits were declining. The Mines Report of 1836 observed that

'there are many Blast Furnaces, Forges, Rolling Mills, and one or two Foundries belonging to the Trust Estate, but ... they are all under Lease to Tenants at Will ... most of whom consume Coal, Ironstone, and in some cases even Limestone from Collieries and quarries not belonging to the Trustees.'²⁴³

The loss of revenue to the Dudley estate is indicated by the fact that, to the south of Dudley alone, ironworks on the estate consumed

'130,000 Tons of Coals of various descriptions per annum, 16,000 Tons of Limestone and 60,000 Tons of Ironstone'²⁴⁴

in 1834. It is evident that the carefully worded leases of the late 1790s, negotiated for a stated period of years and compelling the lessee to purchase raw materials, at least in part, from the Dudley estate, had not been renewed when they lapsed. This is a further indictment of the slack management of Downing after 1826. In view of the favourable position of the Dudley estate with regard to transport facilities and the availability of capital and raw materials, and the continued

²⁴² D.P.L. 23/6, Lord Dudley to Messrs. Zachariah, Joseph, and Zephariah Parkes. Lease of Land for 21 Years in Himley Wood, 7 May 1784.

²⁴³ Mines Report, 1836.

²⁴⁴ Ibid., p. 28.

expansion of the Black Country iron trade, it might be expected that, as in the case of mineral enterprise the estate would enter into production on its own account. This was not the case, with the exception of the mill and forge at the Round Oak Store Yard. The store yard supplied not only timber and bricks to Lord Dudley's mines, but also manufactured all castings and steam engines used in the mines by 1822. However, it functioned as a branch of mineral enterprise rather than a commercial enterprise selling in the open market.

v. The Coal Measures

As the leading mine owners in the Black Country, the Dudley estate was faced with the problems of establishing administrative efficiency and financial stability similar to those which faced all mineral estates in the period of rapid economic expansion at the end of the eighteenth century. There were, however, two important respects in which mineral enterprise on the Dudley estate did not conform to the usual pattern. In the first place, the scale of each enterprise and the manner of working the pits differed from other Black Country enterprises. Secondly, although it was more usual for landowners not to run the risks of industrial undertakings, especially in the coal trade, preferring to secure their income as rentiers rather than entrepreneurs,²⁴⁵ mineral enterprise on the Dudley estate remained largely entrepreneurial until after 1836 when a policy of leasing the mines began while retaining a greater proportion under the direct management of the estate²⁴⁶. As in the case of other

²⁴⁵ F. M. L. Thompson, English Landed Society in the Nineteenth Century (1963), p. 264.

²⁴⁶ The estate continued to work some pits until 1923. In the oldest coalfield, the Duke of Northumberland leased out all of his collieries by 1799. Thompson, op. cit., p. 264.

aspects of estate enterprise, mineral enterprise had been rapidly expanded after 1774 to take advantage of the situation created by the second viscount's work in enclosures, transport improvements, and the development of the iron trade. However, rapid expansion was achieved at the expense of efficiency and an attempt was made after 1797 to remedy the weaknesses. This was partially successful, but after 1826 the efficiency of mineral enterprise again deteriorated until the problem was tackled by the trustees after 1833.

After 1774, collieries were opened throughout the estate and were worked directly under estate management rather than leased to coal-masters. In some cases, coal was leased but usually for the use of the lessee only, as in the case of the ironmasters who erected furnaces on the estate. Another agreement leased land and coal at the Level to Lord Dundonald on which he erected

'tar kilns and buildings necessary for extracting tar from pit coal.'²⁴⁷

Dundonald had earlier erected premises

'for the Distilling of Pit Coal'

at Ironbridge and a chemical works near Newcastle-upon-Tyne²⁴⁸. Reference has already been made to the shortcomings of Edward Cockshutt, Lord Dudley's chief mineral agent before 1796 and, after his dismissal for incompetence, Charles Beaumont was engaged in March 1797 to reorganise the pits. In common with Black Country mines in general, Lord Dudley's collieries were inefficient²⁴⁹. However, as the scale of each enterprise tended to be larger on the Dudley estate

²⁴⁷ D.P.L. 23/6, Lord Dudley to Lord Dundonald and the Honourable Alexander Forrester Cochrane. Lease of Land and Mines at the Level, 6 Oct. 1787.

²⁴⁸ The Hatchett Diary, ed. Arthur Raistrick (1967).

²⁴⁹ Select Committee on Coal Supply, Parl. Papers 1871, XVIII, p. 27. '... the early workings of the south Staffordshire ... coalfield were not conducted under any scientific

because ~~city~~ contained large areas of mineral-bearing land, inefficiency and loss of profits took on a greater significance. Elsewhere in the Black Country, the prevailing system of landownership led to a proliferation of small enterprises.

Beaumont's task was to maximise profits and achieve complete cost effectiveness by eradicating

'imposition without immediate discovery' and
'... to secure a Vend which will produce an Immense Revenue.'²⁵⁰

Particular emphasis was to be placed upon

'an extension of the Water sale to the utmost extent'²⁵¹,
in order to take advantage of the developing canal network. Within a month of his appointment, Beaumont made proposals to secure wider markets for Lord Dudley's coal

'at Birmingham - and on the line of the different Canals to near London ...'²⁵²

The main competition on the canals beyond Birmingham would come from the Warwickshire coal-field especially at Coventry

'which is the first place of note where the Competition takes place'.

Comparative costs were set out by Beaumont.

'The Staffordshire Coal pr. ton of 21 Cwt
is sold to the Dealer at
Tonnage 62 Miles at 1½ pr. mile
Haulage on 20 tons at 1/- pr.mile

£0	6	0
	7	9
	3	1
	<hr/>	
	16	10
	<hr/>	

system of management, nor (owing probably to the great thickness and value of the principal or 10-yard seam) with any view of economy.'

²⁵⁰ P.R.O. C110/170, Beaumont to Jeans (Lord Dudley's London agent), 11 Sept. 1797.

²⁵¹ Ibid. Beaumont to Jeans, 22 June, 1797.

²⁵² Ibid. Undated, probably April 1797.

'Common (Warwickshire) Coal pr. ton of		
26 Cwt	10	0
Tonnage 6 Miles		9
Haulage		<u>2$\frac{1}{4}$</u>
	10	11 $\frac{1}{4}$
		<u>253</u>
In favour of the Common and the difference in weight	5	10 $\frac{1}{4}$ '

He proposed to counter this difference by 'price-savings and extra demand'. According to Beaumont, the

'Colliers at present give 21 Cwt to the ton, but have not more than half the work they could turn out - and a great part of the lumps (or Cobbles) lost to the Owner and Colliers by want of a demand for this Article.'²⁵⁴

By increasing the demand for Lord Dudley's coal and paying for the cobbles, Beaumont increased the productivity of the pits and provided the colliers with full-time employment in return for which they had to accept a ton of 26 cwts. To make his proposals attractive to the dealers on the Fazeley, Grand Junction, and Oxford Canals, he suggested that their boats should be loaded at Birmingham rather than at the estate collieries

'so admitting the Dealer to make a greater Vend with the same boats, Men and horses'.

By loading Lord Dudley's coal at Birmingham, the dealers on the main canals would be saved the costs of sending empty barges beyond Birmingham to the estate pits and, over a period, more coal would be transported from Birmingham by the dealers' boats. This would enable

'the owner to charge for saving five days on the average to the Dealer and the extra 5 cwt etc.'

From the data available, the financial advantages to the dealer are not certain as Beaumont proposed to recoup the cost of transporting coal to Birmingham. Presumably, Beaumont charged less for transporting coal to Birmingham than the dealers' costs would be as boats would make the return journey

in one day, not five. Moreover, a regular stock of coal would be maintained at the Birmingham wharf whereas time would be lost by dealers' boats making their way to the individual colliery wharves where coal was available. Furthermore, by sorting the coal, the quality of each boat-load could be guaranteed to meet the specific requirements of customers. All of these proposals were new to the Staffordshire coal trade at this time. Where dealers on the canal

'will not make their demands worth the Coal Owner's notice'²⁵⁵,

Beaumont proposed to establish wharves at which the Dudley estate could distribute coal directly to consumers in the area. Under further proposals outlined by him, dealers at Coventry would be able to sell Lord Dudley's coal at 8½d. per ton cheaper than Warwickshire coal, while beyond Coventry, transport costs would be the same for both sources of supply:

'To the Dealer at Birmingham (price per ton)	6 0
Tonnage and hauling (tolls and working costs from pits to Birmingham)	1 11
For saving in time and additional weight (5 days on average and an extra 5 cwt per ton)	<u>1 1</u>
	9 0
Further the Dealer has to pay at Coventry	
50 Miles tonnage at 1½ per mile (Canal tolls paid on return journey to Birmingham)	6 3
Haulage do. on 16 tons (working costs of one barge)	<u>3 11</u>
Total cost to dealer at Coventry	18 4½

254 Ibid. 'Collier' here means butty collier as the chartermaster system operated in Lord Dudley's pits at this time. Labour was not yet directly employed. Because of the methods used, large quantities of cobbles or small, broken coal (relatively worthless) tended to be produced in working the thirty-foot seam. The method of cutting the coal, Staffordshire 'square-work', involved the undercutting of a mass of coal and at the sides, so that the 'square' rested on a small base. This mass was then brought down by the 'pricker' who unbalanced the coal by shaking it with a long pole.

255 Ibid. The 'canal' referred to was the Fazeley, Grand Junction and Oxford Canals.

Total cost to dealer at Coventry		18 4 $\frac{1}{4}$
'Common Coal (Warwickshire)	10 0	
Tonnage and Haulage	11 $\frac{3}{4}$	<u>10 11$\frac{3}{4}$</u>
Difference between Staffordshire and Warwickshire coal at Coventry		7 4 $\frac{3}{4}$
The difference in price (retail?) on these coals at Coventry is 2d. per cwt on 26 cwts is	4 4	
5 cwt increase at 9d.	3 9	<u>8 1</u>
	per cwt (ton?)	8 $\frac{1}{4}$

in favour of Staffordshire - above Coventry
the tonnage and haulage is the same on both.²⁵⁶

All of these calculations were based on the London chaldron
of 26 cwts.

'which is the same weight as the Warwickshire ton and
causes it ... necessary to fix the Staffordshire that
Weight.'²⁵⁷

Here again, the available data does not clearly demonstrate
Beaumont's line of reasoning: how could an advantage of
7s. 4 $\frac{3}{4}$ d. per ton in favour of Warwickshire coal in the
Coventry market - in terms of dealers' costs, be transformed
into an advantage for Lord Dudley's coal of 8 $\frac{1}{4}$ d. per ton?
Presumably, the reference to a difference of 2d. per cwt.
relates to the selling price to consumers who would prefer
Staffordshire thick coal of a guaranteed quality. The 5 cwt.
increase at 9d. would reflect the advantage enjoyed by Lord
Dudley over his competitors in the Staffordshire coalfield
who sold to dealers on a basis of 21 cwt. to the ton. Lord
Dudley's dealers did not pay for the extra 5 cwts. and would
make a clear profit of 9d. per cwt. on the additional weight.
These two figures would offset the cost to the dealer at
Coventry by 8 $\frac{1}{4}$ d. per ton. Beyond Coventry, Lord Dudley's
coal would meet increasing competition from Newcastle coal
transhipped via London. Nevertheless, Beaumont calculated
that, by his arrangements, the long-standing monopoly of

256 Ibid.

257 Ibid.

Newcastle coal would be challenged even in the Thames valley. At Oxford, Staffordshire coal would be 19s. 10½d. per ton cheaper than Newcastle coal, and, at Reading, 12s. 9½d. per ton cheaper.

'On the Newcastle Coal

This Coal on the average to London cannot be calculated under the price stated in my plan on that Subject which is into the Barges to take up the Country - say

To Oxford for expences and Dealers profits	£2	0	0
		12	0
		2	12 0

Staffordshire Coal to Coventry	18	4½	
76 Miles tonnage to Oxford	9	6	
Hauling on 16 tons	4	3	
			1 12 1½

(Difference in favour of Staffordshire coal at Oxford)		19	10½
--	--	----	-----

Say the Newcastle Coal to Reading	£2	8	0
Staffordshire to Oxford	1	12	1
Hauling to Reading 50 Miles	3	1½	
			1 15 2½

(Difference in favour of Staffordshire coal at Reading)		12	9½
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If there is tonnage it will be paid on both.²⁵⁸

Beaumont's proposals were attractive to dealers 'of the first Cpnsequence ... on the different Canals'²⁵⁹. It was agreed that the price per ton was to rise and fall in accordance with prices charged by neighbouring Black Country pits but, the key to increased sales, the 26 cwt. ton, was to remain constant. He also extracted a promise from the company 'most beneficial for his Lordship's Interest, to land no other Dealers' Boats on the Oxford and Grand Junction Canals'²⁶⁰ which would enable Lord Dudley and the company to 'lead the Vend'. By these arrangements, he hoped to

²⁵⁸ Ibid., p. 6. Vide T. S. Ashton and J. Sykes, The Coal Industry in the Eighteenth Century (Manchester 1929). p.226 et seq. for a discussion of the inland coal-trade. The price of coal in Staffordshire was 4s. 6d. a ton in 1790: the price of coal in London was £2 10s. 0d. per ton in 1800. Vested interests (Midlands industrialists fearing a decrease in their coal supplies, and Newcastle dealers) secured restrictive legislation, and, after 1805, inland coal had

'dispose of 3 or 400,000 Tons anny. to the best advantage'²⁶¹

at a time when national production has been estimated at 10 million tons

Having secured a dominant share of the market beyond Coventry, Beaumont entered into negotiations for the Birmingham market:

'reached Birmingham and ... had the Subject in full over with the Compy. there. They are agreeable to the same terms and Contract for a term of years ... and will take ... not less than 50,000 tons - the first year and soon increase the quantity.'²⁶²

This would be approximately 25 per cent of the existing market in Birmingham²⁶³. The new marketing arrangements were put into effect by June 1797 and the activity of the Dudley pits increased. However, to avoid hostility in the area, should details of his plans leak out, Beaumont arranged for the companies' boats to be

'charged and cleaned out as hitherto - they deducting the 5 cwt and remitting payment on account ... The colliers to give the same weight as formerly, 21 cwt.'²⁶⁴

to pay a duty of 10s. 0d. per chaldron. The wider markets secured by Beaumont may have helped bring matters to a head.

259 P.R.O. C 110/170, Beaumont to Jeans, 25 April 1797.

260 Ibid. Beaumont to Jeans, 2 June 1797.

261 Ibid.

262 Ibid. Beaumont to Jeans, 2 June 1797.

263 In 1791, annual consumption of coal in Birmingham was 200,000 tons. Arthur Young, 'Tours in England and Wales' selected from the Annals of Agriculture, L.S.E. reprint, p. 256, as quoted by W. H. B. Court, op. cit., p. 165.

264 P.R.O. C 110/170, Beaumont to Jeans, 10 June 1797.

Inevitably, rumours and speculation occurred and one local coal-master, F. Dumaresq, informed Jeans that Beaumont was giving 26 cwts. to the ton:

'this will ... considerably lower the price and ... other works must follow.'²⁶⁵

while owners would be unable to reduce wages, in spite of falling profits, because of 'the scarcity of miners'.

Jeans indicated that

'the answer to this will be merely evasive.'²⁶⁶

Dumaresq's observation indicates that the demand for Black Country coal had expanded so rapidly that there was a shortage of miners: the influx of miners from South Wales and Shropshire solved this labour shortage in the 1820s. This labour shortage, together with the dangers of working the thick-coal seam, was probably responsible for the payment of relatively high wages to the Black Country miner which resulted in high absenteeism from drunkenness at the commencement of the week. Beaumont attempted, in vain, to induce the miners

'to work on Monday - giving up their Holydays -
But ... I gave up Monday and shall attempt to save
Tuesday and Wednesday.'²⁶⁷

He was also anxious to replace weekly pay by a settlement of wages every fortnight - this would reduce absenteeism and increase output. The incidence of absenteeism indicates a relatively high standard of living amongst the local miners. This phenomenon persisted into the nineteenth century and provoked comment from the parliamentary commissioners in 1842, although wages were paid every second Saturday by that time²⁶⁸. Drinking and gambling were prevalent in the area and the fact that miners could afford these pleasures while working only a

²⁶⁵ Ibid. Dumaresq to Jeans, 16 Aug. 1797.

²⁶⁶ Ibid. footnote.

²⁶⁷ Ibid. Beaumont to Jeans, 2 June 1797.

²⁶⁸ S.C. on the Employment of Children, 1842. Report on south Staffordshire, p. 2.

three or four-day week, even in times when demand for coal was high, is an illuminating commentary on the 'exploitation' of the working classes under laissez-faire management.

Having secured a regular and expanding market of over 400,000 tons per annum for Lord Dudley's coal, Beaumont turned his attention to increasing the efficiency of the pits and ~~in~~ reducing production costs. His first concern was to establish a new charter or contract for the butties who worked the Dudley pits. This was first introduced in September 1797²⁶⁹ and is of particular interest, not only because it introduced new sub-contracting arrangements into south Staffordshire, but also because it was printed in a standard form with details added as appropriate to each particular case.

First of all, the relationship between butty and coal-owner was defined to ensure that all work would be done under the direction of Lord Dudley's agents and that all working costs would be met by the butty. A minimum amount of coal had to be raised to the surface every fortnight in

'a proper and workmanlike manner'²⁷⁰

and so prevent damage to the pit. Prof. A. J. Taylor²⁷¹ has commented that if the owner drove a successful bargain, the butty would work the mine in his own immediate interests by over-working his men and exploiting the mine for the choicest pickings, rather than the fullest yield, while development would be neglected. Beaumont's contract would safeguard the owner from such practices. The charter, or payment for coal raised to the surface, was then laid down in the standard contract. Lumps and slack remained fixed at 1s. 6d. and 6d.

²⁶⁹ P.R.O. C 110/170, Contract between Charles Beaumont and B. Cartwright and Co. for Mining Lord Dudley's Coal, 8 Sept. 1797. This concerned a pit at Brierley Hill.

See Appendix B.

²⁷⁰ Ibid.

²⁷¹ A. J. Taylor, 'The Sub-Contract System in the British Coal Industry', Studies in the Industrial Revolution (1960), Ed. L. S. Pressnell, p. 217

per ton respectively, while the price of best and second-grade coal was to rise and fall in proportion to the movement of the selling price above or below 6s. 0d. or 5s. 6d. respectively. In this particular contract, the butty, Cartwright, was to receive 2s. 11½d. per ton for best coals and 2s. 0d. per ton for second-grade coal, leaving a profit for Lord Dudley of 3s. 0½d. and 2s. 6d. per ton. The butty had

'to allow as many Hundred Weight ... to the Ton, as his Lordship allows to the Buyer.'²⁷²

The last section of the contract laid down conditions to apply in particular circumstances. If Lord Dudley erected a steam engine at the pit, his capital expenditure and working costs were offset by a reduction in the charter paid - 4d. a ton in Cartwright's case. To discourage butties from leaving slack in the pit, because it was less profitable, all slack

'which is not wanted below in the Pit'²⁷³,

was to be brought to the surface. This would also encourage the butties to cut the coal with care so as to reduce the amount of small broken coal produced.

Many of the features in this contract were new to the Black Country coal-trade at this time. It was more usual for the owner, both here and in other coal-fields, to lease his pits on royalty rather than exploit them as part of estate enterprise²⁷⁴. Payment of charter according to selling price, removal of slack to the surface, and a ton of 26 cwts. were all new to the area. Moreover, the standard printed contract, probably unique in the district, would 'simplify the Books and prevent all imposition,' a reference to the abuse of power in

²⁷² P.R.O. C110/170, Cartwright's Contract, 8 Sept. 1797.

²⁷³ Ibid. This refers to the practice of using slack to support the roof in the thick-coal mines which often resulted in underground fires through spontaneous combustion.

²⁷⁴ Thompson, op. cit., p. 264.

the past by Lord Dudley's agents and the butties when the form of contract was less explicit - probably a verbal agreement - as in other local pits. The major costs remaining to be met by Lord Dudley were

'heading and ... sinking'²⁷⁵ which would be reduced

'to a trifle if 300,000 tons are vended'

and a profit of over £20,000 would be secured. Under the new contract and marketing arrangements, the butties' men and equipment would be more fully occupied and contracts were quickly made with butties throughout the Dudley estate.

However, there was some opposition at this time from Lord Dudley's agents who resented the criticism, real and implied, which Beaumont levelled at the existing organisation inherited from Cockshutt. Criticism of his expenditure on railways and wharves has already been considered - in spite of the resulting reduction in transport costs from the pit-head to the canal wharves, and the elimination of haphazard methods of recording sales by erecting weigh-beams and offices.

Alternative marketing arrangements were proposed in July 1797, by Charles Norton²⁷⁶, the limestone lessee, who also offered to take over the working of the pits from Lord Dudley on the west and south of Dudley. Beaumont criticised these proposals on the grounds that Norton's intention of

'Stacking on Wharfs and Compelling Traders to come in thro' fear of Opposition'

would lead to

'hostilities which will prove as ruinous to his Lordship's Concerns as the present War to England.'²⁷⁷

Moreover, he believed that neither Norton nor any other dealer was

'equal in the smallest respect to Compell the Rich body of dealers on the whole Line of the Canal who I had

²⁷⁵ P.R.O. C110/170, Beaumont to Jeans, 11 Sept. 1797.

²⁷⁶ See Appendix 2.

²⁷⁷ P.R.O. C110/170, Beaumont to Jeans, 29 July 1797.

'agreed with - and who will inevitably ... repel any measure he can suggest.'²⁷⁸

Under Norton's proposals to work the pits on royalty, Lord Dudley would meet all the capital costs incurred in the completion of existing plans for expansion, and Norton would enjoy certain rights, such as brick manufacturing, without payment of royalties. Beaumont further observed that if Norton's business activities

'should miscarry, the Lime Contract suffers also. Mr. Norton laid his usual prudence asleep when he thought of stepping into the Coal Trade to such a vast extent ... unacquainted with the different branches ... and above all the Vend which ... will be proved impossible to secure.'²⁷⁹

Norton's offer to market Lord Dudley's coal was turned down as also were his proposals to work the mines for Lord Dudley on payment of a royalty to his lordship of 5/- in the pound calculated on the value of coal sold by Norton. However, an arrangement to market Lord Dudley's coal was made with Fereday and Turton²⁸⁰ - two other limestone lessees. They undertook to

'purchase and take all the Coals and Cokes to be raised and made at the Parkhead and Level Collieries now worked and caried on by the said Viscount.'²⁸¹

A minimum of 80,000 tons of coal were to be purchased and sold either 'land sale' at Park Head or along the line of the Dudley Canal from Netherton to Selly Oak on the outskirts of Birmingham. Lord Dudley reserved the right to sell coal on his own account in this area and limited the lessees to supplying no more than 10,000 tons per annum in the 'Stourport Market'. These provisions for regulating the distribution of minerals were similar to clauses in the limestone leases which

278 Ibid.

279 Ibid.

280 D.P.L. 12/1, Agreement 18 Nov. 1797 between Samuel Fereday of Etingshall Park, Sedgley and William Turton, Upper Gornal, Coalmasters and Lord Dudley.

281 Ibid.

ensured that particular lessees would be restricted to supplying given areas. It is evident that Lord Dudley owned a number of barges to distribute his own coal: under the arrangement with Fereday and Turton, the lessees could

'take to all the Boats belonging to the said Viscount and now employed by him in Navigating Coals from the aforesaid Collieries and to use the same ... paying ... the rate of £7 per Cut per annum'

of the current value of the barges which had to be kept in good repair and returned at the end of the contract.

In November 1797, Lord Dudley asked a well-known iron manufacturer, Alexander Raby, to report on the state of the mines. His comments illustrate the value of Beaumont's work - although it seems likely that Jeans was assuming the credit for the improvement in Lord Dudley's mineral interests:

'Mr. Beaumont your Master Collier means extremely well for your Interest ... Mr. Jeans is a very proper person, he must have taken uncommon pains to make himself so much Master of the subject.'²⁸²

He also advised that

'Ironstone can be made equally productive by increasing the number of furnaces on the estates ... on one furnace you will receive £1,000 per annum and you should allow the agent some gratuity for every furnace he can effect the building of.'²⁸³

It is significant that these remarks coincide with the granting of numerous ironstone, furnace, and limestone leases in the period 1797-1800 and it may be that Raby provided the necessary initiative. Nevertheless, it was Beaumont who not only provided the basic raw materials, coal, in ever-increasing quantities but also demonstrated the value of carefully constructed leases which secured maximum profits and safeguarded Lord Dudley's long-term interests. It seems likely that the form of agreements drawn up by him provided the basis

²⁸² P.R.O. C110/170, Raby to Lord Dudley, 22 Nov. 1797.

²⁸³ Ibid.

for subsequent leases of ironstone, furnaces, and limestone - even after he ceased to be employed by the Dudley estate.

It was not until early in 1798²⁸⁴ that Beaumont submitted proposals for a comprehensive reorganisation of the pits. Methods of sinking pits were condemned as expensive and inefficient as estate pits had followed

'The Provincial method of sinking ... by two Shafts of 6 feet diameter ... for a free communication of air,'²⁸⁵ This limited the distance which could be worked between the shafts to 100 yards - new shafts then had to be sunk. Beaumont proposed to sink only one shaft, 12 feet in diameter, with a

'Wood bratige (brattice) down the Center ... which would carry the air much stronger down.'²⁸⁶

The construction of trap-doors would improve ventilation and enable galleries to be driven 300 yards from the shaft and one pit would 'answer for four' of the existing pits. This more efficient system of ventilation, sinking shafts, and driving galleries had been in operation at Newcastle for many years. The fact that

'The present situation of Lord Dudley's Coal Mines is unfortunately and wholly owing to a lack of Knowledge in the Science of Mining'

is most clearly illustrated by his comments on the location of the four steam pumping engines south of Dudley. These expensive pieces of machinery were not 'sumped down' to the deepest layers of coal and, during the winter, many pits were flooded. By deepening the drainage shafts and linking pits by water levels, pits could be worked all the year round and one engine could cease operations.

²⁸⁴ Ibid. Beaumont to Jeans, 4 Jan. 1798, A Plan for Working Lord Dudley's Extensive Coal Mines to the Greatest Advantage: also, A Report on Lord Dudley's Coal Mines. Subsequently referred to as Beaumont's Plan and Beaumont's Report.

²⁸⁵ Ibid. Beaumont's Plan, p. 1.

²⁸⁶ Ibid.

Methods of cutting and extracting the coal were next considered under a plan whereby

' $\frac{2}{3}$ if not $\frac{1}{4}$ will be saved'²⁸⁷

and by the same number of men 'as at present' - about 200. Instead of bringing down a pillar of coal 30 feet high, Beaumont proposed to work the thick coal from the bottom to a height of six feet only and extend the work up to 300 yards from the shaft. Then a second layer would be removed and so on until the whole height of the seam had been cut: this would drastically reduce the proportion of small broken coal produced by existing methods. To speed up and facilitate the handling of coal both above and below ground, he proposed to introduce tubs

'containing 24 pecks, or 3 bolls Winchester Measure'²⁸⁸, thus standardising measurement, and each miner was to be paid

'3s. 6d. per score of tubs making 60 bolls of $2\frac{1}{2}$ cwt to the boll which gives $7\frac{1}{2}$ tons for $\frac{3}{6}$ - to the Collier say per ton £0. 0. $5\frac{1}{4}$ d.'²⁸⁹

The total expense per ton was estimated thus:

'Drawing from the Collier to the Surface	5d.
Overman, deputy, controller, Barksman, horse with all remaining expenses	<u>1$\frac{1}{4}$</u>
Total expense per Ton (to the surface)	£0 ls. 0' ²⁹⁰

As the existing charter paid to the butties was

'from $\frac{2}{2}$ to $\frac{2}{10}$ per ton, the saving on 300,000 tons would amount at $\frac{1}{6}$ per ton including extras to £22,000.'²⁹¹

This proposal for the coal owner to employ labour directly was revolutionary in the Black Country and would necessitate the abandonment of the butty or chartermaster

287 Ibid., p. 5. A reference to the wasteful methods in the Black Country which produced large quantities of slack and reduced the proportion of good coal available.

288 Ibid., p. 4. Time and expense would be saved as these tubs would be loaded at the face and raised intact to the surface. Wheeled corves or trucks were first used in 1790. Vide

289 Ashton and Sykes, op. cit., p. 60.
Ibid. 'Collier' here means individual miner, not the butty. Beaumont calculated that by these methods, 200 miners could

system. Direct employment already existed in the Newcastle coalfield by the end of the eighteenth century²⁹² but, in the Black Country where units of land tended to be small, the butty system was predominant and was valuable to the small landowner because working capital was supplied by the butty who also took all of the risks. Various arrangements had evolved in the coal-trade whereby a coal-owner could exploit his property. In some cases he employed butties to work a pit or sections of a larger colliery and paid the butty so much charter per ton of coal raised to the surface. The butty engaged and paid his own men and the mineral owner sold the coal on his own account. This was the practice on the Dudley estate between 1774 and 1798. Occasionally - as in the Newcastle area - the owner might employ miners directly to work the pits for him: both of these arrangements ensured that pits would be directly managed by the owner's bailiffs. The latter arrangement was the form proposed by Beaumont in January 1798. Under a third arrangement, illustrated by Norton's proposals, the owner might lease the pit to a coal-master who would either work the pit by labour directly employed by himself or engage butties to exploit the lease on his behalf. The lessee would sell the coal on his own account and pay a royalty per ton to the coal-owner. This was an arrangement adopted by the trustees after 1836. Because of the extensive nature of his property, Lord Dudley was able to develop large collieries, and, as he did not depend upon the butties for working capital, he could dispose of them if it could be shown to be in his interest to do so²⁹³.

produce 300,000 tons per year.

²⁹⁰ Ibid.

²⁹¹ Ibid. A daily wage of 3s. 6d. would probably exceed existing wages which have been estimated at 1s. 8d. in 1780 and 3s. 4d. in 1813, Ashton and Sykes, op. cit., p. 137

²⁹² Taylor, op. cit., p. 217.

²⁹³ By the mid-nineteenth century, the butty system was challenged in the Black Country by the miners themselves and mine-

There is no evidence that the Dudley estate was in debt during the period 1774-1833 and, in view of the considerable outlay in enclosure costs, steam engine construction, loans to canal and turnpike companies, and expansion of mineral and industrial enterprise, it is likely that the income from agricultural rents and the easy profits from the shallow thick-coal seams provided the necessary capital for all these activities. Beaumont's proposals, to cut out the middleman's profit by abolishing the butties, were accepted and the butties were dismissed from the Dudley pits - a decision which was to produce a considerable impact in the area.

Unfortunately for Beaumont and the future prosperity of Lord Dudley's mineral interests, his extensive reorganisation had earned him the enmity of many butties and agents while neighbouring coal-owners were jealous of the active state of the Dudley pits. He informed Jeans that he had received information

'That the Coal Masters found themselves so hurt that an outburst would soon take place and that from our discharging the Butties and bringing up 300 Men from the North, an insurrection would take place the day of their arrival.'²⁹⁴

The butties undoubtedly resented the loss of the opportunity to work the Dudley pits by the new contracts introduced in September 1797. However, the miners were evidently satisfied with the new arrangements made in January 1798 whereby they were freed from the exploitation of the butties and employed directly by Lord Dudley's agents at a fixed, regular daily wage for a given stint of work. Beaumont observed:

'went to every pit - and find the Wagemen (miners) to my wishes willing to defend me on any occasion

owners such as James Foster who demonstrated that the abandonment of sub-contracting led to increased output and greater economy. Midland Mining Commission, 1843, p. 69, as quoted by Taylor, op. cit., p. 219.

²⁹⁴ P.R.O. C110/170, Beaumont to Jeans, 22 Feb. 1798. The number of men was actually 30.

'and no objections to the Mens coming as they themselves are assured of Constant employ.'²⁹⁵

Riots and general unrest did occur and Lord Dudley's residence at Himley and his pits were threatened with destruction. This is probably the incident recorded by Prof. T. S. Ashton and J. Sykes²⁹⁶. Exactly why the miners rioted is not clear, but the arrival of 'foreign' miners probably provided the butties and rival coal-owners with an opportunity to create unrest and champion the cause of the local miners in the interests of full employment, by alleging that Beaumont's association with Newcastle, and his preference for methods in operation there, would result in the replacement of local miners by men brought from the Tyne. Whatever the motive, the riots undoubtedly indicate the influence of the butties who traditionally exercised great power in the area as the hirers of labour and to whom the men were further bound by the indebtedness produced by the truck system. Beaumont defended his actions in a printed pamphlet²⁹⁷ and asserted that the Newcastle men would only sink new shafts and not be engaged in mining the coal. However, faced with these disturbances, Lord Dudley dismissed Jeans²⁹⁸ and Beaumont was probably removed from his position at the same time to be succeeded by Charles Roberts²⁹⁹.

Beaumont's work and achievements were similar to those of John Carr³⁰⁰ who was appointed coal-viewer to the mines of

295 Ibid.

296 'About 1800, when Lord Dudley attempted to introduce into Staffordshire some thirty colliers from the Tyne, a riot broke out and his collieries were threatened with destruction.' Ashton and Sykes, op. cit., p. 154.

297 P.R.O. C110/170, undated pamphlet.

298 Ibid. Lord Dudley to Jeans, 16 April 1798.

299 See Section 1, Chapter 2, Part C.

300 J. T. Ward 'West Riding Landownership and Mining in the Nineteenth Century', Yorkshire Bulletin of Economic and Social Research, XV, p. 64.

the Duke of Norfolk in the West Riding in 1774. Carr introduced a number of Durham practices, similar to Beaumont's innovations, including surface and underground railways and trucks or corves of a standard size. However, Beaumont's term of employment was far less than that of Carr who managed affairs for the Norfolk mines until 1801. Nevertheless, his achievements marked the end of the first phase in the development of Lord Dudley's mineral enterprise. The uneconomic and inefficient organisation of his pits, so typical of the Black Country at this time, had undergone radical change and the more professional methods of the longer-established Newcastle coalfield were introduced. Wider markets had been opened to the estate pits and a higher degree of profitability both above and below ground seemed assured. However, traditionalism, fear, jealousy, and suspicion of outsiders were to determine otherwise and the Dudley pits, and, ultimately no doubt, the Black Country, were deprived of Beaumont's forceful and progressive management. The question remains: to what extent did Beaumont's work benefit Lord Dudley's mineral enterprise after 1798? There is little doubt that the pits continued to work at reduced costs and higher profitability than before Beaumont's appointment, although the incentive to the dealers of a 26 cwt. ton and the new method of sinking shafts did not survive his dismissal. His capital expenditure on weighing machines, railways, and the re-siting of steam engines remained valuable assets. However, deprived of his personal influence, it seems unlikely that Beaumont's arrangements to dominate the 'vend' in Birmingham and beyond Coventry on the line of the Grand Junction and Oxford Canals would prevail for long, although Lord Dudley's coal no doubt competed on equal terms with other Black Country coal in these markets. But, the extent to which his methods of cutting the coal and direct employment of miners at a fixed daily wage persisted is not clear. Coal was sorted to meet

the particular demands of dealers and 'wagemen' were employed in the Dudley pits in 1833 - but, there may have been some lapse in these practices after 1798 before their obvious advantages persuaded later agents to reintroduce them.

The continued prosperity of Lord Dudley's mines after 1798 is further illustrated by his policy of erecting steam engines and purchasing the rights to mine coal in numerous areas throughout the Black Country. Reference has already been made to the existence of at least four steam engines on the Dudley estate by the mid-eighteenth century: between 1797 and 1801, twelve more were constructed³⁰¹. The boilers for ten of these were made by John Wilkinson at Bradley at a total cost of £317 0s. 2d.; the remaining two boilers were made by William Johnson for £16 0s. 8d.³⁰². Many of the parts were obtained from local manufacturers such as Horton and Parkes - both tenants of Lord Dudley, and the engines were constructed at new and existing pits in Tipton, Bilston, Dudley, Brierley Hill, and Netherton. The total cost of materials for ten of the engines or whimsies was £2771 13s. 6d. Lord Dudley's agents also negotiated several leases or purchases of coal under small plots of land at this time - probably adjacent to workings owned by Lord Dudley, which could be mined by an extension of galleries from shafts already in operation. Three purchases of coal were made in 1801 in the Dudley Wood area at £330 per acre of coal - in each case the surface area was less than one acre. Lord Dudley was not liable for damage to surface buildings, and his right of access was to run for 99 years. More expensive was the right to work thick coal under a piece of land in Coseley: this ran for nine years and the price was £600 per acre.

³⁰¹ See Appendix 8.

³⁰² D.P.L. 6/A. Alex Raby's Account for Steam Engines, Nov. 1800. See Statistics 1 and 2 relating to the Dudley Estate: in separate portfolio.

Accounts for 1804 show that, although the estimated annual profit of £22,000 per annum forecast by Beaumont in 1797 was not being reached, there was an average net profit of £17,684 7s. 1d. over the preceding five years.

<u>Parishes</u>	£	s.	d.	<u>Poundage</u>
Sedgley	8,227	4	0	411 7 2
Kingswinford	5,624	8	0	281 4 2
Tipton	277	9	0	13 17 6
Dudley	<u>3,555</u>	<u>11</u>	<u>1</u>	<u>177 15 7</u>
	£17,684	7	1	844 4 5

£844 4s. 5d. pr. ann. poundage.³⁰³

This document indicates a parochial basis for mines accounts and shows that Roberts, the mineral agent, was receiving 'poundage' or commission calculated at 1/- per pound profit - as in the case of the agreement on salary negotiated by Beaumont:

'£200 p.a. salary plus poundage equal to my services'³⁰⁴.
Towards the end of the first phase of expansion, in 1833, the profitability and efficiency of estate mineral enterprise declined - especially after the appointment of Downing as mineral agent in 1826.

This state of affairs was revealed by the report on the mines submitted to the trustees by Smith and Liddell in 1836. Liddell was a professional mining engineer from Northumberland and Richard Smith, a local man and an acquaintance of Littleton, one of the trustees, had distinguished himself as the mining engineer in charge of the General Mining Association's concerns in Nova Scotia. He was subsequently appointed mineral agent to the Dudley estate in December, 1836³⁰⁵. The trustees were determined to have a thorough survey made and issued a detailed list of instructions and enquiries to

³⁰³ D.P.L. 6/A. Account of the Profits of Lord Dudley's Mines, Lady Day, 1804.

³⁰⁴ P.R.O. C110/170. Beaumont to Jeans, 22 June 1797.

³⁰⁵ See Section III, Chapter 2, Part A.

be pursued³⁰⁶. Their report, concluded by March 1836, throws light on the organisation of Lord Dudley's mineral enterprise between 1798 and 1836 and provided the blueprint for reorganisation and further expansion after 1836³⁰⁷.

Chart 8. The Trustees' Instructions to Smith and Liddell, 1835, For Their Investigation of the Mines and Ironworks

1. To consider ... the propriety and expediency of changing the present system altogether of working the Mines, and of substituting the Plan or System of letting the same.
2. If it shall not appear to them to be advisable to abandon the present system, to consider and report upon such Alterations or Improvements in it as shall appear to them to be proper - particularly as
3. Although there is a profit upon the whole Concern, yet it is necessary to ascertain whether upon individual portions of it, the reverse is not the case - and if so, such portions of it as should be abandoned, or let or carried on
4. To take into consideration whether it would be more advisable to extend the getting of the untouched Mines, or to reserve them until the adjoining Mines become more exhausted.
5. To state, if it shall be thought advisable to abandon the present System ... whether the Trustees may possibly get and dispose of the Mines, or any portion of them, abandoning the conversion of them into Iron.
6. The profits on the Sale of Lime and Limestone were formerly very great - to consider whether any measure could be adopted to restore this branch of the Concern to its former prosperous condition.

³⁰⁶ S.C.R.O. D260/M/F/5/19/2, A Short Statement Submitted to Messrs. Smith and Liddell as Instructions for their Survey of the Mines and Works of the Late Earl of Dudley. Subsequently referred to as Instructions, 1835. See Chart 8.

³⁰⁷ These aspects are considered in Section II, Chapter 3 and Section III, Chapter 2.

Chart 8 (continued)

7. It appears to be necessary that the Annual Profit of the Mines and Works should be distinctly shown ... they will therefore distinguish them from other Profits and point out how the distinction should be observed and shewn in future.
8. To ascertain ... the Quantity of Unwrought Mine under all the Estates.
9. If they shall be of the opinion that the Works can be wholly or partially and safely carried on by the Trustees, then they will please to report upon a detailed mode of future operation.
10. As the previous System seems to be defective in Checks or Control in ascertaining the Quantity of Mine got and of the expenditure of Money in working the same - they will please to ... report what checks or Control may be devised for securing a more efficient responsibility in every Department.

S.C.R.O. D260 M/F/5/19/2.

Beaumont's policy of exploiting all the mines for immediate profit and maintaining productivity at a maximum level, had been allowed to lapse and many pits were conserved as assets³⁰⁸. Only three pits were

'prepared to get Coal out of the Mines ... and we consider those were not in a very active state'³⁰⁹ -

a situation all the more serious because

'both Coal and Ironstone of every quality being now in great demand and at high prices.'³¹⁰

However, it would take time and considerable outlay to increase existing production because new shafts would have to be sunk:

³⁰⁸ Mines Report, 1836, p. 55.

³⁰⁹ Ibid.

³¹⁰ Ibid., p. 26.

'We think ... it would not have been bad policy at the time wages were low and labour abundant to have put down new pit shafts in store to avoid sinking them when wages are high and Men scarce, besides they would have been ready for putting into immediate activity at a period ... of ... high prices ... and ... the money which ought to have been spent last Year or probably the Year before, must be laid out from this years or the next years profits for the purposes of raising the works again to their former or proper Standard.'³¹¹

Such comments reflect the depression in the Black Country iron and coal trades in the early 1830s and show to what extent the inefficient management, which Beaumont had striven to eradicate, had returned to the Dudley pits under Roberts and Downing.

Beaumont had replaced the use of wooden curbs in shafts and had used iron so that unnecessary expense would not be incurred should the wood rot and the shaft collapse, when the under-lying iron, clay, and thin-coal seams came to be worked after the exhaustion of the thick coal. The report criticised the fact that some shafts

'are in bad repair ... highly important to the future ... working ... of the thin Coals and Ironstone measures as well as in clearing out all the old ribs and pillars left in the broken Mines of thick Coal.'³¹²

It was the practice in the Black Country to remove pillars left to support the thick coal once the seam was exhausted in the pit - this was always dangerous and was usually done after subsidence had filled the stalls or spaces between pillars. The pillars would then be removed using the in-filled stalls as supporting 'pillars': 'broken mines' were pits or sections where only the pillars of thick coal remained to be worked. Over a long period of time, as further subsidence took place, pillars were worked on three or even four separate occasions. After sixty years of intensive working, there

³¹¹ Ibid., p. 55.

³¹² Ibid., p. 16.

were many old shafts and galleries which presented a danger to existing works as well as a potential loss of income from ignorance of the whereabouts of worked-out areas. Detailed mining plans and records would remedy this situation, but, as the report pointed out:

'The Trustees' Office does not afford any plans of the underground workings except in one or two instances and these of an imperfect nature. A commencement was made many years ago ... but from some cause unknown to us the system was abandoned.'³¹³

One of the few plans represented the Brockmoor Colliery as it was

'thirty or forty years ago about which time that portion of Lord Dudley's property was in a very active state;'

this was probably one of Beaumont's plans. Smith and Liddell were forced to consult the mine bailiffs but

'found difficulty in procuring information that could be relied on regarding the extent of former workings as also the situations where faults and Dykes intercept the Coal.'³¹⁴

Francis Downing, the mine agent since 1826, presented his own observations³¹⁵ on the report to the trustees and, in seeking to defend and justify his administration of affairs, succeeded merely in providing further evidence of his own incompetence. He asserted that, since the bailiffs were able to supply information to Smith and Liddell

'this tends to prove that they are possessed of the knowledge qualifying them for their duties' and that

'the Catchings (quantity mined) have been marked on the surface.'

This was the traditional and crude method of recording the amount of coal worked in the Black Country and it was common practice for mine bailiffs either to

³¹³ Ibid. p. 10.

³¹⁴ Ibid. p. 5.

³¹⁵ S.C.R.O. D260/M/F/5/19/4, Downing's Comments on the Mines Report, 7 June 1836.

'measure the work done by a butty and keep it in their minds ... or peg it down on the surface.'³¹⁶

In this and other respects, the Select Committee on the Mining Districts, reporting in 1850, indicates that Downing was no less competent and conservative than other local mine agents:

'Fourteen years ago (1836) there were scarcely any regular plans made of the workings in this district.'³¹⁷

The professional efficiency of Beaumont, unsurpassed in 1797, was still confined to few besides Smith and Liddell in 1836:

'Besides butties there is a superior class of persons ... the mine agents, of whom there are about 60 in the district. They have the supervision of the coal and ironstone pits ... about 15 cannot write or read ... there may be 25 who are educated men: the rest, say about 20, are in a sort of intermediate state as regards intelligence.

'It is a serious loss to all the iron and coal works of the district, and to the capital employed in them, that the whole of the mine agents are not equal in point of education ...'³¹⁸

Nevertheless, the extent and complexity of Lord Dudley's enterprises magnified the errors of management on his estate before 1836, and the report by Smith and Liddell asserted that the only way to secure efficient control was

'to place the responsibility of this Department on a professional Mine Engineer.'³¹⁹

Downing further remarked that, as far as he was concerned, existing underground plans

'served for practical purposes'³²⁰.

He also stated that the report's estimate that Lord Dudley's estate west of Dudley consisted of 2,000 acres was exaggerated

³¹⁶ S.C. on the State of the Population in the Mining Districts, 1850. Report on South Staffordshire, p. 33.

³¹⁷ Ibid.

³¹⁸ Ibid.

³¹⁹ Mines Report 1836, p. 59.

³²⁰ Downing's Comments, 7 June 1836.

and also questioned the report's estimates of raw materials consumed by ironworks on the estate. As Lord Dudley's Kingswinford estate alone was 2,200 acres³²¹ in extent, and, in view of the absence of detailed plans and accurate accounts,³²² Downing's opinions and rule of thumb methods must remain suspect.

The main task assigned to Smith and Liddell was 'To consider ... the propriety and expediency of changing the present system altogether of working the Mines and substituting the Plan or System of letting the same.'³²³

On this matter the report concluded that

'we recommend their being let on royalty: indeed the Trustees ... have let some of the broken Mines of thick Coal ... at various rates per ton and by the Superficial Yard.'³²⁴

In fact most of the coal mined in 1833-4 was from 'broken mines' leased to contractors employing their own butties. However, these arrangements were unsatisfactory because

'the parties to whom the Mines are let are only Tenants at Will and therefore ... will (not) spend Capital ... or push works with the same energy as they would do if they received possession by leases granted for a proper term of years.'³²⁵

With these observations, Smith and Liddell completed their survey on the existing organisation and scope of the iron and mineral trades on the Dudley estate in 1836. Their recommendations to effect improvements in efficiency and profitability, and the extent to which these were carried out by the trustees in the period 1833-45, will be considered elsewhere³²⁶.

³²¹ B.H.P.L. H13.1, Survey of Kingswinford, 1822, W. Fowler.

³²² See Part D below. ³²³ Instructions, 1835, p. 6.

³²⁴ Mines Report, 1836, p. 26. These forms of agreement were traditional and common in the Black Country.

³²⁵ Ibid. ³²⁶ See Sections II and III.

In every branch of industrial and mineral enterprise, rapid expansion after 1774 had been followed by an attempt to establish greater cost efficiency in the 1790s - a period when the iron trade rapidly expanded on the estate. However, there was no rational, comprehensive approach to industrial and mineral problems. On the one hand, Lord Dudley ceased to work all the limestone quarries on his own account and leased a number of them in the 1790s to secure higher profits. In contrast, Beaumont overhauled colliery management and involved the estate more directly in the working of the mines by replacing the butties - who had employed their own labour but worked under the supervision of Lord Dudley's agents, by miners directly employed by the estate. Both branches experienced further change by 1833 by which time the limestone workings were once more directly managed by the estate and the bulk of coal and ironstone produced came from broken mines occupied by tenants at will. The iron trade remained in a more flourishing state throughout the period, except for periods of regional depression - but, the estate derived lower profits than could have been realised because of faulty leases and the failure to integrate its own activities beyond the point of distribution of raw materials. Nevertheless, despite inefficiency, the long-term benefits of Beaumont's work and the rapid expansion of the Black Country iron trade after 1800 combined to produce a net profit of £36,911 13s. 9½d.³²⁷ from Lord Dudley's mineral and industrial enterprise on the Dudley estate for the year ending in March, 1834.

D. Systems of Management and Administration

It is evident that the management of industrial and mineral enterprise on the Dudley estate failed to overcome

³²⁷ S.C.R.O. D260/M/F/5/19/4, Lord Dudley's Accounts, 1834.

the problems presented by the scale and complexity of Lord Dudley's interests in the period of early expansion which ended in 1833. Certain branches were more efficient than others but the overall impression, except for temporary periods, is one of unplanned development and general inefficiency. The problem of finding agents suitably qualified to manage the industrial and mining concerns has already been considered. However, in addition to these interests, the Dudley estate also derived a considerable income from agricultural and cottage properties - the gross income from all sources was £117,493 14s. 1d.³²⁸ in 1833. Several questions remain to be answered: what kind of men managed the landed interests of the Dudley estate, to what extent did the Lords Dudley involve themselves in the management of affairs, what systems of accounts were developed to record the activities of the estates, and how far did the estate deal with local provincial banks?

Some of the older professions³²⁹ which provided agents for the great estates were landed estate agents, attorneys, clerks, and accountants: men from such professions, especially landed estate agents, managed the industrial and mineral interests of the Dudley estate between 1774 and 1833. Richard Mee, steward of Kingswinford manor, was both a local landowner and an attorney who had acted as attorney to the Ashwood Hay enclosure commissioners. As chief land agent, his duties included the supervision of the manor courts - in his capacity as steward of Lord Dudley's local manors - the management of the agricultural properties, and the collection of cottage and great rents. Lord Dudley held manor courts in Belbroughton, Dudley, Himley, Kingswinford, Rowley Regis, Sedgley, and Swindon where his stewards supervised the transfer of copyhold farm and cottage properties and collected the

³²⁸ S.C.R.O. D260/M/F/5/19/4, Lord Dudley's Accounts.

³²⁹ Pollard, op. cit., p. 126.

finer or heriots due. Minor manorial officials were also appointed by the courts, such as supervisors of highways for the various liberties. By the end of the eighteenth century, Lord Dudley had constructed large inns, known as the 'Court House', where the manor courts were held and where tenants came to pay their rents to his agents. By 1788, Mee was succeeded as chief steward or land agent by members of the Brettell family³³⁰, Richard and Thomas, both of whom were local landowners and attorneys.

On the death of his steward, John Keelinge in 1823, Lord Dudley was forced to break with the traditional pattern because Francis Downing, who now succeeded to the position of chief land agent (and, in 1826, mineral agent) lacked the professional training necessary to administer the work of the manor courts. Accordingly, Joseph Bourne, a Dudley solicitor and landowner in Kingswinford, became chief steward. In a circular issued in May, 1823, Lord Dudley announced Bourne's appointment as chief steward with the right to hold

'Courts Baron and Customary Courts ... to do all acts usual and customary to be done by Stewards in relation thereto accounting to me ... such Fines, Heriots, Reliefs, Forfeitures, Amerciaments and other manorial profits as shall be received by him ... and to make voluntary grant of all or any Customary or Copyhold Lands ... and execute any Licences to demise or otherwise ... as shall seem expedient.'³³¹

As in the case of the mines department in 1804³³², the work of the chief steward and the chief land agent was assisted by a large, permanent staff of clerks. Lord Dudley continued to employ local attorneys to transact legal business on his account down to 1833. However, the growing volume of business

³³⁰ Thomas Brettell lived at Summer Hill, Kingswinford: he and Richard Brettell had acted for William Ward (third viscount 1788-1823) in the dispute over the felling of timber on the estate by his half-brother, 1784-8. See Part A above. The Brettells presumably took over the landed and legal business of the estate on the succession of William in 1788.

³³¹ D.P.L. 10/K, Statement by John William, Viscount Dudley

necessitated the employment of a London solicitor after 1800, and John Benbow³³³ of Lincoln's Inn handled major legal transactions for the Dudley estate after this date and gradually assumed a general supervisory position over all estate activities. The expansion of estate interests after 1774 raises the question: to what extent did the Lords Dudley involve themselves personally in the administration of affairs both in decisions of general policy and in the day-to-day conduct of business? By the mid-nineteenth century, the aristocracy in England were probably more closely involved in the administration of their estates than ever before³³⁴. In the case of the Dudley estate, the Lords Dudley continued to exercise general control of policy throughout the period 1774-1833, but only the second viscount and, for a few years after his death in 1788, his successor, were personally involved in everyday administration.

Broad questions of policy were undoubtedly decided by the second viscount between 1774 and 1788. He was responsible for the introduction into parliament of all the local enclosure bills, which extended his personal estate and consolidated his rights in the area, and for most of the local canal bills. Rentals and accounts were also examined and passed by him. The full extent of his activities has already been considered and, in view of the timing of events and the close correlation between the lines of the various canals, the location of timber and thick-coal measures, and the location of allotments and rights made to him by the various enclosure awards, one must conclude that the development of the Dudley estate after 1774 was due to his personal involvement and initiative. In the

and Ward, 14 May 1823.

³³² See Part C above.

³³³ Benbow was nominated as a trustee, 1833-45.

³³⁴ D. Spring, The English Landed Estate in the Nineteenth Century, Its Administration, 1830-1870 (1962), p. 53.

early years after acceding to the title in 1788, William, third Viscount Dudley and Ward, remained active in exercising general control of estate policy but ceased to involve himself in the day to day conduct of affairs such as the passing of rentals and accounts. After 1790, these were signed by Thomas Brettell. It may be that William's disinclination to attend to routine administration led him to ask an old friend, the Reverend Thomas Jeans of Paddington, to

'superintend my concerns'³³⁵.

Jeans was tutor to his son and his diligence and honesty no doubt commended him to William at a time when the affairs of the Dudley estate were inefficiently administered and the honesty of the agents was suspect³³⁶. Nevertheless, policy decisions, such as Beaumont's proposals, still had to be submitted to the third viscount. Another friend, Alexander Raby the ironmaster, at least advised Lord Dudley after Jeans' dismissal in 1798 and may have been employed by him in a supervisory capacity as he was closely connected with the construction of steam engines on the estate and acted on behalf of³³⁷ Lord Dudley in 1802. Benbow probably assumed the overall supervision of affairs shortly after this and held this position at the commencement of the trust on the death of the fourth viscount in 1833. Professor F. M. L. Thompson has shown³³⁸ that the great landowners' chief men of business were London based and usually solicitors. In this respect, the Dudley estate conforms to the general pattern after 1802.

After 1800, the third viscount probably involved himself less and less in the direction of affairs and he has been described as

'One of those ordinary mortals on whom capricious fortune takes a pleasure in lavishing worldly advantages.' The obscure existence of the old lord was passed in the

335 P.R.O., C 110/170, Lord Dudley to Jeans, 10 Dec. 1797.

336 See Part C above.

337 C. Hadfield, The Canals of the West Midlands (1966), p.113.

'society of those who, like himself, preferred port wine and fiddling to the pursuits either of politics or literature.'³³⁹

This may explain the deterioration in the state of affairs on the Dudley estate after 1800. His son, John William, inherited the title as fourth viscount in 1823 and was even less active in the management of the estate. Both before and after 1823 he was frequently abroad, and was involved in politics after becoming an M.P. in 1802. Although he declined an undersecretaryship of foreign affairs in 1822, he remained active in national politics and held office as foreign secretary between April 1827 and May 1828, when he resigned along with other Canningites when Wellington became prime minister. Such a career prevented him from maintaining close contact with his estate, although major policy decisions still had to await his consent. Illness incapacitated him during the last two years of his life when he was under constant medical care:

'Unsteadiness of purpose ... unwillingness to risk, and reluctance to assent - incapacity to make up his mind either as to the measures of others or his own conduct ... chequered his existence ... during the latter years.'³⁴⁰

This pattern of growing isolation between the Lords Dudley and their estates contrasts with the general trend among aristocratic landowners and probably explains the degree to which inefficiency and corruption flourished in the latter years of the period 1774-1833. These practices were to be exposed and condemned by the trustees.

Systems of book-keeping and accounts remained primitive and inefficient on the Dudley estate down to 1833 in spite of improvements generally. In the early part of the period

³³⁸ F. M. L. Thompson, 'English Great Estates in the Nineteenth Century, 1790-1914', I.C.E.H. (Aug. 1960), p. 391.

³³⁹ S. H. Romilly, Letters to Ivy from the First Earl of Dudley (1905), p. 6.

³⁴⁰ Lord Brougham, Edinburgh Review, I XVII, p. 79, as quoted by Romilly, *op. cit.*, p. 385.

1774-1833, the rentals were the most significant accounts. Until 1788, all rents received from estate properties were recorded in volumes designated as 'Lord Dudley's Rental', but, after this date, rents were recorded in separate volumes known as the 'Cottage Rental' or the 'Great Rental'. After 1788 there was also a change in the nature of the items included in the rentals which, before that time, had been 'really a statement of income'³⁴¹. The 1701 rent roll³⁴² records totals of rents, profits from coal-mines and timber sales, and manorial dues. Until 1791³⁴³ the rentals remained general statements of income including interest on loans and profit from turnpike and canal investments. After this date, a more systematic form of accounts was introduced to record items in separate accounts. The final change in the form of the rentals came in 1825³⁴⁴ when the practice of collecting rents and recording payments on the basis of location within a manor was replaced by an alphabetical list of tenants for each manor. This may be explained by the great influx of population into the Black Country during the 1820s which necessitated a more precise record of tenants and properties.

Such alterations and improvements in the form of the rentals reflect a desire to deal with the problems of an expanding estate, but in themselves had little impact on the efficiency of accounts concerned with mineral, industrial, and estate enterprises. Whatever the deficiencies of Lord Dudley's administration between 1774 and 1833, systems of accounts were never so primitive as those which prevailed on the Wentworth Woodhouse estate of the Earls Fitzwilliam where collieries had begun as a department of household administration and colliery accounts were kept in the household account books³⁴⁵. On the Dudley estate, household administration was supervised by a steward and was quite separate from estate

³⁴¹ Court, op. cit., p. 152, writing about the rent roll of Lord Dudley for 1701.

³⁴² W.S.L. 417/37, Lord Dudley's Rent Roll 1701, see chapter 1, Part B above.

enterprise, but, with regard to the form of accounts used, traditional forms prevailed until 1833. Prof. S. Pollard has shown that the master and steward system of accounts persisted until the end of the eighteenth century, and was based on a double-entry form whereby the debit side was the 'charge', representing all the receipts of the agent on behalf of his master, and, the credit or 'discharge' side recorded all payments made, leaving the balance of cash held by the agent³⁴⁶. The 'Cash Account of Thomas and Messrs. Brettell to the Right Honourable Lord Viscount Dudley and Ward'³⁴⁷ for 1789 followed this pattern. On the 'charge' side of the account were dividends from canal shares, interest on loans, sales of timber, manorial fines, and rents received. The 'discharge' side contained a wide variety of payments including subscriptions to clubs, repair bills, gratuities, and agents' salaries. One notable absence from the account is any reference to mining profits or outlay: this suggests that a division already existed between estate business in general and mineral and industrial enterprise in particular. The traditional form of accounts remained in use until 1833 in spite of the fact that modern double-entry systems were increasingly adopted by landowners and industrialists in the more professional approach to management which developed after 1800.

One of the tasks assigned to Smith and Liddell by the trustees in 1835 was to improve the systems of accounts used by Lord Dudley's mineral and industrial agents:

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- 343 D.P.L. 614/20, Lord Dudley's Great Rental, 1791.
344 D.P.L. 613/20, Lord Dudley's Great Rental, 1825.
345 Spring, op. cit., pp. 81-3.
346 Pollard, op. cit., p. 209.
347 D.P.L. 608/20, Lord Dudley's Rental, 1788-91.

'Although there is a profit upon the whole Concern ... it is necessary to ascertain whether upon individual portions of it, the reverse is not the case.'³⁴⁸

The existing form of accounts enabled comparisons to be made between the total profitability of the estate from year to year but failed to indicate the state of affairs for individual collieries, farms, or ironworks. Moreover, the existing accounts made no distinction between profits from mines and ironworks owned and managed by the estate, and profit from such enterprises leased to entrepreneurs:

'It appears to be necessary that the Annual Profit of the Mines and Works should be distinctly shown - the Accounts do not give this result - insomuch as Rents, Royalties etc. seem to form part of them, and which do not appear to be properly connected with the Profits of Mines etc. worked.'³⁴⁹

Not only were the accounts inadequate to meet the requirements of such a large and complex estate, they were also inefficiently maintained. One of the trustees added a comment to the account drawn up to show the mine transactions for the year ending in March 1834:

'Mr. Benbow does not know whether this be correctly stated or not, but he has an idea that the Debts contracted between 6th March 1833 and 31st March 1834 fell short of this sum.'³⁵⁰

All existing mines and industrial accounts were submitted to Smith and Liddell in order to assist them in compiling their report. Apart from their primitive form the accounts were incomplete and possibly inaccurate:

'The above statements are the best Mr. Benbow can submit to Messrs. Smith and Liddell. They are however, he thinks, substantially to be relied upon though he can by no means vouch for their complete accuracy.'³⁵¹

In view of the fact that Benbow had been for many years the London agent of the Dudley estate, responsible not only for legal transactions but also for the general supervision of

³⁴⁸ Trustees' Instructions, 1835.

³⁴⁹ Ibid.

³⁵⁰ Ibid.

³⁵¹ Ibid.

affairs, this is as much an indictment of himself as of the local agents such as Downing. James Loch, auditor of the trust accounts, commented that, in Downing's mine accounts items

'are put down in the order of the date of payment without any classification.'³⁵²

This recalls the form used by Brettell in 1788 and the continued use of traditional accounts may be explained by the fact that Downing, like Brettell, was a product of the local landed gentry and was unable to adapt the traditional account used for landed estates in spite of its inadequacy for industrial affairs. Loch was moved to condemn, in extreme terms, the accounts presented to him:

'no matter of accounts ever occupied so much of my consideration and personal labour and that of my Clerks ... All accounts should be so made out that they will explain the transactions to which they relate to any one who peruses them with ordinary detail ... This I submit neither Mr. Downing's Accounts or Books do.'³⁵³

In view of Loch's considerable reputation and experience as an auditor and adviser on estate development, this reflects the extent of the deficiencies in the management of the Dudley estate.

In one respect the Dudley estate did incorporate a development of the late eighteenth century³⁵⁴ by the departmental allocation of costs. This was an attempt to take account of internal transfers of goods from one department to another, and, to calculate which of the different departments or goods were producing a satisfactory contribution to the total profit. The Dudley estate partially operated this system before 1833 by allocating costs but the true profitability of individual branches of enterprise remained a mystery because of the absence of individual accounts for each

³⁵² S.C.R.O. D260/M/F/5/19/4, Report on the Trust Accounts.

³⁵³ Ibid. ³⁵⁴ Pollard, op. cit., p. 211.

enterprise. Timber was purchased from Lord Dudley's store yard in Kingswinford, for use in his mines, and these transactions were recorded in the rentals for 1790 and 1791 as payments to the estate by Cockshutt, the mine agent. Estate enterprises were supplied with a variety of materials from Lord Dudley's store yard, and the mining and industrial concerns run by the estate paid a land rent to the estate. In the case of the Old Level Iron Works money was credited to the estate for the rent of furnaces and forges by Gibbons and Co. and by Izens and Co. but a land rent of £50 13s. Od. was debited to the estate³⁵⁵.

One of the problems facing Lord Dudley and his agents was to ensure the security of bank deposits. Considerable use was made of banks, both by individual Lords Dudley to conduct their own personal affairs, and by the mine and land agents for the transaction of business. Probably as a safeguard against bank failures, two banks at least were used throughout the period. Between 1779 and 1812 the second and third viscounts maintained an account with Messrs. Child and Co., a London bank, into which the chief mine and land agents paid their receipts. Payments were made to the chief agents for their own salaries and, in lump sums, employees' wages. When this bank failed in July, 1812, Lord Dudley's mine account was transferred to Dixon Dalton and Co. of Dudley³⁵⁶. Deposits were also maintained in the Wolverhampton Bank after May 1795 when Cockshutt remitted £2,000³⁵⁷, and with Hammersley and Co. of London after an account was opened in October 1795. This policy of not concentrating all capital in one bank was even more rigorously observed by the trustees after 1833.

³⁵⁵ Mines Report, 1836, p. 43.

³⁵⁶ D.P.L. 10/H, Lord Dudley's Accounts, 1779-1823.

³⁵⁷ D.P.L. Cockshutt to Thos. Brettell, 1 May 1795.

On the whole the system of rentals and accounts changed little during the period 1774-1833 and the manor courts continued to provide the machinery for the exchange of copyhold property and the collection of manorial dues. In the early years after 1788 some improvements were made by the third viscount which correspond to his vigorous involvement in affairs in the 1790s. Rentals ceased to be general statements of income, and he may have introduced departmental allocation of costs by the payment of land rent to the estate by estate enterprises and the recording of transactions between various sectors of estate enterprise. However, the general situation remained one in which traditional practices continued to flourish despite their unsuitability for an estate with such diverse interests. This state of affairs was largely attributable to the types of agent appointed and to the declining involvement of the Lords Dudley in the development of the estate after 1800.

In reviewing the mineral and industrial activities of the Dudley estate between 1774 and 1833 there is no doubt that the second viscount laid the foundations for development after 1774 by his work in providing adequate transport systems, extending the area of his personal estate, and establishing favourable conditions and rights through enclosure bills. Rapid expansion of agricultural, mineral, and industrial enterprise had followed to the benefit of the Dudley family and the area in general. In every one of these spheres, attempts were made to rationalise and consolidate the organisation of affairs between 1790 and 1812 but in every case, by 1833, conditions and efficiency were deteriorating. Even agricultural properties had failed to yield the profits one might expect during the war years after 1793 and from the proximity of a large and rapidly increasing urban population in the Black Country. Variety of enterprise on leased

properties was considerable, but, in spite of the fact that the estate continued to work the bulk of the pits directly before 1833, total integration was not attempted and the Dudley mineral enterprises were integrated only up to the point of distribution of the raw materials. Iron production was left to lessees, who, because of faulty leases, purchased materials from outside the estate. Inconsistency was also a feature of the estate in this period with the approach to mineral enterprise vacillating between total estate management and the leasing of the minerals as in the case of limestone and the collieries. In view of the deficiencies of management, the net income received for much of the period would be only a proportion of the potential value of the Dudley lands. Nevertheless, the net income for 1833 from all sources of estate enterprise was as high as £55,327 9s. 7d.³⁵⁸ The main source of income came from mines and industrial enterprises including railways, the store yard, clay, coal, ironstone, and limestone pits owned and managed by the estate together with leased 'broken' mines and ironworks. In their instructions to Smith and Liddell, the trustees gave some indication of the extent of Lord Dudley's capital tied up in these activities: floating capital consisting of

'book debts and cash supposed to be necessary for carrying on the Works'³⁵⁹

amounted to £126,000 and 'dead capital' totalled £56,000 consisting of timber, iron, engines, mine shafts, railways, canal basins, and boats. The extent to which the trustees succeeded in overcoming existing problems and expanding the interests of the Dudley estate, and the systems of administration and organisation adopted by them, will be considered after an examination of the Will of the fourth viscount and first earl which established the Dudley trust in 1833.

³⁵⁸ S.C.R.O. D 260/M/F/5/19/4. Report on Lord Dudley's Accounts,

³⁵⁹ See Chart 9, p. 149.

Trustees' Instructions, 1835, p. 3.

Chart 9. An Estimate of the Total Annual Income of the Dudley Estates, 1833.

	£	s.	d.
The gross income from all mineral and industrial enterprise, March 1833 - March 1834	91,067	19	2
The gross rental of the Dudley (Black Country) and Welsh estates, March 1832 - March 1833	20,099	14	2
The proceeds of the Jamaica estate	4,415	7	0
Dividends from stocks and shares	1,650	13	9
Interest on £6,500 at 4%	260	0	0
Approximate gross income per annum	<u>111,493</u>	14	1
Outlay on mineral and industrial enterprise, March 1833 - March 1834	54,156	5	4½
Estate expenses, March 1832 - March 1833	<u>8,009</u>	19	2
Approximate expenditure per annum	<u>62,166</u>	4	6½
Approximate net income c.1833	55,327	9	6½

Because 1832-3 was a period of depression in the area and in view of the inefficient management of the estate in general, the total income estimated above would probably be below average and was certainly below the potential value of the estate.

These figures are taken from the Report on the Accounts of the Trustees and Executors of the Dudley Estates, 18 July 1834 by James Loch. S.C.R.O. D260/M/F/5/19/4.

Chapter 3. The Will of the First Earl, 1833

The fourth viscount¹ died in March 1833 and the provisions of his complex Will came into force: the effects of this document were so extensive as to establish 1833 as a major turning point in the development of the Dudley estate. There had been earlier strict settlements of the estate², first of all in 1780 and again in 1804 and 1810 after which the estate was jointly entailed to the third viscount and his son, an unusual³ arrangement. The irresponsibility of William, Third Viscount Dudley and Ward, in his attitude towards estate management and the hostility which developed between himself and John William, his son, undoubtedly influenced the latter in his exercise of responsibilities as the titleholder to the estate between 1823 and 1833. Some confusion had resulted from the fact that the third viscount had been so inconsiderate as to die intestate in April 1823. His son took absolute possession by letters of admission on 23 June 1823 and paid off the debts inherited by him. An inventory was taken revealing a

'residue of £423,278 14s. 2d. one third part of which ... Viscountess (Dowager) Dudley is entitled to under the Statute for the distribution of Intestates personal effects.'⁴

¹ John William Ward, created First Earl of Dudley, 1827.

² D.P.L. 10/K, John Benbow to the Honourable John William Ward, 28 Jan. 1823.

³ F. M. L. Thompson, 'The End of a Great Estate', *Ec.H.R.* 2nd ser. VIII (1955), as quoted by D. Spring, 'English Landownership in the Nineteenth Century, a Critical Note', *Ec.H.R.* 2nd ser. IX, (1956-7), p. 483.

⁴ D.P.L. 10/K, Indenture between Julia, Dowager Viscountess Dudley and Ward and the Right Honourable John William Viscount Dudley and Ward, 26 Oct. 1824.

This proportion was paid to Viscountess Dudley who then renounced all claims to the estate. Before his own death, John William, the fourth viscount, took steps to draw up a comprehensive Will⁵ which not only entailed the estate under strict settlement but also established a trust to perform a number of tasks to benefit the estate. In entailing the estate, the earl was establishing a situation which was commonly created for most estates at the time of the marriage of the eldest son⁶. As the earl never married, the Dudley estate was resettled by his Will.

In general, the purpose of strict settlement was to preserve a family estate intact - as the basis of social and economic power, for contingent remainders, by restricting the heir to the position of a life-tenant only, so that he was unable, in general, to do anything with the estate which might produce effects beyond his own lifetime⁷. The establishment of a trust to manage the estate was not such a common occurrence and usually resulted when indebtedness had reached crisis proportions, so that trustees were appointed to enforce economy and more efficient management, or when the estate was left to a minor⁸. Indebtedness was the main reason for the establishment of the Ailesbury trust in 1832⁹ which concerned the Wiltshire and Yorkshire estates of the Marquis of Ailesbury. In the case of the Dudley estate, the Ward barony was inherited by the earl's cousin, William Humble, but the estate was entailed in trust to his son, a minor. From the details of the Will and the events of 1833,

⁵ S.C.R.O. D260/M/F/5/19/1, The Earl of Dudley's Will, 26 July 1831. Subsequently referred to as The Will, 1831.

⁶ Spring, op. cit., p. 483.

⁷ F. M. L. Thompson, English Landed Society in the Nineteenth Century (1963), pp. 68-9.

⁸ G. E. Mingay, 'The Large Estate in the Eighteenth Century', Int.Conf.of Ec.Hist. (1960), p. 334.

it is likely that this arrangement was decided upon by the earl because of his awareness of the need to restore efficiency to the estate's affairs, and, because his cousin's sanity was suspect, he was passed over by the Will which made his nephew heir to the estate.

A. The Main Provisions

i. Establishment of the Various Trusts

Under the terms of his Will, drawn up in 1831, the earl had devised all his estate to two trustees, the Earl of Aberdeen and the Right Honourable James Abercromby, should he produce an heir¹⁰. In default of this, as was the case, a number of other provisions were to operate. The family home, Himley Hall, was to be left to his cousin, the Reverend William Humble Ward, for life plus an income of £6,000 per annum¹¹. The earl's rights to the

'Advowsons, Donations rights of patronage and presentation (were) ... devised to the use of the Right Reverend Henry Philpotts, Lord Bishop of Exeter, Edward John Littleton of Teddesley Park in the County of Stafford Esquire, Francis Downing of Dudley and John Benbow of Lincoln's Inn'¹²

for a period of 99 years. A further trust, by far the most significant in its effects, was established whereby the same four trustees were to manage and receive the income of all the estate for a twelve-year period and fulfil a number of tasks.

The work and contribution of these trustees during the trust period, 1833-1845, will be considered elsewhere, but their reputations and contrasting careers before 1833 are of interest. John Benbow, a partner in the firm of Messrs. Alban and Benbow of Lincoln's Inn, had been employed since

⁹ F. M. L. Thompson, 'English Landownership: The Ailesbury Trust', Ec.H.R. 2nd ser. XI, (1958), p. 121.

¹⁰ The Will, 1831, p. 1.

¹¹ Ibid.

¹² Ibid., p. 5.

1800 by the Dudley estate in the capacity of chief legal adviser. By the 1820s he was evidently acting as a general supervisor of all the business of the estate and, as such, he stood condemned by the various reports made to the trustees after 1833 which revealed numerous deficiencies in management and administration. As the earl had nominated him a trustee, this was to produce considerable disharmony amongst the trustees. Equally, Francis Downing, the chief land and mineral agent, who had recently moved into a splendid residence constructed by the estate at The Priory, Dudley, was condemned by the various reports. He had been employed as a clerk in the chief steward's office as long ago as 1796. His actions as a trustee produced numerous crises over policy decisions. These two men had obviously been nominated by the earl as employees whom he could trust and who would maintain continuity in the management of affairs after his death while consideration was given to the changes of policy permitted by his Will. The other two trustees were personal friends. One of them, Henry Philpotts, Bishop of Exeter, could be trusted for his integrity and be expected to work unselfishly to carry out the tasks entrusted to him. In fact, as a reactionary tory, his attitudes towards liberal and social reform were to harm the good relationship between the Dudley estate and the working population of the area and his attempts to use his influence over trust affairs in the interest of his son were to create considerable difficulties.

It was the fourth trustee, Edward John Littleton, a close personal friend of the late earl, whose career and experience were to prove most beneficial of all to the future prospects of the Dudley estate. His residence at Teddesley Park near Wolverhampton, and his estates in the Cannock area, gave him first hand experience of conditions in Staffordshire and in the management of a large landed estate

with mineral interests. He had been a whig M.P. for Staffordshire since 1810 and demonstrated his progressive sympathies by supporting the cause of parliamentary reform from 1828 onwards. Since 1825 he had been an advocate of a catholic emancipation bill for Ireland and, in 1830, after close collaboration with Huskisson, he presented the anti-truck bill as a private member's bill: this became law in 1831. At that time, Littleton owned eight brickfields, two stone quarries, two lime works, and three collieries and disliked truck masters as did most large employers¹³. He wished to end truck because it impoverished independent employers who did not use the system and it reduced wages beneath their nominal value. His reputation stood high in Staffordshire where he was known as 'The Man of the People'¹⁴. Shortly after the commencement of the trust, Littleton was appointed Chief Secretary to the Lord Lieutenant of Ireland but, after his resignation in November 1834, following a political indiscretion over the Wexford election which incurred him the criticism of O'Connell, he was able to concentrate his attention on the management of his own affairs and the Dudley estate. He was created Lord Hatherton in May 1835 and, because of his character and standing, was to emerge as the most satisfactory of the Dudley trustees, not least in his efforts to mould the character of William Ward, heir to the Dudley estate.

Although not nominated as a trustee, the appointment of James Loch, under the terms of the Will, as auditor to the trust was to prove almost as valuable to the interests of the estate as the choice of Littleton. His experience of business management was vast: since August 1812 he had been chief agent to the Duke of Sutherland - a position he was

¹³ G. W. Hilton, The Truck System, 1465-1960 (1960), p. 104.

¹⁴ Staffordshire Advertiser, 29 Oct. 1831.

to retain until 1855¹⁵. As a law student at Edinburgh in 1798, Loch mixed with a talented group of progressive thinkers known as the Speculative Society including such men as John Murray and Henry Brougham. Brougham was a friend of the late Earl of Dudley and as he too had been tutored by Dugold Steward of Edinburgh in 1798, it is possible that the earl had been acquainted with Loch from that date. He was also an M.P. from 1822 to 1852 and a friend of leading whigs such as Littleton. Within a short space of time after his appointment, Loch had overhauled the Sutherland estates and wrote in 1813

'in another year I trust we shall have everybody understanding each other and carrying on things in a regular and systematic order.'¹⁶

His principles of management were clearly enunciated:

'The great sinews of improvement should be Lord Stafford's (Duke of Sutherland) object ... (and) immediate return, though not neglected has never been permitted to stand in the way of permanent advantage'

and the agents were enjoined to

'look forward 50 years that you may make the most of the present.'¹⁷

Efficiency and improvement were to be the obligation, the duty of his agents, as they were for himself. The property of the Stafford estates included industrial, mineral, canal, and agricultural enterprises. Many of the farms were in a dilapidated condition in 1812 and, although Loch's ideas were founded in Lothian and Northumberland and corn husbandry,

'his energies were directed to the improvement of English clayland farming ...'¹⁸

¹⁵ E. S. Richards, James Loch and the House of Sutherland, 1812-1855, unpublished Ph.D. thesis, University of Nottingham, 1967.

¹⁶ Ibid., p. 28.

¹⁷ Ibid., p. 29.

¹⁸ R. W. Sturgess, 'The Agricultural Revolution on the English Clays', Agric.Hist.Rev. II, XIV, (1966).

As leases fell in, it was his policy to insert covenants restricting the acreage under corn and be more selective in the choice of tenants. Such policies were introduced by him on the Stafford estates along with an increase in mixed farming and the amalgamation of properties. Loch's high standards of personal conduct earned him the gratitude of his employers and also the criticism of some colleagues and acquaintances. He was closely connected with the Highland Clearances and earned himself the titles of 'The Duke's Premier' and 'The Sutherland Metternich'¹⁹. Nevertheless, Loch, 'the king of auditors'²⁰, established such a reputation that he was employed not only by the Duke of Sutherland but also by the Earl of Ellesmere, the Howards of Castle Howard and, after 1837, as superintendent by the Bridgewater Trust. The Dudley trust was fortunate enough to have Loch as its auditor between 1833 and 1845: although not in a position to act as the prime mover of affairs, as he could in his capacity as chief agent to the Sutherland estates, Loch's standing and character involved him closely in policy-making and, together with Littleton, theirs was the most valuable contribution to the improvement and retrenchment of the Dudley estate which laid the foundation for the future profitability of the estate on a short and long term basis.

The four trustees had to manage all the estates which included property in Staffordshire, Worcestershire, Merioneth, London, and Jamaica, and fulfil a number of tasks with estate revenue over a period of 12 years before William Ward, son of the late earl's cousin, inherited the estates in 1845. The estates were given

'to William Ward, the eldest son of Lord Ward, for Life with Remainder to his first and other sons

¹⁹ Richards, op. cit. p. 36.

²⁰ D. Spring, The English Landed Estate in the Nineteenth Century, Its Administration, 1830-1870, p. 89.

'successively in tail.'²¹

After the payment of the late earl's mortgages and debts and the annual provision of £6,000 to Lord Ward, other annual charges on the estate had to be met. William, the heir, was to receive £3,000 per annum until 1838 when, after reaching the age of 21 years, his income was to be raised to £5,000. Should his father die within the trust period, William would inherit the title and, after he was 21, an income of £8,000. In addition, £500 annuities were paid to William's brother, Humble Dudley Ward and his sister, Susannah Julia. Portions of £20,000 were to be paid to William and Humble at the age of 21 and £10,000 to Susannah on her marriage. A further £5,000 could be spent on the education of Lord Ward's two sons during their minorities. These were considerable changes on the estate, but typical of the wealthy landowning aristocracy. Strict settlement of their estates was a means of ensuring the maintenance of relatives in the style to which they were accustomed and to enable daughters to marry well²². However, family charges could create problems for the life-tenant who might find his gross income severely depleted by such payments, as in the case of the Ailesbury trust²³: faced with the payment of £60,000 in portions and annual charges of £5,720, the Ailesbury trustees were forced to seek a reduction in 1838. The charges on the Dudley estate were no less and, but for the improvement in estate income, difficulties may have arisen. Other charges on the estate included legacies of £6,000 to be paid to Abercromby, £5,000 to Benbow, £4,000 to Downing, and £2,000 to the Bishop

²¹ The Will, 1831, p. 7. Lord Ward (the late earl's cousin) had two sons and a daughter alive in 1833.

²² Thompson, English Landed Society in the Nineteenth Century, pp. 69-70.

²³ Thompson, English Landownership: The Ailesbury Trust, pp. 124-5.

of Exeter²⁴. Finally, the trustees were empowered
'to retain any yearly Sum to be divided between them
as a compensation for their trouble as a majority of
them should think fit over and above all Expences.'²⁵

The final task allocated to the trustees was to use the
remainder of the annual income from the estates to purchase
'freehold Estates situate in Great Britain or of
Copyhold or Leasehold Estates conveniently to be
held.'²⁶

The residue of rents was also to be

'accumulated by investment in the Funds or on real
Securities in Great Britain ... and the Interest
and Dividends (were) to be applied ... to Estates
to be purchased therewith.'²⁷

All properties purchased were to be managed by the trustees
and handed over to the heir along with the devised estates
at the end of the trust. This was a major feature of the Will
and served to enlarge considerably the area of the Dudley
estate by 1845.

11. Directives Concerning the Organisation of the Estate

In addition to the various tasks entrusted to the
trustees in the uses made of estate income, the Will included
several directives designed to achieve alterations in the
management and control of affairs. The trustees could
continue to work the mines but had to observe certain con-
ditions, should a policy of leasing be introduced. Leases
up to 40 years could be granted for

'any of the Mines ... Forges, Foundries and other
Iron Works already opened ... or which may be opened
... and lessees (shall have) power to remove ... at
the end of their Term all or any Engines, Machinery,
Tackle, Gear and Articles whatsoever ... they shall
have erected.'²⁸

²⁴ The Will, 1831. Codicil, 21 Sept. 1831.

²⁵ Ibid. p. 44.

²⁶ Ibid. p. 18.

²⁷ Ibid. p. 20.

²⁸ Ibid. p. 31

Such a policy would enable the trustees to derive

'the best and most improved yearly rents or royalties' and lessees, with security of tenure, would be encouraged to invest capital to exploit their lease to the full. Agricultural leases could also be negotiated

'for any Term not exceeding 21 years at Rack Rent'²⁹ and these too were subject to strict conditions including the right of re-entry on non-payment of rent and a clause obligating tenants to

'keep and leave the buildings in repair and to cultivate the lands in a proper and husbandlike manner.'³⁰

A third category of leases was specified - building leases - which could be granted up to 60 years. These conditions were undoubtedly sound yet they contrast sharply with existing practices on the Dudley estate. The inefficiency of mineral and industrial organisation is apparent: equally, agricultural enterprise was faulty. Rents had not increased as one would expect in this period, and farm properties were in a dilapidated condition. With regard to building leases, there is no evidence to show that the estate exploited the opportunity provided by the urbanisation of the Black Country to establish an income from this source. This apparent discrepancy between policies outlined in the Will and current estate practice raises the question: on whose advice did the earl include such provisions in his Will? His existing agents must be excluded and it seems likely that he consulted James Loch on those sections of his Will which concerned estate policy. The last directive affecting the management of the estate stipulated that all trust accounts must be audited in February by James Loch Esq. of Bloomsbury Square.

It was under the terms of these directives that the trustees subsequently issued their instructions to Smith and

²⁹ Ibid. p. 29

³⁰ Ibid.

Liddell:

'The Earl having evidently contemplated a change of System and having given power to his Trustees to affect it, they ... have appointed Messrs. Smith and Liddell to survey and Report upon the Mines and Works.'³¹

If the earl was aware of the need for improvement and changes in the administration of his estate, the nature of his illness probably explains his indecision and failure to effect these changes under his own direction. Most settled estates had power to grant agricultural leases for terms up to 21 years but it was unusual to grant powers concerning mining and building leases in the first half of the nineteenth century³². The first earl's Will was a remarkable document which not only ensured the re-settlement of the estates during the minority of an indirect heir but also provided for the reorganisation of the Dudley estate in every department.

B. Problems Relating to the Will

The circumstances which existed at the commencement of the trust inevitably created problems which resulted in acrimony and litigation. Because of the late earl's state of mind, the validity of the Will was questioned by his cousin, Lord Ward, whose own sanity was impaired, and who was disappointed at not inheriting all the estates. He not only contested the powers of the trustees but also attempted to secure control of estate affairs. His hostility was increased when his son William, heir to the estate, and his two other children were removed from his care and placed under guardianship. A final problem arising out of the Will concerned the provisions made for Lord Ward's income and the upkeep of the family home at Himley.

The decline in the earl's health and mental powers have

³¹ Trustees' Instructions, 1835, p. 2. See Chart 8.

³² F. M. L. Thompson, 'English Great Estates in the Nineteenth Century', I.C.E.H. (1960), p. 389.

already been considered. One of the few friends with whom he maintained contact in the last months of his life was E. J. Littleton, subsequently a trustee:

'my prison^{is} in Surrey about 7 miles from Town ... as to that story about inflammation in the brain ... it is a mere imposture got up for their own purposes by some bad men ... I am never allowed to see a newspaper or ... receive private letters ... It would be very kind of you to speak to some of your friends in power to put a stop to this tyranny.'³³

After the earl's death, Littleton's association with him and his responsibilities as a trustee incurred him the wrath and hostility of Lord Ward. Since 1826, Lord Ward had been separated from his wife Amelia and their three children. After March, 1833, Lord Ward attempted to establish contact with his son for the purpose of securing influence over estate affairs and the case was brought before the Lord Chancellor in a private hearing in August 1833³⁴. Baker, appearing for Lord Ward, acknowledged that the separation had occurred as a result of his client's insanity but stated that Lord Ward now had a medical man living in his house

'for his protection and assistance'³⁵.

Sir Edward Sugden, representing Lady Amelia Ward, attempted to restrain Lord Ward from going to Himley House and asserted that the Will, while leaving £6,000 per annum to Lord Ward, made no provision for the upkeep of Himley House, which he was entitled to live in for life. The Lord Chancellor himself pointed out that

'It is not quite in proportion that a Gentleman with £6,000 a year should live in a place which costs £1,200 a year to keep.'³⁶

³³ S.C.R.O. D260/M/F/5/19/11, Correspondence, Earl of Dudley to E. J. Littleton Esq. 25 July, 1832. The earl had been placed under restraint in March 1832: he remained at Norwood in Surrey until his death on 6 March 1833.

³⁴ Ibid. Arguments before the Lord Chancellor, August 1833.

³⁵ Ibid.

³⁶ Ibid.

Baker claimed that his client was

'not particularly anxious about it'
and felt that^{if} his son William would inherit the estates when
25 years old, it

'was only proper his eldest son should frequent Himley
as much as possible ... and Lady Ward might make it a
residence during a portion of the time for herself and
the other children.'³⁷

The outcome of the hearing was that Lord Ward, being declared
sane by the Court of Chancery, set up his household at Himley:
Lady Ward was also to set up a household at Himley with her
children and to receive £1,500 per annum to maintain it.
This was in a residence adjacent to the grounds of Himley Hall.
Lord Ward was allowed to

'receive his sons during a portion of their vacations
and his daughter at any time.'³⁸

Under this unhappy arrangement, the Ward family maintained an
uneasy truce until Lord Ward's death in 1835. On one point,
friction remained: Lord Ward refused to accept Lady Ward and
Benbow as guardians of William³⁹, his eldest son, but after
prolonged disputes, he accepted Littleton and Lady Ward as
guardians.

Tension persisted because of Lord Ward's attempts to
influence William and to interfere in the management of
estate affairs. Downing became so alarmed at the trend of
events that he wrote to Littleton that Lord Ward

'is having constant dinner parties ... and talks much
about his own personal affairs - sometimes inweighing
against the unpardonable proceedings of the ...
Trustees ... The representations he makes of these
circumstances have created a strong impression in his
favour, and his situation is become a subject of public
interest, and himself an object of popularity.'⁴⁰

In particular, two of Lord Ward's household seemed to influence
him considerably: these were Dr. Heath his physician and
'Mr. Baker ... a shrewd clever keen attorney who

³⁷ Ibid.

³⁸ Ibid.

'seems to rule the whole household.'⁴¹

Young William made things more difficult when he wrote to Lady Amelia:

'I think you decided rather hastily upon sending me here (Petherwyn), as indeed I think most things are about me ... I am sure the circumstances in our family are disagreeable enough, without adding to them ... I think too that all the correspondence about my not receiving Papa's letters is highly unjust and foolish ... I know what the state of his mind is, and I read and consider the letters accordingly.'⁴²

This provides an early insight into William's character, he was 16 years old at the time: his forthright manner, perceptive qualities, and his sense of justice were to provoke many clashes with the trustees before the end of the trust. Benbow's response to Lord Ward's continued attempts to influence the conduct of estate affairs and recover complete parental authority, was to propose an investigation by the courts - however, Littleton advised against this:

'it would not do to proceed the length of hazarding a Commission of Lunacy, in which we should be infallibly beaten and disgraced.'⁴³

Littleton's sense of decency led him to acknowledge his satisfaction that Lord Ward should have some control of his children but:

'with respect to the Trust ... we should insist on its integrity being maintained.'⁴⁴

As he himself was still resident in Ireland, Littleton's absence weakened the standing and reputation of the trustees at Dudley and produced misunderstandings between Benbow and himself:

'I do assure you that your communication to me on the subject of Lord Ward's affairs, although no doubt intelligible to any professional man was by no means intelligible

³⁹ William was born in 1817 and his affairs were under guardianship from 1833 to 1838.

⁴⁰ Ibid. Downing to Littleton, 17 Oct. 1833.

⁴¹ Ibid. ⁴² Ibid. William Ward to Lady Ward, 24 Nov. 1833.

⁴³ Ibid. Littleton to Lady Ward, 30 Nov. 1833.

'to me.'⁴⁵

This remark was occasioned by Littleton's belief that he was not being kept fully informed of events. Benbow's rejoinder was equally to the point:

'You request to know "to what, if any, extent you might be favoured with the confidence and support of your Co-trustees." I am not aware that you have asked me any such question, nor can I conceive the necessity for asking it.'⁴⁶

He went on to reassure Benbow that

'you are the only one of my Colleagues in whose ability and determination I have any confidence at all'⁴⁷ and that he was grateful for this,

'overwhelmed as I am with business so urgent and important that, compared with it, this affair of Lord Ward's is a mere feather.'

This was probably a reference to the political crisis which was to produce Littleton's resignation as Chief Secretary in Ireland - the letter also reflects the personal tension which existed between Benbow and Littleton. It was after Lady Ward⁴⁸ appealed to Littleton for help that resort was again made to the Court of Chancery, and the position of herself and Littleton as guardians of Lord Ward's children was^a clarified:

'William must not remain here he not only assumes the character of Master of the House but is insufferably insolent to his father and to me and to the visitors at the house.'

After the hearing before the Lord Chancellor, Littleton observed: that

'I rejoice to think the sorry business is so well settled. I will write to Lady Ward on the subject of the removal of both young gentlemen.'⁴⁹

44 Ibid. Littleton to Benbow, 31 Dec. 1833.
45 Ibid. Littleton to Benbow, 8 Jan. 1834.
46 Ibid. Littleton to Benbow, 9 Jan. 1834.
47 Ibid. ⁴⁸ Ibid. Lady Ward to Littleton, 29 Jan. 1834.
49 Ibid. Littleton to Benbow, 6 Feb. 1834.

Heath and Baker also left Himley and the trust was not interfered with again by Lord Ward.

However, the problem of finance remained because the upkeep of Himley was not adequately provided for by the late earl's Will:

'Every thing is confusion for current expenses.'⁵⁰

Littleton pointed out to Downing that the trustees

'can incur no responsibilities of any kind, either for the benefit of Lord Ward or any other parties ... until we can state that your accounts have been audited.'⁵¹

It was agreed that, with regard to coal delivered to Himley, Downing should hand the accounts to Lord Ward

'and when William attains the age of 21, he may give us a note of hand.'⁵²

When the first year's accounts were received from Downing, the trustees approached the Court of Chancery for leave to spend estate revenue for purposes not designated in the Will, but permission was not obtained until after the death of Lord Ward on 6 December 1835. Then, by order of the Court of Chancery dated 6 August 1836,

'the sum of £3,000 per annum was directed to be paid for the maintenance etc. of Lord Ward (William) from 6 December 1835 and £1,000 for Mr. Dudley and Miss Ward (his brother and sister)'⁵³

By the same order, £2,600 per annum was to be paid for two years from 25 March 1836 to Lady Ward for maintaining her household at Himley. This would terminate in 1838 when William, Lord Ward, attained his majority.

In spite of technical defects and the problems created by Lord Ward's actions between March 1833 and December 1835, the Will of the first earl was an attempt to re-settle and overhaul the affairs of his complex estate. It reflected the chaotic and undesirable state of affairs at the time of his death and his own unpreparedness or inability to take the

⁵⁰ Ibid. Lady Ward to Littleton, 29 Jan. 1834.
⁵¹ Ibid. Littleton to Downing, 10 May, 1834.
⁵² Ibid. Littleton to Lord Ward, 10 May 1834.

necessary action, Nevertheless, the Will, in establishing the twelve-year trust, provided the machinery and the men necessary to tackle the problems. However, in appointing Downing and Benbow as trustees, the earl had bequeathed a legacy from the existing management which would probably have destroyed the intentions of the Will but for the character and integrity of Littleton, their co-trustee, and the professional expertise of Loch, the appointed auditor. Problems of personality remained, but the practical problems of the trust were to be tackled so successfully as to satisfy the wishes of the late earl and in accordance with the intentions of those who advised him on the content of his Will.

⁵³ S.C.R.O. D260/M/F/5/19/4, Fourth Report on the Trust Accounts by James Loch, 11 May 1838.

Conclusion to Section I

With the death of the first earl in March 1833 and the implementing of his Will, the early period of intensive exploitation of the Dudley estate ended. This had commenced in 1774 with the accession of John, Second Viscount Dudley and Ward to the title. However, changes in the condition and exploitation of the estate were more a question of the scale of enterprise rather than innovation, as was the case with the Black Country in general. Mineral and iron-working had provided income from enterprises owned and worked by the estate for many years before 1774 and such properties had also been leased from time to time. In addition, a substantial and regular income was traditionally derived from cottage and agricultural rents. At the commencement of the eighteenth century, Lord Dudley's income from mineral and industrial enterprise represented 43.8 per cent of his gross income: income from manorial dues, cottage and agricultural rents still accounted for more than half the total income¹. By 1774, except for the fact that the balance had probably tilted in favour of industrial and mineral sources of income, the proportions of total income derived from the various sources would remain almost unaltered. It was the work of the second viscount who seized the opportunities provided by the nature and location of his estate to exploit energetically the factors which were then operating to bring about changes in the iron and mineral trades, which in turn were affecting that area of the west midlands, subsequently known as the Black Country.

His achievements laid the basis for future expansion:

¹ See Section I, Chapter 1, Part B for a discussion of Lord Dudley's Rent Roll, 1701.

the family estates were consolidated and extended, private acts of parliament and personal influence ensured the securing of rights particularly beneficial to the estate, regional communications and access to distant markets were established by the various canal acts, and an incentive was provided to settle in the area by allowing immigrants to construct cottages on the enclosed wastes. As a result the drawbacks of the physical topography were overcome and the mineral advantages were exploited. For the Dudley estate, this situation meant a rapid expansion in the number and scale of enterprises in terms of agricultural, mineral and industrial activity. These were established by leasing properties throughout the estate and by direct investment in and management of mineral enterprises by Lord Dudley's agents themselves.

In one respect, the work of the formative years, 1774-1788, might be criticised: this was the failure of the second viscount to engage qualified, professional men to administer his rapidly expanding interests. However, such men were not readily available and, probably, so long as he himself was so directly involved in the management of affairs, the shortage of qualified men was not so serious. In the 1790s, the third viscount made some attempt to remedy managerial deficiencies: the limestone quarries were let, ironworks leases were exploited and increased, and Charles Beaumont was appointed to overhaul the mineral trade. The outcome of these attempts resulted in the estate working the bulk of the pits by direct employment of labour, and mineral income increased for a time. However, in the period after 1815, mineral and industrial enterprise declined. Agricultural enterprise too was languishing and had failed to exploit opportunities to the full even during the Napoleonic wars. By the time of the earl's death in 1833, a policy of drift had produced disintegration and a decline in income.

The faults in management and organisation were identified - indirectly, by the earl's Will and, after 1833, were clearly specified by Loch, Smith and Liddell. During the period of the twelve-year trust, the machinery was provided for a thorough overhaul of estate affairs and, once the initial crises produced by Lord Ward's attempts to meddle in the management of his son's settled estates were overcome, the way was apparently clear for the trustees to carry out the first earl's wishes and restore the former prosperity of the Dudley estate. Nevertheless, in spite of the criticisms made, the total income of the Dudley estate in 1833 was considerable² and derived from a wide variety of sources. This degree of liquidity enabled the trustees to embark upon a policy of expansion with confidence: indebtedness was not a factor which influenced the Dudley estate at any time between 1774 and 1833. Possession of legal powers and extensive capital availability would not in themselves ensure the success of the trust - this was to be determined by regional economic factors and the personal qualities of certain individuals concerned with the management of trust affairs.

² See Chart 9.

SECTION II. THE EXPLOITATION OF THE ESTATE BY THE DUDLEY
TRUST, 1833-1845

Introduction

Several lines of enquiry need to be pursued when examining the economic development of the Dudley estate during this period. The condition of the various branches of economic enterprise in 1833 must be contrasted with the state of affairs in 1845 in order to assess changes in scale and profitability. To what extent did regional economic factors influence trust policies? Of particular significance is an examination of the extent to which the trustees seized the opportunities provided by the high level of capital availability on the Dudley estate at the commencement of the trust, and the provisions of the late earl's Will which entitled them to introduce new policies. Finally, there were obligations to be fulfilled such as the provision of annuities and the administration of the profits to purchase stocks or real estate.

The evidence suggests that the trust was very successful not only in restoring the profitability of the estate in all branches of economic enterprise, but also in expanding the scale and variety of enterprise. Within the region as a whole, this period was generally one of expansion and the policies of the Dudley estate, although failing to exploit the situation in 1833, were to dominate and benefit the Black Country as a whole by 1845. The high level of profitability enjoyed by the Dudley mineral enterprises not only enabled the trustees to purchase a considerable amount of stocks and real estate, but also brought prosperity, full employment, and an improved standard of living to a large proportion of

the local population. One of the most significant achievements of the trust was the acquisition of extensive landed estates in Worcestershire, Scotland, and Wales. This was particularly important as a long-term factor when the value and income of the Black Country mineral properties began to decrease after 1860 because of increasing costs and the exhaustion of the valuable seams. The fortunes of the Dudley family would have waned much earlier had their source of income been based solely on the agricultural and mineral estates of the Black Country.

It is difficult to assess the acreage of the Dudley estate in 1833. A small estate was owned at Ednam in Scotland and near Langollen in the Dee valley in Wales. The bulk of the estates were still situated in south Staffordshire and north Worcestershire. The survey¹ of the local landed estates of Lord Dudley in 1824 shows that he owned 6,646 acres of agricultural and cottage property. With the addition of mineral property the total would probably be about 10,000 acres. By 1873, another survey² shows that the second earl owned 11,216 acres in the same area. During the intervening period, numerous small cottage plots were sold - especially after 1848, but mineral properties had been purchased by the estate. Most of the great landowner class possessed more extensive estates than the Dudley family: at least 5,000 acres were owned by the least opulent in this class by 1800 and the average income was £10,000 per annum³. As has been shown, the Lords Dudley enjoyed a high income compared with many aristocratic landowners in spite of the relative small area of their estate and were free from debt charges. This was the

¹ D.P.L. 32/6, Survey of the Landed Estates of Lord Dudley by John R. Roberts, Dec. 1824. See Section I, Chapter 2, Part A.

² D.P.L. 12/A, Survey of the Himley Estates the Property of the Right Honourable the Earl of Dudley, 12 Mar. 1873.

result of mineral exploitation which, by 1833, was the most valuable source of estate revenue. By 1845, the area and the income of the Dudley estate from all sources ~~was~~ considerably increased as a result of the trustees' policies. However, in the case of the agricultural estates, the full benefits of the trustees' policies was not felt until after 1850.

³ G. E. Mingay, The Landed Estate in the Eighteenth Century (1963), pp. 6-20.

Chapter 1. The Agricultural Estates

Although, by 1833, agricultural rents had been supplanted as the main source of income of the Dudley estate by the income from mineral and industrial enterprise, agricultural properties were extensive and continued to supply a considerable revenue. However, it is apparent that the emphasis on change, which was producing a more efficient use of land in general, was not evident on the Dudley estate before 1833. Unlike other estates, the deficiencies were the result of bad management rather than any shortage of landlord's capital which was needed to create the physical conditions necessary for attracting desirable tenantry. In the case of the Ailesbury trust¹, the trustees were obliged to expend considerable sums of capital to carry out necessary repairs to cottages and farms, and, after 1839, surveys were taken and holdings were re-shuffled so as to produce more rational farm units as part of a general improving policy. Similar measures were advocated by James Loch during the Dudley trust. Most of the agricultural property administered by the trust was situated on the western edge of the Black Country in the manors of Sedgley, Kingswinford, Swindon and Wombourn. However, the first earl had begun to purchase landed estates in other areas after 1825 and this policy was to be continued under the terms of his Will. Several small estates, totalling 634 acres, had been purchased in 1826 around Belbroughton and Broom near Stourbridge in Worcestershire² but much larger purchases had been made in Scotland and Wales - areas which were added to by the trust.

Between 1824 and 1827, over 30 estates³ in Scotland and

¹ F. M. L. Thompson, 'English Landownership: The Ailesbury Trust', Ec.H.R. 2nd ser. XI (1958), pp. 126-30.

² D.P.L. 10/L, Conveyances of Land to Lord Dudley, 1826.

³ D.P.L. 10/K, Particulars and Valuations of Welsh and

Wales were surveyed on behalf of Lord Dudley, but there is no evidence to explain why property was sought in these particular areas. Many of these estates yielded a considerable net income and the valuations ranged as high as £170,000⁴: Lord Dudley's agricultural rents from his Black Country estates would not have enabled him to purchase in such a market. It was the mineral and industrial revenue which made it possible for him to invest capital in landed estates thus ensuring and increasing the family's social and economic status. Many of the surveys were made by professional estate agents such as George Robertson and I. W. Craig. Two major properties were purchased in Scotland - at Ednam in Roxburghshire and Glengarry in Inverness-shire. Another large estate was purchased at Crogen in the Dee valley near Bala. The tasks facing the trustees between 1833 and 1845 were increased by the difficulty of administering such scattered properties in addition to the problems of improving the efficiency of the traditional family estates around Dudley. Ednam was, however, reserved under the terms of the Will, to the personal use of William, the earl's nephew.

A. Leased Properties

Staffordshire⁵ did not escape the post-war trends in agriculture after 1815. Because of the sharp crises which affected agriculture, high rents resulting from the high prices of the war period could no longer be paid and many 'liberal landowners'⁶ reduced rents by 30 per cent, ignoring the discount system which enabled the official rent to remain high. Leaseholds up to 21 years were granted in the county

Scottish Estates, 1824-7.

⁴ Ibid. Particulars of the Estate of St. Fergus (near Aberdeen).

⁵ W. White, Directory of Staffordshire (Sheffield, 1834).

⁶ Ibid.

but many landowners did not grant leases and still left tenants 'undisturbed'⁷. This arrangement was not uncommon after 1815. As farm prices fell after 1815 there was a general reduction in leases, and owners either had to make rent remissions in order to keep land farmed or convert the property to a tenancy-at-will⁸. In such conditions, the problems facing land agents on Lord Dudley's estate were intensified by the inefficient management revealed in Roberts' report in 1824⁹. This report revealed the absence of planned development, the dilapidated state of the buildings, and scattered nature of properties rather than coherent farming units. No improvement had been made on this situation before the time that Loch submitted his early reports on the trust accounts after 1833. He repeatedly seized the opportunity to underline existing weaknesses and to urge remedies on the trustees:

'although the farmers of this Estate cannot have been exempted from the operation of the same causes that have affected their brethren elsewhere, they ought, near the large Towns to have operated less severely where there are so many ways of turning their land to profit.'¹⁰

The late earl's Will had empowered the trustees to grant leases up to 21 years at rack rent, with obligations to

'keep and leave the buildings in repair'¹¹.

Such powers to grant leases up to this term were usual on great settled estates, although not widely used¹². On the

⁷ Ibid.

⁸ F. M. L. Thompson, English Landed Society in the Nineteenth Century (London, 1963), pp. 230-1.

⁹ D.P.L. 32/6, Report and Observations on Lord Dudley's Agricultural Property: John R. Roberts, 1 Dec. 1824. See Section 1, Chapter 2, Part A.

¹⁰ S.C.R.O. D260/M/F/5/19/4, Loch's Second Report on the Trust Accounts, 1835, p. 25.

¹¹ The Will, 1831, p. 6.

¹² F. M. L. Thompson, 'English Great Estates in the Nineteenth Century', I.C.E.H. (1960), p. 389.

Sutherland estates, Loch personally favoured long leases on the grounds that this produced efficiency in the interests of tenant and lessor¹³ - but as this had resulted in 'tardy tenants' on the Staffordshire estates, expired leases were replaced by annual leases and rents were gradually increased as poor tenants were weeded out. The same attention to detail and the ruthless pursuit of efficiency which led him in 1833 to instruct agents on the Sutherland estates to reduce expenditure - except on essentials, and to

'give every Tenant who is in arrear Notice to Quit without exception,'¹⁴

were applied to the Dudley estate. However, unlike the English estates of the Sutherlands, which were in financial difficulties, the Dudley estate enjoyed a state of liquidity which ensured that capital was readily available should the trustees choose to pursue an improving policy. Accordingly, Loch observed that, the high expenditure on repairs to agricultural properties administered by the trust, was not excessive in view of

'the extreme state of dilapidation in which the buildings on these Estates were and the inefficient nature of those repairs which were done in the late Lord Dudley's time (though at great expense)'¹⁵.

In his first report he had stated that the dilapidated condition of farm properties on the Dudley estate

'generally exceed what in my experience in any other part of the country I ever met with'¹⁶

- a considerable indictment in view of his wide experience. Even so, he criticised the fact that, although the repairs to

¹³ E. S. Richards, James Loch and the House of Sutherland, 1812-1855 (unpublished Ph.D. thesis, University of Nottingham, 1967), p. 164.

¹⁴ Ibid., p. 157.

¹⁵ Loch's Second Report, 1835, p. 19.

¹⁶ Loch's First Report, 1834, p. 23.

several buildings visited by him were 'judiciously conceived and not too large,' in some instances he was

'less satisfied with the Character of the Brick Work which appeared to be not sufficiently Bonded ... but Mr. Bateman was unluckily obliged to go from home the day after I got to Dudley, so I could not state my opinion to him.'¹⁷

Shortly after the commencement of the trust in 1833, Downing, who had held the positions of mineral and land agent after 1826, gave up the land agency and Bateman replaced him¹⁸. Nevertheless, Loch concluded that the general condition of the buildings and the

'character of the Estate was very much improved from the time I had seen it last, it was much less ragged and ruinous than it used to be.'¹⁹

He urged that the high expenditure on repairs should continue until all necessary repairs were completed. This would produce a more satisfied tenantry and the

'tenant for life (William Ward) will be a richer man by succeeding to his estates in good order and repair, though with a less capital sum ... and the Estates will benefit immeasurably.'²⁰

He recommended that Bateman should make a report on all the farm properties indicating the order of priority in which improvements should be carried out and that the trustees should then control, limit, and direct the allocation of finance to this end. Where farm buildings necessary for the occupation of the land were in a very poor condition, the trustees should consider the desirability of letting the 'attached land for accommodation land'²¹.

¹⁷ Loch's Second Report, 1835, p. 19. Bateman was the land agent.

¹⁸ See Section III, Chapter 1, Part A.

¹⁹ Loch's Second Report, 1835, p. 20. Gross receipts from the agricultural estates around Dudley in 1835 were £20,190 14 8.

²⁰ Taxes, tithes and rates amounted to £382 10 0.

²¹ Ibid., p. 21

²¹ Ibid., p. 25.

This policy was not acted upon although Bateman did engage an architect to survey and estimate the cost of repairs to farm properties. The extent of the task is indicated by the fee charged - £72 5s. 0d.²², and the annual cost of repairs continued at a high level increasing from £1,420 0s. 7d. in 1836 to £2,958 19s. 1d. in 1837²³. Such an outlay was normal in times of distress so that tenants' capital would be released for farming operations and increased output. This resulted in a theoretically clear distinction between landlord's and tenant's capital²⁴.

The Dudley trustees intended to reduce expenditure on farm repairs as soon as all necessary work was done and to transfer the burden of maintenance to the tenants. This created friction which retarded the introduction of a new form of lease after 1838. Hatherton wrote to Lord Ward (William), that tenants would resist any attempt to bind them to maintain buildings in good repair

'never having been bound by strict agreements'²⁵ and that 'the easy habits of the late Viscount having permitted it the Tenants have practically established a habit of procuring all repairs to be done by the Estate. An end must be put to this system.'

He proposed that tenants should take out leases of 21 years,

'bricks, tiles, and timber in the rough being found them by us to make any alterations or repairs they desire ... and to give them up at the expiration ... in good condition.'

After such a term, the owner might be expected to renew a floor or roof

²² S.C.R.O. D260/M/F/5/19/4, Loch's Fourth Report on the Trust Accounts, 1837, p. 84.

²³ Ibid. Loch's Fifth Report, 1838, p. 1.

²⁴ F. M. L. Thompson, English Landed Society, p. 235.

²⁵ S.C.R.O. D260/M/F/5/19/11, Lord Hatherton to Lord Ward, 12 Nov. 1838.

'but these are incidents of the Property not alterations of caprice and repairs of neglect such as we are, and you will be bothered with if the new system ... is not enforced.'

Lord Ward himself insisted that leases should be more clearly worded so as to obligate the tenant not only to keep but to leave the property in good and substantial repair²⁶.

Ultimately, farm tenants on the Dudley estate did accept the new form of lease which not only ran for a term of years - as envisaged by the late earl's Will, but also contained clauses designed to procure efficient farming practices and administrative efficiency together with a clear statement of the tenant's and lessor's obligations. Typical of the new lease was one granted in 1854 to William Perry for a farm and premises at Sedgley²⁷. The lease, for 19 years, covered an area of 58 acres at an annual rent of £86 16s. 0d. per annum and the main conditions were:

1. Rent must be paid within 30 days when due.
2. Tenants must not 'suffer any spoil, destruction, decay or waste' but remedy it within one month's notice.
3. Growing crops must not be sold 'not being clover, vetches, potatoes or other green crops'.
4. A limit of two successive crops of grain or white straw corn.
5. Land not to be mowed more than once a year except for clover or lucerne.
6. After two successive mowings of grass land, no further mowing allowed without first spreading '12 tons of good rotten dung, night soil or compost at least on each acre'.
7. Sheep must be fed with turnips on such ground.

²⁶ Ibid. Benbow to Hatherton, 20 Nov. 1838.

²⁷ D.P.L. 12/D, Lord Ward to William Perry: Lease of a Farm and Premises called Hickmear Lands in Sedgley, 25 Mar. 1854.

8. Land must be cultivated in a good husbandlike manner 'according to the custom of the country thereabouts'.
9. Hedges must be neatly trimmed.
10. Trees could not be lopped without permission.
11. All game including hares and pheasants must be preserved for hunting by Lord Dudley.
12. Sub-letting was forbidden.
13. Within the last year of the lease, a new tenant could enter, plough and sow best grain.
14. Every year all hay, straw, fodder and clover produced must be used on the premises.
15. Tenant to pay all repairs to existing buildings or any erected - being allowed 'timber in the rough, bricks and tiles' by the landlord: the tenant also had to paint the outside and interior once in 7 years 'in good and proper oil colours'.
16. Chimney pieces, grates and other features bought by the tenant could be removed by him at the end of the lease.
17. Mines and access were reserved to Lord Dudley.
18. Extra rents of £10 per acre were liable for every acre not farmed in a husbandlike way and £20 per acre for misuse of meadow and pasture.

This was a comprehensive lease which probably conformed to a standard form evolved by Loch and Hatherton after 1838. As a result, the condition and efficiency of agricultural estates administered by the trustees, improved considerably compared with that observed by Loch in 1833.

There was a general improvement in agriculture within the area, because of the work of the Stewponey Agricultural Society, with which William, Lord Ward, was associated. This was founded in 1841

'for the Improvement of Agriculture, and the collection and dissemination of new and important facts; having reference to ... cultivation, ... general management ... perfection of the various operations and implements of husbandry ... amelioration of the condition of Labourers in their domestic comforts, and moral improvement.'²⁸

Lord Ward was president of the society in 1849 and paid an annual subscription: however, in that year, the list of prizes for stock, husbandry, and crops contains no mention of any tenant of Lord Ward. It may be that, despite the considerable expenditure on repairs and improvements by the trustees, the full benefit in terms of quality and profitability were not experienced by the Dudley estate for many years because of the degree of neglect and inefficiency at the commencement of the trust.

The question of the movement of rents and real profits between 1833 and 1845 is clouded by the fact that, during the war period, rents on the Dudley estate had not increased as much as might be expected, so that pressure for allowances or rent reductions during the difficult years after 1815 was likely to be firmly resisted by Lord Dudley's agents. Agriculture in Staffordshire was in a depressed state at the commencement of the trust in 1833²⁹ and arable farmers in general continued to suffer the effects of low prices in the years 1833-6 and 1843-5³⁰. A contemporary writer observed that, in 1851,

'the Rateable Annual Value of real property in the county is now £1,953,384 though in 1815 it was assessed to the property tax at only £1,150,285, and the rent of the land was much higher at that period than now.'³¹

In these circumstances, the difficulties of initiating reforms and improvements were increased because of the extent of the earlier unsystematic, inefficient, and mis-guided development of Lord Dudley's farm properties. Although landlords often attempted improvements during periods of agricultural distress, low yields were endemic on the Dudley estate and, because of their structure and character, this situation was

²⁹ White, op. cit. See Section I, Chapter 2, Part A for the developments before 1833. Total rents 1833-45 are considered in Chapter 5 below.

³⁰ Thompson, op. cit. pp. 231-9.

³¹ W. White, Directory of Staffordshire (1851), p. 29.

unlikely to change, whatever the fortunes of agriculture generally, until widespread improvements had been effected.

Loch soon drew attention to the fact that

'The Estates at one time were very unequally let and it was intended to have gone over the Estates for the purpose of equalising the rents. If this has not been done it is, I am sure, essential that it should be so.'³²

This policy was pursued, but with difficulty, after 1838.

The high arrears which had accumulated by 1833 and which tended to increase thereafter also offended Loch's liking for efficiency. Outstanding rents amounted to £6,297 7s. 9d. in 1833: these were reduced to £3,831 1s. 2d. by 1835.

However, arrears which were accumulated after 1833 by the trustees had reached £7,886 1s. 10d. by 1835³³. Loch advised that Bateman should carefully examine both sets of arrears and

'such as are hopeless should then be done away with as a person who once gets into arrear rarely ever pays in future with any regularity and may put off paying anything in the expectation of paying all and get quite reckless.'³⁴

Furthermore, he proposed that the introduction of

'a small allowance out of their arrear might induce such Tenants to make an exertion to pay up the remainder.'

Such a policy together with the strict enforcement of

'payment from those who are able to do so'

would secure a 'considerable diminution in the amount of arrears'. The arrears had been accumulated mainly by

'the Great Farm Tenants and by the Gentlemen Tenants ... the farmers no doubt are affected by the price of Agricultural produce - the second class are not good payers.'

The small tenants did not

'pay their rent out of the land (and) it is worthy of consideration how far in the vicinity of Dudley at least, a more considerable portion of the Estate might not be thus let.'

It seems that this last category were cottage tenants employed

³² Loch's Second Report, 1835, p. 25.

³³ Ibid.

³⁴ Ibid.

on the farms or in the mines and Loch suggested that an increased rent might be achieved by letting agricultural land adjoining

'the more respectable Cottage holdings' to the tenants. Presumably the estate would derive a higher income from improved cottage plots with land attached: as indicated above, Loch was conscious of the potential revenue to be gained from the provision of housing in the area. The policy of offering allowances or discounts on agricultural rents had already been introduced elsewhere in Staffordshire although some 'liberal landowners' had preferred to reduce rents by up to 30 per cent³⁵.

On the Ellesmere estate of Lord Francis Egerton³⁶, Loch was to recommend the introduction of corn rents, but on the Dudley estate, 1833-45, this refinement was unknown and instead, he advised a firm line on arrears once the current debt had either been settled or written off. His advice and concern went unheeded so that by the end of the fourth year of the trust in December 1836, arrears were

'larger by a great deal than on any Estate with which I am acquainted - Exceeding one fourth of the Total Rental of the Estate.'³⁷

By then, farm arrears amounted to £19,616 9s. 6d. and cottage rents (which had been separated from the land agents' accounts in 1836) totalled £5,252 15s. 10d. It has been suggested that during this period, it was the farms principally on clay which were severely affected by low prices, and rents fell into arrears: this was not the case on the Dudley estate as the farms were on sandy soils. This situation could only be remedied, according to Loch, by strict adherence to the rule

³⁵ White, Directory of Staffordshire (1834).

³⁶ D. Spring, The English Landed Estate in the Nineteenth Century, Its Administration, 1830-1870 (Baltimore, 1962), p.95.

³⁷ S.C.R.O. D260/M/F/5/19/4, Loch's Fourth Report on the Trust Accounts, p. 32.

'never to keep a tenant who gets into arrear for a second half years Rent ... if he is a fit object for consideration, let him have the necessary allowance immediately, strike off his arrears, and let him feel himself a free man, and he may in some cases do well, but if he is not a fit object for consideration then the sooner he quits the farm the better ... for himself as well as ... the landlord.'³⁸

Some decisive step should not be delayed even though it involved a considerable change of tenants. Such a hard line on the question of agricultural rent arrears was uncommon, but this was typical of the Draconian approach resorted to by Loch when the circumstances required it. Bateman did meet with a measure of success by reducing the expenditure on farm repairs to £1,420 0s. 7d. for the year ending December 1836. Nevertheless, Loch again urged that, in the case of particularly dilapidated buildings, they should be demolished and that more land should be let

'as accommodation land with land attached.'

The trustees were reluctant to fully enforce Loch's advice on arrears and operated it only on a modified scale. Accordingly, his observations on Bateman's accounts for 1838 included a comment to the effect that, although arrears for 1836 had decreased, this had been largely due to the fact that several sums had been written off. Since 1836, arrears had again increased as

'those persons formerly in arrear, are still getting further into debt.'³⁹

With the introduction of the new form of lease in 1838, farming properties on the Dudley estate were more efficiently administered and the problems of high arrears, high cost of repairs and inefficient husbandry were gradually eradicated.

After this date, except for the rigorous weeding out of tenants in arrears, most of Loch's recommendations were, gradually, put into effect. With very few exceptions,

³⁸ Ibid.

³⁹ Ibid. Loch's Fifth Report on the Trust Accounts, p. 3.

allowances of 10 per cent were introduced for all farm rents on estates in the vicinity of Dudley by 1850⁴⁰ - this affected property in the manors of Dudley, Himley, Kingswinford, Rowley, Sedgley, and Wombourn. This allowance may have been introduced in 1844 as surviving accounts show that it was introduced for the first time on the Kidderminster and Witley⁴¹ estates in that year and this would coincide with the general agricultural depression of the period. In addition to the bill for repairs on the estates around Dudley, there was considerable expenditure on repairs for the Kidderminster estate. This increased from £1,912 13s. 9d. in 1838 to £4,160 15s. 8d. in 1842 when the figure declined to £1,616 1s. 1d. in 1845. The main outlay covered repairs to buildings and, in particular, mills. In addition, improvements and alterations to the Lion Inn at Kidderminster cost £4,775 10s. 5d. - this was probably the administrative centre for the collection of rents by Matthews, the Kidderminster agent. In his final report, Loch acknowledged that the inn was in a dilapidated condition when purchased from Lord Foley and that

'It was essential for the Town and the Public that it should be restored.'⁴²

There was a similar pattern of expenditure on the Witley estates: repairs to farms cost £50 19s. 2d. in 1840 and reached £390 8s. 9d. in 1843 when total costs began to decrease. In 1845, repairs cost £187 16s. 8d. but none of this outlay was spent on farm properties - only the mill at Witley Court was affected. Repairs to farm cottages follow the same pattern and reached £217 in 1841 in addition to £200 spent on the erection of new cottages. From these figures, it

⁴⁰ D.P.L. 626/20, Lord Dudley's Great Rental, 1850.

⁴¹ Purchased from Lord Foley in 1838: see Chapter 6 below. S.C.R.O. D260/M/F/5/19/5, Accounts of the Kidderminster, Witley, and Welsh Estates from 1838 to 1845.

⁴² Loch's Report on the Trust Accounts, 1838 to 1845, p. 4.

seems that the trustees were prepared to incur high capital outlay in order to restore the property to the best possible condition as soon as possible after the purchase of the Kidderminster and Witley estates in 1838. Presumably, this had largely been achieved by 1845 in view of the reduction in outlay.

In addition to the costs of allowances and repairs, rents during the trust period also had to finance improvements effected in all the main agricultural estates between 1833 and 1845. Capital expended on improvements was, however, far less than the sum spent on repairs to buildings. On the Kidderminster estate, the highest annual outlay was £161 15s. 2d. in 1842: this fell to the negligible sum of £1 13s. 6d. in 1845. At Witley, the cost of improvements was at its highest in 1842 - £19 1s. 6d. and this fell to £2 19s. 9d. in 1844. In both cases, expenditure was entirely concerned with drainage tiles and fencing. It may be that, as these two estates were in good condition - unlike the Dudley estate around Dudley, there would be little need for outlay on improvements. The income from the agricultural estates purchased from Lord Foley far exceeded receipts from the traditional family estates around Dudley: in 1850, receipts from the latter totalled £18,459 5s. 2d. compared with £30,906 8s. 4d. from the Kidderminster and Witley estates⁴³. In the case of the Welsh estates in the Dee valley, Loch observed that:

'the Rental of the Estate is not large and the Remittances are naturally kept low from the outlay required to fit it for Lord Ward's residence.'⁴⁴

This was the Crogen estate which was developed to provide considerable sporting amenities along the River Dee and on the grouse moors of the Berwyn hills. It is probable that the two

⁴³ See Chapter 5 and Appendix 9.

⁴⁴ Loch's Fourth Report on the Trust Accounts, p. 110.

Scottish estates were also purchased primarily for their sporting value. The trustees purchased⁴⁵ four more small adjacent estates along the Dee to increase Lord Ward's interests in this area. As in the case of the other main estates, large sums of money were spent on improvements and repairs to buildings, but the outlay on actual farming improvements was much smaller. The cost of repairs increased from £40 13s. 10d. in 1838 to £238 18s. 8d. in 1843 declining to £48 15s. 2d. by 1845. Improvements, mainly concerning drainage and liming were most costly in 1843 - £32 15s. 10d. One particular feature of the Welsh estates was the heavy expense of embanking the River Dee presumably to prevent flooding: this cost £513 19s. 11d. in 1841.

In the light of the policy of improvement, particularly in terms of repairs to farm houses and buildings, which was vigorously pursued on all the agricultural estates administered and purchased by the trustees after 1833, it is not surprising that the Bishop of Exeter expressed the opinion in 1846 that:

'The receipts from the Landed Estates seem to be very small, considering that the rental has been upwards of £30,000 per annum. The sum actually paid into Mr. Benbow's Account is, on the average about £14,000 per annum and the Arrears of rent still due may make this £15,000 - somewhat less than half the rental.'⁴⁶

He did acknowledge that

'The expenditure on Buildings is said to have been very large - and the purchase money of some small properties has been paid out of these rents,'

but his observation that

'the result is not what it probably might have been, had constant vigilance been exercised'

seems misguided. Loch and Hatherton were particularly vigilant in trying to improve the state of affairs but their efforts were less successful than they hoped because of the conservatism of fellow trustees and agents of the Dudley estate who

⁴⁵ See Chapter 6 below.

⁴⁶ Trust Accounts, 1838-48.

were responsible for the unfortunate condition of the estate in 1833. Benbow, Downing, Bateman and Turner (the Welsh agent) had all been employed by the Dudley estate before 1833. In addition, the general fortunes of agriculture during the period 1833-45 provided no great inducement to tenants. Nevertheless, had all of Loch's recommendations been adopted sooner and consistently enforced by the trustees - including the Bishop, the estates would probably have emerged in a stronger position than was in fact the case. In spite of the Bishop's criticism, the main point was that, because of the work of the trust period, the agricultural estates might expect increasing profits as a result of capital outlay and administrative improvements.

B. Estate Enterprise

As units of ownership rather than units of agricultural production, great landed estates were rarely farmed by the owner but were divided up into tenanted holdings⁴⁷. The fact that the Dudley estate conformed to this pattern between 1774 and 1833 has already been considered. In one respect, these estates were directly managed and exploited by Lord Dudley's agents - this was the exploitation of the timber reserves allocated to the estate by the various enclosure awards. However, this branch of enterprise can also be regarded as an aspect of estate mineral enterprise. After 1833, the trustees made little change in this situation and continued to sell timber and to lease the agricultural estates. However, there was some farming enterprise carried on by Turner, the agent of the Welsh estates on behalf of the trustees. In this context, the activities of the Jamaican plantations may also be considered as an aspect of estate enterprise.

⁴⁷ Thompson, 'English Great Estates in the Nineteenth Century, 1790-1914', I.C.E.H. (1960), p. 392.

Turner's accounts⁴⁸ for the Welsh estates contained a new account for 1841 headed 'Farm in Hand'. For 2 or 3 years a vigorous policy of stocking the farm was pursued including such items as:

		£	s.	d.
1841	Purchases: 128 sheep (local)	68	16	0
	Cheviot sheep	19	5	0
1842	Heifers	24	15	6
	Implements, clover, seed, waggon wheels	62	16	3

Labour costs in 1842 amounted to £66 9s. 2d. and the upkeep of stock £71 0s. 10d. Net receipts from the enterprise were:

1841	£79	10s.	11d.
1842	55	11	6
1843	332	15	6
1844	123	12	0

As no returns or capital outlay are shown for 1845 it seems likely that this venture may have been given up and leased to tenants on the Crogen estate. Small receipts are also recorded from 'Crogen Garden'. These range from £15 16s. 0d. in 1839 to £1 in 1843. Similar produce sold at Witley realised £105 2s. 8d. in 1840. However, entries of this nature may record the cost of food grown on the estate and sold to the household. The largest income from estate enterprise, other than timber, was 'Venison and Tack' sold by the Witley estates: in 1840 this was as high as £395 15s. 6d.

Considerable timber reserves remained on the estates in the vicinity of Dudley, and further plantations were included in the Witley and Kidderminster estates purchased from Lord Foley. Although the timber was extensively exploited after 1833, a plantation policy was also enforced to maintain this asset. On his early tours of inspection, Loch examined the condition of local timber around Dudley and, in 1835, reported that

'the extensive working of the Mines ... have ... affected the Oak Timber - nothing can save a considerable proportion of it. The moment that a Tree becomes stag headed (and many of them are so) it should be cut down.'⁴⁹

⁴⁸S.C.R.O. D260/M/F/5/19/5, Estate Accounts, 1838-45.

The effect of the smoke was to render the timber more brittle, thus reducing its value, and

'by preventing the Bark from running the profit from that source (for tanning) is also lost.'

In the vicinity of Himley Hall where it was desirable to preserve the wooded aspect, he recommended the planting of beeches which were

'not affected by the Smoke nearly to the same extent - the smoothness of the Bark and Leaves prevents the soot resting upon them to any great extent and the first rain washes it off.'

He observed that the new plantations

'lately executed near Wombourne ... are remarkably well-executed.'

Because this area was the only part of the estate free of mines and much of it was

'less useful for farming purposes, (presumably because of its sandy nature), it may be judicious to add considerably to the extent of New Plantations in this direction.'⁵⁰

In 1850⁵¹, the estates around Himley contained 1,147 acres of woodland of which approximately 220 acres were planted after 1833. These woods supplied timber for estate repairs amounting to £329 17s. 11d. in 1834 and £769 8s. 9d. in 1835. Apart from timber sold to estate and other mines in the vicinity, the Level timber yard also sold in the Potteries district. Freightage costs on one consignment of 'cratewood' in 1835 were £42 10s. 6d.⁵² Timber worth £700 was supplied to the Level yard in 1837 and Loch criticised the fact that Benbow had rendered

'no account of the receipts and expenditure of this'⁵³.

⁴⁹ Loch's Second Report, 1835, p. 26.

⁵⁰ Ibid. In January 1835, labourers' wages for plantation work were £79 17s. 5d.

⁵¹ D.P.L. 626/20, Lord Dudley's Great Rental, 1850.

⁵² Loch's Third Report, 1836, p. 76.

⁵³ Loch's Fifth Report, 1838, p. 2.

It is evident that Loch's advice to extend new plantations was carried out and Bateman's account for the year ending in December 1837 indicates the extent of timber enterprise:

Woodmens wages	£212	5s.	8d.
Felling timber			
Paid Jevon Hickman for felling timber and converting underwood	265	0	0
Planting at Long Hill, Greensforge Swindon	252	0	0
Protecting woods on Sundays	23	9	6 ⁵⁴

An active policy of exploiting the timber was also pursued on the estates at Witley and Kidderminster which were purchased from Lord Foley in 1838, and a timber yard was established at Olansmoor near Witley. Trees worth £80 were planted on the Kidderminster estate in 1839, £130 in 1840 and £156 6s. in 1847: labour costs increased from £157 7s. 10d. in 1838 to £248 2s. 5d. in 1842. Receipts for timber also increased in the short term:

	<u>Kidderminster</u>	<u>Witley</u>
1838	£48 10 9	-
1839	356 18 9	-
1840	241 15 0	£426 12 8
1841	126 13 6	693 19 8
1842	134 13 2	582 3 10
1845	6 0 0	260 9 0 ⁵⁵

This pattern conforms to the rate of expenditure on general repairs and improvements and it may be that timber was largely consumed on the trust estates at Kidderminster and Witley. It is possible that some of this timber was supplied to a paper mill at Hurcott which may have been owned and worked by the Kidderminster estate. The Kidderminster accounts for 1841 contain an item for repairs to

'Hurcott Paper Mills £124 ls. 3d.'⁵⁶

⁵⁴ Ibid., p. 73.
⁵⁶ Ibid.

⁵⁵ Trust Accounts, 1838-45.

Timber was also sold by the Crogen estate:

1839	£49	13s.	2d.	
1841	131	18	4	
1843	169	9	2	57.
1845	Nil			

It is apparent that one of the more efficient aspects of enterprise on the agricultural estates was the exploitation of timber reserves, and, that this activity remained, as it had before the trust, under the direct management of the estate.

The Dudley estate in Jamaica remained under the direct management and control of the trustees and was not leased to tenants during the period of the trust. There is no evidence to suggest when these interests were acquired but it was probably during the life of John, Sixth Baron Ward, 1740-74. These were substantial estates as large as any in Jamaica and, in 1811, contained

'640 Slaves and 572 Stock'⁵⁸

in the parish of Clarendon. Lord Ward received £13,186 12s. 4d. as compensation for loss of slaves after the Act of Emancipation in 1833. In that year, the profit from the Jamaica estate was £4,415 7s.⁵⁹ During the trust period, the arrangements for the marketing of produce - sugar and rum, created a rift between the various trustees. This followed a proposal by Thomas Phillpotts, brother to the Bishop of Exeter, that the task of transporting and selling the sugar and rum should be removed from G. W. S. Hibbert and Co. of London and granted to a company in Gloucester, with which he himself was connected, on the grounds that it would reduce costs and increase receipts by £500 per annum. This proposition was attacked by Messrs. Hibbert & Co.

'Considering the very long Course of years during

⁵⁷ Ibid. ⁵⁸ D.P.L. 10/11, Jamaica Year Book, 1812.

⁵⁹ S.C.R.O. D260/M/F/5/19/4, Estate accounts, 1833.

'which our House has been honoured by the Confidence of the Earl of Dudley's family'

and on the grounds that the estimated gains

'must be evidently erroneous: for the Average Consignments instead of being 600 Hogsheads of Sugar with a proportion of Rum, as assumed by Messrs. Philpotts and Co., have in fact only amounted during the last 10 years to 366 Hogsheads of Sugar, without any Rum, it having been the practice of the Jamaica Manager, with our full Concurrence, to sell all the Rum at the Kingston Market.'⁶⁰

This episode was evidently connected with the fact that the price of sugar was temporarily higher at Gloucester than London because Gloucester was 'new as a Depot for Colonial Produce'⁶¹. However, as Messrs. Hibbert & Co. pointed out,

'Gloucester wants that great Concentration of supply and demand ... for the general sale of sugar ... (and) is removed from direct intercourse with the Continent.'

Experimental consignments of colonial produce had recently been shipped to minor ports such as Newcastle, Newhaven, Leith, Plymouth and Limerick by Sir Simon H. Clarke but these were now discontinued⁶². If the trustees should decide to consign a proportion of Jamaica produce to another port, Hibbert & Co. recommended Liverpool or Dublin as preferable to Gloucester.

The Bishop of Exeter was moved to write to Lord Hatherton enclosing

'a letter from my Brother on the subject of our West India concern'

and stated that

'I have no personal wish on the subject'⁶³.

This letter made out a strong case for consigning the produce of the Jamaica estates to Gloucester on the grounds that

'the consumption of unrefined sugar in Gloucestershire, Worcestershire, part of Herefordshire and Warwickshire is about 4,000 Hogsheads annually ... The present

⁶⁰ S.C.R.O. D260/M/F/5/19/11, G. W. S. Hibbert and Co. to Benbow, 16 June 1835. ⁶² Ibid.

⁶¹ Ibid.

'importation to the Port is about 1,000 Hogsheads.'⁶⁴
Phillpotts claimed that the large grocers 'who are now our customers' would rather purchase in Gloucester because of
'the injury which Sugar sustains by Water Carriage from a distant Port'

and that sugar was

'worth 1/- to 2/- per cwt. more to them buying in Gloucester than it would be in Bristol, Liverpool or London.'

As a further incentive, Phillpotts and Co. were prepared to offer a five-year guarantee to the trustees of

'a clear Profit ... on every Hogshead of Sugar consigned to us at Gloucester, of one pound Sterling above what the same would net in London'

and indicated that they would be prepared to

'enter the same Engagement for 1,000 Hogsheads more.'

From the merchants' point of view,

'most of the Articles required for shipment to Jamaica are obtained cheaper in Gloucester than in London - none higher.'⁶⁵

In spite of this tempting offer, it seems unlikely that the offer was taken up as subsequent accounts refer only to Hibbert and Co. Profits remained fairly constant until the last years of the trust reaching £4,376 19s. 6d. in 1836 and £3,518 15s. in 1840. However, profits evidently declined by the end of the trust and

'yielded nothing for several years before the last audit' (27 July 1849)⁶⁶

In general, the agricultural estate benefited from the administration of the trustees. At the outset in 1833, the landed estates were inefficiently administered under loose tenancy agreements which had resulted in low productivity and dilapidation. This situation was all the more to be condemned because of the failure to exploit neighbouring urban markets as the population of the Black Country increased rapidly

⁶³ Ibid. Exeter to Hatherton, 7 Sept. 1835.

⁶⁴ Ibid. Thomas Phillpotts to the Bishop of Exeter, 26 June 1835

⁶⁵ Ibid.

during the early decades of the nineteenth century. Loch's persistent criticisms and constructive advice, supported by Hatherton in his desire to improve the estates, gradually took effect. In spite of the inherent conservatism of the estate as represented by Downing and Benbow, a new form of lease was introduced and capital expenditure on improvements was increased. The rationalisation of rents and farm units was also begun. However, the benefits of these policies were not felt until after 1845. Estate enterprise remained confined to timber sales, except for a temporary farm enterprise at Crogen and, after 1838, the sale of venison at Witley. Probably the most significant result of the trust period in terms of the agricultural estates, was the tremendous increase in the area of estates owned by the Dudley family. These, especially the Witley and Kidderminster estates, served to maintain the income and assets of the family when their industrial receipts began to fluctuate and decline after 1860, but, in turn became liabilities with the growing pressures on the great landowners towards the end of the nineteenth century.

⁶⁶ S.C.R.O. D260/M/F/5/19/13, R. Craig's Report and Opinion upon the Accounts of the Property of the Late Earl of Dudley, May 1856.

Chapter 2. Industrial Enterprise

During the period of the trust, all the forms of industrial enterprise which existed in 1823 were continued. However, the trends already revealed before 1833¹ were accelerated. That is, industries such as brick, glass and pottery manufacture continued to expand in Brierley Hill and Wordsley as supplies of local clay and fireclay were exploited to meet growing demands. The sector which expanded most rapidly was the iron trade. As a result of policies initiated by the trustees, the Dudley estate established a dominant position in the Black Country iron industry as it approached its peak development during the 1850s.

A. Bricks, Glass and Pottery

The continued expansion of industries based on the exploitation of local clay measures is reflected in the affairs of the Dudley estate in terms of greater diversification and specialisation of production on the one hand, and increased rates of royalty on the other, as demand for clay expanded. Certain areas of the estate in the old manor of Kingswinford - fast becoming the industrial town of Brierley Hill, became associated with particular products. Bricks and tiles were manufactured at Brierley Hill itself and the industrial villages of Bromley and Wordsley: earthenware manufacturers developed along Brettell Lane and glass works at Wordsley, Audenham and Brettell Lane. This distribution was probably determined by the nature of the clay and its accessibility in these particular areas. For example, fire clay lay at a relatively shallow depth along the line of the Wordsley to Stourbridge road where glass works were most numerous. In

¹ See Section 1, Chapter 2, Part C ii and iv.

1851² there were about 15 manufacturers engaged in production, mainly brick, tile or earthenware products, and at least 6 of these were tenants of Lord Dudley. Many of the tenants leased not only land and buildings from the estate, but also clay and coal pits which they worked themselves, paying a surface rent, a royalty on minerals extracted, and a royalty on goods produced.

One of the larger manufacturers, Hughes and Eades, worked the clay mine at the Delph for the first part of the trust period: this was taken over by Webb, Harper and Moore subsequently to become leading manufacturers in the area. Apart from paying a surface rent of £100 per annum in 1836, royalties were also paid which varied according to the value of the clay or product.

'Best Clay	21/-	per ton (fireclay)
Second Clay	7/6	
Black Clay	7/6	
Offal Clay	2/-	
Red Bricks	2/-	per 1,000
Tiles, Cress etc.	2/6	per 1,000.'

³

Coal as well as clay was raised from another pit leased from the estate: coal royalties were 2/6 per ton for best coal, 1/6 for common coal, and 6d. for slack. These rates are typical of such leases on the estate at this time and the lease reflects developments since the period of early expansion. Whereas the royalty for bricks had been 1/- per 1,000 in 1790⁴ and remained so until the 1820s, the increase to 2/- per 1,000 indicates the growing demand for bricks in the Black Country towns. Increasing numbers of blue bricks were being manufactured for which south Staffordshire became famous. Great numbers of these were used in the construction of bridges and viaducts throughout the country. This

² W. White, Directory of Staffordshire (Sheffield, 1851), p.188.

³ D.P.L. 8/K, List of Mines Leases, Oct. 1836.

⁴ See Section 1, Chapter 2, Part C ii.

explains the specific reference to 'red' bricks. Blue bricks were not manufactured from ordinary brick clay but from one of the inferior fire clays and the royalty on them would be higher. There was no change in the royalty charged for 'tiles' and 'cress' in 1836 from that charged in 1796⁵. However, fire clay royalty had increased and a distinction was made between the various types. Whereas Messrs. Grazebrook paid 9/- per ton royalty for glass house clay in 1796, Hughes and Eades paid 7/6 per ton for the two inferior fire clays and 21/- per ton for best glasshouse clay. 'Offal' was the term used to designate the less valuable common brick clay. All of these charges reflect the growth in demand for the various clays. Lord Dudley's income from these enterprises would be further increased by supplying coal and sand to the manufacturers. By 1845⁷, glass works in the area were manufacturing a total of 2,300 tons of flint glass per annum while Westwood and Moore alone manufactured 980 tons of bottles, pottery ware, and fire-bricks. This enterprise obtained 320 tons of clay, 450 tons of sand, and 3,500 tons of coal from the Kingswinford area - it is likely that much of it came from the Dudley estate. The trustees did not alter the earlier policy of estate enterprise: bricks only were manufactured, mainly at the Brockmoor Colliery at Brierley Hill and at the Level Store Yard. These were sold to estate pits and no attempt was made to enter the glass or earthenware trades on an entrepreneurial basis.

B. The Iron Trade

i. Introduction

The state of the iron trade at the commencement of the period 1833-45 has already been considered⁸. In general, the

⁵ Ibid.

⁶ Ibid.

⁷ D.P.L. L.D/625, Minutes of Evidence taken before the Select Committee on the Oxford, Worcester, and Wolverhampton Railway, 1845, p. 190 and p. 200. Subsequently referred to as Railway Report, 1845.

trade was expanding in the Black Country, but, on the Dudley estate, inefficient leases, bad management, and declining revenue had destroyed the dominant position created in the 1780s and 1790s. By the end of the trust, the iron trade had been established as the most significant factor in the economic expansion of the Dudley estate. Not only were estate pits more effectively linked to pig iron and finished iron production, thus creating an enormous increase in mineral revenue, but also, iron production by lessees of estate property expanded rapidly. By 1845, the estate had begun to manufacture iron on its own account for the first time since the seventeenth century. This development held great significance for the evolution of the Dudley estate until its decline as a unit of industrial production in the 1940s. This policy of reorganisation and expansion by the trustees was accomplished in time for the estate to play an important part in the period of peak production attained by the Black Country iron industry during the early 1850s⁹.

By 1830, the Black Country equalled South Wales and surpassed Shropshire as a centre of finished iron production¹⁰. Wrought iron production continued to increase until, by 1850, 600,000 tons per annum or one third of the national output was made in the Black Country. Pig iron production expanded by 300 per cent between 1830 and 1858, although Scottish production was expanding more rapidly by mid-century. The number of blast furnaces went up from 123 in 1830 to 175 in 1854 and production of pig iron from 213,000 tons to 743,000 tons over the same period. Associated trades inevitably expanded in the area and an increasing range of manufactured iron goods was produced such as cables, chains, and tubes in addition to traditional products, so that, by 1845, the

⁸ See Section 1, Chapter 2, Part C iv.

⁹ See Appendix 5.

¹⁰ G. C. Allen, The Industrial Development of Birmingham and

'principal export' of the district was stated as 'manufactured iron, pig iron, and coal'¹¹. At this time, 1845, there were 135 blast furnaces in the Black Country, of which 100 were in blast, producing 468,000 tons of pig iron¹². However, there were temporary recessions in the general trend between 1833 and 1845 especially in 1842-3 when the number of furnaces in blast fell to 75. There was heavy unemployment in the iron trade and, consequently, a fall in mineral activity¹³. Nevertheless, at the commencement of the trust, prospects for the trade were good and Downing wrote to Littleton:

'You will rejoice to hear of the returning prosperity of the Iron trade and to know that your old friends the Coal and Ironmasters are now in high spirits at the favourable prospect before them - that the prices and wages have been raised and that the working people have full employment.'¹⁴

This trend was maintained and, in 1835, Smith noted that

'the Iron and Coal Trades are attended with unprecedented prosperity.'¹⁵

Loch acknowledged the situation but sounded a typical note of caution:

'This County ... is in a state of real, substantial and unexampled prosperity. Iron in Staffordshire has got to an extravagant price but I understood at Liverpool that it would be pulled down by a great importation of Scotch pigs.'¹⁶

This general prosperity and temporary recessions were reflected in the price of Staffordshire iron:

the Black Country (1929), p. 39.

¹¹ Railway Report, 1845. Richard Smith (Lord Dudley's mineral agent) in answer to Q.4621.

¹² Ibid. p. 6. Evidence of Mr. B. Best. ¹³ See below.

¹⁴ S.C.R.O. D260/M/F/5/19/11, Downing to Littleton, 17 Oct.1833.

¹⁵ S.C.R.O. D260/M/F/5/19/4, Smith to Benbow, 6 May 1835.

¹⁶ S.C.R.O. D260/M/F/5/19/11, Loch to Hatherton, 17 Dec. 1835.

1832	pig iron sold at £3 per ton
1833	£5 10s.
1841	£5
1843	£2 10s.
1844	£5
1850	£2 15s.

Bar iron rose more rapidly in price.

1833	bar iron sold at £8 per ton
1845	£18
1850	£6. 17

White, writing in 1851, observed that Staffordshire supplied a large proportion of rails used in the period of widespread railway construction between 1835 and 1845 when the

'price of iron rose considerably, but has lately been much reduced.'¹⁸

This expansion in the demand for Staffordshire iron only partly explains the degree of prosperity attained by local ironmasters and, ultimately, by the Dudley estate. Another major factor was the introduction of technical improvements which increased productivity, reduced costs, and improved the quality of the iron.

Blast furnace efficiency was improved by increasing the number of tuyeres from one to three¹⁹ and using a hot blast. This had been developed by Neilson in Glasgow and was introduced into the Black Country during the 1830s. In Scotland, use of a hot blast had produced an

'extraordinary saving in the production of pig-iron ... in 1833, a ton of pig-iron was made with 2 tons 3¼ cwt of raw coal ... in 1829 in the same works, it required 8 tons 1¼ cwt of coal to make the same quantity with cold air and coke ... (also) a saving in the quantity of blast required and consequently in engine power as well as the expense of converting coal into coke.'²⁰

However, in England and Wales, variations in the quality of the coal caused

¹⁷ White, op. cit., p. 59.

¹⁸ Ibid.

¹⁹ Midland Mining Commission, 1843, para. 41.

²⁰ Ibid.

'the saving in English coal to be much less in proportion to the iron made ... It is often used in Staffordshire in the proportion of one third of hot to two of cold air.'²¹

The hot blast was first used in south Staffordshire by B. Gibbons at his Corbyns Hall Iron Works, Kingswinford²² - although there is some possibility that he may have first used the technique as early as 1830 at the New Level Furnaces which he leased from the Dudley trustees.

Several other technical improvements were developed in the Black Country by local ironmasters. Gibbons²³ re-designed the blast furnace and constructed a round one at Corbyns Hall to replace the traditional square-based furnace: because of higher temperatures and a greater uniformity of heat, he was able to use puddling furnace cinder to charge his blast furnace - this, although rich in iron, was normally dumped as waste. Joseph Hall of Tipton pioneered the process known as wet puddling or pig boiling by using iron oxides as a bottom lining in the puddling furnace in the 1830s: this improved the quality of wrought iron produced²⁴. The mining commissioners enquiring into the economic depression and violence in the area, remarked in 1843 that the current low price of iron had led to a search for economy which resulted in the introduction of new ideas for which patents had existed for many years. Among such improvements were the replacement of the traditional huge helve or forge hammer by more modern, efficient equipment and the practice of allowing molten iron to run direct from the blast furnace to the puddling furnace - thus saving the time and expense of casting and re-heating pigs for use in the puddling furnace²⁵. As

²¹ Ibid. ²² Allen, op. cit., p. 144.

²³ It is suggested that he was influenced by the interior shape of the local glass furnaces.

²⁴ Allen, op. cit., p. 144.

²⁵ Midland Mining Commission, 1843, para. 55.

a result of these technological improvements, production costs fell in south Staffordshire: in 1800, ten tons of coal were needed to produce one ton of pig iron and, in 1840, four tons of coal²⁶. Productivity per furnace increased by one-third for each firing and overall production of pig and wrought iron expanded rapidly. These developments were reflected in the activities of the Dudley estate during the trust period in terms of technical innovation and increased production, both at ironworks leased from the trustees and managed by the estate, and in terms of an expansion of mineral activity by estate pits to supply the expanding local market for coal, iron ore, and limestone.

ii. Leased Properties

To remedy the inefficient and slack situation which existed in the management of ironworks on the Dudley estates in 1833, Smith and Liddell made certain recommendations in their report submitted to the trustees in 1836. In particular, they suggested that leases should be

'granted of a more permanent nature to lessees on condition that they either agree to consume certain quantities of mineral produce per annum or connect with the works certain tracts of Mine, at royalties to be agreed upon with Covenants binding the parties to raise a given number of tons of Coal, Ironstone and Limestone per annum, or pay for the same.'²⁷

This would not only guarantee the estate a regular income from raw materials supplied to tenants who, under the lease, would be bound to purchase only from estate sources, but also yield an additional profit from rents levied on the property and royalties based on production. Vertically integrated concerns would develop where ironmasters leased pits adjacent to ironworks which they also leased from the estate and this

²⁶ R. Musket, 'Papers on Iron and Steel' (London, 1840), as quoted by G. R. Morton and M. Le Guillou, 'The Rise and Fall of the South Staffs. Pig Iron Industry', The British Foundryman (July, 1967), p. 272.

²⁷ Mines Report, 1836, p. 28.

would improve the profitability of the enterprise in the interest of the entrepreneur and the estate:

'Capital now in the shape of Iron Works would be made advantageously subservient to the working of the Mines. Whereas in its present form it does not appear to us to make a return commensurate with its perishable nature and value.'

The extent to which the trustees reorganised the iron trade will be examined elsewhere²⁸: in this section only the number of leases and estate income will be considered.

A comparison between the list of leased ironworks drawn up by Downing in October 1836²⁹ for the purpose of providing information to the trustees and the list of some of the major lessees in 1844³⁰ indicates that, apart from the construction of two large ironworks by the trustees, several of the properties had also been taken over by larger companies. The two major projects undertaken by new lessees were the Russells Hall Iron Works, erected by Blackwell and Co., and the Woodside Iron Works, erected by Bramah and Cochrane. The latter works supplied iron for the construction of Chrystal Palace. One of the older furnaces on the estate - at Coneygre, Tipton, was occupied at the commencement of the trust by George Parker, under an agreement of 29 December 1826, who undertook to work

'the Iron Furnace at Coneygre ... with blast Engine, blowing Machinery, Finery Iron Foundry, Buildings, Shops, Dwelling Houses, Land and Premises ... for the yearly Rent of £330 ... The Tenant to provide a new Furnace hearth ...'³¹

It is possible that this alteration involved the construction of a circular base to the furnace following the example set by Gibbons at Corbyn's Hall Iron Works. Parker evidently suffered during the depression of the early 1830s and wrote³²

²⁸ See Section III, Chapter 2, Part B.

²⁹ See Chart 10, p. 205.

³⁰ See Chart 11, p. 206.

³¹ D.P.L. 8/K, Agreement between G. Parker and F. Downing, 29 Dec. 1826.

Chart 10. The Ironworks Leased from the Dudley Estate in 1836

<u>Date</u>	<u>Type of Agreement and Parties</u>	<u>Property Let</u>	<u>Terms</u>
1 Jan. 1822	Grazebrook and Whitehouse (now H.B. Whitehouse) Lease.	Land at Coseley to erect a furnace (Wallbrook?)	21 years at £37 5s.
29 Sept. 1825	Small, Shears and Taylor (formerly Attwood) Lease.	Dudley Wood Iron Furnaces	Rent of £291 6s.
Ditto	Ditto	Netherton Iron Furnaces, Engine Warehouse etc.	Rent of £390
25 Mar. 1832	Jones and Barker, Lease	Deepfields Iron Furnaces etc.	14 years at £150
17 Oct. 1833	J. and B. Gibbons, written agreement	2 of the iron furnaces at the New Level.	6/- a ton on iron made
31 Jan. 1834	Ditto	New Level Iron Furnaces	5/- a ton on iron made when more than 2 furnaces at work.
25 Mar. 1834	Evers and Martin, written agreement	Parkhead Iron Furnace	Rent of £260
25 Mar. 1822	Izons and Co. Tenants at Will	Old Level Furnace	Rent of £460
29 Sept. 1826	Samuel Evers, Tenant at Will	Cradley Iron Works	Rent of £300
25 Mar. 1825	John Gibbons, Tenant at Will	Level Forge and Mill	Rent of £228
29 Dec. 1826	Payton and Hopkins, Tenant at Will	Coneygre Iron Furnace	Rent of £250.

By 1845, the furnaces at the New Level and the Coneygre Iron Works were being worked by the estate.

D.P.L. 8/K. List Supplied to Trustees by F. Downing, 16 Oct. 1836.

Chart 11. Production Figures for Leased Ironworks on the Dudley Estates, in Brierley Hill and Dudley, 1844.

	<u>Lessee</u>	<u>Total Annual Production</u>	<u>Furnaces</u>
Old Level Furnaces	Izons and Co.	12,000 tons capacity (only 1 in blast) 6,000 tons of pig iron	2
The Level Ironworks	Gibbons and Co.	6,000 tons of manufactured iron	
Woodside Furnaces	Bramah and Cochrane	9,100 tons of pig iron	2
Park Head Furnaces	Evers and Martin	5,500 tons of pig iron	
Russell's Hall Furnaces	Blackwell and Co.	11,500 tons of pig and castings	2
Holly Hall Foundry	Johnson and Co.	1,000 tons of castings	
Dudley Wood Furnaces	British Iron Co.	} 12,500 tons of pig iron	4
Netherton Furnaces	Ditto		2
Deepfields Furnaces	E. Pemberton	10,000 tons of pig iron	3
New Level Furnaces	Gibbons and Co. to 1843	15,000 tons capacity (not yet in blast)	4

This excludes the blast furnaces in Tipton and numerous small ironworks producing a variety of finished goods throughout the area of the estate.

D.P.L. L.D 625. Minutes of Evidence Taken Before the Select Committee on the Oxford, Worcester and Wolverhampton Railway, 1845.

to Downing requesting his 'approbation' of a 'treaty' he had made with Messrs. Payton and Hopkins to give up the tenancy of Coneygre Furnace. This initiative, taken by a tenant, reflects on Downing's authority and management although he did agree to accept the new tenants subject to

'the terms and conditions (being) ... left to my own settlement'³²

- the rent was reduced to £250 per annum in spite of the recovery in the local iron trade by 1835.

Another of the major ironworks, the New Level Furnaces, also underwent structural alterations and a change of tenancy during the trust period. By 1825, each of the four furnaces was capable of producing 40 tons of pig iron per week and they were still worked by B. Gibbons. No production was recorded for 1830, possibly due to alterations to allow a hot blast to be used³⁴. There were certainly three furnaces in blast in 1839 of which two were hot blast: average weekly production had risen to 85 tons per furnace and the annual output was 13,700 tons - a total surpassed by only three other plants in Staffordshire - those at Chillington, Shut End and Gold's Green³⁵. Gibbons continued to work the plant until 1842 when he removed the hot blast machinery to his new works at Corbyn's Hall where he was no longer a tenant of the Dudley estate. This departure was probably occasioned by an attempt to negotiate new terms for the lease. As early as 1836 Richard Smith had criticised the New Level lease as inadequate because it had been let at a low rent in depressed times and the rent did not reflect the recovery and expansion of the local iron trade by the mid-1830s. Negotiations were opened to lease the New Level Iron Works to Bramah and Cochrane. One

³² Ibid. G. Parker to F. Downing, 9 Oct. 1835.

³³ Ibid. F. Downing to G. Parker, 14 Oct. 1835.

³⁴ T. M. Hoskisson, 'The Earl of Dudley's New Level Furnaces', Trans. of the Newcomen Society, XXVIII (1951-2), p. 154.

³⁵ Ibid. p. 155

of the conditions proposed by Smith was that two new blowing engines should remain under trust management and supply hot blast at a royalty per ton of iron made: the capital cost of the engines was estimated at £5,000. Production from the three furnaces was estimated at 300 tons per week using six tons of raw materials to produce one ton of pig iron. Considerable reconstruction was being undertaken by the trustees which involved alterations to the furnaces, the installation of a new blast engine house, and the extension of the Kingswinford Railway across Pensnett Chase and the Dudley Canal to supply the furnace tops. The negotiations fell through after Bramah's death and the trustees decided to work the New Level plant themselves³⁶.

The total annual income from leased ironworks at the commencement of the trust was about £3,184 lls. Od. This was made up of fixed annual rents from seven ironworks manufacturing iron and the two large forges at Cradley and the Old Level³⁷: a total rent in 1836 of £2,366 lls. Od. The remaining income came from the New Level Iron Works and was based on a royalty per ton of iron produced: the amount received by the estate in 1835 was £818 3s. 8d.³⁸ making an approximate annual total income of £3,184 lls. Od. Comparable figures showing income at the termination of the trust are not available. However, it seems that there was little change in the fixed annual rent for individual concerns already in operation in 1836, with the exception of the Old Level Mill and Forge.

	<u>1836</u>	<u>1846</u>	
Deepfield Furnaces	£150	£150	
Parkhead Furnaces	260	260	
Dudley Wood and Netherton Furnaces	681 6s.	666 6s.	
Cradley Mill and Forge	300	300	
Old Level Furnaces	460	500	
Old Level Mill and Forge	228	350	39

³⁶ See below. ³⁷ See Chart 10. ³⁸ Loch's Third Report, 1836, p. 88.

³⁹ A comparison of Chart 10 and Smith's Mine Account, 1846 (D.P.L. 9/5)

This excludes new leased ironworks and blast furnaces such as Brierley Hill Foundry leased to R. Jobson at £220 per annum and Woodside Furnaces leased to Bramah and Cochrane. The increase in the rent of the Old Level Iron Works was probably due to the fact that the Kingswinford Railway was extended to connect with the Level area in 1845 and transport costs of pig iron and coal were reduced. Coneygre Furnace and the New Level Furnaces have not been included for 1846 because in 1839, the estate began to work Coneygre under direct management and, after extensive alterations in 1844-5, the New Level Furnaces were also directly operated by the estate. In 1836 the annual rent from Coneygre was £250: between 1839, when the estate assumed control, and July 1846, the total net profit from this enterprise amounted to £15,439 10s. 9d.⁴⁰ - a considerable increase in the annual income to the estate. As already indicated, the estate's receipts from the New Level Furnaces in 1835 were £818 3s. 8d.: in 1854 - a particularly good year, net profit was £10,936 14s. 10d. This last figure incorporated receipts from the new ironworks erected adjacent to the furnaces.

In addition to annual rents, the trustees also received an income based on a royalty per ton of iron made at the various ironworks and blast furnaces. This was augmented by a charge levied per ton for the supply of blast to the furnaces and forges. A particularly important feature of the trust period was the increased number of steam engines owned⁴¹ and worked by the estate on leased properties - mines, ironworks and furnaces from which the estate drew an income which varied according to the profitability of each enterprise. The policy initiated by Smith after 1836 of linking mineral leases to ironworks and the supply of limestone from estate mines completed the variety of sources whereby the estate derived

⁴⁰ D.P.L. 8/L, Richard Smith's Mine Accounts, 1837-1860.

profit from the expansion of the iron trade on the estate at this time. In 1839⁴², there were 13 steam engines owned and worked by the estate at the various ironworks - including Coneygre and the Level Store Yard, both operated by the estate. Six of these were blast engines, three supplied power for rolling or boring mills, three drew materials up inclined planes serving blast furnaces, and one supplied power to a forge. By 1844, the number of blast engines alone had increased to 19⁴³ no figures are available for other types of engine. These blast engines supplied air to 19 hot blast furnaces making a weekly total of 1,885 tons of pig iron: 19 cold blast furnaces were also supplied making 1,319 tons of pig iron per week - a weekly total output of 3,204 tons or an approximate annual production of 166,608 tons. This would represent 35.4 per cent of the total annual Black Country production of 468,000 tons of pig iron in 1844⁴⁴ from 135 furnaces of which 100 were in blast and indicates the growing significance of the Dudley estate in the local iron trade. One last feature of the trustees' policy to reorganise and expand the involvement of the estate in the manufacture and working of iron was to erect weighing machines⁴⁵ at the main ironworks. This facilitated and improved the checking of raw materials supplied to the works and enabled the trustees' agents to record production figures for the purpose of calculating royalty.

Taking the period 1833-1845 as a whole, there is little doubt that the trustees pursued a successful policy with regard to the iron trade. At the outset, the recovery of the

⁴¹ See Chapter 3 below and Section III, Chapter 2.

⁴² D.P.L. 8/K, Account of Steam Engines Belonging to the Trustees, Xmas 1839, W. Rollinson. See portfolio, Statistics item 3.

⁴³ D.P.L. 8/K, List of Blast Engines Employed at the Different Iron Works, 6 Oct. 1844, D. Pearson. See portfolio, Statistics item 4.

⁴⁴ Railway Report, 1845, p. 6. Evidence of Mr. B. Best.

⁴⁵ See portfolio, Statistics item 3.

trade in the area was not being reflected in estate income. After 1836, there was not only an expansion of the trade on the estate in terms of leases and output but also a more direct involvement at all stages of production which geared estate revenue to a variety of sources arising out of the iron trade. The most significant feature of the period was, however, the involvement of the estate in the manufacturing of pig iron on its own account at Coneygre, after 1839, and at the New Level, after 1844.

iii. Estate Enterprise

At the commencement of the trust period, the mines report submitted by Smith and Liddell had made no reference to the possibility of the estate producing pig iron for consumption in the local finished iron trades. Why then did Smith, as manager of mineral and industrial enterprise after December 1836, initiate this development? Presumably the boom in the Black Country pig iron and wrought iron industry indicated the advantages of involving the estate in this lucrative development - especially with the trend to higher prices resulting from the railway construction of the 1840s. In 1838, Hawkes-Smith had commented on the boom in the south Staffordshire iron trade:

'there being upwards of 100 furnaces ... and their number is not likely to suffer diminution, as the immense demand for heavy castings for railways, main pipes for gas and waterworks, and other public purposes, promises still, to increase the quantity of iron annually consumed.'⁴⁶

Railway expansion in the mid-1840s considerably increased the demand for finished iron goods - especially rails. Parliament authorised the construction of 805 miles of track in 1844, 2,700 in 1845, 4,538 in 1846 and 1,354 in 1847, and the price of pig iron increased from £3 15s. to £5 per ton.

⁴⁶ W. Hawkes Smith, Birmingham and South Staffordshire (1838), p. 65.

This further impetus to the iron trade may have provided the main incentive to Smith to involve the estate, once more, in the production of iron at the Level. The ultimate and logical development, the production of wrought iron for sale to the finishing trades, was not taken until the 1850s when the Round Oak Iron Works were constructed⁴⁷. At the time that Smith was considering whether or not to retain the Level Iron Works under estate management, the market for local pig iron extended far beyond south Staffordshire:

'The export trade of (pig) iron is 234,000 tons to Hull, Liverpool, Bristol, Gloucester and London ... a great deal is consumed in the neighbourhood of Bristol.'⁴⁸

Much of this pig iron went to the United States and the finished iron goods were sold throughout Britain and in many overseas markets.

In view of Smith's initiative and business acumen, the advantages of integrating estate mineral and industrial enterprise to the point of production would not be lost on him - after all, he had recommended the negotiation of long mineral leases to encourage ironmasters to develop integrated concerns on the Dudley estate which mined their own raw materials, except limestone, and produced pig iron and finished iron goods at the same location. Circumstances too probably played their part because Messrs. Payton and Hopkins relinquished the tenancy of Coneygre furnaces in 1839 and B. Gibbons removed his plant from the New Level to Corbyn's Hall Iron Works in 1842. In the case of Coneygre, alterations had already been affected by Messrs. Payton and Hopkins after 1835 and the estate assumed control without great capital outlay. At the New Level, it is possible that Smith's attempts to re-negotiate the lease in the interests of the estate led to Gibbons' withdrawal. After the abortive attempt to lease

⁴⁷ See Section 4, Chapter 2.

⁴⁸ Railway Report, 1845: questions 423 and 932.

the plant to Bramah and Cochrane, Smith decided to retain control in his own hands. One additional factor indicated the wisdom of the estate once more assuming an entrepreneurial role. This was the fact that by 1845, apart from Lord Dudley, there was only one other ironmaster with an independent supply of raw materials in south Staffordshire.⁴⁹ All other ironmasters were dependent on the Dudley estate or on limestone imported from Caldon Low in north Staffordshire or iron ore from Warwickshire.

At Coneygre the two blast furnaces were supplied by coal and iron ore from estate pits at the site and limestone was brought by canal from the mines at Dudley Castle and the Wren's Nest - a distance of about one and a half miles. No attempt was made to introduce hot blast machinery and both furnaces continued to produce cold blast iron throughout the trust period: average weekly production was 50 tons per furnace in 1843⁵⁰. Some of the pig iron was sold and the rest was worked in the finery and iron foundry at Coneygre. Customers included the Boulton and Watt ironworks near Birmingham. Improvements were continually being made and, by October 1844, the average total weekly production had increased to 170 tons.⁵¹ Between 1839 and July 1846, total net profit from the Coneygre Works amounted to £15,439 10s. 9d.⁵² The net profit for 1847 alone was £8,185 11s. 10d.: this sum is all the more remarkable in view of the fact that by 1847, the railway boom was over and 62 per cent of Staffordshire furnaces were blown out⁵³. Gross income for 1847 was derived from:

	£	s.	d.
Sale of coal	1,297	10	0
Sales of pig iron: 9,447 tons 10cwt	48,600	6	2
Sales of castings: 2,404 tons 15 cwt	16,336	3	10
			54

⁴⁹ Railway Report, 1845, Q. 387. Evidence of Richard Smith.

⁵⁰ W. K. V. Gale, The Coneygre Story (Tipton, 1954), p. 12.

⁵¹ D.P.L. 8/K, List of Blast Engines Employed at the Different Iron Works, 6 Oct. 1844. See portfolio, Statistics item 3.

⁵² D.P.L. 8/L, Richard Smith's Mine Accounts, 1837-1860.

⁵³ J. D. Chambers, The Workshop of the World (1961), pp.33-41.

Until 1846, Thomas Holcroft was bailiff at the works when he was replaced by Smith's grandson, Edward Fisher Smith, with the position of manager.

The major development in estate enterprise was, however, at the New Level Iron Works on the banks of the Dudley Canal at Brierley Hill. After Gibbons relinquished the lease, the furnaces were reconstructed in 1844-5 and the number reduced to three. However, the increased capacity of each furnace and the higher productivity achieved by use of a hot blast resulted in a total weekly production of 330 tons of pig iron.⁵⁵ Two of the old furnaces were taken down and the materials used to construct new furnaces on the old bases to a height of 50 feet at a cost of £85 and £15 respectively - presumably labour costs only.⁵⁶ In addition, a new blast-engine house was constructed, replacing Gibbons' plant, and the engine reservoir was extended. Communications were improved by extending the Kingswinford Railway⁵⁷ across Pensnett Chase and over the Dudley Canal. Taking advantage of the fall of land below the line of the canal, the railway was continued to the top of the furnaces and trucks were emptied directly into them, thus saving the expenses of constructing an inclined plane and raising raw materials to the furnace tops. As the line of the first public railway constructed in the area, the Oxford, Worcester and Wolverhampton Railway⁵⁸, also passed beside the ironworks, the New Level had excellent communications with estate mines, for raw materials and could reach a much wider area for the marketing of pig iron.

⁵⁴ D.P.L. 9/J, Account of Richard Smith as Mine Agent, 31 Dec. 1846 to 31 Dec. 1847.

⁵⁵ Railway Report, 1845. Evidence of Richard Smith.

⁵⁶ Hoskisson, op. cit., p. 155.

⁵⁷ See Chapter 4, Part C i below.

⁵⁸ Ibid.

Hot blast iron was made at these furnaces and, also, cold blast iron. There was a regular market for the latter because of its particular qualities for castings requiring great strength and easy machining. The next logical step in the process of integration was to erect a rolling mill and forge to convert the pig iron into wrought iron - this was done by Smith in the 1850s with the construction of the famous Round Oak Iron Works adjacent to the New Level Furnaces⁵⁹. It was unfortunate that the New Level Furnaces were blown in at a time when the Black Country iron trade suffered a temporary recession with the collapse of the railway boom in 1847. In that year, the quantity of pig iron sold was 2,731 tons for £14,468 10s. The manager of the plant was Frederick Smith, son of Richard, and net profit for the year was £990 8s. 10d.

The wisdom of the trustees' policies with regard to the iron trade became more apparent in the boom years of the 1850s. However, even by the end of the trust in 1845, there was every indication that their decisions - guided by Smith's advice, were highly beneficial to the estate. Demand for long leases was increasing as more leading ironmasters possessing considerable capital sought to take advantage of the opportunity to develop integrated concerns on the Dudley estate mining their own raw materials, producing pig iron and finished goods, and availing themselves of the transport facilities of the estate. These developments increased estate revenue at every stage of production, supply, and distribution. In addition the increasing prosperity of the area - itself partly the result of the more progressive exploitation of the Dudley estate, inspired the trustees to re-establish iron production on an entrepreneurial basis. This completed the closer integration of the estate as an economic unit and the integration of the estate with the

⁵⁹ See Section IV, Chapter 2. ⁶⁰ Smith's Accounts, 1847.

region as a whole and proved to be one of the most profitable investments undertaken by the trust. Local prosperity in the iron trade was not fully reflected in the estate's revenue in 1833: by 1845 the prosperity of the Black Country iron trade was closely linked to the Dudley estate and the estate itself participated in this boom to the full.

Chapter 3. Mineral Enterprise

The mineral and geological structure of the area covered by the Dudley estate in the Black Country has already been examined¹. This inherent wealth was augmented by the distribution of allotments together with specific rights included in the various local enclosure acts and awards. As in other sections of estate enterprise by 1833, the mineral trade was languishing in a depressed state in spite of the growing local demand for coal, ironstone and limestone. This condition was fully exposed in their report² by Smith and Liddell who condemned the existing management as inefficient in terms of the leases negotiated, systems of book-keeping and accounts, and the actual manner of working the collieries and limestone workings.

Developments in the economy of the region rendered the stagnant condition of estate mineral enterprise all the more undesirable. The total demand for raw materials increased as the local iron trade expanded and this demand outweighed the reduction in consumption per ton of iron manufactured resulting from the technological advances of the 1830s. In particular, the potential advantages of the Dudley estate increased during the period of the trust. Supplies of thick coal were almost exhausted on the eastern side of the Dudley ridge by 1836³. With improvements in blast furnace design, the demand for thick coal increased because of its excellent burning qualities and lack of sulphur - this meant that it could be used in a raw state in the blast furnaces, without the expense of coking, and produce the required temperatures more economically. Under the Pansnett Chase area west of Dudley,

¹ See Section I, Chapter 1, Part A.

² See Section I, Chapter 2, Part C.

³ Mines Report, 1836, p. 1.

the estate still possessed considerable quantities of thick coal at a shallow depth. This held great potential value if the trustees could reorganise estate collieries to take advantage of the situation. In addition to the requirements of the local iron trade, there was an increasing demand for house coal, particularly in Birmingham where the population increased from 187,000 in 1801 to 819,000 by 1861⁴, By 1845, the trustees' efforts to remedy the situation had met with considerable success: annual net profit from estate mineral enterprise had increased from £36,911 13s. 9½d. in March 1834⁵ to £157,990 5s. 9d. in December 1847⁶. However, the latter figure does include income from ironworks worked and leased by the estate: in 1847 this sum amounted to £9,175. As in the case of the iron trade, the policies of the Dudley estate after 1836 with regard to minerals, produced beneficial results not only for the estate but for the Black Country as a whole. In this section, the scale and profitability of mineral enterprise will be examined in all respects: systems of management and control will be discussed in detail elsewhere⁷.

A. Limestone

Bad management, inefficient marketing arrangements, and failure to exploit the geographical advantages of the limestone workings had all combined to produce a situation by 1836 in which leased ironworks on the Dudley estate, and the Black Country iron trade in general, were obtaining limestone from other sources⁸. The mines report underlined the nature of the problem by pointing out that

⁴ Allen, op. cit., p. 33.

⁵ Loch's Second Report, 1835. See Chart 12, p. 219

⁶ D.P.L. 9/J, Smith's Mines Accounts, 1836-47.

⁷ See Section III, Chap. 2, Part C.

⁸ See Section I, Chap. 2, Part C iii.

Chart 12. Transactions of the Mines Department for the Year Ending 31 March, 1834.

Receipts	£	s.	d.	Payments	£	s.	d.
For Coals, Slack and Coke	33,899	9	9	For Park Head Colliery	9,459	3	6
Limestone and Lime	13,509	9	0	Kingswinford	4,509		
Royalties	4,765	1	8	Brierley and Brockmoor	7,366		
Rent of premises belonging to the works	1,669	3	7	Netherton	7,318		
Bricks	8	0	10	Princes End	2,296		
Water	360	3	9	Coneygre	803	15	8
Gunpowder	799	10	0	Limestone and Lime Works	11,356		
Drawing Water	337	10	0	Tonnage on Coals	568	14	6
Use of Mine Machinery	398	5	9	Wages of Workmen at the Timber Yard	1,474	16	1
Debts	184	17	7	Moulding and making Iron Castings	263	18	11
Sundries	804	10	0	Making Bricks	620	3	8
Returned Bills	212	9	10	Gunpowder	722	5	6
	56,948	11	9	Expenses of matching	53	5	8
Amount of Debts	30,096	3	3	Iron, Iron Castings	1,452	17	3
				Necessary things	1,202	16	0
				Damages of Land	113	5	4
				Rent, Rates and Tithes	1,086	9	11
				Salaries	2,392	15	5½
				Bills Returned and Expenses	495	3	1
				Cash Lent	130		
				Incidental Expenses	471	14	10
				Balance	32,888	9	7½
	£87,044	15	0		£87,044	15	0

'Mr. Benbow does not know whether this be correctly stated or not, but he has an idea that the Debts contracted between the 6th March, 1833 and the 31st March, 1834 fell short of this sum, but Mr. Downing can ascertain the fact.' Loch's Second Report did in fact reveal that the actual profit for the year was £36,911 13s. 9½d.
S.C.R.O. D260/M/F/5/19/2 and S.C.R.O. D260/M/F/5/19/4.

'The present depression (in the limestone sector) ... is principally occasioned by the great competition to which it is now exposed from the introduction into this district of the Mountain Limestone from Caldon-low in the Northern part of Staffordshire, the Walsall Quarries now very extensive, the Sedgley Beacon Stone Pits, and from the recent discovery of Limestone at Dudley Port (Tipton) ... on the banks of the Birmingham Canal ...'⁹

To remedy the defects and depressed condition of the estate's limestone interests, the report recommended an increase in production from the upper limestone beds - preferred as a flux by the ironmasters, the separation of the upper and lower limestone at the wharves so as to guarantee the better quality to the ironmasters, and, because of this, an increase in selling price from 4/6 to 5/- per ton - the price charged at Dudley Port for upper limestone¹⁰. Further proposals included the replacement of the old plate-ways with modern railways and trucks for use in the underground workings and the negotiation of sound leases. At the commencement of the trust the limestone workings were operated under the direct management of the estate and, for the year ending in March 1834, sold lime and limestone worth £13,509 9s. However, the high working costs which amounted to £11,356¹¹, reduced their profitability to a relatively low level. An increase of 6d. per ton

'would produce an increased annual income of £1,915 12s.6d. without allowing ... for a probable increase in the quantity sold.'¹²

Downing criticised the proposals to separate and sell the two types of limestone at different prices. He alleged that this scheme had been considered in the past but never adopted because

'all the produce of the Thick Quarries would be depreciated, or rejected by the Customers - thus $\frac{2}{3}$ of the whole quantities that are raised must be left.'¹³

Such a remark reveals a great deal about Downing's abilities

⁹ Mines Report, 1836, p. 22.

¹⁰ Ibid.

¹¹ Ibid., p. 23.

¹² Ibid.

and the condition of the limestone workings at that time. If 66 per cent of total production was coming from the thick or lower limestone beds, it is no surprise that the ironmasters were rejecting the Dudley estate's stone in favour of others because a mixture of the upper and lower stones would produce a poor flux in the furnaces. It is also doubtful that the thick stone quarries would become depressed because this stone was more suitable for use as agricultural lime and as mortar for building purposes, building stone, quarries and slabs - all in great demand in the area.

After Downing was replaced by Smith as mineral agent in December, 1836¹⁴, all the policies recommended by the report were put into effect. Internal transport within the limestone workings was improved by the purchase of wrought iron rails, costing £412 11s. 8d., from John Bradley and Co. at Shut End¹⁵. This would represent a considerable length of track and the rails were used to replace the old plate-ways in the limestone workings. The demand for lime in the agricultural and building markets was met by an increase in the number of lime works leased by the estate. In 1836 there were four of these listed in Downing's record of mineral and ironworks leases.

<u>Date of Lease</u>	<u>Tenant</u>	<u>Agreement</u>	<u>Premises</u>	<u>Rent</u>
31 March 1834	Astley and Hampton	Written	Tipton Pieces	£15 12s.
25 April 1814	S.D.Williams	Tenant at Will	Castle Mill	£66
25 March 1834	J. and G. Smith	"	Brettell Lane	£10
25 March 1816	Thos. Hodgetts and Son	"	The Level	£12. 16

¹³ Downing's Comments on the Mines Report, 1836.

¹⁴ See Section III, Chap. 2, Part A.

¹⁵ D.P.L. 9/J, Richard Smith's Accounts as Mine Agent from 31 Dec. 1836 to 31 Dec. 1837, p. 17.

¹⁶ D.P.L. 8/K, Particulars of Leases, Agreements etc. Belonging to the Late Earl of Dudley. From Mr. Downing, 16 Oct. 1836.

By 1846, three more had been added: these were -

<u>Tenant</u>	<u>Agreement</u>	<u>Premises</u>	<u>Rent</u>
William Jeffries	Written	Pensnett	£5
George Bate	"	Ashwood	£45
David Pearson	"	Dudley Wood	£10. 17

The Ashwood Lime Works lease had been negotiated initially in 1839, for fourteen years, when John Simpson had undertaken to construct four kilns at the canal basin there. This concern would supply lime for agricultural purposes in the farming areas west of the Black Country and along the line of the Staffordshire and Worcestershire Canal. In 1844 Bate took over the lease and a total of 3,148 tons of limestone was conveyed there by canal from the estate wharves at Castle Mill. All the other lime works leases were also situated alongside the various canals. However, the Castle Mill and Tipton Pieces works, which produced lime at the quarries, probably supplied the agricultural market also. The remaining lime works were situated in the new urban areas and probably supplied the building trade. Another increased source of income came from the supply of limestone bricks (blocks) and quarries to the building trade. Such lessees paid a royalty on production in addition to a ground rent.

Typical royalties were those paid by Daniel Hughes in 1847:¹⁸

Hurst Hill:	Bricks, 156,400	at 2/- (per 1,000)	£15 12s.10d.
Wrens Nest:	" 157,000	at 2/-	" £15 14s.
" "	Quarries 51,301	at 2/6	" £ 6 8s. 5d.

The main recommendation of the report - that the productivity of the thin or upper limestone workings should be increased and that this commodity should be sold separately to the ironmasters, was also implemented. Unlike the collieries, Smith continued to lease sections of the

¹⁷ D.P.L. 9/J. Richard Smith's Accounts as Mine Agent, from 31 Dec. 1846 to 31 Dec. 1847.

¹⁸ Ibid.

limestone workings to chartermasters, who cut and brought out the stone, for distribution by the estate from its wharves at Castle Mill and Deepfields, in return for a charter or payment by the estate per ton of stone mined. In the case of the collieries, he introduced royalties which were paid to the estate per ton of minerals worked by ironmasters who mined coal and ironstone which they either marketed or used in their own furnaces and forges¹⁹. In accordance with Smith's general approach to the mines, it is probable that the estate continued to work the more valuable limestone workings directly and leased the less productive sections to other entrepreneurs. The charter paid per ton was reduced in 1843 as demand for limestone fell because of the depression in the Black Country iron trade which began in 1842²⁰. For some time before the end of 1842, the charter paid to the 12 chartermasters engaged in working sections of the thin beds had been fixed at between 2s. 2d. and 2s. 5d. per ton depending on the nature of the stall or section being worked. Because of the depression, these payments were reduced to between 1s. 9½d. and 1s. 11d. per ton by April 1843. In general, charter rates increased by July 1843 reflecting the recovery of the local iron trade and the price of limestone. A similar trend occurred in the thick limestone charters. Seven chartermasters were engaged in working this stone in 1842 and the charter paid varied from 1s. 10d. to 2s. 0d. This fell to its lowest point in April 1843 ranging from 1s. 6½d. to 1s. 8d.²¹ If the lower or thick beds supplied the building and agricultural markets rather than the iron trade, the reduction in charter paid was probably

¹⁹ See Section III, Chap. 2.

²⁰ Day Letter Book of Richard Smith in possession of Messrs. Johnson, Poole and Bloomer, Mining Engineers, Dudley.

²¹ Ibid.

brought about by the general depression in the area because of the slump in the iron trade: this would presumably affect the prospects of the building trade also.

In spite of this temporary recession in the limestone workings, there was an expansion in the scale and profitability of this sector of the estate's affairs during the trust period. Several more offices and weighing machines were erected by the estate to supervise and check the activities of the various lessees and chartermasters. No fewer than seven weighing machines were built at the Wren's Nest and Castle Mill lime works and two more at Hurst Hill²². Additional steam engines were constructed and, by 1839,²³ 11 were in operation at the various limestone workings.

	<u>Air</u>	<u>Winding</u>	<u>Drainage</u>	<u>Type</u>
Mons Hill	1	1	1	Double power
Wren's Nest	1	1	1	" "
South Castle	1	1		" "
Hurst Hill	1	1	1	" "

Throughout the period of the trust, the bulk of the production came from the Wren's Nest and Castle Hill workings: the quarries at Hurst Hill supplied only about 13 per cent of the total output in 1834 and had virtually ceased operations by 1845, except for building material, because the accessible seams were exhausted. Timmins observed in 1866 that the Hurst Hill quarries were virtually abandoned apart from

'a little of the thick measure which is of very superior quality.'²⁴

Downing's accounts for the year ending in December 1834 indicate that total receipts were £13,956 17s. 5d. and total costs, £10,419 15s. 4d.²⁵ The limestone produced was

²² D.P.L. 8/K, Account of Steam Engines and Weighing Machines Belonging to the Trustees, Xmas 1839. W. Rollinson.

²³ See Appendix 6 and separate portfolio, Statistics item 3. Ibid.

²⁴ S. Timmins, Birmingham and the Midland Hardware District (1866), p. 46.

²⁵ D.P.L. 9/J, Account of Francis Downing, Mine Agent, as

74,267 tons 16 cwts and, in addition, 2,951 tons of lime were sold. This compared favourably with the previous year ending in March 1834 when 77,625 tons of stone had been sold for £13,509 9s.: however, the higher price of limestone, as the iron trade recovered, would explain the increased profit from the reduced quantity sold. Smith supplied figures to the commission of enquiry for the proposed Oxford, Worcester and Wolverhampton Railway to demonstrate the consumption of limestone by blast furnaces in the Black Country in 1844²⁶: out of a total of 110,914 tons no less than 92,164 tons came from the Dudley estate's mines and quarries at the Wren's Nest and Castle Hill. The latter figure would largely represent the upper, thin limestone mined for use in the iron trade and would not take account of production by estate mines to supply blast furnaces not adjacent to the proposed line. It also excludes limestone mined from the lower, thick beds to supply the building trade and agriculture. Accordingly, the total production of the estate limestone workings in 1844 would be far higher than 92,164 - this figure alone indicates that the trustees had successfully expanded the activities of the upper limestone workings to the point where production from this sector exceeded total production from all sectors in 1834.

Smith's figures also indicate that the estate had reasserted control of the iron trade's supply of limestone in much of the Black Country and that the challenge from Walsall, Dudley Port, Caldon Low and elsewhere had been successfully resisted. The supply of lime is also excluded from Smith's list - with the exception of limestone sold to

amended by James Loch, December 1834. See Chart 13.

²⁶ D.P.L. LD 625. Report of the Enquiry into the Oxford, Worcester and Wolverhampton Railway, 1845. Evidence of Richard Smith. See Chart 14.

Ashwood Lime Works. From figures quoted above, it is evident that the output of lessees engaged in quarrying limestone bricks and quarries also increased during this period. No figures are available to demonstrate the overall profitability of the estate's limestone workings in 1844 when Smith compiled his list. However, assuming that the charter paid by the estate remained similar to that paid in 1843 - on average, about 2s. 4d. per ton, and the selling price of limestone remained at 5s. per ton to the ironmasters, estate profit at the distribution point at Castle Mill wharf would be approximately 2s. 8d. per ton. Because of the increase in the iron trade, the selling price of limestone was probably higher than 5s. per ton. On the total of 92,164 tons included in Smith's figures, this would represent an income of £12,283 10s. as compared with a total net income of £3,537 in 1834. This figure excludes the income from the limestone referred to above which was excluded from his figures.

Surviving accounts for 1847²⁷ do provide an accurate indication of the state of the limestone workings:

		Tons	Cwts	£	s.	d.
To Sales on Credit						
	Limestone	182,976	18	42,331	2	1
" " " "	Lime	2,383	8½	1,307	18	8
				<u>43,639</u>	0	9
To Sales for Cash						
	Limestone	1,063	9	185	17	1
" " " "	Lime	1,090	18	593	12	4
		<u>187,613</u>	16	<u>44,418</u>	10	2
Net profit				£14,349	1s.	7d.

From these figures it is evident that the actual selling price of limestone had fallen to 3s. 5d. per ton cash or 4s. 0d. per ton on credit, probably the result of the 1847 depression in the iron trade. Lime sold at 10s. 9d. and 11s. 0d. per ton respectively: the lower rate for cash sales

²⁷ Smith's Accounts for the year ending Dec. 1847

was to induce ironmasters and other customers to pay their debts promptly. However, it was usual in the Black Country iron trade to receive several months grace before payment - the scale of debts accumulated by this practice was to create problems for the trustees in 1845. The reduction in prices suggests that the Dudley estates recovered their predominance of the limestone market in the local iron trade not only by greater efficiency, guaranteed quality and increased productivity but also by more competitive prices. Moreover, a comparison between the gross income and net profit for 1834 and 1847 shows that real profitability of the limestone workings in terms of net income and gross income had also increased from 25.3 per cent in 1834 to 32.3 per cent in 1847. The total net profit for the period from 1 January 1837 (when Smith's accounts commenced) to 27 July 1846²⁸ was £75,092 4s. 8d. - an average of £9,344 per annum as compared with the net profit of £3,537 for 1834.

There is no doubt that the trustees amply fulfilled their task of reinvigorating the limestone interests of the Dudley estate during the period 1833-45 and that their success was closely linked to their general policies with regard to the iron and mineral trades both on the estate and in the locality as a whole²⁹. The fame of the Dudley limestone workings was considerable. In December 1843 they were visited by the Duke of Bordeaux and, in September 1849, by the British Association for the Advancement of Science while in the following year, sections of the finished workings were opened to the public after the installation of gaslighting. When the bill was passed authorising the construction of the Oxford, Worcester and Wolverhampton Railway, the Company was not allowed to interfere with the activities of the Castle Mill wharves, tram roads and weighing machines.

²⁸ D.P.L. 8/L, Richard Smith's Accounts with the Trustees, 1 Jan. 1837 to 6 Mar. 1845 and with Lord Ward, 6 Mar. 1845 to 31 Dec. 1860.
²⁹ See Appendix 6.

Chart 13. Francis Downing in Account with the Limestone and Lime Works, from 31 March to 31 December, 1834.

<u>Receipts</u>	Tons	Cwts	£	s.	d.
To Limestone sold for ready money	845	19	148	1	1
" " " on credit	58,889	2	10,305	10	9
To Wrens Nest Limeworks	4,252	10			
	63,987	11	10,453	12	8
To Lime sold for ready money at Wrens Nest	787	15 $\frac{1}{4}$	393	17	9
To Lime sold on credit do.	2,163	4 $\frac{3}{4}$	1,081	12	6
	2,951	$\frac{1}{4}$	1,475	10	3
To Limestone sold for ready money at Hurst Hill	2	0	0	7	0
To Limestone sold on credit do.	10,278	6 $\frac{3}{4}$	1,798	14	2
	10,280	6 $\frac{3}{4}$	1,799	1	2
To Sundries for ready money: old rope, grass, revenue			9	10	4
To Sundries sold on credit: old timber, castings, brass, iron			110	0	0
To Norton Williams & Co. for 1 yrs. rent of Castle Mill Lime Kilns Dwelling House etc.			59	5	0
To Hartley Hampton $\frac{1}{4}$ of a years rent of Tipton Place Lime Kilns Weighing Machine etc			11	14	0
To William Hughes for Royalty on Common Bricks (limestone)		143150	14	6	3
Do. Tiles and Quarries		31099	3	17	9
			£13,956	17	5

Payments

Bailiff for getting Limestone etc.	Total			
By William Bowaters Disbursements (monthly)	8,025	12	0	
Bailiff for getting Limestone etc.				
By David Hill's Disbursements	1,296	1	5	
Castings Robert Martin and Evers & Martin	291	5	0	
Rates	27	16	0	
Ropes	62	4	6	
Boiler Plates by May Hill	13	0	6	

Chart 14. Sources of Limestone Supplied to Ironworks Within the Black Country, 1845.

<u>Ironworks</u>	<u>Source:</u>	<u>Dudley Castle</u>	<u>Dudley Port</u>	<u>Froghall</u>	<u>Walsall</u>
Oak Farm		3,500 tons p.a.		2,500	
James Foster's		1,550	7,450		
Corbyn's Hall		6,000		2,000	
Corbyn's Hall New Furnaces		14,500			
Ketley's		6,500			
The Lays		c.8,000			
Brettell Lane		3,000			
Old Level		2,800			
New Level		Not in blast			
Woodside		6,000			
Ashwood Basin Limeworks		3,148			
Parkfields		4,500		2,500	2,000
Prior Field		8,500			
Ettingshall		1,200		2,300	
Bovereaux		2,525			
Tipton		4,500	(Mons Hill)		
Park Head		4,252			
Russells Hall		6,320			
Blower's Green		5,329			
Stourport		40			
Total		92,164	7,450	9,300	2,000
Gross Total		110,914			

Dudley Castle and Mons Hill limestone came from mines and quarries owned and worked by the Dudley Estate. This list includes most of the leading ironworks in the Tipton, Dudley, and Brierley Hill area.

Minutes of Evidence Taken Before the Select Committee on the Oxford, Worcester and Wolverhampton Railway, 1845 - D.P.L., L.D 625.

These were crossed by a lengthy viaduct which also left access to the Dudley Castle Canal Tunnel unimpeded³⁰.

B. Coal and Ironstone

i. Introduction

At the time of the commencement of the trust, the south Staffordshire coalfield supplied all the ironstone mined in the area to the local iron trade: much of the coal produced was also consumed in the area but a considerable quantity was marketed in east Worcestershire, Birmingham, Warwickshire, north Gloucestershire and Oxfordshire³¹. The particular advantages, weaknesses and geological structure of the south Staffordshire coalfield have already been considered³². Apart from the fact that a variety of minerals could be raised from the same shaft, the most important feature of the coalfield was the rich thirty-foot seam. However, this advantage was countered by the fact that the local ironstone had a low extraction rate and was generally of poor quality:

'... how much ironstone do you get of what you disturb, not above one-sixth? It is about that.'³³

Nevertheless, the quantity of ironstone mined had increased from 60,000 tons in 1798 to 959,000 tons in 1858: this fell to 786,000 tons in 1860 and the general decline was thereafter maintained³⁴. Coal production followed a similar trend: in 1800 the Black Country produced 840,000 tons rising to 5,000,000 tons in 1858³⁵.

³⁰ D.P.L. LD 625, The Oxford, Worcester and Wolverhampton

Railway Bill, 1845, para. 52.

³¹ Report of the Select Committee on the State of the Coal Trade, 1830. Map showing distribution of coal.

³² See Section I, Chap. 1, Part A.

³³ Railway Report, 1845. Q. 544, Evidence of R. Smith.

³⁴ Allen, op. cit., pp. 39 ff.

³⁵ Ibid.

This apparently healthy outlook in the middle decades of the nineteenth century was, however, already being clouded as early as the 1830s by indications of future difficulties. These were twofold: the exhaustion of the surface and shallow deposits of thick coal in certain areas and the growing problem of drainage. In their report, Smith and Liddell remarked that

'The Thick or Ten Yard Coal having been always preferred for domestic and manufacturing purposes has been so hard wrought that little now remains to be worked within the Parishes of Bilston, Wednesbury, Sedgley, Tipton and Dudley compared with the quantity which those Parishes once contained.'³⁶

By 1845, the remainder of this coal had 'for the most part', been gone a great many years since.'³⁷ It is significant that the most extensive mineral areas of the Dudley estate lay south and west of the Dudley ridge in Himley, Kingswinford and Rowley parishes. These were the areas where the greatest quantity of thick coal remained in the Black Country, and as a result of the enclosure acts of the late eighteenth century, the Dudley estate held the mineral rights for much of the area. These areas dominated the local supply of coal and ironstone to the Black Country after the 1830s and produced great wealth for the Dudley estate. By 1850, drainage problems had become acute in certain areas - especially Tipton: this was occasioned by the widespread presence of clay under the thick-coal workings which produced flooding and rendered the working of the lower seams of coal, clay, and ironstone difficult as well as increasing production and capital costs from the installation of large steam pumping engines.

The economic recovery and expansion of the Black Country iron trade after 1833 and the fact that the Dudley limestone workings were failing to take advantage of the

³⁶ Mines Report, 1836, p. 1.

³⁷ Railway Report, 1845, Q. 773. Evidence of R. Smith.

situation have already been considered. In much the same way, the estate collieries and ironstone workings were failing to increase production in the early 1830s and were badly managed. Only three collieries were in a position to expand production in 1836 and these were operated by the estate. The bulk of estate income came from broken mines leased to tenants at will³⁸. A comparison between the total number of collieries and those actually producing coal in 1834 indicates the magnitude of Downing's errors of management and the under-production of the Dudley mineral enterprises at a time of expanding demands. Of the three pits³⁹ worked by the estate in 1836, two were at Brockmoor and one was at Kingswinford.

In their review of the various enterprises, Smith and Liddell commented on the state of production. The collieries situated north and east of Dudley had largely exhausted the thick coal: however, the Coneygre estate of about 350 acres still contained

'important beds of Ironstone which have not been noticed.'⁴⁰

This was a very old colliery which had

'been worked more or less from a very remote period and has been very productive of thick Coal, although we believe there are many ribs and Pillars yet to get.'⁴¹

Pits had been sunk to the lower seams - to the

'Heathen Coal and Gubbin Stone in some parts of the Estate and to the White Stone in others.'

However, the property was not being exploited by the estate - except through tenants at will in certain sections. This situation existed in spite of the fact that the Birmingham Canal ran through the property. The question of drainage was

³⁸ See Section I, Chap. 2, Part C v. ³⁹ See Chart 15.

⁴⁰ Mines Report, 1836, p. 4.

⁴¹ Ibid., p. 12. See Maps 3 and 4.

not tackled at all:

'drainage is at present performed by the Mine Water passing into the neighbouring Collieries.'

These ironstone beds were also to be found in the other collieries in Sedgley, Tipton and Bilston in addition to the thinner seams of coal lying at a greater depth than the thick coal. Of these, the Old Park and Fox Yards Collieries were the most important and, as they were adjoining, contained about 150 acres of minerals. A short branch of the Birmingham Canal had been cut to the pit-head at the Fox Yards, Colliery. Parts of this concern were being worked by the trustees - but these consisted only of broken mines of thick coal: other sections of heathen coal and gubbin ironstone were leased to tenants at will. Several estate mineral properties were adjoining in this area including Rounds Hill, Dimmocks and Princes End. At the last colliery the report noted that

'A powerful Mine Engine has for some years been inactive ... and the Colliery entirely at a stand.'

All of these collieries were inactive 'although capable of being worked to much advantage' as they contained extensive areas of broken thick coal and unworked seams of thin coal and ironstone - all lay within easy reach of the Birmingham Canal. The last concern on this side of Dudley was the Brierley Colliery

'situated near to the great Bradley Iron Works (of John Wilkinson).'

The Birmingham Canal also passed through this property 'in a very convenient manner.'

On the other side of Dudley at Windmill End, some thick coal remained and

'the thin Coals and Ironstone beds are in their maiden state.'⁴²

As the Netherton Canal ran through this property,

⁴² Ibid., p. 6. See Maps 3 and 4.

'Wharves and Rail Roads (were) already made and will be useful in taking the thin Mines of Coal and Ironstone to Market.'

Some 40 acres of thick coal also remained at the Netherton Colliery, out of a total of 130 acres, although the report warned that there were

'two instances where the Coal has been got by Lord Dudley beyond his Lordship's boundary line.'⁴³

West of the Netherton Colliery, the trust estate formed a very extensive and uniform block of land containing more than 2,000 acres of minerals

'in a large part of which the thick Coal is still unwrought and only a few acres comparatively of the thin Coals and Ironstone measures have been worked.'⁴⁴

One of the oldest and largest mineral enterprises south and west of Dudley was at Park Head where the Dudley Canal joined the Netherton and the Dudley Castle Tunnel Canals. In 1836, the only production here came from a few sections of broken mines - this was particularly regrettable because of the excellent communications enjoyed by Park Head. Two other features were criticised by the report, one of which concerned a large block of coal

'left by one of the Old Charter Masters (nefariously as reported) to support some Buildings of his own near the same pit. It is not improbable that this Square of Coal may realize £1,000 ... and furnishes another instance of the necessity for Plans and Surveys of the underground workings.'⁴⁵

Apart from the lack of adequate plans in the Dudley pits, this point also illustrates the usual effect of thick coal mining in the area, which was to produce severe subsidence. Under the enclosure acts, the Lords Dudley were not liable for surface damage. Another questionable practice was referred to by Smith and Liddell - this concerned the safety of the Dudley Canal Tunnel itself:

⁴³ Ibid.

⁴⁴ Ibid., p. 11. This would include the area of Pensnett Chase between Netherton and Kingswinford village.

⁴⁵ Ibid., p. 8.

Chart 15. Collieries Belonging to the Dudley Estate in 1834

<u>North and East of Dudley</u>	<u>In Operation</u>	<u>Not in Operation</u>
In Tipton	Tipton Colliery Tipton Moat Rounds Hill Bloomfield Highfield Denbigh Hall	Coneygre Princes End
In Sedgley	Old Park Deepfield	Fox Yards Catchems Corner
In Bilston	Brierley Dimmocks	Bilston
In Wolverhampton	Parkfields	
<u>South and West of Dudley</u>		
In Dudley	Bumble Hole Buffery Windmill End Baptist End Old Park	Netherton Park Head Dudley Wood Tipton
In Kingswinford	Corbyn's Hall Bradley Moor Brierley Hill Brettell Lane Brockmoor Bridge Shut End Cryers Plane Farthing Lane	Brockmoor Level Kingswinford

Of the collieries in operation in 1836, production came mainly from sections of 'broken mines' being worked by tenants at will. The estate was actually working three pits only, two at Brockmoor and one at Kingswinford.

Mines Report, 1836, p. 8. See Maps 3 and 4.

'... we are informed there is a clause in the act (Dudley Canal Tunnel) authorizing proprietors of mines to work within 21 yards of either side ... but we think it singular that a pair of pits should be sunk within the Parliamentary limits by virtue of which at the depth of 100 yards the Thick Coal ... has been wrought. One of these shafts is now sunk down to the New Mine Stone which is being got near to the rib of coal left to support the Tunnel ... Whether the Trustees will be liable for damage ... we consider it a proper subject for enquiry ... If the ground should sink it may prevent the passage of Boats.'⁴⁶

There is no indication of the trustees' action on this point, but, as the tunnel still remains intact, it seems likely that work in this section of Park Head Colliery was halted! One encouraging feature was the fact that the deeper shafts would

'very soon produce large quantities of Ironstone and thin coal'

from those seams underlying the worked-out thick coal.

The Pensnett Chase collieries contained large tracts of unworked thick coal as well as numerous old shafts which

'will be very useful hereafter in getting the lower mines of Coal and Ironstone - for this purpose preparations are already commenced at a place called Holland where a small pumping engine is erected.'⁴⁷

The main drainage in this area was provided by the

'great Pensnett Mine Engine ... This Engine will command the more valuable portion of thick Coal in the quick, which the Trustees have to get assisted as it will be by other Engines of smaller power.'

This large engine had been erected by Beaumont and drained several hundred acres of minerals connected by water levels. It was situated beside the Fens Pools - the reservoirs at the head of the Stourbridge Canal branch on Pensnett Chase: water was sold to the canal company. Another large pumping engine south of Dudley was at Park Head -

'this ... large Mine Engine has long performed the drainage of the thick Coal.'⁴⁸

⁴⁶ Ibid., p. 9.

⁴⁷ Ibid., p. 10.

⁴⁸ Ibid., p. 8.
See Map 4.

Having described the existing state of the collieries and analysed the deficiencies of management and control⁴⁹, Smith and Liddell made a number of recommendations to the trustees. In order to take advantage of the current demand for minerals, they advised that the mines should be exploited for immediate profit rather than conserved as an asset - as had been the case under the first earl. All the collieries should be worked to capacity and the old shafts sunk down to the deeper seams in order to work the thin coal and ironstone which lay under worked-out sections of thick coal. Further recommendations concerned the problem of adequate drainage. In particular, pits in the areas which had been intensively exploited from an early date were becoming waterlogged. One such case was at Deepfields⁵⁰, on the eastern flank of the Dudley-Sedgley ridge, where large areas of broken mines of thick coal were flooded with the consequent loss of production from these and the deeper seams of thin coal and ironstone. The subsequent problems of establishing a co-operative mines drainage scheme which were to bedevil similar attempts later in the century,⁵¹ were already apparent:

'The different proprietors of these Mines have had several meetings to arrange a plan of union drainage by erecting a large Mine Engine in some eligible situation. The plan has ... been ... impeded from a difference of opinion as to the property on which such Engines should be planted, but we believe it has finally been decided to erect it at a pit belonging to the Trustees ... This arrangement when settled will justify the Trustees in opening and working the Lordship Mines in this district.'⁵²

A similar service was already being performed by an estate engine at Bloomfield Colliery. This engine also drained the

⁴⁹ See Section I, Chap. 2, Part D.

⁵⁰ Mines Report, 1836, p. 15.

⁵¹ See Section IV, Chap. 3 for a discussion of the South Staffs. Mines Drainage Act.

⁵² Mines Report, 1836, p. 15. See below.

neighbouring Tibbington Colliery owned by Messrs. Walker who

'pay a rent or compensation to the Trustees for the same'⁵³ as did the Birmingham Canal Company which received the water from the mines. The lucrative value of this arrangement was not lost on Smith and Liddell - Messrs. Walker paid £337 10s. for 'water ease' in the nine months ending in December 1834. Accordingly, the report indicated that:

'as long as these contributions are maintained they will form excellent subsidies in defraying the drainage expenses of the Bloomfield Mines, but it appears to us that the best time for getting the Lordship Mines is whilst other persons fill an interest in subscribing towards the expense of drawing the Water.'⁵⁴

It is evident that, as early as the 1830s, estate pumping engines⁵⁵ already performed a valuable service not only for Lord Dudley's pits but also for the Black Country mines in general and for the local canals. This provided a regular source of income and the value of these engines increased as the problem of flooding intensified during the century.

These various proposals and observations concerning individual collieries were all included in their report by Smith and Liddell, together with the summary of managerial weaknesses already considered. Perhaps the most significant recommendation of all was their proposal that the basic policy, whereby the estate worked the pits directly until the main thick-coal seam had been exhausted, should be replaced by a system of leasing the mines on royalty. Smith had prepared the ground for this radical innovation in a letter to Hatherton before the report was submitted:

'The more I think of the subject and nature of the trust Estate, the more I am convinced of the propriety of letting the Mines on Royalty.

It is very difficult for Trustees to steer a clear course through a trading will. It most commonly happens

⁵³ Ibid., p. 16.

⁵⁴ Ibid.

⁵⁵ See Appendix 8 and portfolio, Statistics item 3 for data concerning these engines.

'that they end in unpleasant and perplexing Chancery suits, frequently with great loss to the most cautious Trustees, and in some instances, in total ruin. A strict adherence to the Royalty system will avoid such consequences, taking care that the Mines are judiciously let, and worked in a proper and workmanlike manner.

The present time affords a most striking and favourable opportunity for letting Mines (i.e. at a high royalty) indeed the Trustees may never witness such another during the period of their Trust.'⁵⁶

Fortunately for the estate, and the trustees, the late earl's Will empowered them to grant mineral leases - an unusual feature⁵⁷ in an early nineteenth century Will, and the trustees could implement this recommendation without delay.

The trustees were in a position to take advantage of the situation afforded by the fact that increased demand was threatened by early signs of a dwindling supply of thick coal and ironstone in many parts of the Black Country and that the bulk of the minerals remaining at a shallow depth were on the Dudley estate. All the mines should not be leased at once

'but rather as the demand ... calls for them ... in this way there will be a fair competition for them, and they will be likely to produce their maximum value.'⁵⁸

The current practice in Staffordshire with regard to letting mines was

'to take a ... proportion of the Sale price; in some instances $\frac{1}{8}$ in others $\frac{1}{7}$ and as high as $\frac{1}{5}$ even for Maiden Mines, where the Lessees have to incur all the expences of plant etc. ... the Lessor finding no Capital whatever.'

The report advised that all the mines on the Dudley estate should be let at the high royalty of 20 per cent on sales.

56 S.C.R.O. D260/M/F/5/19/12, Smith to Hatherton, 13 April 1836.

57 F. M.L. Thompson, 'English Great Estates in the Nineteenth Century', I.C.E.H. 1960, p. 389.

58 Mines Report, 1836, p. 29.

These proposals were particularly opportune because much revenue was being lost from under-production in spite of rising demand. There were two additional factors which underlined their value at this time. Lord Dartmouth was opening up new mines in the thick coal at West Bromwich which would probably be more efficient than the older pits on the Dudley estate. More important still was the fact that, by 1834, the existing capital invested in the Dudley mineral enterprises totalled £100,000⁵⁹ - in addition to working costs of £54,156 5s. 4½d. in 1834. Much of this was tied up in old concerns and would be useless when the mines were exhausted. A charge of 10 per cent per annum should in future be levied on lessees of pits and ironworks already in operation, to recover the cost of existing capital expenditure⁶⁰.

With these final observations and proposals, Smith and Liddell concluded their report. Many of their recommendations were in fact implemented after Smith became mineral agent in December 1836. In this chapter, changes in the scale and number of mineral enterprises as well as the profitability of both leased and estate-managed pits will be considered. Details of organisation and control, and the structure of management during the trust period, will be considered elsewhere⁶¹.

ii. Leased Properties

Lord Hatherton had already taken steps to test the response to the report's proposals to lease certain sections of the mines on a firm basis for a period of years at a royalty, as opposed to the existing system of leasing only sections of broken mines to tenants at will. Rumours of the pending change of policy brought many enquiries and

⁵⁹ Ibid., p. 51. ⁶⁰ Ibid. ⁶¹ See Section III, Chap. 2, Part C.

Hatherton came to Himley Hall where he

'Saw other parties who made offers for Mines ... we shall increase the estate at least £7,000 a year ... we have not yet seen many parties who wish to deal with us.'⁶²

In the event, this was to prove a conservative estimate of the income from the mines when properly leased.

When Downing was replaced by Smith as mineral agent in December 1836, there were several agreements in operation to work sections of the mines but these were mostly broken mines⁶³. Royalties paid varied in amount and type from 2/6 per ton on best thick coal to 1/6 for common coal and 6d. for slack (thick coal): heathen coal slack produced a royalty of 3d. per ton. Ironstone royalties ranged from 2/6 per ton of best black ironstone to 1/- per ton for inferior stone. The form of royalty also varied from a fixed price per ton - as indicated, to a charge levied per acre of minerals worked: this varied from £488 per acre paid by Sir Horace St. Paul for working mines at Windmill End containing brooch and heathen coal, gubbin and white ironstone, and thick coal ribs, to £80 per acre paid by Samuel Share for brooch coal at Blowers Green. Brooch coal lay at a shallow depth and heathen coal was below the level of the thick coal⁶⁴: in the case of St. Paul's lease, it is probable that the thick coal only had been worked by the estate - as was usual, and, as the remaining seams would be in an unworked estate, this would account for the higher rent. Other charges were calculated at 2/6 per superficial yard for ribs of thick coal and 7d. a yard for brooch coal⁶⁵. Several tenants paid 3d. per ton of minerals raised for drainage provided by

⁶² S.C.R.O. D260/M/F/5/26, Lord Hatherton's Diary, 30 Sept. 1836.

⁶³ See Chart 16, p. 243. ⁶⁴ See Chart 1.

⁶⁵ On average, an acre of unworked coal produced 10,000 tons: three acres of broken mines produced the same quantity. Mines Report, 1836, p. 9.

Chart 16. Mine Leases and Agreements, October, 1836

<u>Parties</u>	<u>Particulars of Things Leased</u>	<u>Terms</u>
7 Feb. 1820 John Bradley & Co.	Water ease by Parkhead Engine	3d. per ton on all minerals
27 Aug. 1822 J.B. and T. Gibbons	Thick Coal Pit at Park head. Discontinued	Coal and Lumps 2/6 per Slack 10d. Use of whimsey 1d.
15 Apr. 1824 Hughes and Eades	Clay and Coal at the Thorns. The getting of Coal is discontinued.	Best Coal 2/6 Common 1/6 Slack 6d.
29 Nov. 1834 Thos. Brettell	Use of engine for draining mines at Brierley Hill.	3d. per ton.
29 Nov. 1834 Pidcock and Brettell	Ditto at Brettell Lane	No mines yet drained
29 Sept. 1825 Small, Shears and Taylor	Coal and Ironstone Mines at Dudley Wood	Thick Coal 2/- per ton " " Slack 6d. Heathen Coal 1/- " Slack 3d. Black Ironstone 2/- White " 1/9 Crow " 1/4½ Balls " 1/-
H. Foley 9 Sept. 1830 Izons and Co.	Thick Coal Mine at Brierley Hill	Thick Coal 2/- per ton Common 1/- Heathen 10d. " Slack 2d. Black Ironstone 2/4 White " 2/- Bind " 1/-
21 Mar. 1833 George Parker	Mines at Coneygre. He has ceased work.	Thick Coal 1/6 per ton " Lumps 9d. " Slack 4½d. Heathen Coal 1/6 " Lumps 6d. Gubbins Ironstone 2/2 White " 1/6

<u>Parties</u>	<u>Particulars of Things Leased</u>	<u>Terms</u>
6 Aug. 1833 Dudley Canal Co.	For Water raised by Windmill Engine	£50 per annum.
27 Sept. 1833 J. and B. Gibbons	Mines at Shutt End	Ironstone 2/6 per ton Heathen Coal 1/6 " " Coke 1½ pr sack " Slack 6d. per ton
14 Jan. 1834 Joseph Stanford	Ribs of Thick Coal, Ettingshall	2/6 per superficial yard.
4 May 1834 Payton and Hopkins	Mines in Coneygre Upper Field	1/5 of Selling Price
22 Sept. 1835 Sir Horace St. Paul	do. in Lower Field Mines at Windmill End	1/6 Brooch and Heathen Coal, Gubbins and White Ironstone, Ribbs of Thick Coal £488 per acre.
22 Oct. 1835 Ditto	For Water drained by Bloomfield Engine	£3 per week
12 Dec. 1835 Messrs. Gibbons	Brooch Coal and Ironstone at the Level	Brooch Coal 1/2 per ton " " Slack 3d. Binds or Brooch Ironstone 1/8 ¼
13 Jan. 1836 Timmins and Massey	Mines at Gornal Wood	¼ of Selling Price
18 Jan. 1836 John Wheeley and Co.	Mines at the Delph	Brooch Coal 1/6 per ton " Lumps 1/- " Slack 4d. Binds Ironstone 2/- Penny Earth " 2/- Pins " 2/-
18 Jan. 1836 Samuel Share	Brooch Coal at Blowers Green	Brooch Coal £80 per acre
1 Jan. 1831 Edw. Cresswell	Mines at the Foxyards	Heathen Coal 1/- per ton " Slack 3d. Black Ironstone 2/6 " " Inferior 1/6 White Ironstone 1/9

<u>Parties</u>	<u>Particulars of Things Leased</u>	<u>Terms</u>
29 Sept. 1834 Blackwell, Jones and Oakes	Mines at Lower Gornal	Coal 1/- per ton Slack 3d. Ironstone 1/4
1 Jan. 1835 Small, Shears and Taylor	Mine at Brierley Hill	Brooch Coal and Ironstone 7d. per yard
1 Oct. 1835 Joseph Stanford	Mines at Bilston Colliery	Brooch Coal 5d. per yard
2 Oct. 1829 Bishton and Underhill	Mines at Catchems Corner	Half Yearly payments of £125.

D.P.L. 8/K, 16 Oct. 1836. Mines Leases and Agreements Made by F. Downing.

These were the existing agreements at the termination of Downing's agency.

engines on the estate. In 1836, only two tenants paid royalties based on the selling price of the minerals. One such case concerned Messrs. Payton and Hopkins who made agreements in 1834 and 1835 to work mines at Coneygre for a royalty calculated at $\frac{1}{5}$ th of the selling price of minerals raised from the upper seams and $\frac{1}{6}$ th from the lower seams where working costs would be higher. These were probably the first leases of minerals to be linked to selling prices since Beaumont's contracts in 1797-8. No agreement had been made for a given period of years and no provisions existed to ensure the proper working of the mines.

After 1836, Richard Smith negotiated numerous firm leases of partly-worked and unworked minerals ⁶⁶. These

⁶⁶ See Chart 17, p. 246. Details of Smith's leases will be discussed in Section III, Chap. 2.

Chart 17. Mineral Leases Negotiated by R. Smith, December
1836 - March 1845

- 31 March 1837 Lease of mines to Mr. George Bate of mines at Commonside K'ford for 21 yrs.
- Ditto Lease to Messrs. Blackwells and Jones of Coal and Ironstone Mines under lands called the Broad Park in Dudley 8 yrs.
- 1st April 1837 Lease to Messrs. Evers & Martin of Park Head Furnace and Ironworks and certain mines of Coal and Ironstone in Dudley for 21 yrs.
- 30 June 1837 Lease to Mr. Joseph Stokes Chavasse of Mines of Thick Coal under lands at Brockmoor in K'ford - 21 yrs.
- 30 Sept. 1837 Lease same to same of Mines of Coal Ironstone in K'ford for 21 yrs.
- Ditto Lease to Mr. Willm Bannister of mines of Coal at Brierley in Sedgley for 14 yrs.
- Ditto Lease to Messrs. Pearson of Mine of Thick Coal at Holly Hall, Dudley for 12 yrs.
- Ditto Lease to Mr. Benjamin Gibbons of Mine of Thick Coal at Pear Tree Lane, Dudley for 10 yrs.
- Ditto Lease to Messrs. John & Benj. Gibbons of Mines of Thick Coal and Ironstone under lands at Common Side in K'ford for 12 yrs.
- 31 Dec. 1837 Lease of Mine of Thick Coal under lands near Corbyn's Hall for 7 yrs.
- 31 March 1838 Lease to Messrs. Harper & Moore of Clay Works and Mines of Clay and Coal in and near the Thorns, 21 yrs.
- 30 Sept. 1838 Lease to Messrs. Webb, Smith and Page of certain Mines of Coal lying under lands at Deepfield in Sedgley for 21 and 9 yrs.
- Ditto Lease to Joseph Stubbs decd. to Mr. Richard Harries of Mine of Thick Coal and pit of surface Clay in and under Denbigh Hall Estate in Tipton - 24 yrs.

- 30 Sept. 1838 Lease to Mr. William Izon of Level Furnace and of certain Mines of Coal and Ironstone in K'ford for 21 yrs.
- 31 March 1839 Lease to Small, Shears and Taylor - Trustees for Butch Iron Co. of Mines of Coal and Ironstone under lands at Netherton, Dudley - 3 yrs.
- Ditto Lease to Mr. Joseph Haden of Mines of Coal and Ironstone under lands at Bumble Hole in Dudley - 21 yrs.
- 30 Sept. 1839 Lease to Messrs. Hopkins of Mines of Coal and Ironstone under lands at Coneygre, for 21 yrs.
- 31 Dec. 1839 Lease to Messrs. Smith and Robinson of Mines of Coal and Ironstone under lands at Brockmore - 21 yrs.
- Ditto Lease to Messrs. Phillpotts and Plant of Mines of Coal and Ironstone in Dudley and K'ford (Brockmore) - 21 yrs.
- 25 March 1840 Lease to Mr. H. B. Whitehouse Messuage farm and lands in Sedgley for 21 yrs.
- Ditto Lease to Messrs. Page and Ensell of a Glasshouse and premises at Holly Hall - 14 yrs
- 30 June 1840 Lease to Francis Downing of mines of Clay Ironstone and Clay under lands at Sedgley assd. for 28 yrs.
- 30 Sept. 1840 Lease to Messrs. Bramah & Cochrane of Mines of Coal and Ironstone at Dudley and K'ford for 25 yrs.
- 25 March 1841 Lease to Mr. Robt Jobson of an Ironfoundry Bldgs etc at Level for 14 yrs @ £220 p.a.
- 1st April 1837 Agreement betwn R. Smith & Saml Evers & Robert Martin respecting the working of Park Head Pumping Engine
- 11 Nov. 1840 Agment with Messrs. Bramah Cochrane & Co. for working Nelson Pumping Engine.
- 12 April 1841 Agreement betwn Ferdinando Smith & Trustees for accepting lease of a Mine of Thick Coal near Russells Hall.

- 30 June 1841 Agment with Messrs. Bramah Cochrane and other respecting certain mines of Coal and Ironstone - Dudley.
- 29 Oct. 1841 Agment with Messrs. Cresswell respecting Headway in certain mines at Fox Yards.
- 7 June 1843 Agment R. Smith & Messrs. Pearsall and others respecting Mines of Brooch Coal under land at Brierley Hill.

D.P.L. 10/L, Schedule of Documents in the Evidence Room at Himley Hall.

were situated not only in the areas where minerals had been worked over a long period of years but also in parts of Kingswinford, Dudley and Himley where the mines report had indicated the existence of large tracts of adjoining mineral properties which remained in a relatively undeveloped state in 1836. A significant number of the leases negotiated after December 1836 were taken out by ironmasters - as the mines report had anticipated. The extent to which vertically-integrated ironworks developed on the estate after 1833 has already been considered. In each case, the lease was agreed for a particular period of years - unlike the loose, indeterminate agreements made by Downing. One of the benefits to the estate from adopting a policy of leasing some of the mines was the sale of machinery and equipment to lessees - where such machinery was not fundamental and necessary to the working of the large areas of minerals which the estate continued to operate. During 1837, Smith sold machinery worth £12,046 9s. 4d., thereby recovering some of the capital costs incurred by the estate in the past, and reduced the amount of machinery the value of which would fall rapidly as minerals became exhausted in a particular pit.

In addition to royalties levied by the estate on minerals sold by the lessees and for water drained from their pits, Smith opened a new account in 1837 - the Rent

Account, which recorded payments for premises and land leased. The total rent paid in that year amounted to £3,484 18s. 6d.⁶⁷ but not all of it came from surface area occupied by the lessees - several payments related to canal wharves leased from the estate: the average rent for a canal wharf was £10 per annum. From the commencement of Smith's agency in December 1836 to 27 July 1846, the rent account received a gross total of £29,909 8s. 11d. with the average annual rent tending to increase in the last year or so to £4,000.

Lord Hatherton had estimated in September 1836 that leases would increase the mineral revenue by £7,000 per annum. Smith raised a substantial proportion of this figure from rents alone and the real extent of his success is indicated by the increase in revenue after 1836.

	<u>Total Rent</u>	<u>Total Royalty</u>
1834	£1,669	£4,765
1837	3,484	14,839
1847	4,116	74,955

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Within a year, he had exceeded Hatherton's expectations on the royalty account alone and, by the end of the trust, had increased the royalty income many times over. Moreover, the expense to the estate was marginal and only involved the payment and cost of clerks, bailiffs and weighing machines. Working costs were all met by the lessees themselves. The total mineral royalty received by Smith between 1 January 1837 and 27 July 1846 was £314,650 18s. 2d.⁶⁹: over the same period, an additional rent for land and premises amounting to

⁶⁷ D.P.L. 9/J, Richard Smith's Accounts as Mine Agent, 1837. Richard Smith in Account with Rent Account for Year Ending December 1837, p. 34.

⁶⁸ D.P.L. 9/J, Richard Smith's Accounts as Mine Agent, 1836-47.

⁶⁹ D.P.L. 8/L, Richard Smith's Accounts with the Trustees, 1 Jan. 1837 to 6 Mar. 1845: and with Lord Ward, 6 Mar. 1845 to Dec. 1860.

£29,909 8s. 11d. was received. Apart from the effect of the depression in the local iron trade in 1841-2, there was a steady increase in annual receipts, especially after 1843 when the railway boom produced highly favourable conditions for the Black Country iron and mineral trades. Many of the lessees of minerals from the Dudley estate were in fact ironmasters engaged in supplying the rising demand for railway iron. Many of the individual leases produced a high royalty especially from mines of unworked coal opened up by the lessees themselves. Typical of such leases was one in Pensnett granted to Messrs. Philpotts and Plant in December 1839. In 1847 this lease alone produced a royalty of £8,984 13s. 11d. This was calculated on the production of 68,149 tons of coal and 3,886 tons of ironstone. In addition, pumping charges, paid for the use of the Pensnett Engine, amounted to £289 8s. 7d.⁷⁰. It is evident that a phenomenal increase occurred in the income from leased mineral properties as a result of the efforts of the trustees: this was exceeded in the long run by an even greater expansion in the activity and income from mineral enterprises worked directly by the estate.

iii. Estate Enterprise

Throughout the trust period, the larger collieries, and the most lucrative pits and sections within each colliery, remained part of estate enterprise. Minerals were only leased when a particular seam or section became less profitable but each leased area remained part of a particular colliery for administrative purposes with lessees contributing to the cost of drainage where an engine served parts of the colliery worked both by the estate and by lessees. This complex structure was inevitable because of the extensive area and mineral rights owned by the estate which enabled larger

⁷⁰ D.P.L. 9/J, Richard Smith's Mines Accounts for 1847.

units of production to be developed than was usual in the Black Country. Generally, pits in the area did not exceed three acres⁷¹, and an acre

'may sell on the average at £1,000, but sometimes even £1,500 ... and ... The sinking of the two shafts in a mine 300 feet below the surface ... providing the steam engine and all the other parts of the moving power, may require a capital of £6,000 and very often it is much more.'⁷²

The labour force was generally small and even as late as 1843, in the Netherton area, most pits employed fewer than 100 men, and over half, fewer than 50 men⁷³. Estate mineral enterprise was on a far greater scale both in terms of the area and the labour force involved.

As in the case of other coal owners in the area, the Dudley estate supplied minerals to the local iron and domestic market. Out of a total area production of 4,212,000 tons of coal and ironstone, no more than 200,000 tons were sent out of the district in 1844⁷⁴. Total production of coal and ironstone on the Dudley estate, from both estate and leased pits, was 1,400,000 tons per annum⁷⁵. Most of the coal sent out of the area by the estate went by canal to Banbury and Oxford⁷⁶. In the course of the enquiry, which was held in 1845 to consider the case for the construction of a main line railway through the Black Country⁷⁷, local canal interests, through their solicitors, sought to discredit the value of such a line to the area.

⁷¹ First Report of the Commissioners for Enquiring into the Employment of Children in Mines and Manufactories, 1842; Report on South Staffs. p. 2, para. 10. Subsequently referred to as Mining Commission, 1842.

⁷² Ibid.

⁷³ Victoria County History of Staffordshire (1967), II, p. 98.

⁷⁴ Railway Report, 1845, Q. 380-4.

⁷⁵ Ibid., Q. 359.

⁷⁶ Ibid., Q. 924.

⁷⁷ See Section II, Chap. 4, Part C ii.

Q. 886 'Do you think it would be of any real advantage to these particular districts if you could send and export coal so as to supply all England, or would it be a disadvantage?

Q. 893 'Do you know you are rather short of coal in that county? (i.e., Staffordshire)

I know we are not.⁷⁸

There was a shortage of coal to the north of the Dudley ridge in Tipton, Wednesbury and Bilston in the sense that the shallow, easily-worked seams of thick coal were exhausted - but, there was no fundamental shortage of local coal because of the tremendous reserves of thick coal to the south of Dudley which the estate was exploiting after 1836. The Dudley estate could meet local demand and still produce a surplus for sale elsewhere: Smith was aware of his advantageous position and was determined to exploit it.

Since his appointment as mineral agent, the estate, in contrast to the static situation in 1833, had carried out a number of trial borings to ascertain the location and extent of the minerals - mainly to the south and west of Dudley. Smith's first account recorded payments to the 'Graveyard Trial Pit' and the 'Dudley Wood Trial Pit' in 1837⁷⁹. Subsequently, many established collieries which were not being worked in 1833, were re-opened as shafts were sunk down to the seams lying beneath the thick coal. These were mainly in the central areas of Dudley and Tipton. New collieries were established in Rowley, Kingswinford and Gornal⁸⁰. One new account reflected this exploitation of the deeper seams at the older collieries: this was headed 'Richard Smith in Account with the Dudley Ironstone Field'⁸¹ and it began in March 1846. It probably recorded the working of the deep ironstone at Park Head Colliery.

⁷⁸ Railway Report, 1845. Evidence of Richard Smith.
⁷⁹ D.P.L. 9/J, Account of Richard Smith as Mine Agent, 31 Dec. 1836 to 31 Dec. 1837.

⁸⁰ See Chart 17.

⁸¹ D.P.L. 9/J, Account of Richard Smith as Mine Agent, 31 Dec. 1846 to 31 Dec. 1847.

The difficulties created by increasing drainage problems have already been indicated. Where estate engines could relieve neighbouring mines of flooding, the estate was paid an annual sum for 'water ease' - usually calculated on the quantity of minerals raised, not on the volume of water. In the latter half of the nineteenth century, attempts were made to establish adequate drainage in the Black Country by agreements amongst neighbouring coal owners to erect and maintain pumping engines by common subscription⁸². This development was foreshadowed as early as 1838 when, under the leadership of the trustees, 15 mine owners in the Deepfield area of Sedgley, contracted with the trustees to erect a steam pumping engine to relieve their properties

'from a great accumulation of water therein called the Deepfield Round and which prevented the working of the Mines.'⁸³

The expense of erecting the engine was to be met by subscriptions totalling £3,000 with the balance being met by the Dudley estate. Working costs were to be paid by all the subscribers but the engine was to be the property of the estate because it was situated on trust property. This was a valuable arrangement for the estate because considerable quantities of minerals remained in the area beneath the exhausted thick coal seams. The fact that only £2,675 were raised by subscription may be explained by the subscribers' awareness that the estate would have to erect an engine and the neighbouring mines could profit from it - perhaps by paying only the conventional charges for 'water ease' rather than capital and working costs. Nevertheless, the trustees had the engine erected and, christened 'Hercules', it began work in/a depth of 160 yards. About 800 acres of minerals were pumped dry as a result of this enterprise. Eventually,

⁸² See Section IV, Chap. 3.

⁸³ D.P.L. 6/A, Agreement Between the Subscribers to the Hercules Pumping Engine (Deepfield Engine) and the Trustees of the Late Earl of Dudley, 1838.

the original agreement was given up in 1847⁸⁴ and the subscribers received back their capital and the engine remained the sole property of the trustees who received an income from neighbouring mines.

Out of a total of 48 steam engines owned and worked by the estate in 1838⁸⁵, 38 served the mines and the remainder supplied power to the ironworks. Of the 38 engines, most performed a dual and, occasionally, a triple function: 13 were ventilation and winding engines, 10 were ventilation and pumping engines, 4 (at the limestone workings) supplied power for winding, ventilation and drainage, and 11 were winding engines only. The growing number of winding and pumping engines indicates the greater depth to which most of the estate pits were being sunk to work the lower seams while the number of ventilation engines indicates the extent of the underground workings. This enabled one pair of shafts to work deeper and more extensive areas of minerals at a lower capital outlay than the cost of sinking new shafts as the working faces moved further from the original shafts. The technical features of the engines are of particular interest and illustrate the way in which the old-fashioned and inefficient atmospheric engines of the pre-Watt era survived well into the nineteenth century in the Black Country because of the availability of cheap engine slack (small coal). However, only three estate engines working in 1839 were of the atmospheric type whereby atmospheric pressure forced the piston back to its original position. Seven were classified as 'expansive' engines: these were improved engines of the early type designed by Watt. In this case, the cylinder was closed at the top and the piston was forced down by the expanding force of steam injected at the top of the cylinder.

⁸⁴ Ibid., 1 Nov. 1847.

⁸⁵ See Appendix 8 for the number of engines on the Dudley estate 1712-1882.

This increased the number of strokes per minute, improved efficiency and reduced fuel costs. The remaining 28 engines were 'double power': that is, either power was provided both on the up and the down stroke of the piston or two sets of cylinders and pistons operated - the second powered by steam exhausted from the first cylinder. However, this latter development was an innovation of the mid-nineteenth century and, in the case of the Dudley engines, 'double power' probably represents the most technically advanced stage at that time whereby the piston provided power in both directions. Another invention of Watt was the replacement of arch head chains at each end of the beam by pivoted rods providing parallel motion. This improved efficiency by offsetting the arc movement described by the beam ends and provided a more direct transference of power. Only one engine retained arch head chains in 1839, all the rest incorporated parallel rods. Most of the double power engines also incorporated slide valves at each end of the cylinder: this was a nineteenth century development to enable steam to be injected and exhausted alternately at each end of the cylinder.

Apart from their practical functions in the operation of the Dudley mines, these engines - especially the pumping engines, provided a regular source of income from the local canals, from estate mine tenants and from neighbouring mineral owners. Typical of such payments was that made to the estate by the Dudley Canal Company in 1834,

'for one years water raised by the Pensnett Engine £200.'⁸⁶
In 1847, the Birmingham Canal Company paid £694 10s. for water supplied by the new Deepfield Engine⁸⁷. In the same year 'sundry persons' paid £201 14s. 5d. for 'water ease' provided to neighbouring collieries by the Park Head Engine⁸⁸.

⁸⁶ D.P.L. 9/J Account of Francis Downing as Mine Agent for the Year Ending Dec. 1834.

⁸⁷ D.P.L. 9/J Account of Richard Smith as Mine Agent, 31 Dec. 1846 to 31 Dec. 1847.

⁸⁸ Ibid.

Mine lessees also paid for this service as a condition of their leases: in 1847, three lessees, Johnson and Cochrane, William Izon, and Philpotts and Plant paid a total of £810 7s. 4d. for drainage provided by the Pensnett Engine⁸⁹. The total income from all the pumping engines must have been considerable and would have exceeded by far the working costs of the engines which remained under the direct control of the estate. As the engines also served the large collieries owned and worked by the estate on its own account, working costs of draining these pits were more than offset by receipts from lessees, neighbouring pits, and canal companies.

From the commencement of his agency, Smith began to work the pits to their full capacity - as he had recommended in his report. A comparison⁹⁰ of the annual accounts for Park Head Colliery in 1834 and 1837 illustrates not only the expansion in productivity but also the growing complexity of estate mineral enterprise, and was typical of all the major collieries on the estate. Although the first account covers only a period of nine months, the average monthly production shows a sharp increase by 1837 in terms of coal, slack, ironstone and coke sold by the estate. In the latter, more detailed account, there is evidence that Smith had negotiated leases for sections of Park Head Colliery with various ironmasters and that these had been valued prior to the commencement of the lease. A similar entry occurs in the accounts of the other major collieries throughout the estate, all of which reflect an increase in production. Probably as a result of leasing particular sections, the monthly wages bill at Park Head was reduced from £1,325 10s. 10d. in January 1837 to £392 4s. 6d. in December. Nevertheless the net profit from estate enterprise remained considerably higher than in 1834,

⁸⁹ Ibid. ⁹⁰ See Charts 18 and 19, p. 257 and p. 258.

Chart 18. Account for Park Head Colliery from 31 March to 31 December 1834.

Dr.				Cr.				
£	s.	d.		Tons	Cwts	£	s.	d.
Disbursements.	7,741	18	10	<u>Sales by estate</u>				
Castings	119	4	5	Coal -	7,668	11		
Chains	42	4	9	ready money			3,328	12 2
Ropes	86	6	6	" credit	<u>22,063</u>	6	<u>7,273</u>	<u>2 3</u>
Rates	270	9	5		29,985	17	10,565	14 5
Rent of land	17	-	-	Slack -	4,503	5		
Damaged land	42	2	-	ready money			956	2 7
Brick Maker	122	13	-	" credit	18,033	-	2,558	17 10
Bailiffs				Engine				
Salary	90	-	-	slack	545	-		
Timber Yard	313	4	9	Fire slack	<u>20</u>	<u>5</u>		
Castings	146	19	7		23,101	10	3,515	0 5
Bal. carried				Cokes -	5,950			
down	<u>6,595</u>	<u>3</u>	<u>2</u>	ready money (sacks)			223	2 10
	£15,587	6	5	" credit	<u>24,589</u>			
				(sacks)			<u>855</u>	<u>15 7</u>
					30,539 (")		1,078	18 5
				<u>Royalties</u>				
				Coal - credit	11	10		11 6
				Slack - "	599	7	14	19 7
				Ironstone "	395	1	42	15 11
				Sundry sales of bricks, ropes etc.				
							284	11 3
				Water ease			82	13 5
				Use of whimsey			<u>2</u>	<u>1 6</u>
							£15,587	6 5
Disbursements for ironstone	1,766	17	1	Bal. brought down			6,595	3 2
Bal. carried down	<u>8,068</u>	<u>1</u>	<u>8</u>	Ironstone - credit	5,468	14	3,111	18 1
	9,834	18	9	Dudley Canal Water			118	0 9
				Dudley and Matthews Interest			<u>9</u>	<u>16 9</u>
							9,834	18 9
				Bal. brought down			8,068	1 8

Based on Mines Report, 1836, p. 32 and the Account of Francis Downing, Mine Agent, from 31 March to 31 December 1834 (as amended by James Loch). D.P.L. 9/J.

Chart 19. Richard Smith in Account with Park Head Colliery
from 31 December 1836 to 31 December 1837.

Dr.					Cr.			
	Tons	Cwts	£	s.	d.	£	s.	d.
<u>Sales</u>						<u>Bailiff for Getting Mines etc.</u>		
To Best Coal						By Joseph Robinson (Bailiff)		
ready money	11,002	12	4,932	16	1	Disbursements	9,016	17 11
" credit	6,179	8	2,881	4	5	On account of Blackwell and Jones	453	16 4
" fire coal	341	5	-	-	-	On account of Evers and Martin	2,544	13 4
	17,525	5	7,814	1	4	On account of Benj. Gibbons	581	5 10
To Common Coal -						On account of J. Pearson and Sons	306	18 0
ready money	2,183	19	873	1	6		12,903	11 5
" credit	24,697	16	9,567	7	5	Getting Ironstone		
	26,881	15	10,440	8	1	By John Hickman	1,508	15 3
To Slack -						James Teague	885	4 6
ready money	9,685	-	1,989	1	6	E. & J. Skelding	92	17 2
" credit	27,047	-	5,026	15	6	Castings		
" engine	1,567	-	-	-	-	By Evers and Martin	106	4 1
" schools	32	14	-	-	-	Oil	83	17 11
	38,331	14	7,015	17	0	Rates	431	2 10
To Coke -						Damages of land	9	15 0
ready money	4,017½	(qtrs)	381	19	4	Timber	47	0 8
" credit	29,204	(qtrs)	2,768	14	4	Bank charges (Dixon & Co.)	118	- -
" to Priory	21½	(qtrs)	-	-	-			
	33,243		3,150	13	8			
To Ironstone -								
credit	7937	18	5,840	4	9			
To Sundries - ready money								
Bricks	9,400		11	15	6			
" "	1,500		1	19	0			
Manure	17	13	4	17	1			
			18	11	7			
To Sundries - credit								
John Bradley & Co. use of Railway			281	0	10			
M. & W. Grazebrook water ease			70	7	7			

Dr.				Cr.
	£	s.	d.	£ s. d.
To Sundries - credit				
John Bradley for				
bricks	6	17	6	
Various				
Estate for bricks	22	18	9	
" " 42,400				
bricks	53	-	-	
Limestone Works for				
48,550 bricks	<u>60</u>	<u>13</u>	<u>9</u>	
	660	11	3	
Valuations of Pit Shafts and Underground Workings				
To Benj. Gibbons	470	-	-	
Evers and Martin	495	1	10	
Blackwell and Jones	54	8	6	
Jos. Pearson and				
Sons	607	3	1	
Izons and Co.	29	17	6	
Blackwell and Jones				
for disbursements				
during time the				
trustees carried on				
the Colly. for them	477	5	5	
Deduct overcharge of				
Robinson's Salary	<u>8</u>	<u>16</u>	<u>8</u>	
	37,069	19	3	
				<u>37,069 19 3</u>
				By balance
				19,221 8 7

D.P.L. 9/J.

while the total net profit of the colliery would be even higher when royalties from the leases were taken into account. A feature of both accounts is the high proportion of sales on credit: this was normal practice in the Black Country but created dissension amongst the trustees because of the amount of credit outstanding at the termination of the trust⁹¹. The increased value of the colliery is also reflected in the increase in rates from £270 9s. 5d. in 1834 to £431 2s. 10d. in 1837.

Estate mineral enterprise as a whole expanded after 1836 as a result of Smith's activities. Total sales of coal and ironstone amounted to £84,861 13s. 1d.⁹² in 1835: by 1838 this had increased to £126,891 3s. 1d.⁹³ Between 1837 and July 1846, when an attempt was made to submit the final accounts of the trust, the total net profit received from estate collieries was £117,390 9s. 6d. - an average of £12,500 per annum. This is lower than the total net profit on all the collieries in 1833 - £18,012 12s. 3d. However, in order to obtain a true comparison, the income from the policy of leasing sections of the collieries must be taken into account: over the same period total royalty received amounted to £314,650 18s. 2d. - an average of £33,063 14s. per annum. This indicates, on average, a total annual net profit from the collieries of £45,563 14s. and fully indicates Smith's advice on the desirability of leasing sections of the existing collieries while continuing to retain easily worked seams of thick coal and ironstone under the direct management of the estate. Towards the end of the trust period, total net income tended to rise in response to the boom in the local iron trade during the mid 1840s, and the income from estate operated pits

⁹¹ See Section III, Chap. 1, Part D iii.

⁹² Loch's Third Report, 1836: Downing's Account as Mine Agent for the Year Ending Dec. 1835.

⁹³ Loch's Fifth Report, 1839: Smith's Account as Mine Agent for the Year Ending Dec. 1838.

tended to increase more rapidly and exceeded the royalty from leased pits.

	<u>1836</u>				<u>1847</u>		
	£	s.	d.		£	s.	d.
Receipts	92,251	9	2		246,753	14	4
Payments	<u>81,570</u>	<u>10</u>	<u>3</u>		<u>174,506</u>	<u>19</u>	<u>2</u>
Net profit (estate enterprise)	11,381	18	11		83,045	1	5
Royalties	13,623	9	5	(Broken mines)	74,955	4	4
					<u> </u>	<u> </u>	<u> </u>
Total net profit	25,005	8	4		157,990	5	9

On the basis of these figures, a comparison of the net and gross income from estate colliery enterprise, excluding leases, indicates an increase in the rates of net income to gross income from 12.3 per cent in 1836 to 33.6 per cent in 1847. This greater cost efficiency resulted from Smith's decision that the estate should work only those seams which yielded easy profits - where working costs would be low because of the shallow depth of the seam and from the proximity of the working faces to the shafts. Because of the practice of including both mineral and industrial enterprise in one consolidated 'Mines Account', it is difficult to indicate the return on capital from mineral enterprise alone. Costs were also reduced by his general reorganisation of the workings in terms of new plant and machinery, an extension of underground railways, and the coverage of drainage costs by receipts from lessees and neighbouring pits. These figures also indicate the trend whereby the proportion of total net income coming from estate enterprise began to exceed the amount from royalty towards the end of the trust period. In 1836, net receipts from estate enterprise amounted to 45.5 per cent of the total net income from estate and leased pits: in 1847, the proportion had increased to 52.6 per cent. This general expansion

⁹⁴ D.P.L. 9/J, Richard Smith's Mine Account, Dec. 1836 and Dec. 1847. Net income for 1847 includes £9,175 from the two ironworks worked by the estate.

in the scale and production of mineral enterprise was accompanied by an extension of the transport facilities⁹⁵ owned by the estate, and an increase in the activities of the Store Yard at the Level.

C. The Store Yard

The development of the Store Yard at the Level, in Kingswinford manor, before 1833 has already been considered⁹⁶. This had evolved on the banks of the Dudley Canal at Round Oak at the time of the enclosure awards of the 1780s. By 1822 its function was not only to supply timber to estate pits, ironworks and farms, but also castings, and machinery. The tithe survey of 1822 described the site as containing an 'Iron Foundry, Saw Mill, Boring Mill, Steam Engine Manufactory, Carpenters' Shop, Pattern Rooms etc.'⁹⁷ It remained in the occupation of the estate for much of the trust period and was essentially an aspect of mineral enterprise. At the time of their report, Smith and Liddell considered it to be one of the few well-run enterprises on the estate:

'We consider the Iron and Timber Yard a useful and necessary establishment - at this place all new Engines are made and the old ones repaired - it appears to be under well regulated management.'⁹⁸

Shortly before the death of the first earl in 1833, a second store yard had been opened in Tipton, at Castle Mill. Because of its more central position at the Tipton end of the Dudley Canal Tunnel, this site was in a more convenient position to serve and maintain estate properties throughout the Black Country. The earlier site had probably developed at the Level - then a relatively isolated area, because of the concentration of timber in the vicinity. In the first

⁹⁵ See Section II, Chap. 4.

⁹⁶ See Section I, Chap. 2.

⁹⁷ B.H.P.L. H3/1, Survey of Kingswinford by W. Fowler, 1822. Items 1,484-1,509.

⁹⁸ Mines Report, 1836, p. 11.

quarter of 1833, the Tipton New Warehouse showed a profit of £90⁹⁹. Smith extended the activities and facilities of the Tipton site after 1836 while the Level Store Yard resumed its original function as a timber yard. The foundry and boring mill were leased to Robert Jobson who made turntables and castings for the railway companies until 1858 when Smith erected the Round Oak Iron Works on the site.

During the early years of the trust, the establishment at the Level continued to operate as before. In the nine months ending in December 1834¹⁰⁰ it supplied timber, stores and castings worth £3,029 8s. 1d. to estate collieries and ironworks: the wages bill for the same period was £1,212 18s. 5d. As the estate did not yet manufacture iron on its own account, pig iron worth £156 7s. 1d. was bought from two tenants, Izens and Co. and Evers and Martin, while wrought iron worth £217 15s. 9d. was purchased from four other estate tenants. Castings were still being manufactured here for estate mines and railways. The Store Yard itself was managed by an engineer, William Rollinson, at an annual salary of £127 10s. As a result of the expansion of mineral enterprise, the Store Yard made a considerable loss in 1837¹⁰¹ because of the cost of iron purchased for the manufacture of mine machinery. Total income was £3,124 16s. and expenses were £5,336 9s. including an increased wages bill of £1,854 5s. 11d. At some point between 1837 and 1846, Smith decided to construct new premises at Castle Mill to replace the foundry at the Level Store Yard: in 1846, this enterprise, known as the Fitting Shops, made a profit of £1,166 3s. 2d. under the management of John Skidmore. The capital invested

⁹⁹ S.C.R.O. D260/M/F/5/19/3, Profit and Loss Account, 1833.

¹⁰⁰ D.P.L. 9/J, Account of Francis Downing as Mine Agent, March - December, 1834.

¹⁰¹ D.P.L. 9/J, Account of Richard Smith as Mine Agent for the Year Ending in December 1837.

at this time was £3,389 9s. 7d. while capital invested at the Level Store Yard had been reduced from £8672 0s. 6d. in 1837 to £1,066 2s. 5d. in 1847¹⁰². Subsequently this site was greatly enlarged and became known as the Castle Mill Engineering Works and in addition to the existing canals, was connected, via the Oxford, Worcester and Wolverhampton Railway and Lord Dudley's Pensnett Railway, to all parts of the Dudley estate.

Conclusion

There is no doubt that, after 1833, mineral enterprise became more profitable as a result of the trustees' policies - particularly after Smith's appointment in December 1836. This was in spite of the fact that, by 1844, the market for Black Country coal had

'been diminished ... owing to the introduction of the Derbyshire coals down the line of the Gloucester Railway.'¹⁰³

By that time the expansion of the Black Country iron trade had produced a market for 4,212,000 tons of minerals of which the Dudley estate, because of its relatively large reserves compared with certain parts of the region, supplied 1,400,000 tons¹⁰⁴. From the static outlook and low profitability at the commencement of the trust, mineral enterprise on the Dudley estate had expanded in terms of scale, output and real profits.

A comparison of the capital invested in industrial and mineral enterprise in 1837 and 1847¹⁰⁵ indicates an increase from £66,956 9s. 8d. to £219,990 14s. 11d. However, because of the integrated approach which he adopted, Smith's 'Inventory of Mines Department Stock' also contained capital

102 See Chart 20.

103 Railway Report, 1845. Q. 1839, Evidence of W. Matthews.

104 Ibid. Q. 359, Evidence of Richard Smith.

105 See Chart 20.

invested in various ironworks, the Pensnett Railway and the Castle Mill Engineering Shops. Nevertheless, the bulk of the capital employed was invested in the colliery and limestone workings, and, excluding the three items referred to above, represented a total investment in mineral enterprise alone of £57,107 in 1837 and £137,962 in 1847. Taking the mines inventory as a whole, there had been an increase of £153,034 5s. 3d. in capital investment during the ten years. This trend was maintained and by 1849 the total had been increased by £167,206 13s. 8d.¹⁰⁶ In terms of net profit on capital invested, there had also been a dramatic increase in mineral and industrial income from 37.3 per cent in 1836 to 71.75 per cent in 1847.

	<u>Net Profit</u>	<u>Dead and Convertible Stock</u>
1836	£25,005 8s. 4d.	£66,956
1847	£157,990 5s. 9d.	£219,990

Not even Smith had estimated the true potential of the Dudley mines accurately. In 1838 he had supplied figures to Benbow when the question of the purchase of the Witley estate¹⁰⁷ was being considered. On the basis of existing mineral income, he estimated that the annual income at the end of the trust in 1845 would have risen to £53,300 - a considerable under-estimate when compared with the net income of £157,990 in 1847.

Admittedly, 1846-7 was a boom year for the local iron trade and the mineral income was therefore not representative of the average. In 1841-2, a general cessation of work in the iron trade had produced low profits

'accompanied in some parts by serious breaches of the peace and destruction of property ... during the autumn of 1842 ...'¹⁰⁸

This was reflected in a serious drop in cash received by Benbow from mineral sales which fell from £60,000 for the

¹⁰⁶ S.C.R.O. D260.M/F/5/19/4, Loch's Report on the Final Accounts.
¹⁰⁷ See Section II, Chap. 6, Part B.
¹⁰⁸ Midland Mining Commission, 1843, para. 57.

Chart 20 (continued)

The following represent new enterprises developed or old pits re-opened after 1837.

	<u>1837 Total</u>			<u>1847 Total</u>			<u>Dead</u>			<u>Convertible</u>		
Cryers Plain Colliery (re-opened)	£5,228	18	11	£5,228	18	11						
Delph Clay Works	941	13	9	941	13	9						
Foundry, Holly Hall	2,931	5	0	2,931	5	0						
Barrowhill Colliery	1,830	2	9	1,640	11	2	£189	11	7			
Ashwood Lime Works	358			358								
Gornal Stone	114	3	0	22	3	0	92	0	0			
Tividale Colliery	3,907	17	8	3,907	17	8						
Sedgley Park Colliery	3,516	2	1	3,143	2	4	372	19	9			
Coseley Moor	1,647	11	4	1,171	3	4	476	8	0			
Windmill End (re-opened)	6,299	6	5	6,297	6	5	2	0	0			
Widewater	2,664	7	6	2,661	7	6	3	0	0			
Rounds Hill (re-opened)	5,094	19	2	3,838	3	2	1,256	16	0			
Planet	4,580	5	0	2,406	6	1	2,173	18	11			
Old Park (re-opened)	15,327	1	10	10,828	11	5	4,498	10	5			
Pensnett Railway	10,336	10	3	10,336	10	3						
Castle Mill Fitting Shops	3,389	9	7	1,108	9	8	2,280	19	11			
Gunpowder Magazine	1,066	2	5				1,066	2	5			
Level New Colliery	4,221	15	11	4,221	15	11						
Darby Hand (Darby End)	1,519	5	6	1,519	5	6						
Total	£66,956	9	8	£219,990	14	11	£177,344	14	0	£42,646	0	11

Net profit for the year ending 31st December 1847 -

£157,990 5s. 9d.

Net profit for the year ending 31st December 1836 -

£25,005 8s. 4d.

The valuations represent the current value of the investment after taking depreciation into account. The total initial investments would be much higher.

year ending in June 1842 to £5,000 for the following year. The corresponding credit allowed by Smith, though advantageous to the estate and the local ironmasters in the long run¹⁰⁹, produced a crisis of confidence amongst the trustees themselves. These two years, 1842 and 1847, were times of abnormal trading conditions: the general trend was for the Dudley estate to produce a steady increase in net profit. At the termination of the trust, the total net profit from all estate mineral enterprise, mining royalties, and from ironworks, amounted to £509,202 16s. 3d. between 1 January 1837 and 6 March 1845¹¹⁰. This represents an average of £63,650 7s. per annum although, in fact, net profit rose steeply after 1842. After the end of the trust, Smith retained his position and the trend continued: total net profit from 6 March 1845 to 31 December 1859 amounted to £1,542,391 1s. 9d. - an average of £110,170 per annum. The rise in real profitability in terms of capital invested by the end of the trust has already been discussed. On the basis of the accounts for 1836 and 1847, real profits also increased in terms of working costs: total net income (from mines and ironworks) as a proportion of gross income was 26.7 per cent in 1836 and 64 per cent in 1847. This increase was due partly to improvements in general cost efficiency but also to the increase in royalty income which only involved the estate in a nominal outlay.

During this period, the mineral revenue from the Dudley estate compared favourably with other aristocratic landowners and, in many instances, was higher per acre of mineral-bearing land owned.

¹⁰⁹ See Section III, Chap. 1, Part B iii.

¹¹⁰ D.P.L. 8/L, Richard Smith in Account with the Trustees, from 1 Jan. 1837 to 6 Mar. 1845.

	<u>1836</u>	<u>1847</u>	<u>1850</u>	<u>1856</u>	111
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
Lord Dudley, c. 11,000 acres	25,005 8 4	157,990 5 9		138,493 - -	
Earl Fitzwilliam, c. 19,164 acres	2,576 - -(1831)		8,991 - -		
Earl of Durham, c. 17,000 acres	31,438 - -(1834)	11,695 - -		84,207	

John Buddle valued the Earl of Durham's collieries at £540,000 in 1835: capital investment in the Dudley estate was much smaller at this time. In many ways there is a parallel between the estates of the Earls of Dudley and Durham because the period 1841-49 constituted the minority of the second earl. A policy of retrenchment revived and extended the fortunes of the mineral enterprise of the Durham estate by the 1850s. Many of the collieries were worked directly by the estate - as in the case of the Dudley mines: on the Fitzwilliam estate, most of the mines were leased. The Earls of Durham also invested heavily in mineral enterprise, like the Dudley estate, because of their more direct involvement. For both families, mineral exploitation had become the main source of revenue during the nineteenth century - unlike many landowners in the north who tended to use it to subsidise agriculture through lean years or to prop heavily-mortgaged properties¹¹².

111 D. Spring, 'The Earls of Durham and the Great Northern Coalfield, 1830-1880', Canadian Historical Review, XXXIII (1952), p. 250 and J. T. Ward, 'West Riding Landowners and Mining in the Nineteenth Century', Yorks. Bulletin of Economic and Social Research, XV, p. 63.

112 Ward, op. cit., p. 73.

During the period of the trust, the mineral interests of the Dudley estate had been revived, expanded and reorganised in such a way as to provide the family with enormous wealth down to relatively modern times. The instructions of the trustees to examine and report on ways of restoring the mineral estates to their former wealth in turn produced the mines report of Smith and Liddell which provided a detailed plan of action. The determination of Lord Hatherton to fulfil his obligations to the late earl resulted in Richard Smith receiving the opportunity to put his ideas into effect after December 1836 - this he did to the benefit of Lord Dudley and the area in general.

Chapter 4. Transport Improvements

The basic geographical features of the Black Country and their effect on transport developments before 1833 have already been considered¹. In brief, the Sedgley, Dudley, and Northfield ridge divided the area and, as the watershed between the Severn and Trent systems, resulted in a total absence of natural water communications. After the construction of the Staffordshire and Worcestershire Canal, 1766-72, the activities of the Birmingham Canal Company and John, second Viscount Dudley and Ward, provided the area with improved internal communications and links to the main river systems and ports². Turnpike improvements and provisions of the various enclosure acts opened up all parts of the Black Country to road transport and gave access to towns in the immediate vicinity such as Birmingham, Wolverhampton, Stourbridge, and Kidderminster³. Mineral railways had been in operation on the Dudley estate since the 1790s and, after 1829, the first steam locomotive railway - the Earl of Dudley's Kingswinford Railway, was in use. The basic network of canals, horse mineral railways, and roads which existed by 1800 was to serve the area until the 1830s. During the trust period there was an extension of the local canal system for the purpose of improving internal communications within the Black Country and the first main line railways reached the area.

A. Roads

Because of the heavy nature of minerals and iron transported in the Black Country, the condition of local roads had always been poor. Water transport was much more suitable

¹ See Section I, Chap. 2, Part B. ² See Map 4.

³ See Map 5.

and after the construction of the canals, most local traffic moved onto the canals. Even as late as 1845, it was stated that, of the total goods traffic, only

'One seventh is conveyed by land, by teams, at a charge averaging 1s. 3d. per ton per mile.'⁴

Since the pattern of local roads had been established by the enclosure acts, the Dudley estate had retained an interest in the local turnpike system only. At the beginning of the trust, the estate held turnpike securities worth £3,700⁵. These were retained throughout the trust period and produced an annual income at 4½ per cent. The main roads and loans concerned were:

The trustees of the	
Dudley and Rowley Regis road	£400
Dudley, Wolverhampton and Birmingham road	500 (5 per cent)
Stourport Bridge	200m (5 per cent)
Kidderminster District of roads	400
Dudley and New Inn road	1,000
Dudley, Wolverhampton and Oldbury road	500
Dudley, Halesowen and Bromsgrove road	500
Sedgley and Wombourn road	200

To the list the trustees added two other loans: a further £210 to the Dudley and Rowley road and £200 to the Sedgley and Bridgenorth road. Many of these roads served areas which had no direct canal link and the trustees continued the policy of sponsoring local turnpikes, begun by the second viscount in the 1770s, to the mutual benefit of the estate and the area as a whole.

B. Canals

Canals were to remain the basis of internal goods communications within the Black Country long after competition from railways had produced a decline in traffic elsewhere.

⁴ D.P.L. LD/625, Minutes of Evidence Taken Before the Select Committee on the Oxford, Worcester and Wolverhampton Railway, 1845. Schedule of goods traffic. Subsequently referred to as Railway Report, 1845.

⁵ S.C.R.O. D260/M/F/5/19/4, Loch's First Report on the Trust Accounts, 18 July 1834, p.17.

In 1845 it was estimated that, of the total goods traffic,

'Six sevenths are conveyed by canals ... charges vary ... but average 2d. per ton per mile. The rate of travelling is about 3 miles per hour.'⁶

The probable reason for the continued widespread use of canals was the fact that most of the mines, ironworks, and factories were situated near enough to the canal system to construct their own wharf or cut which facilitated the movement of raw materials and goods. Moreover, there was a considerable inter-change of iron between ironworks engaged in various manufacturing and finishing processes, and the main line railways could not hope to compete effectively with the existing canal system within the area. Some rationalisation began in the 1830s when the Birmingham Canal Act of 1835⁷ repealed existing acts and enabled the amalgamation of the Birmingham, Fazeley, Wyrley and Essington, and Dudley Canals to form the Birmingham Canal Navigations. In 1846, this enterprise was taken over by the London and Birmingham Railway Company.

Almost half a century after the 'canal mania' of the 1790s, several new canals were being cut in the Black Country. These were mainly on the north-eastern fringe in the Walsall, Cannock and Tamworth area. Such canals were the Tame Valley, 1839-40, the Rushall Canal, Daw End Branch, Anglesey Branch, and the Bentley Canal, 1840, Hatherton Branch, 1841, Cannock Extension, 1854 and the Church Bridge Locks, 1855. Most of these were built at the instigation of the Anson, Bradford and Hatherton estates to exploit minerals in these areas as the Black Country seams began to run out. The Dudley estate was not involved in these enterprises but was concerned with canal construction in the central and western areas of the Black Country both during and after the trust period. These were the Birmingham and Liverpool Junction Canal, 1826-35,

⁶ Railway Report, 1845. Schedule of goods traffic.

⁷ The Birmingham Canal Act, v William iv, Ch. 34.

the Stourbridge Extension, 1839, Lord Ward's Branch, 1844, and the Netherton Tunnel and Two Locks Line, 1855. There was even resistance from local iron and coalmasters, to the construction of railway links between the Black Country and the main ports. A number of these petitioned⁸ parliament in 1845 against the plan to convert the Ellesmere and Chester Canal, which linked the Staffordshire and Worcestershire Canal to the Mersey, into a railway dominated by the London and Birmingham and the Grand Junction Railway Companies. Goods were sent to London, Liverpool, Hull, and Bristol by rail and water while recent improvements to the Severn had improved this communication at a cost of £200,000. If constructed, the proposed railway

'will create a monopoly in railway traffic and destroy competition not only between the Canal Companies but also in a great measure between the Canal and Railway Companies.'⁹

By using the existing canals,

'your Petitioners can load and unload and dispatch their boats at any time they please' -

a facility not offered by the railways. Moreover, the petition pointed out that

'the boats navigating the Canals are the property or under the controul of your petitioners whilst the Railway Companies, being carriers themselves, have an interest in keeping other carriers off the line.'

This document may well have been sponsored by Lord Hatherton because of his connection with the Staffordshire and Worcestershire Canal and it indicates the mixed blessings offered to industry by the early railway companies. Railway politics and Hatherton's vested interest were to involve the trust in a considerable amount of public and internal recrimination¹⁰.

⁸ S.C.R.O. D260/M/E/43/21. Petition to the House of Commons from South Staffordshire. / Ironmasters and Coalmasters of various

⁹ Ibid.

¹⁰ See Part C below and Section III, Chap. 1, Part D ii.

At the commencement of the trust, the Dudley estate was closely involved in the existing canal system because of the policy of canal construction adopted by the second viscount, loans made to various local canal companies, and shares held in them by the estate¹¹. The main canals with which the estate was closely connected were the Stourbridge, Dudley, Dudley Tunnel, and Netherton canals. During the trust, the estate was faced with the problems created by the inadequacy of the existing canals as new concentrations of mining and industry developed, and the need to establish a main line railway link from the Black Country to the ports. This need became more pressing after the estate began to manufacture and sell iron on its own account.

i. Estate Policy in General

At the commencement of the trust, James Loch advised the trustees on the subject of the canal interests of the Dudley estate:

'Some of the Canals pay regularly and will continue to do so ... To dispose of any of this property now, would be a sacrifice and would be besides parting with that which gives an Influence on those concerns that are intimately connected with the property of the Mines and the Station of the owner of this Estate.'¹²

He had earlier advised E. J. Littleton (Lord Hatherton), in 1829, to extend his own canal interests to discourage railway construction to the 'interior'. The trustees retained the existing canal shares for a time and a regular source of income was produced - especially from the Staffordshire and Worcestershire Canal.

Typical receipts from shares were:

1832 Sept. 6	By cash received: a half yearly dividend on 50 shares in the Worcester and Birmingham Canal	£52
Oct. 8	Ditto on 8 shares in the Birmingham Canal	50

¹¹ See Section I, Chap. 2, Part B.

¹² Loch's First Report, 1834, p. 17.

	£	
1833 Feb. 6 By cash received: a half yearly dividend on 10 shares in the Staffordshire and Worcestershire Canal	170	
July 2 Ditto on 13 shares in the Stourbridge Canal	52	
Dec. 5 Ditto on 64 shares in the Dudley Canal	88	13

Additional shares were taken out in the Birmingham and Liverpool Grand Junction Canal which was completed in 1835: a dividend of £36 was paid on these two shares in that year. Because of the heavy volume of traffic carried by the canals throughout the trust period, regular dividends were paid: in 1836, total receipts from canal shares amounted to £1,131 10s.¹⁴ Regular interest payments were also received from the loans of £4,500 and the £2,000 made at 4½ per cent to the Dudley and the Worcester and Birmingham Canal Companies before the first earl's death. The total value of canal and railway shares held by the estate in 1833 was £19,920¹⁵.

In view of the regular income and influence resulting from the possession of these shares, it seems odd that the trustees should sell most of them in 1839, in spite of opposition from Loch and Smith. The explanation is probably connected with the purchase of very extensive estates in that year from Lord Foley which involved the trustees in considerable capital outlay¹⁶. As shares held in March 1833 were part of the late earl's estate, an act of parliament was necessary to effect their sale. The high capital value of some of the shares is indicated by Benbow's accounts recording their sale in the year ending June 1839.

'Received of Mr. Downing for 64 shares in the Dudley Canal	£5,440
13 shares in the Stourbridge Canal	4,615

¹³ Ibid., p. 17.

¹⁴ Loch's Third Report, Downing's Account, p. 117.

¹⁵ Loch's First Report, p. 17.

¹⁶ See Chap. 6, Part B below.

'Received of Mr. Smith for 6 shares at £650 in the Staffs and Worcs Canal	£3,900
Received of Lord Wrottesley by Mr. Downing for 3 of do.	1,950
Received of J. Benbow for 1 share of do.	650
Received of Messrs. Bourne and Co. by Mr. Downing for 15 shares in the Birmingham and Worcs. Canal	1,095
Do. for 27 shares	1,971
Do. for 8 shares	584
Received of Messrs. Bourne and Co. by Mr. Downing for 3 shares in the Grand Junction Canal	585
Deduct Commission and Charges on Sale of these and other shares	8
Total	£20,782. ¹⁷

From these figures, it is evident that the most valuable shares were those held in the Staffordshire and Worcestershire Canal - £650 each: Stourbridge Canal shares were also valuable while Dudley Canal shares had perhaps the least market value because of the high indebtedness incurred by the company when constructing the Dudley Tunnel.

This disposal of shares does not mark a reversal of the traditional estate policy of sponsoring canals: with Hatherton and Smith involved in the conduct of affairs, such a change would be highly unlikely. In fact, many of the shares were purchased by Smith, Benbow and Downing so that some degree of connection was maintained between the estate and the canals. Significantly, Smith purchased shares in the Staffordshire and Worcestershire while Downing unwisely bought shares in the Dudley Canal. Considerable debate had preceded the decision to sell. Hatherton had informed Benbow in "January 1839:

'You know my opinion ... that the owner of the Himley Estate ought to be proprietor in all the neighbouring Canals ... and my conviction is that to keep the Shares in your own and Smith's hands would not only be advantageous to yourselves but a prudent thing for the Estate.'¹⁸

¹⁷ Loch's Fifth Report, Benbow's Accounts for the year ending June 1839.

¹⁸ S.C.R.O. D260/M/F/5/19/11, Hatherton to Benbow, 27 Jan. 1839.

As evidence that the estate remained committed to canal transport, and that liquid capital had to be realized to meet as much of the outlay for the Witley estates as possible, was the fact that, at the time of the sale of canal shares, Smith and Hatherton were supporting the plans which produced the Severn Navigation Improvements Act of 1842. This involved improvements to wharves at Stourport and at Diglis near Worcester and would obviously be of benefit to the Staffordshire and Worcestershire Canal and the Black Country in general as movement of goods was facilitated. The estate subscribed £250 to the Severn Navigation Association in 1842, £50 to parliamentary costs incurred in the passage of the bill, and £100 to the Severn Commission's opposition to the Dean Forest Railway Bill¹⁹. Although regular dividends were paid on 30 canal shares in the Birmingham Canal down to 1845, the estate never again acquired shares to the same extent in local canals as the number held before 1839. However this was no great misfortune as dividends began to suffer after the railway construction of the 1850s, and the estate was still able to avail itself of all the existing canal facilities. The 30 Birmingham Canal shares were sold for £1,365 in 1848²⁰. The estate continued to support the canals while benefitting materially throughout the trust by leasing more land for the construction of canal wharves in addition to existing estate wharves, and from the sale of mines drainage water to the various canal companies.

ii. The Stourbridge Extension Canal

As new mines in the thick-coal seams were brought into operation to the west of Dudley after 1820, additional transport facilities were required. One of the most

¹⁹ Loch's Fifth Report on the Trust Accounts from 1839 to 1849,

²⁰ Benbow's Accounts for 1842.

Ibid. Smith's Account.

potentially lucrative areas was at Shut End in Kingswinford parish²¹ where the only means of communication were the roads cut under the provisions of the Pensnett Chase Enclosure Award of 1786. The first attempt to improve the situation was made in 1824 by the Stourbridge Canal Company²² which proposed to construct a horse mineral railway from the canal arm at Brockmoor to Shut End. At no point was Lord Dudley's land involved. However, on the grounds that prior notice and consultation had been inadequate, several local landowners blocked the proposal. This was unfortunate for the canal company because their plan may have given John Foster the idea of the railway communication with Shut End which was built across the Dudley estate from the Staffordshire and Worcestershire Canal at Ashwood between 1826 and 1829²³. Subsequently, two horse mineral railways were built from the Stourbridge Canal to B. Gibbons' Corbyn's Hall estate and to mines on Barrow Hill under powers cited in the Stourbridge Canal Act of 1776. However, no canal branch was cut until 1839 and Lord Dudley's Kingswinford Railway monopolised the carriage of goods and materials until then.

Further attempts were made in 1836 by the Stourbridge Canal Company to extend a branch into the Shut End area. This was to be a more ambitious project whereby the extension canal was to pass northwards under Sedgley by a tunnel, to the Birmingham Canal at Bloomfield. If built, this would have enabled coalowners in the Shut End area - including the Dudley estate - to supply the ironworks in Tipton, and Sedgley, and Bilston with thick coal which they could no longer obtain within the immediate vicinity. Largely because of the opposition of the trustees²⁴, the project was scaled

²¹ See Map 4.

²² D.P.L. 10/M, Proposals of the Stourbridge Canal Company to construct a Railway from Pensnett to Shut End, 7 Sept. 1824.

²³ See Section I, Chap. 2, Part B.

²⁴ See Part B iv below.

down and the Stourbridge Extension Canal terminated at Oak Farm on the southern side of the hill without connecting with the Birmingham Canal. This canal passed from Oak Farm through Shut End and Corbyn's Hall to the Stourbridge Canal at the Leys in Brockmoor and was completed in June 1840. Richard Smith later informed the railway commission of enquiry in 1845 that the Dudley estate had never been 'interested'²⁵ in the Stourbridge Extension Canal. Pressed further by representatives of this canal, who denied the need for a railway link in 1845, Smith retorted that, with regard to the extension,

'although it was an injury to Lord Ward ... he made no complaint, but allowed it to be made for the benefit of the community: but Lord Ward has never gone upon the canal.'²⁶

The extent to which it really was against the interests of the Dudley estate is questionable. It did end Lord Dudley's monopoly of transport in the area and, given the fact that the Kingswinford Railway was then changing 11d per ton for coal, transport costs along the extension canal would be less. But, there was no real threat of a reduction in the carrying trade from the Shut End area itself because Lord Dudley's railway afforded a much quicker and cheaper communication with the Staffordshire and Worcestershire Canal than the lengthy and relatively costly passage of boats through the numerous locks on the Stourbridge Canal to the junction with the Staffordshire and Worcestershire Canal at Stourton. Coal could reach the Tipton side via the junction with the Birmingham Canal at Wolverhampton: this would also be quicker and cheaper overall than the alternative route up the locks to Park Head and the delays of the Dudley Tunnel. Smith's implied claim that the area and interests concerned were indebted to the Dudley estate was rather doubtful. However,

²⁵ Railway Report, 1845, Q. 496, Evidence of R. Smith.

²⁶ Ibid. Q. 4643.

numerous ironworks and collieries did flourish on the banks of the Stourbridge Extension Canal itself - it was in terms of supplying distant markets with raw materials that its commercial success is questionable.

iii. The Pensnett Canal or Lord Ward's Branch

One canal, the Pensnett Canal or Lord Ward's Branch, was constructed during this period entirely on estate property, and the total capital cost was met out of estate income. This was cut in 1839-40 from Park Head locks at the western end of the Dudley Tunnel, across Pensnett Chase via Round Oak, to the Wallows area beside the Fens Pools in Brockmoor²⁷. About two miles in length, this private canal provided a canal link with the Birmingham Canal system not only for the collieries and ironworks in this area of Pensnett but was also a more direct link between developments at Shut End and the Tipton side of the ridge. It was cut on a level along the whole of its length and there was no loss of time from passing through locks. This latter improvement resulted from an extension of the Kingswinford Railway²⁸, to be known as the Pensnett Railway, from Shut End to sidings at the Wallows. In its obituary to Richard Smith in 1868, the Dudley Herald recorded that the Pensnett Canal had

'been of inestimable benefit to the trade of Brierley Hill and the district west of Dudley.'²⁹

Because the canal carried estate and other traffic, profits from freight charges were considerable from the commencement of the undertaking. From 1840 to 1846, the canal made a profit of £4,888 7s.³⁰ As the economic activity of the area grew, profits increased, reaching a total for the year of £1,042 9s. 8d. in 1871³¹. The extent of the new

²⁷ See Map 4. ²⁸ See Part C i below.

²⁹ D.P.L. Dudley Herald, 25 July 1868. Obituary to Richard Smith.

³⁰ D.P.L. 8/L, Richard Smith's Accounts: Profit and Loss Account, from 1 Jan. 1837 to 27 July 1846.

³¹ D.P.L. 12/L, Report Upon the Examination of the Earl of

transport facilities constructed west of Dudley in the mid-nineteenth century indicates the relatively profitable and expanding economy of the area in comparison with areas to the east of the town. In their report of 1836, Smith and Liddell had predicted high profits from this section of the estate in view of its extent and the quantity of unexploited minerals, especially thick coal, which it contained. The Pensnett Canal was a valuable addition to the pattern of local communications and, taken in conjunction with the Pensnett Railway, provided strong competition for the Stourbridge Extension Canal, because of its savings in time, as a link with Park Head and the older industrial areas where coal was in short supply east of the Dudley Tunnel.

iv. Other Canals

Two other canal projects concerned the trustees - both had the keen support of Richard Smith - but the trustees were divided over policy in each case. The first was the Birmingham and Stourbridge Junction Canal which was subsequently built, in part, as the Stourbridge Extension Canal. This was first discussed in April 1836 as a proposal to link the Stourbridge Canal at Brockmoor via Corbyn's Hall, Shut End, and a tunnel under Sedgley to the Birmingham Canal at Tipton Green. Hadfield³² asserts that, although Lord Dudley opposed it, many local iron and coalmasters supported the scheme because it would undercut existing freight charges on the Shut End and Kingswinford Railway - 11d. per ton, and on Gibbons' horse mineral railway to Brockmoor - 5d. per ton. In fact neither Richard Smith nor Lord Ward were opposed to the scheme. Smith informed Hatherton that he had met the surveyor, W. Fowler,

'... to select the best line for the proposed Tunnel

³² Dudley's Accounts, Mines Department, 1871.
C. Hadfield, The Canals of the West Midlands (1966), p. 104.

'through the Dudley Hills.'³³

A map³⁴ of the proposed route shows the canal commencing at Wallbrook Iron Works in Coseley, passing under the Sedgley ridge to Cotwallend, and joining the extension branch from the Stourbridge Canal at Oak Farm near Shut End. Although this project fell through, as the new canal terminated west of the ridge, hopes of completing the link remained. Hatherton, in his capacity as Chairman of the Staffordshire and Worcestershire Canal, had opposed it fearing that traffic would be lost to this new link between the eastern and western sectors of the Black Country.

Further attempts were made by Smith and Benbow to establish a direct link in 1840 - after the Stourbridge Extension Canal was completed. Benbow informed Hatherton³⁵ of his intention to introduce a bill into parliament to link the new canal with Tipton Green on the Birmingham Canal. The proposed route would traverse only Lord Ward's property and was so contrived as to pass numerous estate and leased enterprises, such as the Kettle Hill Lime Works in Sedgley, collieries in Sedgley occupied by John Waterfield, Gornal Forge, leased to James Wilkes, and the brickyard and clay pits worked by the trustees in Stawlings Lane, Kingswinford, before its junction with the extension canal. Hatherton replied that although he would support the proposed canal as a trustee of the Dudley estate,

'I shall not consider myself precluded ... from taking my usual part in the deliberations of the Staffordshire and Worcestershire Canal Committee.'³⁶

After an interchange of extremely caustic letters, in which Benbow accused Hatherton of encouraging opposition to the proposed link on the grounds that it would favour only Lord

³³ S.C.R.O. D260/M/F/5/19/11, Smith to Hatherton, 8 June 1837.

³⁴ D.P.L. 10/H, Map of the Proposed Birmingham and Stourbridge Junction Canal, 1836.

³⁵ S.C.R.O. D260/M/F/5/19/10, Benbow to Hatherton, 5 Dec. 1840.

³⁶ Ibid. Hatherton to Bourne and Wainwright (Lord Ward's solicitors), 8 Jan. 1841.

Ward and the Bishop of Exeter asserted that it was Hatherton's duty to support the trust's interests, the proposal was dropped. A letter from William, Lord Ward throws some interesting light, both on this project and on his own growing strength of character, which his usual pleasure-seeking³⁷ activities belied. He observed in a letter to Hatherton:

'I am glad that at last you have given leave to put an end to the unpleasant correspondence between Mr. B. and yourself ... he says he cannot see that he has been guilty of any want of Courtesy towards you ... and that he has only spoken plainly to prevent the chance of misconception. Were I in full possession of my property, of course the case would be different, and I should laugh at the opposition of the Staffordshire and Worcestershire Canal Company.'³⁸

In all probability, Lord Ward suppressed his own good business sense on this matter, in the interests of preserving harmony amongst his trustees. It may be that Smith's subsequent activities in extending the railway from Shut End to the Wallows sidings, where it linked with the new Pensnett Canal, were intended to effect the new link between the eastern and western sections - although in a less direct manner than the abortive canal proposal.

Smith's other scheme in 1839, to construct a canal branch from the Staffordshire and Worcestershire Canal at Hincksford to Pensnett Chase near Gornal, was also dropped. This may have been intended as a possible alternative to the link with Tipton which, as it would serve the Staffordshire and Worcestershire Canal, might be expected to meet with Hatherton's approval. However, it did not meet with Lord Ward's approval as it would pass

'through Himley Wood ... a part of my property that least of all others I should like to see cut up'³⁹

³⁷ See Section III, Chap. 1, Part B for a discussion of William's relationship with the trustees.

³⁸ S.C.R.O. D260/M/F/5/19/10, Lord Ward to Lord Hatherton, no date, probably c. Feb. 1841.

³⁹ Ibid. Lord Ward to Hatherton, Jan. 1840.

although he did acknowledge that

'it would have been of great advantage to have had a communication opened between the mines on the Chase and the Staffordshire Canal.'

This reflects creditably on Lord Ward's priorities. In spite of the trade which would be brought to the latter canal, Hatherton also was opposed to this scheme although his reasons are by no means clear. At this time, between April 1839 and April 1841, the Hatherton Branch Canal was under construction, from his own mineral estate near Cannock to the Staffordshire and Worcestershire Canal, and it is possible that he hoped to supply the market for coal in the Tipton area and wished to prevent strong competition from the Dudley mines on Pensnett Chase. This, however, would be generally out of character for Hatherton in his capacity as a trustee⁴⁰. It may be that the proposed canal would have been superfluous because its route duplicated that followed by the Kingswinford Railway from Shut End to the canal at Ashwood: Hincksford is situated about one mile further along the canal towards Wolverhampton. However, in the long run, extensions to the Pensnett Railway and construction of the Pensnett Canal secured the same end in terms of a quicker route to the east.

In general, the additional canals proposed by Smith during the trust period, would have benefitted not only the estate but also the Black Country in general - as did the Pensnett Canal. Although stock in the local canals was sold to raise capital in 1839, the estate remained closely interested in and dependent on the canal system, and its contribution to the improvements of the Severn Commissioners, as already indicated, underlines the trustees' awareness of this fact. However, towards the end of the trust, the Black Country and, inevitably, the Dudley estate, became closely involved in the expansion of main line railways into

⁴⁰ See Section III, Chap. 1, Part D i.

the area. This introduced a new factor into the question of local communications because, as Smith agreed in 1845⁴¹, canals were still the basis of the estate's communications, as private canals and railways linked with the main branches, but the need to supply wider markets forced the trustees to support one of the rival railway schemes for the area.

C. Railways

The evolution of a network of horse mineral railways on the estate during the 1780s and 1790s - under the terms of the various enclosure and canal acts, has already been considered, together with the construction of the first steam locomotive railway in the Black Country - the Kingswinford Railway, between 1826 and 1829⁴². During the trust period, this private steam railway was extended and the estate became involved in schemes to bring a main line connection into the Black Country.

i. The Pensnett Railway, 1842-5

Attempts to improve estate and general transport systems in the Pensnett Chase area of Shut End and Gornal have been discussed above, in so far as the various canal schemes were intended to provide new and quicker links with the through canals and between the two sides of the Dudley-Sedgley ridge. As has been suggested, the extension of the estate railway from Shut End across Pensnett Chase to the Wallows area, near Round Oak, may have been occasioned by Smith's determination to exploit the demand for coal in Tipton in spite of Hatherton's blocking tactics. When the railway extension was decided upon in 1842, it was planned to cross under the Dudley to Brierley Hill turnpike and link up with the New Level furnaces at Round Oak, then occupied by B. Gibbons and,

⁴¹ Railway Report, 1845, Q. 397, Evidence of R. Smith.

⁴² See Section I, Chap. 1, Part B.

when completed in 1845, the total length of track from Ashwood was ten miles⁴³.

As in the case of the original section from Ashwood to Shut End, numerous engineering and constructional problems had to be overcome. There is a considerable fall in land, from the summit of the ridge from Dudley to Brierley Hill at the Wallows, to Shut End. This was negotiated, in the early years, by means of a stationary winding engine at the top of the Barrow Hill incline - a 1 in 24 gradient, and an engine at the head of the Wallows Incline - a 1 in 48 gradient. The line crossed between the large canal feeders and pools at the Fenssby means of a high embankment and terminated beside the Pensnett Canal at the Wallows in a series of wharves and sidings. In spite of its relatively short length - about six and a quarter miles of track including sidings, capital costs were high and were assessed at £10,336 10s. 3d. in 1847⁴⁴. Nevertheless, this scheme proved to be of immense value to the estate in the long run - especially after the construction of a main line railway of the same gauge after 1845 which crossed the line of the Pensnett Railway at Round Oak.

There had been a change of policy regarding goods and materials carried on the Kingswinford section after 1836. Before this date the line had been used

'by no other parties than Lord Dudley's Trustees and Mr. Foster.'⁴⁵

Downing also reported that freight income came only from Foster's activities, not from estate traffic. This situation arose out of his decision that, as maintenance costs of the railway were borne by the Kingswinford Colliery,

'I have considered such charges as being an adequate

⁴³ See Map 3.

⁴⁴ See Chart 20.

⁴⁵ Loch's Third Report on the Trust Accounts, 1836, p. 102. Downing to Loch, 1 Nov. 1836.

'compensation in lieu of the Tonnages of the Coal conveyed.'⁴⁶

On Loch's advice, transport facilities were made available to iron and coalmasters in general and, as indicated above, 11d. per ton was charged for coal in 1839. The sole income from John Bradley and Co., Foster's tenants at Shut End Iron Works, had been £813 16s. 7d. in 1834 and £858 2s. 6d. in 1835⁴⁷. In 1835, 14,141 tons of coal had been conveyed down the line from Kingswinford Colliery free of charge. Estate freight continued to use the Kingswinford line, free of charge, throughout the trust period while income increased from the transport of materials from collieries leased from the estate.

	£ <u>1835</u>	s. d.	£ <u>1837</u>	s. d.
<u>Dr.</u>				
To John Bradley and Co. for ton-				
ages	858	2 6	1,025	18 3
George Bate	Do.		168	18 8
Sam Chavasse	Do.		61	16 6
	858	2 6	1,256	13 5
			48	

Total net income from the Kingswinford section of the railway was £6,196 13s. 4d., between 1 January 1837 and 27 July 1846⁴⁹, an annual average of £652. Revenue would undoubtedly have been higher but for the construction of the Pensnett Railway. In 1847, the latter branch made a profit of £1,286 5s. 7d.

⁴⁶ Ibid.

⁴⁷ Ibid. p. 95. and D.P.L. 9/J, Account of Francis Downing, Mine Agent, as Amended by Mr. Loch, from 31 March to 31 Dec. 1834.

⁴⁸ Ibid. Account of Richard Smith as Mine Agent, from 31 Dec. 1836 to 31 Dec. 1837.

⁴⁹ D.P.L. 8/L, Richard Smith's Accounts from 1 Jan. 1837 to 27 July, 1846.

<u>Dr.</u>	£	s.	d.	<u>Cr.</u>	£	s.	d.
Tonnages received				Bailiff for disbursements	101	17	4
Geo. Bate	409	15	5	Tonnage and haulage by John Bradley & Co.	328	10	8
Sam Chavasse	394	5	6	Rent and Rates	49	10	5 ⁵⁰
John Bradley and Co.	962	3	8				
	<u>1,766</u>	4	7		<u>479</u>	18	5
Profit 1,286 5 7							

Over the next thirty years, the Kingswinford and Pensnett Railways were extended in many directions until about 80 miles of track had been constructed. The network was so extensive and complete, that the Dudley estate and its lessees had a virtually independent transport system on the western side of Dudley. It connected with ironworks, 'landsale' wharves, and canal wharves throughout the area which gave access to wider markets. After the construction of the Oxford, Worcester and Wolverhampton Railway⁵¹, the estate railway system connected with the through line at Round Oak and gained access to distant markets as well as to the Tipton side of Dudley by rail. This predominant position resembled that established by Lord Durham when, in 1829, he broke from the 'Grand Alliance' of the Tyne and Wear coal-owners and exploited the Lambton estate of 17,000 acres by constructing a private railway network with its terminus in Sunderland⁵². In the case of the Dudley estate, private canals and, later, railways branched out to various points such as Ashwood, Brockmoor, the Wallows, Castle Mill, Coneygre, etc.⁵³ where minerals could be transhipped to regional and distant markets. Because of the nature of the local and

⁵⁰D.P.L. 9/J. Richard Smith's Accounts as Mine Agent from 31 Dec. 1846 to 31 Dec. 1847.

⁵¹ See below. ⁵² Spring, op. cit., p. 240. ⁵³ See Maps 3 and 4.

main canal system, one distribution point, such as the Lambton estate possessed, would have been uneconomic and totally inadequate.

ii. Main Line Railways

By the mid-1840s, it was imperative that the Black Country as a whole should no longer be denied the benefits of a main railway link. The significance of this 'new pacemaker in the United Kingdom's economy'⁵⁴ has been well-established, both as a major influence on the development of the capital market and the level of savings, and as a factor which rescued the English economy from an impending 'static state' by acting as a sponge for surplus capital⁵⁵. Earlier main line developments had by-passed the Black Country, which remained relatively isolated in terms of railway communications down to the late 1840s. Internally, the area was well-served by its network of canals, but its competitiveness in distant markets, especially at the ports, was suffering. For the Black Country in general, railways would also reduce the transport costs of raw materials, especially iron ore, which were being brought into the area in increasing quantities. From the point of view of the Dudley estate, railway links would enable it to sell coal and pig iron in a wider market: raw materials were readily available from its own pits. While a railway would be to the mutual advantage of the estate and the area as a whole, it was unfortunate that construction schemes became complicated and protracted by the battle of the gauges, and the support given to rival projects by the estate on the onehand and local ironmasters on the other.

The first public railway in the area was the Grand

⁵⁴ P. Deane and W. A. Cole, British Economic Growth, 1688-1959, p. 295.

⁵⁵ E. S. Richards, James Loch and the House of Sutherland, 1812-1855. Ph.D. Thesis, Univ. of Nottingham, 1967, pp. 40 ff.

Junction line, constructed in 1838-9, which ran north from Birmingham to Stafford, passing the Black Country coalfield⁵⁶ at its nearest point at Bescot between Wednesbury and Walsall. This was a narrow gauge line - subsequently the standard gauge, sponsored by the London and North Western Railway Company. In 1844, two rival schemes were projected. One, sponsored by the London and Birmingham Railway with the Midland Railway, was known as the London, Worcester and South Staffordshire line with R. Stephenson as the engineer: a branch was to be constructed to Dudley and Sedgley. The alternative, sponsored by the Great Western Railway, was a broad gauge line linking Oxford, Worcester and Wolverhampton where it would terminate. Brunel was the engineer and a branch was to be constructed via Brierley Hill to Dudley. Generally, landowners did not invest in main line railways but did support secondary lines where these were connected with mineral interests⁵⁷. In the case of the Dudley estate, Smith urged the trustees to offer strong support to the London, Worcester and South Staffordshire line, with which he was personally connected. As early as 1834, the estate had purchased £19,920 of canal and railway shares of which more than half were railway stock. For his part, Lord Hatherton also favoured the narrow gauge line because it would serve areas which would not present a serious threat to existing canal and river transport systems which he, as a Severn Commissioner and Chairman of the Staffordshire and Worcestershire Canal, represented.

By 1844, the Dudley trust was prepared to associate with a railway scheme but there is evidence that it had tried to block the construction of main line railways into the area prior to this - presumably to preserve the strong

⁵⁶ British Association, Birmingham and its Regional Setting (1951), p. 240. See Map 3.

⁵⁷ F. M. L. Thompson, English Landed Society in the Nineteenth Century (1963), p. 263.

position held by the estate in supplying the local market for coal and ironstone by the canals. Benbow and Hatherton in particular were divided on this issue. Benbow informed his fellow trustee in June 1837 that

'It is the duty of the Trustees to open such Communications as may be likely to benefit the Estates.'⁵⁸

This probably relates to the Grand Junction Railway scheme, then under consideration. Hatherton wrote that

'my own individual Objection to any Railway linking together the towns in South Staffordshire, by expansion Works, Embankments and Cuttings throughout the Mining District remain unchanged. I conceive the mischief to the Mining Interests of the District would be very great, without any corresponding advantage.'⁵⁹

While it remains true that a line would bring competing minerals into the area, the Dudley estate would be able to supply coal, and, after 1839, pig iron to a wider market. It may be that the extension of the Pensnett Railway to Round Oak, Smith's reconstruction of the New Level Furnaces and his support for a main line railway were all part of a long term plan for the Dudley estate to market its own coal and pig iron on an unprecedented scale. The opposition to railways which Hatherton urged in the late 1830s probably explains entries in Benbow's accounts for 1837:

<u>Law Expenses</u>	£	s.	d.
5 May 1837. R.B. Morse Esq. for fees, attendance etc. on the opposition of the Trustees to the Grand Connection Railway Bill	250	0	0
29 June. Messrs. Thorp, Pitt and Sherwood on account of ditto	200	0	60

By 1844, even Hatherton was silenced on the urgent need for a railway connection - but gave strong preference

⁵⁸ S.C.R.O. D260/M/F/5/19/11, Benbow to Hatherton, 8 June 1837.

⁵⁹ Ibid. Hatherton to Messrs. Tyndel and Rawlins, 8 June 1837.

⁶⁰ Loch's Fourth Report on the Trust Accounts, 1838, p. 23.

to one of the two rival schemes. His own personal commitments may explain the support given by the trust to the narrow gauge line. It has been suggested that, after the construction of the Grand Junction Railway, there was little difficulty regarding the northward transport of goods from the Black Country.⁶¹ In view of the lack of railway connections with the main area of the Black Country, this may be an exaggeration. The southward movement of goods via Stourport and the Severn remained slow⁶². Of the two rival lines proposed in 1844, the broad gauge would provide a shorter route to London and enable local coal to compete with Leicester coal in the London market, while the narrow gauge line and its Sedgley branch would provide a better communication with Liverpool and London⁶³. Hatherton maintained a stubborn opposition to the broad gauge line to the end:

'putting aside private interests of my own and looking at my position as a Severn Commissioner, I could not countenance ... the proposed Railway from Worcester to Wolverhampton. I hold myself bound in honour to give it my opposition.'⁶⁴

This commitment, and Smith's association with the South Staffordshire narrow gauge line, swung the Dudley trust in behind the supporters of the rival line sponsored by the London and Birmingham Railway Company.

During the course of his long examination by the parliamentary commission of enquiry, Smith presented statistics to show the movement of goods and materials in the region of the proposed through narrow gauge line⁶⁵. He calculated the total quantity per annum at 5,062,000 tons which, when broken down, indicated a daily figure of 16,224 tons or 1,333 tons in transit per hour⁶⁶. He was attempting to

61 Victoria History of the County of Stafford II (1967), p.306.

62 Ibid.

63 Ibid.

64 S.C.R.O. D260/M/E/430/26, Hatherton to I. W. Lea, 31 Aug. 1844.

65 See separate portfolio, Statistics item 5. These tables only contain figures of trade along the line of the railway itself.

establish the point that such a volume of goods

'would be too great to be accommodated by any through (railway) line'⁶⁷

and that the existing canal and private railway systems provided a more convenient service than a main line railway could supply. What he advocated was a branch line from the London, Worcester and South Staffordshire Railway - which would establish a major railway link between Birmingham and Wolverhampton, while the branch line would pass from the main line in Tipton, to Dudley, Brierley Hill (via a tunnel) and Sedgley. This would open up the Black Country by providing a link with a through line and also remedy the one serious defect in the system of local transport - the inadequacy of the Dudley Castle Canal Tunnel as an east-west link.

Q. 403. Has the canal been at all sufficient for your purposes?

There are some difficulties ... in the winter with respect to ice, and in the summer from shortness of water ... and the connection between the Dudley and Wolverhampton Canal (the Dudley Tunnel) has a very inconvenient tunnel indeed.

Q. 407. And you think a railway would remove the impediments?

Yes.⁶⁸

When the second viscount had sponsored the Dudley Castle Canal Tunnel in the 1780s, it had been constructed without a towpath and was only wide enough to permit the passage of boats in one direction at a time. The practice had developed whereby boats passed through in one direction during the morning and in the opposite direction during the afternoon. Smith was not alone in wishing to effect a better communication between the two sides of the hill to meet the increased trade. An ironmaster, Mr. B. Best, had earlier

⁶⁶ Railway Report, 1845, qq. 382-401, Evidence of R. Smith.

⁶⁷ Ibid. Q. 409.

⁶⁸ Ibid. qq. 403-7.

argued along the same lines:

'Q. 6 ... are the canals adequate ... for the present wants of this district?

They are not ... There is a scarcity of water... and the inconvenience of passing the Dudley Tunnel ... causes a great delay in the transit of minerals, and ... a great many works and pits would be opened if there was a better communication ... there is abundance of ironstone on the eastern side, and a scarcity on the western while there is an abundance of coal on the western and a scarcity on the eastern ... several furnaces are out of blast in consequence of the scarcity of minerals on the western side.'69

There was plenty of ironstone on the western side of the ridge but it was not yet being worked in general. This was because it lay beneath the main coal seams and was not worked until the latter were exhausted: if the ironstone was worked first, subsidence would fracture the coal seams above and create dangers and difficulties and loss of production in working the coal. East of the ridge, ironstone was being worked as the upper coal seams had been exhausted.

Apart from asserting the greater convenience which a local railway branch and through line would offer, Smith also argued on the basis of transport costs and counter-attacked when representatives of the canals tried to establish points in their favour:

'Q. 470 ... have you been connected with canals when they have been in competition?

Yes.

Q. 471 Has the general result been that the public have profited by that?

I think, very little indeed; they commonly have come to an understanding ... about terms.

Q. 477 Do you extend that observation to canals and railways?

I think it is very likely.

69 Ibid. Q. 6, Evidence of B. Best.

'Q. 478 Then you think it would be a better thing for the public either to have a canal or a railway?

... considering the terms the railway propose to charge ... it would be better to have a railway.'⁷⁰

Smith also claimed that the Dudley estate could supply a larger market for coal in the Banbury and Oxford region if the London, Worcester and South Staffordshire line was constructed. This would not be a new market as they had continued to supply these areas by canal since the 1790s.

'Q. 927 That would be by competing with and displacing the coal from Derbyshire?

They have been displacing us.'⁷¹

As the Black Country still depended on canal transport, it was losing distant markets where railways gave an advantage to rival coalfields. Another tack tried by the canal representatives was to assert that the connection urged by Smith would supply 'the domestic district' where 'there is a great consumption of coal' and that this export of coal would be to the detriment of the Black Country.

'Q. 886 Do you think that it would be of any real advantage ... if you could send coal ... to supply all England, or would it be a disadvantage?

An advantage.

Q. 887 ... are you aware there is a great difference of opinion.

No doubt about it.

Q. 892 Do you know you are rather short of coal in that county? (south Staffordshire)

I know we are not.

Q. 893 Do you think there is sufficient to work the ironstone that is there?

Yes I do.'⁷²

⁷⁰ Ibid. Qq. 470-8, Evidence of R. Smith.

⁷¹ Ibid. Q. 927.

⁷² Ibid. Qq. 886-893.

The Dudley estate had abundant supplies of coal to the west of Dudley: what was needed was a new link by railway to supply the eastern side of the ridge. But Smith was not simply arguing the case on behalf of the Dudley estate. He rightly asserted that, whether or not the estate increased its coal trade with other districts, the railway connection would

'afford our district a very great advantage ... our great object ... is to get to port as cheap as we can.'⁷³

The estate sold no pig iron at all outside the district although pig iron made at Coneygre was sold within the Black Country. What mattered to Smith was that the Black Country iron trade in general should enjoy the best possible marketing conditions because the vast majority of estate profits came from the supply of raw materials to the local iron trade. Not all of the 5,062,000 tons of goods and materials in transit annually would use the proposed line and branch. Smith estimated that 467,261 tons would be transported on the through line - ^{to} the east of the ridge, and 235,063 tons on the branch line from Sedgley, Brierley Hill and Dudley producing an income of £60,083 7s. 9d. and £16,098 2s. 6d. respectively⁷⁴. The remaining traffic, over 4,000,000 tons within the area, would continue to use existing transport systems - mainly canal.

Apart from the route taken by the proposed London, Worcester and South Staffordshire Railway - which would give access to Liverpool, Hull, Worcester, Bristol, Oxford, and London, where the Dudley estate and the Black Country had established markets, there was another important factor which led Smith to favour this line. This was its gauge - the narrow (standard) gauge of 4 ft. 8½ ins. Lord Ward's Kingswinford and Pensnett Railway had the same gauge and it was hoped to connect it to the branch line.

⁷³ Ibid., Q. 932.

⁷⁴ Ibid. Q. 4474.

'Q. 420 ... these mineral lines will pass on to the through lines and so carry you any distance?
Yes.'⁷⁵

The estate had recently purchased from the London and Birmingham Railway Company 'something like 300 carriage wheels and axles' in anticipation of the new facilities. For this reason, Smith argued that if the rival Oxford, Worcester and Wolverhampton line was built, the narrow gauge should be extended outwards along the whole of its length as far as Bristol, rather than introduce the broad gauge into the area. Smith further claimed that three or four tons was the maximum weight of coal desirable in a railway waggon:

'that was the weight ... considered when Lord Ward's road was built.'

The nature of Black Country coal, especially thick coal, is

'very friable ... and the value of it depends entirely upon the size of the article we send to market ...

The narrow gauge has a smaller carriage and ... there is less likely to be so much breakage by the weight.'⁷⁶

The London, Worcester and South Staffordshire Railway was prepared not only to allow Lord Ward's waggons to use their lines but also to construct

'two side lines ... for the special accommodation of the mines ... and ironworks'⁷⁷.

At the time of the enquiry, the broad gauge line of the Oxford, Worcester and Wolverhampton Railway had no such intention of establishing a double set of rails to accommodate local mineral railways.

'Q. ... do you know in the Bill if there is any such clause ... with regard to double rails?

There is no clause of the kind in the Great Western Bill.'⁷⁸

The canal companies tried to denigrate all the railway projects on the grounds of safety because of mining subsidence.

⁷⁵ Ibid. Q. 420, Evidence of R. Smith.

⁷⁷ Ibid. Qq. 903-4.

⁷⁶ Ibid. Q. 433.

⁷⁸ Ibid. Q. 1037.

'Q. 727 How many miles of railway ... have you?
... about 10 miles.

Q. 729 ... is it ever in fact made?
Yes.

Q. 730 But do you not lose it in the morning sometimes?
No.

They also attempted to establish the high cost to the railways of purchasing coal under the proposed route in the interests of safety. While agreeing on the need to purchase the coal up to 15 yards on either side of the line, Smith doubted the high cost, because it was in everyone's interests to have the railway, and pointed out that

'The canal companies have not been in the practice of purchasing mines but they have received great expense in keeping the canal banks up'⁷⁹ -

because of mining subsidence.

Besides the opposition of the local canals, especially the Stourbridge Canal, to any railway scheme, there was also opposition to the narrow gauge line from other interested parties, and support for the broad gauge Oxford, Worcester and Wolverhampton line. This was intended to pass from Worcester and Kidderminster, up the Stour valley, via a tunnel at Dudley, to Wolverhampton where it would terminate. A branch was proposed from Stourbridge through parts of Kingswinford, Brierley Hill, Round Oak and on to Dudley via the tunnel. At a public meeting held in Dudley on 13 September 1844, before the commission sat, the proposals of the Oxford, Worcester and Wolverhampton Railway were accepted by the majority:

'Thornycroft, Matthews and Gibbons were the Speakers on behalf of the ... line'⁸⁰

all of whom were iron and coalmasters in Wolverhampton, Brierley Hill and Kingswinford. Isaac Badger, a Dudley

⁷⁹ Ibid. Q. 1043.

⁸⁰ S.C.R.O. D260/M/E/430/26, Smith to Hatherton, 13 Sept. 1844.

industrialist,

'proposed that the Town should give its ... support to the Railroad in question notwithstanding what I said upon Lord Ward's determination to oppose it (and) ... that the Resolution ... be transmitted to Mr. Benbow, and that he be requested to give the Measure his best support in Parliament ...'81

This was an embarrassing situation because Benbow, one of the Dudley trustees, had recently been returned to parliament as the member for Dudley⁸². Whatever course of action he determined upon - and his support for a railway connection in the late 1830s has already been indicated, he would antagonise either his fellow trustees or powerful interests in Dudley. Smith reported that

'Fellowes was the only man who laboured to avert the scheme ...'83

It is not clear why the Dudley estate and leading ironmasters in the district should be on opposing sides in this matter. One factor was undoubtedly the desire of Hatherton to protect the interests of the Staffordshire and Worcestershire Canal and the Severn Commission which would be more threatened by the broad gauge line down the Severn valley. Smith's association with the South Staffordshire Railway was also a factor. Of equal importance would probably be the fact that, at the time of the debate, the distant markets served by the estate and the area, were quite different. The estate sent coal out of the Black Country, notably to serve the 'domestic districts' while the iron trade of the area supplied wrought iron and finished iron goods to the ports, especially Bristol, and the American market. However, their interests were really bound together by the fact that the estate sold most of its minerals to the local iron trade. The only real advantage of the narrow gauge line to the estate would be its ability to send mineral waggons over a wide area, by the main line,

81 Ibid. 82 See Section III, Chap. 1, Part B iii.

83 Smith to Hatherton, 13 Sept. 1844.

without having to re-load them as happened at present where the estate railways joined the canals. Re-loading would also be necessary if the wide gauge line was built without parallel narrow gauge lines over any real distance.

During the course of the enquiry, Mr. Cockburn, representing the Oxford, Worcester and Wolverhampton line, went to great lengths to prove that Smith and the Dudley trustees had attempted to use their influence against the wishes of majority opinion in Dudley. Robert Stephenson was questioned in his capacity as engineer to the rival narrow gauge line:

'Q. 6035 You say you have consulted the parties interested: who do you consult?

Principally Mr. Smith.

Q. 6041 Has that line ... been laid out with a view to Lord Ward's interest?

It has not.

Q. 6044 Have you consulted the parties interested with the exception of Lord Ward's agent?

I do not know that I have had much communication with any.'

This line of questioning was persisted with until a counter-attack was mounted by Mr. Serjeant Wrangham for the London, Worcester and South Staffordshire Railway

'Q. 6349 Are you in a situation to speak of the proportion of local support which our plan receives from the ironmasters?

... the one in favour of the narrow is most numerously signed.'

Wrangham asserted that the Board of Trade report listed the representatives of 46 ironworks, 57 furnaces and 98 collieries, including the Dudley estate, as being in favour of the narrow gauge route.

However, the Kingswinford ironmaster, William Matthews, stated that all the meetings of ironmasters held in Wolverhampton, Dudley and Stourbridge supported the broad

gauge line⁸⁴. He also ventured to disagree with Smith on his statement that broad gauge waggons would tend to break up the coal. He also claimed that a comparison of the two memorials submitted to the Board of Trade in support of the rival projects showed that the balance of opinion was in favour of the Oxford, Worcester and Wolverhampton line. Moreover, he implied that the trustees had brought pressure to bear on Mr. Bramer (Bramah) to change his name from this list to the South Staffordshire line⁸⁵. Another industrialist, W. Grazebrook, was more direct and stated that he

'believed there was one independent man who dared put his name to the (G.W.R.) memorial, contrary perhaps, to the dictation of the trustees of the Earl of Dudley.'⁸⁶

Another Kingswinford coalmaster noted that the general opinion amongst 'independent' coalmasters was in favour of the broad gauge

'until recently, because the Board of Trade, I believe gave their preference to the ... (other) line.'⁸⁷

'Q. 8885 Do you know of any reason why that change of feeling should have taken place?

There is a great deal of interest connected with Lord Ward in our district.'

No further light can be thrown on the course of events whereby public meetings and petitions had produced a majority in favour of the Oxford, Worcester and Wolverhampton line but the Board of Trade pronounced in favour of its rival. There seems little doubt that the trustees and Smith would exert considerable pressure at Westminster and on tenants such as Bramah. In the final outcome, however, the decision of the commission of enquiry went in favour of the broad gauge route. On this occasion, the local influence of the Dudley estate had been defeated. When the decision was announced on 4 June 1845, neither the name of Lord Ward nor his trustees

⁸⁴ Ibid. Q. 6903, Evidence of W. Matthews.

⁸⁵ Ibid. Q. 7239.

⁸⁶ Ibid. Q. 7910, Evidence of W. Grazebrook.

⁸⁷ Ibid. Q. 8884, Evidence of G. Bond.

appeared in the list of shareholders while the railway company found that permission to go ahead would cost them dearly as their proposed route lay, of necessity, through the property of the Dudley estate.

Several clauses in the subsequent act of parliament did, however, take account of the claims made by the supporters of the rival line - especially the Dudley estate. Although the Oxford, Worcester and Wolverhampton Railway was to be a broad gauge line the company was to lay down additional rails (narrow gauge) between Abbotswood (near Worcester) and Wolverhampton

'for allowing the free and uninterrupted passage ... of carriages, waggons and trucks'⁸⁸

and, between Wolverhampton and Stourbridge,

'such side lines as may be necessary or convenient for the accommodation of the traffic in minerals ... and ... all owners ... or occupiers of mines ... (may) make branches therefrom.'

It was shortly after this, in 1846, that a royal commission advised that all future lines should be narrow gauge. Strict provisions were included concerning the exact line and level of the railway - presumably at the insistence of the trustees. Where it passed through Lord Ward's estate at Hurcott near Kidderminster, there was to be no deviation nearer to Park Hall 'than as now laid out'. Where the line curved from Stourbridge through Brierley Hill and climbed up towards the tunnel at Dudley, it passed through Round Oak beside the New Level Furnaces. The Pensnett Railway, still under construction, lay directly across the route. Smith refused to alter his levels by an inch and the act stipulated that the main line must cross the level of Lord Ward's railway at right angles. The main line also had to cross the Pensnett Canal (Lord Ward's): here again, strict provisions were laid down:

⁸⁸ Ibid. An Act for the Making of a Railway from the Great Western Railway at Oxford to Worcester and to Join the Grand Junction Railway at Wolverhampton, para. 44.

'every such bridge ... shall be constructed, as regards its position, form, and dimensions to the reasonable satisfaction of the engineer for the time being of Baron Ward.'

Penalty clauses too were included:

'if the ... Pensnett Canal, or the towing path ... be obstructed ... or in case the space of any bridge be less in width or height than is ... prescribed ... the Company shall pay to ... Baron Ward ... the sum of five pounds for every half-hour during which the rail obstruction or construction shall continue ... and the further sum of ten pounds for every half-hour (above 72 consecutive hours).'

Similar provisions operated where the line crossed Castle Mill wharf and the eastern entrance to the Dudley Tunnel by a high viaduct. Even the freight charges appear to show extreme consideration for the interests of the Dudley estate. Tolls levied for every waggon not belonging to the company were not to exceed 5d. per mile: Lord Ward's waggons would be the highest number of private waggons on the line, as a junction was made with the Pensnett Railway at Round Oak. Coal, ironstone and other articles carried in private waggons could not be charged at more than three farthings per ton per mile where the distance travelled was more than 50 miles and not more than 1d. per ton per mile for less than that distance. Normal rates of charge for such materials carried in company waggons was 1½d. per ton per mile.

The company did not complete the link to Wolverhampton until 1854. When the line reached Round Oak, an agreement was made between Smith and the company's engineer, Vardon, that the main line should

'alter its gradient so as to cross Lord Ward's railway at a level.'⁸⁹

It became tradition that engines on the Pensnett Railway had the right of way over the crossing! The estate sold a considerable amount of land in Brierley Hill, Dudley and Tipton

⁸⁹ D.P.L. 9/F, Agreement Between Richard Vardon and Richard Smith, 23/9/1852.

to enable the line to be built. Under an agreement made in 1846⁹⁰, the estate sold 23 acres of land in Dudley for £15,250, reserving all the minerals, and allowed the company to occupy a further 3 acres for up to 5 years to gain access for construction purposes at £70 rent per annum. A further 16 acres were sold in Kingswinford and Tipton in 1848 for £11,307 while compensation totalling £7,803 15s. was claimed by the estate in March 1848.

	£	s.	d.
'For destruction of 2 limekilns at the mouth of the Dudley Tunnel	£1,500		
Injury to 2 pit shafts at Princes End	1,200		
Damage to a reservoir		300	
On behalf of Mines Department	£3,000		
On behalf of Estates Department for loss of properties and compensation to tenants		4,803	15
		£7,803	15. ⁹¹

These figures are high and there seems little doubt that the estate extracted every ounce of advantage from its position as the dominant landowner and mineral owner in the district.

Even though the rival line, which had been supported by Smith and the estate, had been rejected, the final outcome was not very different. Estate waggons could run as far as Worcester - and beyond after 1854 when the narrow (standard) gauge was extended to Bristol. Its market in the 'domestic districts' of Oxfordshire could be reached by this railway and the bottleneck of the Dudley Canal Tunnel could be bypassed by estate waggons using the narrow gauge from the junction with the Pensnett Railway at Round Oak, through the railway tunnel under Dudley to the Tipton side. It was from the opening of this link that the Castle Mill Engineering

⁹⁰ D.P.L. 9/F, Agreement Between Lord Ward and the Ox., Worcs. and W'ton Rlwy. Co., 16 June 1846.

⁹¹ D.P.L. 9/F, Richard Smith to Ox. Worcs. and W'ton Rlwy. Co., 31 Mar. 1848.

Shops of Lord Ward became the main supply and maintenance centre for the Dudley estate because a branch ran from the main line into the works. Moreover, the narrow gauge connected at Wolverhampton with the routes to the north on the London and North Western Railway. Not to be outdone by the commission of enquiry's decision to construct the rival line, Smith and his fellow directors in the South Staffordshire Railway Company had in fact constructed a line as far as Dudley, from the eastern side, by May 1850. This did not pass under the ridge but ran eastwards through Wednesbury, Walsall and Alrewas where it joined the Midland Railway.

Just as the Dudley estate had been closely involved in transport improvements, mainly canals, during the earlier period of expansion during the 1780s and 1790s, so in the 1840s, it was also involved in the movement to bring further improvements by railway construction. Such a link was essential for the area and the estate because the central position of the Black Country and its dependence on canals, made it very vulnerable to rival competitors using quicker means of transport to the ports. The need for action was complicated by an apparent divergence of interest between markets supplied by the estate - coal to Oxfordshire - and by local ironmasters who supplied iron goods to the ports - especially Bristol, Hatherton's and Smith's personal interests also complicated the issue while the existence of a narrow (standard) gauge steam railway on the estate confirmed its opposition to the broad gauge route. In spite of the defeat of the estate on the choice of line, provisions and compromises within the act preserved the interest of the estate and, together with the action of the South Staffordshire Railway, served the original purpose intended by Smith of improving local communications through the Dudley ridge and speeding up access to distant markets. The

estate remained closely connected with canal transport: the sale of shares in 1839 was not a matter of policy but out of the need to obtain liquid capital for the purchase of the Foley estates. Some shares were retained in the key canal - the Birmingham Canal, while the estate constructed the Pensnett Canal on its own account. As a result of these various improvements, the Dudley estate was in a far better position to supply local, national, and international markets in 1845 than in 1833. This assumed greater significance when the estate became a large-scale producer of pig iron and wrought iron in the 1850s. Within the immediate locality of the Black Country, the private system of communications was improved by a railway link between the Kingswinford and Pensnett Railway on the west, and Castle Mill on the east. Coal could also be supplied more easily to meet the heavy demand from ironworks to the east of the ridge.

Chapter 5. Rentals

The rentals of the Dudley estate reflect the economic growth of the estate in general. They were divided into two sections, cottage and great rents: the latter being concerned mainly with agricultural property and large residences, in the early years after 1774. However, as the exploitation of the estate increased, the great rentals contain references to land let to the various canal companies and to ironworks. By the 1820s, a particularly large entry for each manor was recorded under 'Mine Concern'. This contained the rent of land occupied by collieries and industrial enterprises owned and worked by the estate, and, increasingly, mineral land leased to tenants. The practice whereby the estate levied a surface rent from its own enterprises has already been considered¹ and the movement of agricultural rents after the enclosures and before 1833 has also been discussed². In this chapter the numbers and concentrations of cottage properties will be considered from 1774 to 1845 and also the income derived from this source. The trust period was particularly significant in this respect because it saw the initiation of policies which, after 1847, were to produce a major change of policy with regard to cottage properties. Agricultural rents will also be considered for the period 1833-1845: industrial and mineral rents have already been discussed.

A. Cottage Rents

The total income from cottage rents on the Dudley estate in the Black Country increased by more than threefold over the period from 1768 to 1836³. In 1768, before the

¹ See Section I, Chap. 2, Part D.
² See Section I, Chap. 2, Part A.
³ See Appendix 9.

enclosure of local commons and more intensive mineral exploitation by the second viscount after 1774, the total cottage rental was £240 14s. 1d.⁴ Most of these properties were concentrated in the manors of Dudley, Kingswinford, and Sedgley, and totalled about 500 cottages. The average annual rent in Kingswinford was 9s. 10d. on 215 properties with individual rents ranging between 1s. 6d. and £1 1s. 8d.: these were ground rents. This low figure was supplemented by a large fine when the properties - all copyhold, changed hands⁵. Average rents remained relatively stable until the 1820s when a great influx of population into the Black Country occurred. There had been an earlier influx in the 1780s and 1790s when many entries in the cottage rentals are recorded as 'Cottage and New Enclosure'. Most of these were located on the former commons and wastes enclosed at this time. The average cottage rent remained as low as 11s. 9d. in 1817 but a steady increase occurred during the 1820s although the total number of properties did not increase appreciably. Total income from this source had reached £797 9s. 3d. by 1836. By the end of the Napoleonic Wars, estate properties were concentrated at various places in the Pensnett Chase area at Wordsley, Brockmoor, the Level and Pensnett - usually in the vicinity of estate mines and wharves. In Sedgley, large concentrations of cottages existed at Gornal, Hurst Hill and Deepfields.

The haphazard manner in which the estate had allowed cottage construction to flourish between 1774 and 1817, while providing cheap accommodation and plots of land for miners and iron workers, had produced a situation whereby a large potential source of revenue was lost to the estate. This was one of the problems which Loch, as auditor to the trust, brought to the early attention of the trustees after 1833.

⁴ D.P.L. 5/23, Lord Dudley's Cottage Rental, 1768.

⁵ See Section I, Chap. 2, Part D.

Two questions in particular seemed to be in urgent need of consideration: these were the extent of the estate's liability to pay for repairs, and the basis on which the cottages were occupied. Loch observed in 1836 that

'If the repair of this class of Property is cast upon the Landlord, there will be no end to the outlay and the Cottage Rent should be fixed so as to throw the repairs on the Tenant.'⁶

This is further evidence of the slack management of estate affairs which has already been considered in terms of the cost of repairs to farm properties. He felt that the trustees should not meet the cost of repairs to houses in Dudley

'unless it is to preserve the Interest of the Family, which if judiciously done ... is a legitimate object of consideration.'⁷

Dudley had become a parliamentary borough under the terms of the 1832 act and Benbow had already shown signs of the political ambition which was to secure him this seat in 1844. He informed Hatherton in February 1836 that he disapproved of the vicar of Dudley's sale of glebe land for building purposes as he wanted Lord Ward

'to be a Patron of the Borough ... a Situation ... he would be less likely to maintain with an increased number of voters.'⁸

Of greater urgency was the need to establish a clearer relationship between the estate and the tenants of cottage properties. Loch disapproved of the situation inherited by the trust whereby

'there are many Houses held by Cottage Tenure for the payment of a Nominal rent by Middlemen who live at a distance from the Estate and who receive large rents from the actual Occupiers.'⁹

It is evident that during the periods of immigration, the estate had not seized the opportunity to increase its annual

⁶ Loch's Third Report on the Trust Accounts, 1836, p. 24.

⁷ Ibid.

⁸ S.C.R.O. D260/M/F/5/19/11, Benbow to Hatherton, 14 Feb. 1836.

⁹ Loch's Third Report, p. 25.

income from a policy of exploitation and had allowed entrepreneurs to erect cottages on newly enclosed plots. These middlemen paid a nominal ground rent to the estate while enjoying a much higher annual economic rent from the occupier. Loch advised that the occupants should immediately be made direct tenants of the estate and that the present economic rent paid to the middlemen should be reduced

'to reconcile them to the change.'¹⁰

Land should be attached to these premises by getting rid of existing ruinous buildings:

'The arrangement for letting such person's land, might contain a Condition by which the Cottage premises should be included in the Rent. In many instances this may be found a Convenient way of establishing a doubtful Title to the premises without a Law Suit.'¹¹

However, Loch's urging produced no immediate action from the trustees and the legal position of many of the tenants remained obscure while the estate was denied the full potential rent.

The issue was again raised in 1841 when, having regard to his earlier advice, Loch proposed a change of policy which earned him the opposition of Hatherton and Lord Ward. He proposed that the estate should sell the land on which the cottages stood, giving the first option to the occupants. Lord Ward, always conscious of his responsibilities to his tenants and workpeople, objected that this would give the appearance

'of casting from under his care and protection a vast population which has been established on his property by the permission of his Ancestors.'¹²

His reservations were overcome after Loch again drew attention to the exploitation of the cottage tenants by middlemen and the fact that the tenants did not enjoy his direct protection.

¹⁰ Ibid.

¹¹ Ibid. p. 26.

¹² S.C.R.O. D260/M/F/5/19/11, Loch to Hatherton, 8 Dec. 1841.

By selling the land, the tenants would be released from the excessive rents of the middlemen, while tenants whose cottages stood on land purchased by landlords would enjoy fairer rents and improved living conditions than they did at present. The alternative, of Lord Ward asserting his control of the land and making cottage occupants his direct tenants, was dismissed by Loch:

'no fortune, not even Lord Ward's, could afford to put them and keep them in repair - if they become the property of various landlords, this might and would be done.'¹³

This observation underlines the bad housing conditions which prevailed throughout the Black Country at this time. The need to raise capital for the purchase of the Foley estates was a further incentive to sell the land. Two other considerations were written off by Loch as being of no account:

'If the possession of this property was available either for the purpose of working the mines or contributed greatly to the political influence of the family, it might be wrong to part with it and no one I know would feel this more strongly than your lordship.'¹⁴

The only note of caution sounded by Loch was that his plan should not be put into effect 'when trade is at a low ebb' - presumably because of the effect on the price of 'accommodation land' and the threat of popular unrest. Ultimately, Hatherton and the other trustees became convinced of the need to establish a clearer relationship between the estate and the cottage occupants, or to sell the land on which the properties stood.

Action was not taken until after the trust had officially terminated in March, 1845. In fact, the trustees had to continue in the exercise of their responsibilities for many years after 1845 until the final accounts had been

¹³ Ibid.

¹⁴ Ibid.

audited¹⁵. In order to dispose of a part of the estate, Lord Ward's Estate Bill was introduced into parliament in 1847. Hatherton had become convinced of the wisdom of the bill in 1842 after seizing on the political bait which Loch had shrewdly dangled before him. Benbow became reconciled to the plan in 1845¹⁶ although Claughton, former tutor and close confidant of Lord Ward, still had doubts. Hatherton pointed out that the scheme was based on the action of

'Mr. Sneyd of Keel ... which had ... the effect of greatly increasing his political importance for the Cottagers became Freeholders (and) through the good management of his Agents, continued attached to the family.'¹⁷

In spite of some criticism from Lord Shaftesbury, Chairman of Committees of the House of Lords Committee on Private Bills - not on a matter of principle, but because of Hatherton's non-attendance through the illness of his daughter - the proposal became law on 22 July 1847.

The preamble to the act¹⁸ cited the practice of the late earl and his ancestors to allow people to erect cottages on the wastes and to enclose

'parts of such Wastes ... for Gardens, Yards and other Conveniences to such Cottages, without the Payment of any Consideration for the use of the Lands so appropriated other than ... a small annual Sum for Rent, the Amount thereof being reserved irrespective of the Improvements made ... and without ... any Contract or Agreement ... but in Confidence ... on the part of such Persons that no Increase of Rent would be required ... and some such Erections and Enclosures have been made since the decease of John William, Earl of Dudley.'¹⁹

¹⁵ See Section III, Chap. 1, Part D iii.

¹⁶ S.C.R.O. D260/M/F/5/19/12, Hatherton to Claughton, 3 July 1847.

¹⁷ Ibid.

¹⁸ D.P.L. 23/3, An Act for Enabling the Sale and Conveyance of certain Cottages, Gardens and other Improved Lands comprised in the Will of the Right Honourable John William, Earl of Dudley.

¹⁹ Ibid. p. 7.

To justify the purposes of the act, the preamble asserted that tenants had no right to sell buildings erected by them and an increase in rent or a compulsory eviction 'might be ruinous to them' as the great majority were

'for the most Part of a Condition not superior to that of common Labourers.'²⁰

The act granted powers of sale to Lord Ward so that

'Divers ... Persons so circumstanced ... (who) have signified their Desire to acquire a Title to the Fee Simple ... and to pay ... such a Price ... taking into Account the Outlay ... as shall be considered just ... under the Circumstance of each Case'

might purchase their property.

Schedules attached to the act listed 1,056 properties, mainly in the manors of Sedgley and Kingswinford, but with a minority in Dudley, Belbroughton, and Swindon. In area, the plots were very small: 99 per cent were under two roods, the remainder averaging one acre. Most of the ground rents were approximately 6/- per annum but individual rents ranged from 1/- to £2 10s. After the power to sell was granted, the chief land agent, John Maughan, moved quickly and sent out a circular to all cottage tenants on 30 October 1847. This informed the tenant of Lord Ward's intention to sell the property and that

'It is desired that you should have the first opportunity of purchasing.'²¹

A form was printed on the reverse of the circular which had to be handed in at the Priory Estate Office by 31 December 1847 signifying the tenant's wishes. Failure to comply would be taken as an indication that

'you decline to purchase and Lord Ward will deem himself at liberty to effect Sales as opportunities may offer to others and indifferent parties.'²²

In the event of his wishing to purchase, the tenant had to

²⁰ Ibid.

²¹ D.P.L. 23/13, Circular Concerning the Sale of Cottage Properties, 30 Oct. 1847.

²² Ibid.

appoint his own local land valuer.

The standard form asked for information concerning the tenant's name, address, valuer, area of the property, rent, names of undertenants if any, rents paid by them, when the house was built, and by whom. Typical of many forms returned to the office was one from Peter Turner, a boat builder, who owned a cottage in Can Lane, on an enclosed area of 106 square yards. His rent was 2/6 per annum. An undertenant, Thomas Smith, paid him a rent of 1/10 per week. Turner had built the cottage in 1832. This illustrates the way in which the estate had allowed small enclosures to be made by a copyholder at a nominal annual ground rent. While this enabled people to build their own houses cheaply - bricks and limestone blocks were readily available, it did not necessarily provide cheap accommodation for work people on the estate. Undertenants paid an economic rent to the copyholder. Loch had good reason to criticise this system from which the estate derived no direct benefit, while the dilapidated condition and excessive rents were not in the interests of the miners and ironworkers inhabiting the cottages.

Many, but not all of the estate's copyhold tenants, did opt to purchase their land. A total of 734 properties had been sold by 15 September 1854 and sales continued until 1926 when copyhold was abolished. Three record books were opened at the Priory Office after the act²³. One, begun in May 1848, recorded the sale of cottage properties until June 1946: a second recorded copyhold enfranchisements from May 1849 to January 1926, and the third listed the sale of property, other than cottages, from January 1850 to June 1948. As in the case of the local enclosure acts, copyholders could enfranchise their land and become freeholders on payment of a fine to the lord of the manor - and as Loch had forecast, many were

²³ D.P.L. 9/L.

prepared to do this. However, in at least 40 per cent of such cases, Lord Ward reserved his rights to minerals under the property. The extent to which he had already worked minerals in the area would determine this. Benbow, in his capacity as a solicitor, transacted much of the business at a handsome profit. Exclusive of stamp duty, his scale of charges was £1, where the purchase money was under £20, £2 between £20 and £50, £3 between £50 and £100, and £4 above that figure. Typical sale prices of the land indicate that the estate received a sum which would have taken many years to equal from the existing nominal ground rents:

No. 5. 29 May 1848, 38 square yards: James Eynon, tenant of Dwelling House at Gospel Oak, rent 3/- per annum, purchased for £12.

No. 10. 13 June 1848, 265 square yards: Richard Evans, tenant of Public House at Princes End, rent 3/6 per annum, purchased for £60.

No. 11. 13 June 1848, 418 square yards: James Furnivall, tenant of Dwelling House at Princes End, rent 2/- per annum, purchased for £55²⁴.

The fine for enfranchisement of copyhold land purchased was even higher: for example,

25 February 1850, Messrs. T. and I. Badger for lands in Lower Gornal, 16 acres 2 roods 18 perches, for £120.

15 September 1850, B. Parkes for 4 cottages and 2 nailshops in Sedgley, 1 acre 1 rood, £50.²⁵

Apart from the capital received from the sale and enfranchisement of cottage plots, the Dudley estate had freed itself from an embarrassing situation whereby most of the regular income from this part of the estate had gone elsewhere while any discontent at the bad living conditions might be levelled at the estate as the landowner. Presumably it earned a measure of goodwill from those copyholders who welcomed the opportunity to improve their title to the land. Although the estate had reserved the right to sell the land,

²⁴ Ibid. Sales of Cottage Property, 1848-1946.

²⁵ Ibid. Copyhold Enfranchisement Book, 1849-1926.

whether or not the tenant wished to purchase it, there is no evidence that the estate evicted tenants and undertenants by making a compulsory sale to third parties. This is borne out by the fact that considerable numbers of cottage plots remained on a copyhold basis down to 1926: the total declined down to that date as tenants applied to acquire the title to the land.

Loch's motives in urging the sale had been twofold: to secure capital and to end the practice of economic rents being enjoyed by middlemen: also to bring about an improvement in the general standards of accommodation. There was a growing criticism in general of the condition of many cottages on large estates:

'This concern was becoming common on many large estates in the 1840s, as efforts were started to put the rural house in order at the same time as criticism of urban slums was mounting.'²⁶

In many cases it produced a programme of cottage rehabilitation. Loch's desire for administrative efficiency reduced this problem for the Dudley estate which was, in any case, cushioned by the fact that the estate had not constructed the cottages and had no direct responsibility for their condition. He had earlier been associated with a similar policy on the estates of Lord Stafford in 1812 where

'the cottages were all in the hands of middlemen'²⁷ who sublet at a high rent. However, in this case, the cottage tenants were made direct tenants of the estate. On the Dudley estate - possibly because of the large number of dilapidated properties, the cottage tenants remained in an indirect relationship with the estate or purchased their independence, except where they remained undertenants to the middleman who was now the outright owner of the land. In

²⁶ F. M. L. Thompson, 'English Landownership: The Ailesbury Trust', Ec.Hist.Rev. 2nd ser. XI (1958), p. 128.

²⁷ Richards, op. cit. p. 198.

one sense, the Dudley estate - after 1847 - took advantage of the growing demand for housing in the area by enabling speculators to purchase their land and, presumably, erect more cottages. But, apart from the sale price of this land, no attempt was made to pursue a policy of urban property speculation on the part of the estate itself. Unlike other large estates, such as the Stanley estate in Bury and Liverpool²⁸, it did not seek to derive a large regular income from house rents in the Black Country. The earl's Will had granted the power to negotiate building leases for a period of 60 years: this was the one power in the Will which the trustees did not avail themselves of. This was not the case on other estates administered by the Dudley trust. For example, the estate was directly responsible for cottage maintenance on the Witley estate and, in 1839, spent £200 on the erection of cottages and £217 10s. 2d. on cottage repairs²⁹.

In spite of the uneconomic ground rent derived from cottage plots in the Black Country estates, the total income from this source increased steadily after 1768.

	£	s.	d.
1768	240	14	1
1810	540	10	2
1817	572	18	11
1836	797	9	3
1838	1,039	18	10
1850	1,227	11	11.

Cottage rents were received from other areas during the trust period as a result of the purchase of new estates at Hendwr, Witley and Kidderminster, but these receipts were less than from the traditional Black Country estate.

²⁸ D. Spring, 'The English Landed Estate in the Age of Coal and Iron, 1830-1880, The Journal of Economic History XI (1951).

²⁹ S.C.R.O. D260/M/F/5/19/5, Account of Mr. Matthews for Witley Estate, 1838 to 1845.

B. Great Rents

The extent and location of the various agricultural properties together with their efficiency, administration, and organisation between 1833 and 1845, have already been considered³⁰. Total income and the movement of rents on the various estates remain to be examined. In common with other landed estates, the Dudley estate allowed up to 10 per cent remission on farm rents during the 1840s and 1850s in order to keep the tenants, and to maintain the established rent unchanged. The agricultural crisis of 1850-2 was the sharpest for 30 years and, apart from the general policy of allowing 10 per cent remissions, some estates introduced produce rents³¹. Actual rent receipts tended to fall until after 1856. On the Dudley estate, the average rent per acre for agricultural properties on the fringe of the Black Country, had been 41/- in 1824³². By 1850³³, this had fallen marginally to 39/- per acre and a 10 per cent allowance was made in addition. Average figures for Staffordshire in 1834³⁴ were between £1 and £2 per acre: in 1851, the average rent was between 26/- and 28/-³⁵. The proximity of the large market in the industrial areas probably explains the higher rent on the Dudley estate.

On the traditional family estate in south Staffordshire and north Worcestershire, the total rent due from agricultural property remained fairly static during the period of the trust. This was because most of the available farm land had been divided up into particular properties before 1833 and, as the estate tended to purchase only mineral rather than agricultural land in the area, there was no significant change

³⁰ See Section II, Chap. 1.

³¹ F. M. L. Thompson, English Landed Society in the Nineteenth Century (1963), pp. 240-3.

³² See Section I, Chap. 2, Part A.

³³ D.P.L. 626/20, Lord Dudley's Great Rental, 1850.

³⁴ W. White, Directory of Staffordshire (1834).

³⁵ W. White, Directory of Staffordshire (1851), p. 54.

in the number of properties. Total rent due in 1833 was £17,896 15s. 11d.³⁶: by 1836, this had increased to £19,616 9s. 6d. - probably as a result of implementing Loch's advice on the need to equalise rents in view of the existance in 1833 of low rents agreed in less prosperous periods. Outlay for maintenance and improvements on the local landed estates amounted to £7,995 16s. 11d. - in addition to repairs, £1,420 0s. 7d., and the expenses of management,³⁷ £1,131 2s. 4d. Total rents due continued to rise until 1837 when they reached £20,163 4s. 11d. By the end of the trust in 1850, they had fallen slightly to £18,487 12s. 4d.³⁸ - probably as a result of some reduction in individual rents which fell, on average, from 41/- per acre in 1824 to 39/- per acre in 1850.

Agricultural rents were greatly increased after the purchase of the Hurcot, Kidderminster and Witley estates from Lord Foley at the end of the 1830s. In the first full year of possession, 1838, the gross rent due from the Hurcot estate near Kidderminster was £6,337 4s. 0d. Outlay was about £1,000 per annum. This followed the same tendency as the Black Country estate as the total due at the end of the trust in 1845 had fallen slightly to £5,954 12s. 4d. Further purchases of property at Kidderminster produced a rent of £1,680 and a net income of £1,480. With the purchase of the far more extensive Witley estate³⁹ in 1838, the total rent due was considerably increased - by up to £13,000⁴⁰. Net income was £10,000 per annum, but, because of the interest charge incurred in the purchase of this estate, actual receipts from the agent, Matthews, were usually around £2,750 per annum throughout the remainder of the trust. A similar overhaul of the rents was initiated here - as at

³⁶ See Appendix 9.

³⁷ Loch's Fourth Report on the Trust Accounts, 1836, p. 39.

³⁸ Lord Dudley's Great Rental, 1850.

³⁹ See Chap. 6 below.

⁴⁰ S.C.R.O. D260/M/F/5/19/11, Benbow to Hatherton, June 1838.

Dudley in 1835-6: in 1841 Matthews was paid £251 13s. for his 'survey of Great Witley and apportioning rent charge'⁴¹. The total rent due from Witley at the end of the trust remained approximately the same as at the time of purchase.

The Dudley trust, apart from receiving additional rents from new estates which it had purchased, also received the rents of agricultural estates in the Dee valley near Corwen and from Ednam in southern Scotland. Rents due from the Welsh estate at Crogen⁴² were £933 4s. in 1833. This again followed the pattern at Dudley, rising slightly at first - probably from an equalising up of rents, rather than the establishment of new properties. Rents due totalled £1,099 6s. 11d. in 1838 falling to £919 9s. in 1845. Additional small estates were purchased between 1837-8 in adjacent areas at Hendwr. This increased the total due from the Welsh estate to £2,240 1s. 10d. in 1838; net income was £1,700. Because of a slight fall in the total due from Hendwr, the overall rent due in 1845 was £2,032 19s. 0d. The Scottish estates at Ednam⁴³ were in rather a special position as Lord Ward was entitled to the rent himself - after his coming of age in 1838, and did

'not enjoy this property under the Will of the Earl of Dudley.'⁴⁴

Nevertheless, the trust administered the property until that time and the rent due in 1833 was £3,396 3s. To this was added the Glengarry estate purchased by Lord Ward making a total due from the Scottish estates of £6,601 3s. 3d. in 1836. Other properties from which the estate derived rent were the Jamaica estate which produced £4,415 7s. in 1833 - however this includes proceeds from the sale of rum by the estate itself, and Dudley House in Park Lane, London. This

⁴¹ S.C.R.O. D260/M/F/5/19/5, Matthews' Accounts for Witley, 1838 to 1845.

⁴² Ibid. Turnor's Accounts for the Welsh Estates, 1838 to 1845.

⁴³ S.C.R.O. D260/M/F/5/19/11, Benbow to Hatherton, 9 July 1836.

⁴⁴ Ibid.

was let to the Marquis of Conyngham for £1,600 per annum until the Marquis of Abercorn took out the lease in 1839 for £1,700. This property was valued for insurance purposes in 1836 for £25,300.

While the policies of Loch⁴⁵ ensured that the lax, inefficient and dilapidated condition of the Dudley estate in 1833 would be terminated and replaced by more progressive administration, the trust was denied the full advantage of his work because total rentals, after an early increase, tended to fall slightly on individual parts of the Dudley estate by 1845. However, this was not the result of inefficiency on the part of the trustees, but the influence of general factors which tended to produce difficult conditions for agriculture until rents began to rise again after 1856. Moreover, capital expenditure on improvements to farm properties and the introduction of improving leases would take time to produce benefits which the estate could reap in the form of increased rents: this occurred after the termination of the trust in 1845. Nevertheless, rents due on particular sections of the estate did not fall drastically and the purchases of new estate increased the total income of the trust from this source; Capital to purchase these large properties came mainly from mineral enterprise and helped to diversify the economic basis of the estates. Because of the purchase of additional estates, the total rent (gross) due rose from £18,829 19s. 11d. in 1833 to £51,426 19s. 8d. in 1850. These figures exclude the income from Dudley House and the Jamaica estates - approximately £6,070 per annum, and from the personal estates of Lord Ward in Scotland - approximately £6,601. Cottage rents came mainly from the traditional estates in and around the edge of the Black Country. These rose from £797 9s. 3d. in 1836 to £1,227 11s. 11d. in 1850, while an overhaul of the administration of these properties was carried out to the mutual benefit of the estate and the copyhold tenants.

⁴⁵ See Section II, Chap. 1.

Chapter 6. Investments

Under the terms of the late earl's Will, the trustees had a clear directive to pay the various charges set out in the Will: the residue of the annual income was to be

'accumulated by investment in the Funds or on real Securities in Great Britain'

or used to purchase

'freehold Estates situate in Great Britain or of Copyhold or Leasehold Estates conveniently to be held.'¹

Investment and the provision of capital was not a new practice of the Dudley estate: the provision of loans and the purchase of shares in the main local canals and turnpikes before 1833 has been considered and, at the time of the earl's death, there is evidence that large sums of capital were invested in government funds or securities. The purchase of real estate, as a form of investment, had largely concerned mineral property before 1833. However, John William, First Earl of Dudley, 1823-33, had begun to purchase landed estates elsewhere - in Wales and in Scotland². During the trust, the Dudley estate, in accordance with the Will, invested considerable sums of capital in government stocks and purchased extensive estates in Worcestershire and Wales which added to the rents received from the traditional estates in and around the fringe of the Black Country. However, the largest purchase, the Witley estate, was so costly that it created financial problems for the trustees in the short run. Investment by the trust in new transport systems, ironworks, collieries, and agricultural properties has already been discussed: this section will examine the way in which the

¹ S.C.R.O. D260/M/F/5/19/1, The Earl of Dudley's Will, 26 July 1831, p. 20. Subsequently referred to as The Will, 1831. See Section I, Chap. 3, Part A.

² See Section II, Chap. 1. - 323 -

trustees carried out the provisions of the Will in terms of the purchase of government stocks, other financial investments, and the purchase of landed property.

A. Bonds and Government Securities

There is some evidence to show that, at the commencement of the trust, the estate was enjoying interest on mortgages and bonds negotiated with several local individuals by the late earl. The rate of interest was five per cent - the usual rate for this type of loan, and the total interest amounted to £423. During the trust, this type of loan was not negotiated by the trustees who wanted more security for estate capital invested by them. Some small loans were negotiated in the form of shares in local enterprises which would be generally beneficial, such as the investment of £300 at 10 per cent in the Dudley Arms Inn and Market Place Shambles in 1855. The high rate of interest may reflect the price demanded by the trustees to overcome their reluctance to take risks.

However, there was no reluctance on their part to invest in government stock and public funds. Such investments by the late earl had produced a considerable income in 1833:

	£	s.	d.
1833 March 27. Dividend on 25,300 French Rentes, 5 per cent	486	16	2
May 9. Dividend on 10,600 Dollars Pennsylvania Stock	541	0	0
June 26. Dividend on 5,100 French 3 per cent Rentes	98	5	0
Sept. 25. Dividend on £24,000 Reduced Annuities	360	0	0
Dividend on £14,000 Consols	210	0	0 ³
	1,696	1	2

This total represents only the half yearly dividend. As stipulated by the Will, the trust proceeded to purchase only

³ Loch's First Report on the Trust Accounts, 18 July 1834.
Benbow's Account for 1833-4, p. 8.

those stocks issued in Britain, and, within the first year, sold not only the foreign but also the British stock. Capital realized by these transactions was £84,177 14s. 8d.

	£	s.	d.
1834. Jan. 30. Cash for sale of £14,000 Consols at 88 $\frac{5}{8}$ Brokerage and Commission deducted	12,390	0	0
Cash for sale of £24,000 Red. Annue. at 89 $\frac{1}{8}$ Brokerage and Commission deducted	21,360	0	0
Mar. 26. Cash for sale of 25,300 French 5 pr cent Rentes less charges etc.	20,800	0	0
Cash for sale of 5,100 French 3 pr cent Rentes less charges	5,241	2	2
Mar. 29. Cash for sale of 106,000 Dollars Pennsylvania 5 pr cent at 102 $\frac{1}{2}$	24,386	12	6 $\frac{1}{2}$
	84,177	14	8

Purchases of new British government stock were made with part of the capital realized from these sales.

	£	s.	d.
1833. Sept. 26. Purchase of 1,050-16-11 Consols	930	0	0
1834. April 1. Purchase of 22,160-13-4 Reduced 3 per cents	20,000	0	0
Purchase of 21,947-17-6 Consols	20,000	0	0
" " 5,486-19-4 Reduced 3 per cents	5,000	0	0
" " 5,427-8-2 Consols	5,000	0	0
May 19. Purchase of 329-4-4 Consols	305	15	3
	51,235	15	3

Further purchases were made in 1834-5 until the total stood at £119,294 14s. 6d. with £57,512 6s. 2d. invested in consols and £61,882 8s. 4d. in reduced annuities by January 1836: dividend for the half-year was £1,790 17s. 4d. Further capital was invested in these funds until the total stood at £153,733 9s. 2d. in June 1836: the total amount was then sold to purchase landed estates⁶ and produced a capital value of

⁴ Ibid. p. 10. This account shows a discrepancy in the amount of Pennsylvania stock held compared with the above account.

⁵ Ibid. p. 13.

⁶ Loch's Fourth Report on the Trust Accounts, 11 May 1838. Benbow's Account for 1837, p. 5.

£137,485.

		£	s.	d.
1836.	Oct. 28. For 46,942-0-2 Consols at 88½ less Brokerage etc.	41,485	0	0
1837.	June 1. For 27,744 Consols at 89½ less Brokerage etc.	25,142	14	0
	For 77,944 Reduced at 89½ less Brokerage etc.	69,857	6	0
	June 29. For 1103-9-0 Reduced at 90½ less Brokerage etc.	<u>1,000</u>	<u>0</u>	<u>0</u> ⁷
		137,485	0	0

The estates purchased were in Wales and Worcestershire.

Throughout the trust period, such stocks were purchased and sold again wherever the need for liquid capital arose as more land was purchased. Apart from the income received from these investments, they also served the valuable purpose for the trustees of providing the greatest possible security for estate profits in the short run. Their unwillingness to entrust such large sums of money to the banks⁸ was also a factor in this matter. At the end of the trust in 1845, the stock held by the estate was £10,000 of new reduced annuities at 3½ per cent purchased at the time of issue in 1843 for £10,099 15s., and £35,000 of exchequer bills purchased in 1843 for £35,577 10s.⁹

It was not until 1856 that the final accounts were presented and audited: until then, the trustees had to continue to administer estate revenue arising out of their activities. The legal responsibilities of the situation caused considerable anxiety and divided opinion - especially after the official termination of the trust in March 1845. Hatherton consulted I. W. Craig, a barrister of Lincoln's Inn, who advised him to see that

'all money belonging to the trustees should stand in their names' -

⁷ Ibid.

⁸ See Section III, Chap. 1, Part C.

⁹ Loch's Final Report on the Trust Accounts, 1849. Benbow's Account for 1845.

not Lord Ward's and that they should retain 'nothing in the Bank' but invest all income

'in proper securities which should not be left to anyone's discretion; but be made by an order.'¹⁰

It is evident that Benbow and Exeter disagreed with their fellow trustee on what investments should be made - they favoured exchequer bills while Hatherton wished to purchase government stock. Craig wrote to Hatherton in December and criticised the indecision of the trustees:

'If the investment had been made immediately after the meeting of the Trustees, it might have been made in Consols, which were then open, and which are always a more proper investment than $3\frac{1}{4}$ or 3 per cent Reduced. The Bishop had no power to relieve Mr. Benbow from the obligation.'¹¹

In December 1846, the exchequer bills were sold and all existing capital, amounting to £146,000, was invested in reduced annuities at $3\frac{1}{4}$ per cent. Shortly afterwards, when capital was required for the payment of interest on the Witley purchase, Benbow took the opportunity of pointing out that

'if the Funds continue at their present prices ... the Estate will sustain a loss of more than £13,000. I rejoice to reflect that I was opposed to this Investment and deeply regret that I was in a Minority especially as the purchase of Exchequer Bills would not have exposed any Individual to the slightest Inconvenience or Loss.'¹²

In fact, the sale of stock realized £126,512 10s. in June 1847.

Lord Ward's former tutor and friend, Claughton, also attacked Hatherton over this matter and accused him of causing a loss of £14,000 to the estate. Hatherton retorted that the accusation applied to the Bishop of Exeter also and that

'you are very imperfectly informed on the subject.'¹³

Their main error, he claimed, was due to the delay caused

¹⁰ S.C.R.O. D260/M/F/5/19/12, Hatherton to Exeter, 18 Oct. 1846.

¹¹ Ibid. Craig to Hatherton, 22 Dec. 1846.

¹² Ibid. Benbow to Hatherton, 26 April 1847.

¹³ Ibid. Hatherton to Claughton, 13 July 1847.

by Benbow's failure to

'render to the Auditor Six Year's Accounts: we had no knowledge of the general state of the Trust Affairs.'¹⁴

At their meeting in December, 1846, Hatherton and Exeter discovered that Benbow had loaned Lord Ward

'£35,000 of our Money ... and that £50,000 was lying in one Country Bank, large sums in two others, besides sums in Gosling's (bank) and in a Branch of the Bank of England ... without any Security ... A Crash in the Money Market was expected, And although the Funds might fail ... the Country Banks might Creak, and the Trustees would be responsible for every shilling lost by imprudent Custody. I cannot here go into the reasons which induced the Bishop and myself to concur in thinking the Exchequer Bills an unfit Security ... and order every shilling belonging to the Estate into the funds.'¹⁵

It seems that, with the cessation of the trust in March, 1845, Benbow had ceased to invest estate profits in government stock and was letting capital accumulate in the banks and allowing Lord Ward access to it. Apart from the soundness of Craig's advice on this matter, the trustees had agreed early on that only a minimum balance should be retained in the various bank accounts¹⁶. As estate mineral profits were particularly high in the period 1846-7, Hatherton's concern was justified. Further profits for which the trustees were responsible, mainly from the collection of debts outstanding in March, 1845, were invested in the funds until the trust accounts were wound up in 1856.

Throughout the period of the trust, the directive contained in the late earl's Will, to invest estate profits in government securities, had been faithfully carried out. This proved to be a valuable policy not only from the interest earned for the estate, but also as a safeguard for such large sums of money, and for the trustees themselves. Their uncertainty after the end of the trust underlines the precarious position which trustees of large estates occupied

¹⁴ Ibid. See Section III, Chap. 1, Part D.

¹⁵ Ibid.

¹⁶ Ibid.

and the inadequacy of the existing banking system as a secure deposit for trust funds.

B. Purchase of Landed Estates

In one respect, the directive of the Will, that land purchased by the trust should be incorporated into the administration of the settled estates, was unusual: purchased properties usually remained outside of the settled estate¹⁷. During the period of the trust, Professor F. M. L. Thompson has shown that, on the basis of auction sales - which accounted for about 50 per cent of the land sold,

'the volume of land transfers turned downward in the early 1830s, and there is some suggestion that from then until the end of the 1840s the land market was generally slack and dull, with one bright interval of revived business in 1838-41.'¹⁸

There was a particular depression in values in 1835-7. This trend would work in the interests of the trustees who were bound to invest estate profits in the purchase of real estate and, for much of the trust period, the Dudley estate was operating against the national trend in this respect. However, at the time of the largest purchase - the Witley estate, the purchase cost may have been increased in view of the temporary increased demand for land in 1838-41. There had been a steady decline in the total value of land sold by auction from £5,768,000 in 1825 to £2,893,000 in 1833: the figure for 1840 was £4,229,000¹⁹: these figures tended to reflect a slackening of demand rather than of supply. Purchase over a period of 23 to 27 years was usual during this slack period: with a rising demand for land after 1853, purchase over 35 to 40 years was common.

¹⁷ F. M. L. Thompson, English Landed Society in the Nineteenth Century (1963), p. 68.

¹⁸ F. M. L. Thompson, 'The Land Market in the Nineteenth Century', Oxford Economic Papers, IX (1957), pp. 291-3.

¹⁹ Ibid. p. 288.

Although general conditions in the land market favoured the trustees in their policy of land purchase, Downing was, as in most matters, an obstacle in that he favoured the purchase of estates only within the vicinity of the traditional Black Country estate²⁰. To some extent, his fellow trustees were prepared to purchase estates in the vicinity of Dudley. One such property was the Oak Farm estate in Kingswinford belonging to Sir Stephen Glynne. This property of 97 acres was known to contain extensive minerals which were, as yet, only partially developed:

Farm malt house, flour mill and arable land	£6,550
Value of the mines including engine	<u>14,500</u> ²¹
	21,050

Because of its proximity to Himley Hall, Downing wished to purchase it to prevent Foster from adding it to his adjacent mines and ironworks at Shut End. Although Downing subsequently made the highest bid in a public auction, £35,000, the property was not sold as Glynne was asking £50,000. The trustees' fears were realized in 1836 when Glynne formed the Oak Farm Iron Works Company, one of the shareholders being his brother-in-law, W. E. Gladstone, and constructed furnaces on the site. Hatherton noted that, as a result,

'Himley Hall is rendered uninhabitable.'²²

Lord Ward himself demanded that the trustees should purchase the property - but, as it was no longer for sale, Benbow commented that

'I really do not know what step to take' while Hatherton hoped that something might be done if the price of

'Iron should materially fall, which I incline to think it soon will.'²³

It is possible that the inconvenience to Himley Hall caused

²⁰ S.C.R.O. D260/M/F/5/19/11, Downing to Littleton, 17 Oct. 1833.

²¹ Ibid. Benbow to Littleton, 12 May 1834. Survey for the estate by W. Fowler.

by the furnaces, coke ovens, and engine houses at Oak Farm may have given some impetus to the search for another estate which might become the family residence. Certainly Lord Ward regarded Witley in this light when it came on the market in 1838.

If they were thwarted for the time being in their hopes of purchasing the Oak Farm estate, the trustees did successfully negotiate the purchase of several other small mineral properties in the Black Country which were either adjacent to the Dudley estate or lay in the new areas which were being exploited for minerals in the 1830s. In 1833 they purchased the copyhold of part of an estate and mine at the Thorns near Stourbridge for £376: also a property from J. B. Gibbons for £4,666. Another small property of 9 acres was purchased for £2,890 when Portway Hall²⁴ and estate were sold. This consolidated the trustees' access to mines on the Rowley Regis side of Dudley. Further mineral purchases of freehold land were from William Matthews at Shut End, £5,177 in July 1838 and £3,000 for mineral land from Messrs. Walker, Philip and Williams which was adjacent to the trust mines at Bradley Colliery.

Negotiations were commenced in 1836 for the purchase of the glebe belonging to the vicar of Dudley. This area of 168 acres had been allotted to the living by the Dudley Enclosure Act²⁵ but the mines were reserved to Lord Dudley as lord of the manor. The fact that the estate had begun to work the coal under his land may have persuaded the vicar to sell it:

'he proposes to sell all the Lands and to raise £20,000 at least ... to be invested in the purchase of Estates

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- 22 S.C.R.O. D260/M/F/5/26/13, 30 June 1836.
23 S.C.R.O. D260/M/F/5/19/11, Hatherton to Benbow, 11 July 1836.
24 D.P.L. 14/1, Particulars of the Sale of Portway Hall,
22 Mar. 1837.
25 S.C.R.O. D260/M/F/5/19/11, Benbow to Hatherton, 14 Feb. 1836.

'in Worcestershire ... to be permanently annexed to the Vicarage. For this he must have the Consent of the Patron and Bishop of the Diocese.'²⁶

Lord Dudley was entitled to the minerals without being liable to pay compensation for damage - this right had been allotted to him by all the local enclosure acts: he was also patron of the living. Downing pointed out that subsidence would reduce the value of the surface land to two-thirds of its present value and proposed that the trustees should purchase it. While agreeing with this, Hatherton believed the true value to be in the region of £9,000. The young Lord Ward, again showing his business sense and his fairness, confirmed his support for this plan observing that the vicar should

'receive a liberal compensation ... although I fancy he has no right to claim it.'²⁷

An act of parliament was secured in May which authorised the sale.

This episode was similar to the purchase made in 1826 of the glebe land belonging to the rector of Kingswinford. In the search for new minerals, the estate wished to exploit a seam of thick coal which passed under the ancient church of Kingswinford: as this was likely to bring about the collapse of the church, Lord Dudley, patron of the living, introduced a bill to authorise the sale of the land to him. Downing, described in the act as 'a skilful Mine Valuer'²⁸, valued the property of 38 acres at £19,290 lls. 3d. Under the terms of the act, 10 per cent of the purchase money was

'to be applied towards the Erection of a new Church'²⁹.

This was built at Wordsley and, on the death of the present rector, it became the mother church of the parish of

²⁶ Ibid.

²⁷ Ibid. Lord Ward to Hatherton, 18 Mar. 1836.

²⁸ B.H.P.L. 2/8, An Act for Effecting a Sale of Part of the Glebe Lands belonging to the Rectory of Kingswinford to the Right Honourable Lord Viscount Dudley and Ward, 26 May 1826.

²⁹ Ibid. The old church did not collapse and remains standing to-day.

Kingswinford. The Kingswinford Colliery and the Kingswinford Railway were developed on this property.

The Welsh estate at Crogen in the Dee valley near Bala, purchased by the late earl, was added to by the trustees who purchased adjacent properties until they owned land along a continuous stretch of the river almost from Corwen down to Bala, a distance of about 13 miles. However, at the outset, the Bishop of Exeter was opposed to the purchase of further property in the area and wanted to sell the Crogen estate. But, as Lord Dudley had purchased it 'as a matter of fancy'³⁰, the bishop did not insist on the sale. Benbow strongly favoured the purchase of the Hendwr estate lying between Crogen and Corwen pointing out the fact that, apart from adding to the agricultural property of the Dudley estate in the area,

'of the existence of Mine there can be no doubt - and the price has been considered both by Mr. Smith and Mr. Downing.'³¹

This is presumably a reference to the existence of limestone which might be quarried to supply the demands of the iron trade and agriculture in the area. A survey by H. C. Wright, a London valuer, provides a detailed picture of the estate which, comprising the manor of Hendwr, was 'about 30 miles round'³². The manor contained several townships and

'10,000 Acres of fine Grouching Ground, ranging to the Summit of the Berwyn Mountains - over which ... the Lord ... has the exclusive Right of Sporting.'

The estate itself consisted of 1,097 acres of arable, meadow, pasture and woodland which had a gross annual value, including the sheep walks, of £904 3s. 10d. The annual value

³⁰ S.C.R.O. D260/M/F/5/19/11, Exeter to Hatherton, 5 Dec. 1835.

³¹ Ibid. Benbow to Hatherton, 7 Dec. 1835.

³² Ibid. Summary and Valuation of a Freehold Manor and Estate called Hendwr in the Parish of Llandrillo in the County of Merioneth, 24 Feb. 1836. By H. C. Wright, 40 Tavistock St., Covent Garden. His fee was £49 14s.

of the

'Rights of Sporting, Fishery, Estrays and Chief Rents' was £100. After deducting about 7½ per cent - £74 3s. 10d. for repairs and expenses, the net income would be £930. Wright felt that purchase over a period of 30 years was justified at '£3 6s. 8d. per cent': this, added to the value of the timber, £3,500, made a purchase price of £31,400. An additional £2,000 could be added for improvements from enclosure

'of the best Mountain Land, Planting and chance of Minerals'.

As the land had sporting rights over the adjoining Dudley estate at Crogen, Wright assessed the total value at £35,000. Communications were good as the Dee valley turnpike road ran through the property and, if minerals were quarried, there was the

'prospect of selling lime in Corwen at £1 per waggon of 60 bushels.'

Colonel Passingham, the owner of the estate, fixed the price at £40,000: ultimately, perhaps because of the particularly low demand for land 1835-7, the property was purchased for £35,000. On the basis of the area of the actual estate itself, and, excluding the potential value from improvements, this was about £25 4s. per acre. Additional small properties were bought from Thomas Kenrick, Sir Watkin Williams Wynne, and John Davies in the area of Llanddersel and Llandrillo. Also, the Cross Keys Inn at Llandrillo was purchased - presumably to serve the purposes of administration and rent collecting, as on the other Dudley estates. These small properties were purchased for a total of £11,861 11s. 2d.³³ As a result of these activities, the trustees now held a block of land in the Dee valley containing arable land, but mainly pasture, with mineral and

³³ Loch's Third Report on the Trust Accounts, 1837, p. 27.

sporting rights over an area of 10,000 acres. There was the prospect of marginal improvement for pasture along the lower mountain slopes and the chance to quarry the limestone for commercial profit.

The second area where property was purchased in 1836-7 was much more acceptable to the Bishop of Exeter, although still too distant for Downing's approval: this was Lord Foley's estate at Hurcot near Kidderminster for £133,000. An initial deposit of £12,000 was paid in October 1836³⁴. Another portion of the Foley estate near Kidderminster was purchased in 1837 for £89,000. These transactions and the debt charges incurred by Lord Foley, which probably led to his decision to dispose of large sections of his estate, are set out in Benbow's account for 1836-7.

Payments

	£	s.	d.
1836 Oct. 3. Lord Foley deposit upon £133,000 for the Hurcot Estate	12,000	0	0
1837 June 2. The Rock Assurance Co. their Mortgage upon the Estate	70,000	0	0
Mr. Dawson's Representatives, their Mortgage	25,000	0	0
Henry Talbot Esq., his Mortgage	7,000	0	0
Lord Foley's Trustees	15,500	0	0
Lord Foley	<u>3,560</u>	0	0
	133,000		
Interest on the above purchase money to the 12th		<u>659</u>	<u>18</u> 4
		133,659	18 4
Feb. 14. Lord Foley's Deposit upon £55,500 agreed for part of his Kidderminster Estate (Oldington)	5,500	0	0
June 27. His Lordship's Deposit upon £33,500 agreed for a further part of his Kidderminster Estate	<u>3,500</u>	0	0
		9,000	0 0 ³⁵

Both estates were again surveyed by Wright. Benbow had been particularly keen to purchase these properties

34

Loch's Fourth Report on the Trust Accounts, 1838, p. 27.

35

Ibid.

'next to Kidderminster because of political interest in the Borough'³⁶.

The slackness of the market in land, 1835-7, may have worked in the interest of the Dudley estate on this occasion also: moreover, the trustees were in the fortunate position of being able to pay off a considerable amount of the capital value of the various land purchases because their sale of government securities had realized £137,485 in June 1836. However, some debt charges were incurred by the trustees:

18 Jan. 1839.	Paid Lord Foley half a year's interest at 4 per cent of £50,000, the remainder of the Purchase Money of part of the Kidderminster Estate due Xmas last	£1,000
30 June	Ditto	1,000 ³⁷ .

From the above accounts it seems that the Welsh and Hurcot purchases were probably paid for outright, and that the main debt was incurred over the two portions of the Kidderminster estate. An initial deposit of £9,000 was made on these properties in 1837 and the balance of £80,000 was paid in June 1839³⁸.

Matthews, the land agent for the newly purchased Worcestershire estates, wanted to purchase woods in Bewdley Forest. Benbow was opposed to this and suggested that

'the Severn should be the limit beyond which we should not suffer ourselves to go.'³⁹

All of the purchases from Lord Foley were on the eastern side of the Severn - but, the largest single addition to trust property, the Witley estate, lay to the west of the river. Benbow probably dropped his opposition in view of the desirability of this particular estate and the growing need to secure an alternative residence to Himley because of the

³⁶ S.C.R.O. D260/M/F/5/19/9, Benbow to Hatherton, 15 April 1837.
³⁷ Loch's Fifth Report on the Trust Accounts, 1839.
³⁸ Benbow's Account for 1838, p. 35.
³⁸ Loch's Report on the Trust Accounts from June 1838 to 1849.
³⁹ Benbow's Account for 1839.
³⁹ S.C.R.O. D260/M/F/5/19/9, Benbow to Hatherton, 15 April 1837.

inconvenience caused by the Oak Farm furnaces. His own political aspirations may also have been a factor.

When this estate was first offered for sale in December 1837, it was valued by John Hodgetts Foley at £680,000:

Witley Estate comprises 9,700 acres in the Parishes of Great Witley, Great Skelsey, Martley, Holt, Droitwich and Oldswinford.

Gross Rental about	£13,000 per Annum	£425,000
Livings		20,000
Bewdley Forest		10,000
Witley Court, Park, Timber and Deer		150,000
Woodley estate, about 1,000 acres		45,000
Timber except the Park		<u>30,000</u>
		680,000
	Deduct Mortgage	<u>130,000</u>
		550,000 ⁴⁰

Foley proposed that the sale would be subject to a mortgage to the Rock Assurance Company and that, after an initial payment of £70,000, yearly payments should be made of £50,000 at 4 per cent commencing on 6 March 1841 until 6 March 1845, by the trustees, and £40,000 per annum thereafter by Lord Ward for a further ten years. This would spread the purchase over 15 years - at a time when the average period was between 23-7 years. One of the many problems created by the proposed purchase was that an outlay of £680,000 would have to be spread beyond the termination of the trust: this involved securing permission from chancery and from Lord Ward to pledge his income after 6 March 1845. Lord Ward was very anxious to secure the property in spite of the 'personal sacrifice' he would make after inheriting the full title to his estates as

'it is an offer such as will never be in my power either to accept or refuse again in Worcestershire and scarcely in any other ... I prefer it to the Duke of Norfolk's place at Worksop. At Witley everything has been first

⁴⁰ S.C.R.O. D260/M/F/5/19/11, Terms Proposed by John Hodgetts Foley for the Sale of the Witley Estate, 19 Dec. 1837.

'rate, and could be so again - neglect, total neglect is the thing most observable there - and this only in the grounds - the House tho' on ugly one being in perfect repair.'⁴¹

Hatherton also favoured the project on the grounds that

'Nothing can be more desirable than the locality of this Property, nor more opportune than the offer of it.'⁴²

Several plans were drawn up to discover the best manner of meeting regular payments and interest charges on the purchase. One of the main problems was that, in view of Smith's current reorganisation of the mines, which involved leasing the pits, future revenue from this source was uncertain. In February 1838, Benbow submitted the following forecast of income as a basis for discussion.

	£	s.	d.
<u>Mineral Income</u>			
Minimum Royalties of Leases Settled	9,677	0	0
Do. of Leases not completed	13,500	0	0
Do. for Mines in Treaty only	4,900	0	0
Average of Royalties for 1837 on Mines worked by Tenants at Will	7,623	12	6
Estimate of Profit on Mineral Concerns in Hand	14,400	0	0
Rents of Do. Kingswinford Railroad	3,000	0	0
	559	7	6
	53,300	0	0
Maximum Royalties (suppose)	15,000		
	68,300	0	0

Mines to be let extent of profit uncertain?

<u>Estate Income</u>	£	s.d.	<u>Charges</u>	£	s.d.
<u>Receipts</u>					
Himley	18,509			5,000	
Witley	14,000			3,000	
Crogen (all Welsh estate)	2,000			300	
Hurcot	6,000			1,000	

⁴¹ Ibid. Lord Ward to Hatherton, 16 Feb. 1838.

⁴² Ibid. Hatherton to Benbow, 6 Feb. 1838.

<u>Estate Income</u>	£	s.d.	<u>Charges</u>	£	s.d.
Broome (Kidderminster)					
	1,680			200	
Mines (as above)	53,300		Lord Ward	8,000	
Dudley House and Jamaica Estates	4,000		Lady Ward, Annu- ities	4,800	
Interest on Canal Shares	1,350				
	<u>100,839</u>			22,300	
Annual Surplus	78,539				43

To enter into an arrangement to pay £50,000 per annum, plus interest, on the outstanding capital sum was a gamble which the trustees felt reluctant to take in 1838. Eventually, it was decided to purchase the property after Lord Ward agreed to pay off the outstanding balance in March 1845 and a survey of the Witley Court estate itself had been submitted to the trustees.

<u>Quantity of land</u>				<u>Value</u>	
A	R	P		£	s.d.
427	2	13	Timber, Woods, Plantations and Sheep Walks	72,810	
11			The Mansion, Pleasure Grounds and Gardens	35,000	
484	2	28	The Park and Timber thereon	66,464	
25			The Pools	2,500	
86	1	32	Ornamental Grounds and Plantations	22,428	
			Fixtures	500	
			The Deer	800	
1,519	2	19	The Farms and Timber thereon	82,298	
			The Advowsons	12,900	
<u>2,554</u>	<u>1</u>	<u>12</u>	Total Quantity	Total Value	£295,700

This survey only covered the area around Witley Court itself and excluded those parts of the Witley estate scattered over the counties of Herefordshire, Worcestershire and Shropshire: the agreed purchase price for the whole estate was £667,939.

⁴³ Ibid. Benbow to Hatherton, 13 Feb. 1838.

⁴⁴ Ibid. Mr. Robins' Valuation of Witley Court.

On this basis, the cost per acre of farmland would be £54 6s.: this seems very high but does include the value of timber, which was extensive throughout the area, and buildings. Benbow was particularly anxious that Lord Ward should be quite clear about his commitment:

'If he should unfortunately become embarrassed, he would blame all parties for having deprived him for a time of a portion ... of his income.'⁴⁵

It was with this prospect in mind that Benbow reminded Lord Ward that his gambling debts stood at £16,000 and urged him not to renew his subscription to Crockfords⁴⁶.

The financial arrangement was that the trustees should pay £331,000 of the total cost of the Witley estate by March 1845: an initial payment of £55,000 was made in June 1839, and annual payments of £50,000 were made commencing in June 1841.⁴⁷ In addition, interest was paid on the outstanding debt at 4 per cent. Lord Ward contracted to pay the balance of £336,939 within ten years by annual instalments of £40,000 - commencing in March 1845: until then he was to pay 4 per cent annual interest on this debt which amounted to £13,477 11s. 2d.⁴⁸ The dangers of the situation soon became evident: estate revenue slumped with the decline in the iron trade 1841-2, as debts owed to the Dudley estate for minerals purchased mounted, while Lord Ward further complicated the situation by borrowing £15,000 to pay his gambling debts and also contracted to purchase the Invergarry estate in Scotland for £95,000. He did this on the basis of an income of £9,000 from that portion of the Witley estate which he had contracted to purchase, £2,500 from the Ednam estate - which he enjoyed in his own right as it had been excluded from the trust by the late earl's Will, and £2,200 income from the Invergarry estate. In addition, he received an annual income

⁴⁵ Ibid. Benbow to Hatherton, July 1838.

⁴⁶ Ibid. Benbow to Ward, Dec. 1838. See Section III, Chap. 1, Part B ii for the relationship between Lord Ward and his trustees.

of £8,000 under the terms of the Will. Although he might claim the right to make this purchase out of his own income, the fact remains that his total net income was £21,700 while his commitments, in terms of interest payments, totalled £19,016 3s. 10d.: the trustees, especially Hatherton, felt obliged to assist him. Benbow, who always took a high moral line with the young Lord Ward, felt that he should sell Ednam to pay off his debts: this was a vain hope.

At the end of the trust in March 1845, even the trustees had got into arrears over the payment of interest and annual instalments to Lord Foley. Foley claimed that the outstanding sum was £130,000 while the first payment of £40,000, due from Lord Ward in March, 1846, had not been received - in addition, 'postponed payments of Interest amounting to £45,000 were also due from him⁴⁹. Apart from the years 1841-2, there was no reason why the trustees' payments should be so far behind - probably, the instalments for those two years had been deferred for the time being in view of the economic depression in the Black Country. Fortunately, the boom conditions of 1847, together with the recovery of debts outstanding from local ironmasters, enabled the trustees to meet their commitment to Lord Foley while Lord Ward was able to maintain his payments until the purchase was completed.

During the course of the trust, the terms of the Will, with regard to land purchase, had been faithfully carried out. Property purchased was not concentrated in any particular area: a minority only was mineral land and the bulk was agricultural land of all types:

⁴⁷ Loch's Report on the Trust Accounts from June 1838 to 1849, Benbow's Account for 1839.

⁴⁸ S.C.R.O. D260/M/F/5/19/11, Benbow to Hatherton, 13 Dec. 1841 Statement Showing the Income and Expenditure of the Estates of Lord Ward and of the Trust.

⁴⁹ Ibid. Lord Foley to Hatherton, 8 Sept. 1846.

Local mineral property:	1833-45	£16,109
Dudley glebe (mineral)	1836	9,000
Hendwr (agricultural, sporting, and mineral)	1836	35,000
Properties in Llandrillo (agricultural)	1837	11,861
Hurcot	" 1836	133,000
Kidderminster	" 1836	89,000
Witley	" 1839 (by trustees)	331,000
Kidderminster and Dudley	" 1846	<u>26,000</u>
Purchased by the trustees		<u>650,970</u>
Witley	1839 (by Lord Ward)	336,939
Glengarry	1841 "	<u>95,000</u>
Purchased by Lord Ward		<u>431,939</u>

This represents a total land value of £1,082,909 acquired out of the income of the Dudley estate, all of which became the property of Lord Ward when he assumed full possession of the estate in March 1845, although final payment on outstanding debts was not made until 1854. On the basis of Benbow's assessment of income in 1838, when considering the feasibility of the Witley purchase, all of the agricultural properties offered a reasonable return on capital in the long run - with the possible exception of the Dee valley estates. However, the sporting value and mineral potential would offset the limited return from agriculture. Witley Court itself provided a very suitable residence as an alternative to Himley and the mineral properties purchased in the Black Country served to render the exploitation of existing minerals and shafts more profitable. All of these purchases were, however, intended as capital investment under the terms of the late earl's Will although, in the short term, the heavy outlay on the purchase of landed estates was an uneconomic use of capital compared with returns from mineral property. The other form of investment which the Will laid down - government securities, served the double function of

enabling the trustees to find a secure deposit for estate revenue while allowing them to realize these assets quickly should the need arise. In this sense, the two forms of investment were complementary, as illustrated by the fact that large sums of capital were made available for the purchase of property in 1836-7, thus reducing debt and interest charges to a minimum. The only transaction which involved the estate in debt, to any considerable extent, was the Witley purchase. The fact that this subsequently produced financial embarrassment was the result of circumstances beyond the trustees' control - the slump of 1841-2 and Lord Ward's rash actions, rather than an error of policy on their part. In the long run, the purchase of landed estates which were not linked to the iron and mineral trades of the Black Country, proved a better investment as mineral property values declined in that area after the 1880s.

Conclusion to Section II

Within a remarkably short space of time, the trustees had transformed the economic condition of the Dudley estate in all aspects. This was all the more creditable because the period 1833-45 was generally one of depression or mediocre prosperity, with the exception of the years 1834-6 which were fairly prosperous - although agriculture was depressed - and 1843-5¹. Although there was mounting criticism in the 1840s which demanded 'free trade in land'² to free the great estates from the supposed inhibiting effect of strict settlement on economic development, no such criticism can be levelled at the effects of the first earl's Will and the work of the Dudley trust. Stagnation and dilapidated properties on the agricultural estates had been replaced by sound leases, the rationalisation of farm units and rents, and the expectation, in the long run, of an increased rental. The growing concentration of the iron trade in the Black Country had been linked to estate interests by the granting of leases of land and minerals to ironmasters. Moreover, the rational step had been taken of integrating the estate's activities by producing pig iron on its own account at Coneygre and the New Level. The final step - the production of finished iron, was taken shortly after the termination of the trust.

It was in mineral enterprise that the greatest increase in capital investment and revenue occurred. The haphazard working of 'broken mines' and sections by tenants at will, was

¹ Report of the Poor Law Commission, 1909, table showing the trade cycle, 1830-79.

² F. M. L. Thompson, 'English Great Estates in the Nineteenth Century', Int. Conf. of Ec. Hist. (1960), p. 389.

replaced by leases of extensive minerals on royalty. At the same time, estate mineral production was stepped up to the extent that limestone, coal and ironstone from the Dudley estate once more secured a dominant share of the Black Country market. Total capital invested in industry and mines rose from £66,956 9s. 8d. in 1837 to £219,990 14s. 11d. in 1847. Real profits in terms of net income expressed as a percentage of gross income also increased: on estate operated pits it increased from 12.3 per cent in 1836 to 33.6 per cent in 1847, and, on all mineral and industrial operations and leases, from 26.7 per cent to 64 per cent. On the basis of these figures, it would seem that the rise in the ratio of net income to gross income was smaller than the percentage increase in capital invested. This was because recent heavy expenditure on the extension and modernisation of the New Level Furnaces in 1844-6 had not yet begun to produce its potential income. Income from leased minerals expressed as a percentage of total net income decreased from 54.5 per cent in 1836 to 47.4 per cent in 1847, reflecting the rise in the level of activity in the estate pits. Total net income from all industrial and mineral activity on the estate rose from £36,911 13s. 10d. in 1833 to £157,990 in 1847.

Complementary to this expansion of estate activity was the involvement of the trustees in the improvement of local transport systems. Apart from associating with public projects such as the railway schemes, the estate extended its own private facilities by the construction of the Pensnett Canal and the Pensnett Railway. By 1845, it was in a far better position to exploit the market for minerals and pig iron on both sides of the Dudley ridge - wherever the opportunity arose, and had access to more distant markets via traditional canal links and the new railways.

Estate property in the form of copyhold cottage plots was also overhauled by Lord Ward's Estate Act of 1847. This was desirable because of the doubtful legal relationship between the estate and cottage occupants, and the fact that most of the income arising from this source went to middlemen who had erected cottages on the plots. The decision to sell the land had good and harmful repercussions because, on the one hand, it enabled copyholders to secure the freehold, while on the other hand, it placed hardship on undertenants who may have become more exposed to the exploitation of their landlords who had acquired absolute control of the property. Their decision not to exploit the growing demand for housing in the area was the one provision of the Will not put into operation by the trustees: under the Will, building leases up to 60 years could be granted. However, to the extent that cottage plots were sold, the estate secured an income from this source. Total cottage rents did not increase to any great extent during the period 1833-45. The total of agricultural rents due did increase considerably from £20,099 14s. 2d. in 1833 to £41,200 11s. 4d. by 1845 - this was mainly the result of the increase in the size of the estate: average rents per acre tended to decline marginally over the same period.

The investment policy pursued by the trustees fulfilled the intentions of the Will. Government stocks were purchased to the total of £153,733 9s. 2d. by 1836 of which £84,177 came from stock inherited by the trustees. This was sold in 1837 to provide liquid capital for the purchase of new estates. Investment in securities safeguarded not only the Dudley estate's income but also the trustees at a time when such large sums of capital might suffer from a bank collapse. This procedure enabled them to provide the capital sum for the purchase of all estates, up to the Witley purchase of 1839, without incurring debts and interest charges. The purchase

of extensive property by the trust was in the interests of the Dudley estate, in spite of temporary financial difficulties in 1841-5 which were occasioned by circumstances rather than maladministration. Market conditions probably worked in favour of the trustees as demand for land was generally slack throughout the period. As a result of their policies, the trustees had increased the total net income of the Dudley trust from land, industry and minerals from £49,001 in 1833 to £184,390 in 1847. Total income would be even higher as these figures exclude revenue from canal and other investments. It was on this sound financial basis that Lord Ward assumed full control of his property in 1845 and the Dudley estate was able to profit to the full from the peak reached by the Black Country iron trade in the 1850s. In the long run, the seeds of regional decline, which set in after 1860, took longer to affect the Dudley estate and enabled it to resist, as well as channel, the forces of change in its own interest because of the dominant position which it held in the economy of the area.

SECTION III. THE ADMINISTRATION AND ORGANISATION OF THE
ESTATE, 1833-1845

Introduction

The problems which evolved with the expansion of the variety and scale of economic activities during the period of rapid development between 1774 and 1833, have already been considered. In general these problems had only been partially solved, before 1833, to the extent that systems of accounts were divided up to distinguish between the different sectors of estate enterprise - land rents, cottage rents, minerals, and investments - and certain contemporary advances were incorporated in the presentation of accounts - in particular, transactions between various estate enterprises were recorded so as to secure a truer picture of total income and expenditure. But, the actual form of the accounts was inadequate and old-fashioned, as the traditional eighteenth century forms persisted. Also, the break-down of accounts was incomplete as they did not indicate the profitability of particular sectors of estate enterprise - in terms of individual collieries or woods. Leading agents also tended to be drawn from the traditional landed gentry, although sub-agents with particular skills were employed.

The total inadequacy of the existing administration and its inefficient organisation of affairs were clearly revealed in the mines report of 1836 and Loch's reports on the early annual accounts of the trust. In view of the considerable expansion in the scale and profitability of all sectors of estate enterprise between 1833 and 1845, this would suggest that administrative problems were successfully tackled. This

section examines the details of the administration and organisation of affairs during this period. In addition to the basic problems of management and control inherited by the trustees, they had to overcome the additional problems of administering an estate which they held in trust, and maintaining a sound relationship amongst themselves and with the heir to the estate, Lord Ward. The clash of personal interests with trust responsibilities is examined together with an assessment of the personal contribution of each of the trustees to the total success of the trust. Finally, the organisation of the most important sector of the estate's economic activity is considered - that is, the iron and mineral trades. This was particularly inefficient in terms of organisation in 1833 but, because of a radical overhaul and the introduction of new policies, produced the bulk of estate revenue by 1845 and for many years to come.

Chapter 1. Administration

A. Estate Officials

During the early part of the nineteenth century, the professional and managerial revolution on estates was proceeding at about the same time as similar developments in the legal and medical professions and in the managerial structure of manufacturing firms. In general, these trends were all occasioned by the increasing complexity of economic activity and the growing demand for expert services¹. However, absolute financial control, exercised from a London office by experts combining the skills of land agency and accountancy and able to impose techniques of cost control on total estate expenditure, was not available until the last quarter of the nineteenth century, although not even then widely used². Up to a point, the Dudley estate enjoyed this advantage during the period of the trust to the extent that there was a general manager of the estate's affairs - Benbow, and an auditor - Loch, whose duty it was to analyse and report on the profitability of all aspects of estate interests. Loch was able to combine the skills of land agency and accountancy while maintaining cost control over the whole range of economic enterprise - but, he lacked executive authority to enforce his ideas and could only advise and urge Benbow and the trustees to introduce them. In general, the largest estates were not yet managed as a whole, except where the owner assumed this function himself but there was a trend towards the unification and extension of the area under the control of a principal agent³. This movement was reflected on the Dudley estate by

¹ F. M. L. Thompson, English Landed Society in the Nineteenth Century (1963), p. 158.

² F. M. L. Thompson, 'English Great Estates in the Nineteenth Century', Int. Conf. of Ec. Hist. (1960), p. 168.

³ Ibid.

the consolidation and identification of specific areas of responsibility on the part of a number of sub-agents under the overall control of Benbow. As this role of chief agent emerged, the auditing function passed from him to the London auditor: this practice served as a useful check on the conduct of affairs.

Traditionally, the most important agent on the Dudley estate was the chief land agent. After 1826, Downing had combined this with the function of mineral agent: the unfortunate consequences of this have already been examined, because Downing lacked any professional training in mining, accounting or agricultural matters. In general, land agency⁴ had come to be regarded as a distinct profession by the 1840s as seen in the career of men such as Henry Morton, chief agent of the Earl of Durham, and it was during the trust period that the first professional land agents were employed on the Dudley estate. At the commencement of the trust, Downing was enjoying a salary of £1,050 per annum, in addition to his residence at the Priory. Loch believed that the combined land and mineral agency was too much for one man, and in 1834, Downing was prevailed upon to give up the land agency so that he could concentrate on the latter and on his duties as trustee⁵. Samuel Bateman replaced him in March 1834 at a salary of £500: his responsibilities concerned the management of the traditional landed estates in and around the Black Country. However, Bateman was in the mould of the traditional Dudley land agent, and had been an employee of the late earl. His attempts to influence Lord Ward quickly antagonised Benbow:

'Lord Ward is carrying on a Correspondence with Mr. Bateman ... It cannot but be distressing to those

⁴ Thompson, Landed Society, p. 158.

⁵ Loch's Second Report on the Trust Accounts for the year ending June 1835, p. 1.

'whose Conduct is actuated by the highest, purest and best principles (Benbow?) to see Confidence so much misplaced.'⁶

Benbow proposed to remove him, although he had

'been retained in the Agency pretty much from Compliment to his Lordship ... there would be no Difficulty in engaging a most unexceptionable person.'⁷

Hatherton concurred and Bateman was dismissed and replaced by Maughan - probably the same man described in an account for 1835:

1835 March 17. Paid Mr. Maughan of Bromsgrove,
Surveyor, his Bill for Valuation of the Crogen estate 8
in 1829. £109 14 3.

Maughan was probably the first professional land surveyor employed by the Dudley estate in the capacity of land agent.

One other improvement was made in the land agency by the trustees. In 1836, Bateman ceased to exercise any responsibility for the administration of cottage properties - this allowed him to concentrate on the farm properties. E. P. Cartwright, an employee of the estate, assumed responsibility for cottage rents and administration at a salary of £220 per annum⁹. Other land agents exercised total responsibility elsewhere: Turnor for the Welsh estates and Matthews for the newly purchased Kidderminster and Witley estates. As both earned the commendation of Loch, it might be assumed that both had attained some professional standing before being engaged by the trustees. Matthews received a salary of £250 for the Kidderminster agency in 1838 and a further £300 for the Witley agency after 1839. Turnor's responsibilities were much smaller and he received £100 per annum. Because Lord Ward was also lord of several manors in and around the Black Country, the trustees continued to employ a steward to supervise the manor courts and the

⁶ S.C.R.O. D260/M/F/5/19/11, Benbow to Hatherton, 8 Nov. 1838.

⁷ Ibid. 12 Nov. 1838.

⁸ Loch's Second Report on the Trust Accounts, Benbow's Account for 1835, p. 13.

⁹ Ibid. Fourth Report, p. 103.

collection of manorial fines. Traditionally, this task had been performed by attorneys such as the Brettells who had also fulfilled the task of land agent¹⁰. Since 1827, a special appointment had been made of steward of all the manors whose sole responsibility was manorial affairs - this development was probably occasioned by Downing's appointment as land agent in 1826 as he lacked the legal qualifications necessary to administer the courts. J. G. Bourne, a Dudley solicitor, took over this function and retained it until 1850 when the administration of the remaining copyhold properties was taken over by the Priory Office. It seems that Bourne had the traditional lax approach of the Dudley officials: in 1848, Benbow observed that he had

'never been able to procure Mr. Bourne's Account - It embraces professional Charges - and his Transactions as Steward of the Manor^s.'¹¹

Pressure was successfully exerted by Benbow and Hatherton and Loch wrote in December 1848 that

'Messrs. Bourne and Wainwright's bill is now named for the first time.'¹²

On many estates, the term 'agent' had replaced that of 'steward'¹³ by this time as the profession of land agency flourished. The local Dudley estate was probably unusual in possessing one of each, in connection with the administration of landed affairs, although, after 1827, this was more by historical accident than policy. On the other Dudley estates, the chief land agent also served as steward. Salaries paid to the land agents of the main Dudley estates compared quite favourably with such large estates as Woburn, £760, and Holkham, £650 per annum¹⁴.

¹⁰ See Section I, Chap.2, Part D.

¹¹ S.C.R.O. D260/M/F/5/19/12, Benbow to Hatherton 1 Aug. 1848.

¹² Ibid. Loch to Hatherton, 7 Dec. 1848.

¹³ D. Spring, The English Landed Estate in the Nineteenth Century, Its Administration, 1830-1870 (1962), p. 97.

¹⁴ Ibid. pp. 90-1.

Before being nominated as a trustee and general manager of estate affairs, Benbow had been engaged since 1801 as legal adviser to the estate. However, it seems unlikely that he was involved in the actual management of affairs before 1833 - although he may have audited the annual accounts. Before 1801, Washington Shirley and, later, the Brettells, had been responsible for legal activity and had lived locally near Himley House. Probably, Benbow's appointment had been the start of a division of function between the legal and the landed responsibilities as his residence remained in London. This trend was in common with practice on other large estates¹⁵. Messrs. Brettell, and later Bourne, continued to administer legal matters arising out of manorial affairs from their practices in Stourbridge and Dudley. The amount of business which the London legal agent transacted for the late earl is indicated by the fact that the fee, paid to Messrs. Alban and Benbow of Lincoln's Inn for legal expenses incurred between November 1824 and February 1828, was £2,783 14s. 5d.¹⁶

During the trust, the land agent's department at Dudley was more efficiently organised with a number of sub-agents responsible for particular aspects of work. Bateman's account for 1834-5 indicates their functions and salaries:

	£	s.	d.
<u>Expences of Management</u>			
1834. Sept. 30. Samuel Bateman, Land Agent: one year's salary	500		
June 25. Thomas Davidson, Accountant: $\frac{1}{4}$ of a year's salary (160 per annum)		40	
Dec. 31. John Bateman, Land Surveyor: salary from Lady Clay 1834 (80 per annum)			60
July 7. William Jenkins, rent for half a year of house and gardens occupied by Samuel Bateman			27

¹⁵ Ibid. p. 58.

¹⁶ D.P.L. 12/G, Messrs. Alban and Benbow's Account, 1824-8.

1834. Dec. 31.	Mine Agent for coals for Estate	£	s.	d.
	Agent's house and offices	19	8	6
	Stationery	84	15	9 ¹⁷
		731	4	3

The order of payment, at the expense of chronological accuracy, is significant: a rent-free house and free fuel added considerably to the real income of the land agent. Other employees and salaries indicate the scale of the landed estates in the vicinity of Dudley:

<u>Date</u>	<u>Employee</u>	<u>Salary Payment</u>	£	s.	d.
1835 April 18	Richard Turner, Superintendent of Woodreeves	Annually	100		
March 26	John Johnson, Woodreeve	Quarterly	60		
	William Reed "	"	50		
	George Shaw "	"	50		
	Robert Harper "	"	50		
	Wil. Sharratt "	"	50		
	Joseph Reeves "	"	50		
	Zach Parkes, Assistant Woodreeve	"	25		
April 1	Woodmen	Fortnightly			not specified
March 26	James Naylor, Office Porter	Quarterly	15		
	Lucy Jones, Office Clearner	"	6	10	0
<u>Surveyor's Department</u>					
March 26	Hamlet Durose, Surveyor and Clerk of Works	"	110		<u>18</u>
	Allowance for House Rent		15	18	0

Woodmen were not paid individually at the estate office: the woodreeve responsible for a particular wood or plantation received a lump sum on their behalf and paid them himself. As the policy of planting new timber, advocated by Loch¹⁹, was put into operation, more woodmen were taken on and he expressed doubt about the absence of a record of actual

¹⁷ Loch's Second Report on the Trust Accounts, Bateman's Account for 1834-5, p. 42.

¹⁸ Ibid. pp. 42-4.

¹⁹ See Section II, Chap. 1, Part B.

payment of the men. Turner was responsible for the woods in general while Durose was in charge of the timber yard at the Level. An indication of the increased scale of activity by the woodneeves was the payment of £215 8s. 10d. to woodmen for the year ending in December 1836 and £474 10s. 9d. to labourers for clearing ground and planting trees. The payments to individual labourers varied from £2 to £17 19s.6d. per annum²⁰. Men employed in farm work by the estate earned rather more for a six-day week:

Thos. Davies	Bailiff	16/-	per week	
Jos. Davies	ploughman	2/2	per day	
3 women	picking stones	10d.	per day	
Wil. Milton	hedging	2/4	" "	
Wil. Riley	oweing turnips	2/4	" "	
James Bagley	thrashing	2/4	" "	21

The total 'Expences of Management' in 1835 were £1,196 5s. 2d. - but this figure increased, mainly from salaries, wages and stationery to £1,210 19s. 9d. in 1837. This excludes the costs of maintenance and improvements made to the landed properties²².

Similar salaries, except for the land agent as indicated above, were paid on the Welsh and Worcestershire estates. Because of its greater sporting facilities, there was a park gamekeeper at Witley whose salary was £63 per annum: the gamekeepers at Hurcot and Broome (Kidderminster estate) received £50 and £26 respectively. William Bull, the rabbit catcher at Hurcot, received £29 5s. per annum. As the Scottish estate at Ednam was held by Lord Ward 'under a Deed of Entail'²³ not by the Will of the late earl, and because of its remoteness from Dudley, its affairs were administered by a resident 'factor' or agent, Selby, who was responsible to the 'curator' of Lord Ward's affairs in Scotland, Sir James Gibson Craig. Craig had been appointed by 'the Court

²⁰ Loch's Fourth Report on the Trust Accounts, Bateman's

Account for 1836, p. 73.

²¹ D.P.L. 9/E, Clam Park Farm Accounts, 1836.

²² See Section II, Chap. 1, Part B.

of Session and his Accounts are passed in the same Court.'

It is evident that during the trust period, management of the Dudley estates in general was made more efficient by the introduction of practices currently evolving from the revolution in the management of large estates. In the top management, the dual functions of Benbow and Loch were complementary in that Benbow exercised supreme control over the management of all aspects of enterprise - without being involved in the day to day details of administration, while Loch served to achieve a measure of cost control over the whole estate. This was a system which foreshadowed the developments of the latter decades of the nineteenth century and was in advance of that in operation on many estates. This policy of centralisation and clarification of areas of responsibility was carried down to all aspects of the landed administration and in mineral affairs²⁴. Such a policy was necessary to replace the confusion and indecision existing in 1833, to cope with the increased activity of the Dudley landed estate, and to administer the extensive new properties acquired by the trustees.

B. Lord Ward

i. His Relationship With the Trustees

On the death of John William, First Earl of Dudley in March 1833, the Ward barony and the family house at Himley had been inherited by his cousin, William Humble Ward and the estates were to be held in trust for his son William for a period of 12 years. The problems created by this aspect of the Will, and Lord Ward's attempt to secure control of his son's interests, have already been considered²⁵. When

²³ S.C.R.O. D260/M/F/5/19/11, Benbow to Hatherton, 9 July 1836.

²⁴ See Chap. 2, Part A below.

²⁵ See Section I, Chap. 3, Part B.

Lord Ward died in 1835, the title passed to his son who remained under the guardianship of Lord Hatherton and his mother, Lady Amelia, until William attained his majority in 1838. It was with William that the trustees had the greatest part of their dealings: his waywardness, tempered with an independence of spirit and a shrewd business sense were to enliven the proceedings of trust affairs, as well as creating problems. Lord Ward held the title until his death in 1885 and was ^{created} Earl of Dudley in 1860. Influenced himself by Hatherton and the policies of the trust, William played a significant part in the conduct of estate and regional affairs until his death.

His father's mental illness and the separation of his parents had left a deep impression on William, and the family and legal arguments which continued from March 1833 until his father's death in 1835, made a further impact during these formative years:

'William must not remain here (Himley), he not only assumes the character of Master of the House but is insufferably insolent to his father to me and to the visitors to the house.'²⁶

Littleton responded to this appeal and arranged for William to live with a tutor, the Reverend C. Miller, at Harlow:

'I have written to Miller ... and insisted upon his being firm with him in all his orders and general superintendence.'²⁷

Apart from his work as trustee, the service rendered by Littleton as guardian and general mentor to the young Lord Ward, was of great value at this time. Opinion was divided over what to do with William, especially after he left his tutor's house without permission. Littleton wrote at the time, 8 March 1834:

²⁶ S.C.R.O. D260/M/F/5/19/11, Lady Amelia to Littleton, (Hatherton) 29 Jan. 1834.

²⁷ Ibid. Littleton to Lady Ward, 11 Feb. 1834.

'I think I know Ward well and that anything said in the tone of a Sermon ... will be laughed at by him. His lessons must be of a practical sort to do him any service. For instance, to disabuse his mind of false notions about himself and his prospects, I would show him finer Houses than he will possess, and better company than he will find about Himley. I made him go to Lansdowne House with this view the other night ... and did all I could in the way of raillery to take the conceit out of him. He was greatly pleased with his Evening.'²⁸

He also took the line that William should take a degree and face up to his responsibilities to others and to the estate:

'in matter of duty, he must be made to feel that obedience will be expected, if not requested.'²⁹

In order to occupy his time so that he

'may avoid mischief, and bad habits and Society, his Vacations should be spent in travelling, visiting at Good Houses, and seeing what may instruct and amuse him.'³⁰

William's fourteen year old brother, Humble Dudley Ward, also posed problems: in view of his high spirits and dislike of books, his mother wished him to 'enter the Foot Guards' when he was 18 years of age. Later, in December 1841, she confided to Hatherton:

'the effects of his dissipation having reduced him to a state of disease and weakness ... and he is getting into debt. I ... question ... whether the life of a Guardsman is good for him.'³¹

He was also

'forming an attachment with one of the Miss Hawkes which is a very objectionable thing in every way.'

Lady Ward asked William to discuss matters with his younger brother acknowledging that

'the former is always gratified by being consulted.'

However, William's opportunity to reveal a sense of

28 Ibid. D260/M/F/5/19/7, Littleton to J. H. Foley, 8 Mar. 1834.
29 Ibid. 30 Ibid.
31 Ibid. D260/M/F/5/19/11, Lady Ward to Hatherton, Dec. 1841.

responsibility was clouded by the fact that he too had formed an attachment with Miss Hawkes, daughter of Thomas Hawkes, M.P. for Dudley, who lived at Himley House adjacent to Himley Park. To prevent her two sons from courting Miss Hawkes, Lady Ward had the gateway connecting the grounds of Himley Hall and the Hawkes' residence bricked up³²: Eleanor Hawkes did in fact marry Dudley Ward in December 1843 and 'his brother never spoke to him again.'³³ This disappointment may explain why William married late when it seemed that, as in 1833, there would be no direct heir to the estates.

One of William's main weaknesses was gambling and, although gambling debts during the nineteenth century ceased to be the serious charge on estates that they had been before 1800, Lord Ward's gambling debts embarrassed the trustees and put the whole future of his estates in hazard. While a student at Christ Church, Oxford, William incurred a gambling debt of £1,100 which he asked Benbow to pay, and gave his 'word of honour' not to play again³⁴. The latter wrote:

'I am upon principle, opposed to unnecessary and wanton expense ... The Resolution which your Lordship has taken to deliver yourself into the hands of Sharpers and Jews ... can only lead to Disgrace and Ruin. A mutual Confidence between Trustees and their Wards should exist, and I deprecate in your Lordship's instance, even the possibility that it should not continue ...'³⁵

The tone of this letter and sermon probably marked the beginning of the considerable rancour which characterised all future exchanges between Lord Ward and Benbow. Similar problems faced the trustees of the Earl of Durham during his minority, and Lord Grey, an executor of the late earl's Will, wrote to the present earl in 1849 pointing out the fact

³² D.P.L. 23/D, Earl of Dudley to the Town Clerk of Dudley, 28 July 1949.

³³ Ibid.

³⁴ S.C.R.O. D260/M/F/5/19/11, Lord Ward to Benbow, May 1836.

³⁵ Ibid. Benbow to Ward, 30 May 1836.

that the Duke of Buckingham's properties had recently been auctioned to pay off his debts, and that the earl should do nothing to destroy his own personal credit because

'the greater part of your income depending upon a very fluctuating trade, in which credit is above all things necessary.'³⁶

Lord Ward blackmailed Benbow into paying the debt by opening negotiations to borrow a loan at 25 per cent³⁷. It is evident that Ward's gambling had become notorious, as indicated in a letter by Alexander Hamilton to Lord Lyndhurst, a personal friend of the Ward family. This information was passed on to Hatherton³⁸ to warn

'Lord Ward ... of the nefarious and villainous Schemes to fleece him at private or public Play - indeed my Lord they are now Synonymous Terms - a snare is laid to entrap him at Billiards and Hazard by some very great men and some of them of Title too - and Officers bearing the King's Commission.'³⁹

All warnings went unheeded and Ward's 'word of honour' not to gamble was continually broken:

'Lord Ward is frequenting the Low Halls in Town and losing hundreds ... to a Class of the lowest Swindlers ... I lament this Propensity to low Society and to such ruinous Courses: if he had lost his money among Gentlemen one might have forgiven his Folley.'⁴⁰

Ward denied that he could be in debt as Hatherton's 'friends' alleged as he had only been in London for a day since his debts had been paid the previous June⁴¹. However, even at this period of his life, William had enough shrewdness to comment on the flurry caused amongst the trustees by Loch's attempt to entice Richard Smith away from the Dudley estate

³⁶ Lord Grey to the Earl of Durham, 9 July 1849, Lambton MSS: as quoted by D. Spring, 'The Earls of Durham and the Great Northern Coalfield, 1830-1880', Canadian Historical Review

XXXIII (1952), p. 251.

³⁷ S.C.R.O. D260/M/F/5/19/11, Hatherton to Benbow, 5 June 1836.

³⁸ Ibid. Lord Lyndhurst to Hatherton, 2 June 1836.

³⁹ Ibid.

⁴⁰ Ibid. Benbow to Hatherton, 21 Feb. 1837.

⁴¹ Ibid. Ward to Hatherton, 26 Feb. 1837.

and take up an appointment with the Bridgewater estates:

'I care nothing about Loch whatever determination you come to about him, but I think Smith is too useful to be parted with.'⁴²

At his mother's request, William's tutor at Oxford was T. L. Claughton. He had to negotiate with the Dean of Christ Church in defence of William when the Dean complained to Hatherton in June 1836:

'I do not find in his Lordship that disposition to conform with academical discipline and regulations which is necessary to make residence here advantageous - and ... I feel it my duty to advise his guardians to remove him after the end of the present term ... His literary proficiency is not so great as his friends may have expected. Nor ... from the habits he has contracted (will) ... any material improvement take place.'⁴³

Foreign travel was, in his opinion, the

'fittest mode of completing his Lordship's education.' Hatherton accepted the Dean's recommendation and Lady Ward suggested Edinburgh as a residence for her son until he came of age:

'it is very evident that the temptations of Oxford are too great for him - and ... the Society of Edinburgh is quite fit for him, without offering the dangers of London.'⁴⁴

However, after Lord Ward 'begged to remain', the Dean relented and allowed him to continue his studies with the warning that

'Habits of indulgence, fostered by an unlimited supply of money will not easily be checked in this place.'⁴⁵

Six months later, he wrote to Hatherton:

'I have the painful duty to acquaint you that I have been compelled to rusticate Lord Ward till after the long vacation'⁴⁶

- this followed incidents at a race meeting attended by Lord Ward at Cottesford. However, like Hatherton, the Dean was

⁴² Ibid. ⁴³ Ibid. Dean of Christ Church to Hatherton, 7 June 1836.

⁴⁴ Ibid. Lady Ward to Hatherton, 10 June 1836.

⁴⁵ Ibid. Dean of Christ Church to Hatherton, 12 June 1836.

⁴⁶ Ibid. 22 Feb. 1837.

beginning to discern another side to William's character, and he added that

'His Lordship has many good qualities which if properly directed, will lead him to honour and distinction.'

William returned to Oxford in October 1837 and subsequently took a first class degree.

Part of the summer vacation in 1837 was spent at Scarborough and Claughton wrote in despair to Hatherton:

'Lord Ward has not been going on satisfactorily and I have made an ineffectual attempt to get him away from this place ... within these few days he has so entirely lost the power of self control, playing billiards all the night with low persons, that I dare not answer for the consequences ... could your Lordship possibly come here? There is another circumstance ... that he has some connection with a female in this place - to which possibly may be owing his determination not to leave.'⁴⁷

This turn of events continued to cause Claughton further concern later on that year - although there were signs that he might save himself from excessive gambling:

'of the two Evils which threaten him, gambling is by far the least ... because to such a mind as his, it contains ultimately its own Cure ... since heavy loss would convince him. But the other Evil is dreadful in anybody and particularly in him ... and I am fearful that ... female Influence of the worst kind may be his utter and irretrievable ruin.'⁴⁸

However, his studies were proceeding a little more satisfactorily. It seems that a relapse occurred after he attained his majority in 1838 and his gambling debts reached £10,000 by 1838 and he was 'at Crockford's every night'⁴⁹.

Hatherton observed that

'Although my right (as guardian) to give him advice has ceased ... I shall at all times be ready to assist Lady Ward in influencing him.'⁵⁰

⁴⁷ Ibid. T. L. Claughton to Hatherton, 21 Sept. 1837.

⁴⁸ Ibid. Claughton to Hatherton, 23 Oct. 1837.

⁴⁹ Ibid. Benbow to Hatherton, 3 May 1838.

⁵⁰ Ibid. Hatherton to Benbow, 14 May 1838.

In future, the trustees could only urge William to reform his ways in pursuance of their obligations under the late earl's Will.

There are some indications that William did make a conscious effort to reform, particularly after graduating in the summer of 1838 when, accompanied by Claughton, he spent many weeks staying at one of Lord Francis Egerton's shooting lodges in northern Scotland:

'I threatened to send you the best salmon we caught, kippered, regardless of the ruinous carriage from this Gypectorean abode to the centre of cultivation and civilization (Staffordshire). I now proceed to put that threat into execution ... I only hope it will prove good which will in some measure make up for the folly of sending them 700 miles ... I do not think we shall leave here till the Spring ... I have read but little - Grouse shooting and Deer stalking have occupied my time ... I am reconciling? myself for the last four years I have foolishly spent in late Hours and useless Habits, with the severest north eastern breezes that ever searched through so lathy a being as myself. The breezes in the South are toxicated with dissipation. We have them here pure and unsullied from the founderly in Greenland. Excuse this prosy note ...'51

William Ward's sharp wit and his attitude to the trustees are clearly indicated.

His formal education complete, Lord Ward spent most of his time in the winter of 1838-9 travelling in Scotland, and in London. This contact with the capital revived his gambling instinct which provoked an admonition from Benbow very similar to that administered by Lord Grey to the young Earl of Durham:

'public reports of Gambling Transactions are embarrassing to the Trustees and most injurious to your own Interests: they have great Influence upon the Mine Concerns ... upon which we rely to extricate us from heavy Engagements into which we have entered with your ... Approbation.'52

51 Ibid. Ward to Hatherton, Nov. 1838.

52 Ibid. Benbow to Ward, 1 April 1839.

This was a reference to the Witley purchase. The Times contained a report that

'Lord Ward has lost £200,000 to a noble Earl (well known in the sporting world and whose losses in his ... youth are said to have given him wisdom) and to a Gentleman also of Sporting celebrity. The story goes that this very young nobleman had, from certain suspicions of the play, refused to settle, and that the Earl and Gentleman had threatened Lord Ward with Challenges if he further demurred.'⁵³

Benbow refuted these remarks in a letter to The Times on 28 March 1839 but, on the same day, wrote to Lord Ward that he had heard that

'there are Bills of Lord Suffield's in Circulation with your Lordship's Signature upon them.'⁵⁴

There is no record that Ward paid debts remotely approaching this figure - journalistic licence had no doubt inflated the actual figure, but there is little doubt that William had once more incurred personal debts which, although not directly their concern, the trustees could not ignore - particularly when he obtained loans secured against his personal annuity, rents from Ednam, and the future income of his estates after 1845.

This situation occurred again in 1843 when Benbow informed Hatherton on the subject of Ward's liabilities - increased in 1841 when he personally secured a loan of £95,000 to purchase the Glengarry estate:

Lord Ward's present income

Income	£	s.	d.	Charges	£	s.	d.
Annuity £8,000 less				Interest less Income Tax			
Income Tax	7,766	13	4	on £95,000	4,308	6	8
Ednam Estate				payable to Messrs.			
Less income				Gosling and Sharp in			
Tax	2,427			1845			
Glengarry				Do. on £15,000 and			
uncertain				Do. to Capt. Parker	1,061	9	2
				Do. on £22,000 if			
				borrowed	1,596		

⁵³ The Times, 26 Mar. 1839.

⁵⁴ S.C.R.O.D260/M/F/5/19/11, Benbow to Ward, 29 Mar. 1839.

Income	£	s.	d.	Charges	£	s.	d.
				Do. on £10,000 if borrowed	740		
				Mr. Claughton's Settlement	485	8	4 ⁵⁵
	10,193	13	4		8,191	14	2
Net income to 1845		8,191	14			19	2

Ward's proposals to travel abroad exposed him to additional dangers:

'It would be more than ridiculous to go on the Continent with an English Hairdresser who like himself knows not a word of any foreign language.'⁵⁶

Hatherton had earlier agreed that it would be folly for Ward to visit Paris:

'He will infallibly be followed thence by some Sharpers ... these men will put accomplished and handsome Women in his way - who will assist in the work.'⁵⁷

Until the end of the trust, Lord Ward's gambling continued to harass his trustees - even as late as 1846 when the final accounts were being drawn up, Hatherton insisted on the need to obtain security for the trustees if

'Lord Ward is ... taking so much plate abroad with him.'⁵⁸ Ultimately, when in full possession of his estates, William, Lord Ward reformed, as in the case of his counterpart the Second Earl of Durham after 1854, and settled down to his responsibilities.

That he was capable of firmness, swiftness of decision, and business insight has already been suggested. There was more aptitude for business on the large estates by the mid-nineteenth century

'and it was to be found among landowners as well as

⁵⁵ Ibid. Benbow to Hatherton, 7 Feb. 1843.
⁵⁶ Ibid. 6 May 1843.
⁵⁷ Ibid. Hatherton to Benbow, 1 April 1843.
⁵⁸ Ibid. 28 Oct. 1846.

'among agents.'⁵⁹

Consequently, administrative matters probably took up more of a landowner's time than ever before⁶⁰. Because of the managerial structure of such estates, the landowner was able to exercise a direct influence on the regional and national economy although it is difficult to disentangle the parts played by owner and agent in framing policy⁶¹. In the case of the Dudley trust, the trustees tended to consult Lord Ward on major decisions - particularly those relating to the purchase of estates, while he himself undertook to express his opinions on the conduct of affairs in general and revealed a considerable mastery of essentials. Even as early as 1833, he had shown his forthrightness and shrewdness in his observations on matters relating to the guardianship and his parents' separation:

'I think you decided rather hastily upon sending me here, as indeed I think most things are about me ... I am sure the circumstances in our family are disagreeable enough, without adding to them ... if Papa ever unjustly tries to set me against you and others, I think you may give me credit for being able to withstand it ... I think my Tutor at Eton acted ungentlemanly and Blaguardly in keeping Papa's letters from me. It gives him pleasure to write them; and I know what the state of his mind is, and I read and consider the letters accordingly. I think Papa has acted very very unjustly to you and others, but I do not think all the fault is on his side.'⁶²

William was 16 years old at the time: in the circumstances, this letter reveals his personal qualities of fair play and a sympathetic outlook, stiffened with characteristics typical of all levels of Black Country society such as outspokenness and personal conviction in his own judgment. It is unlikely that Lord Ward would have played no part in the administration of his estate - even if the trustees had

⁵⁹ Spring, The English Landed Estate, p. 19.

⁶⁰ Ibid. p. 53.

⁶¹ Thompson, Landed Society, p. 151.

⁶² S.C.R.O. D260/M/F/5/19/11, William Ward to Lady Ward, 24 Nov. 1833.

wished to exclude him.

After the purchase of Hurcot estate from Lord Foley in 1837, Ward informed Hatherton that although Downing did not consider the additional purchase of Bewdley Forest desirable, he himself was not opposed

'as I am terribly Terrarum Avidus.'⁶³

Writing from Scarborough in August 1837, he stated his opinions on the question of large purchases of land and, incidentally, on the Bishop of Exeter:

'I have no doubt the Bishop of Exeter would like a tour into Herefordshire via Cheltenham, Himley etc. and at the Trustees' expense but I will not if I can help it give him the option of so doing - nor do I wish for a place in that County. My wishes are these ... that it should be large enough to make Himley a second place. Therefore I should like one about 30 or 40,000 Acres. You will smile perhaps but I would rather wait and buy a good one, that will sink some years accumulation than be laying out a yearly Income on small places ... That is what I should call turning the old coal Pits to some Account.'⁶⁴

The bishop's casual and often perverse attitude to affairs had produced an earlier outburst from William:

'I am sorry to hear that the Bishop of Exeter opposes the purchase of the Welsh estate adjoining Crogen (Henwr) ... why he ... should set himself against every wish and project ... I do not see ... it was a purchase on which I had set my heart as one likely to afford sport and real advantages.'⁶⁵

It was not only on matters concerning the purchase of new estates that William was consulted and offered his opinions, but also on matters of policy. When the new form of agricultural lease was being considered⁶⁶ he wrote:

'I have received your letter respecting the proposed alterations in the term of leases to be henceforth

⁶³ Ibid. Ward to Hatherton, Sept. 1837.

⁶⁴ Ibid. Aug. 1837.

⁶⁵ Ibid. 3 Mar. 1836.

⁶⁶ See Section II, Chap. 1, Part A.

'granted ... I am decidely in favour of it ... the plan is much better than the present one ... if my supposition of the extra expense is incorrect.'⁶⁷

This refers to the proposal to replace the tenancy at will by a lease of 21 years: his reference to expense concerned his own fear that, unless a clause was inserted in the lease, tenants would not carry out repairs for the last ten years of a lease - expecting the estate to do this at renewal. At his suggestion, the new leases included a clause that the tenant should 'keep and leave' the property in good repair. In spite of his cynicism and flippancy - he persistently referred to Benbow as 'the Admiral', Lord Ward appreciated Benbow's worth and suggested that he should be persuaded to give up two other agencies in order to concentrate on superintending the Dudley estate:

'I think we should gain by it'
and the loss in salary should be made up by the trust⁶⁸.

He continued all along to exasperate the trustees because, in view of their decision that he should travel during vacations, he was involved in a great deal of correspondence on estate affairs - frequently he was slow in replying to Benbow's letters and often spoke of his 'confinement' in Scotland - presumably a reference to his father's confinement in 1834-5. However, his lapses in correspondence usually concerned the less important matters of estate administration. One such occasion was in 1844 when, because of Ward's silence, the presentation to St. Mary's Kingswinford, lapsed to the crown: when he eventually informed Benbow of his nominee, Hatherton was embarrassed by the fact that he himself could not personally approach the Lord Chancellor, Lord Lyndhurst, on the matter for political reasons⁶⁹. After being informed by Benbow that Lord Ward

⁶⁷ S.C.R.O. D260/M/F/5/19/11, Ward to Hatherton, 8 Nov. 1838.

⁶⁸ Ibid. Nov. 1838.

⁶⁹ Ibid. Hatherton to Benbow, 4 Jan. 1844.

'owes me eight letters written since October'⁷⁰,
Hatherton wrote to Ward stating that his
'conduct (was) ... injurious to his personal and
family Interests'
and towards Benbow it was 'cruel'⁷¹. It seems that, despite
Ward's basic appreciation of Benbow's services to the trust,
he could not resist a gibe at his expense - possibly because
of Benbow's puritanical streak and the personal criticisms
expressed to Ward during his student days:

'I heard from Turnor (agent on the Welsh estate)
yesterday who you know is rather free and easy,
though a would-be most humble and devoted - he says
Mr. Benbow and Dr. Pearson have been out shooting
and the former seemed quite playful (fancy Benbow
gambling).'⁷²

Throughout the trust, William Ward magnified the problems
to be faced, by his own personal actions. He was undoubtedly
cynical, critical and flippant in his dealings with his
trustees. But, he had considerable shrewdness, a grasp of
essentials and was constantly informed of the conduct of
affairs by his guardian Hatherton until 1838, when he came of
age, and subsequently by Benbow as manager of trust affairs.
This enabled him, when he chose, to express his wishes on
important issues. When John Benbow died in 1855, certain
matters relating to the trust were still outstanding, and,
as 'A new "Administrator de bonis non" was required ...

Lord Ward was ... clothed with that character'
in order to secure the outstanding estate'⁷³.

ii. Attitude Towards His Employees

In view of his realistic business sense on fundamental
issues and his flippant attitude to the trustees, what was

⁷⁰ Ibid. Benbow to Hatherton, 26 Dec. 1843.

⁷¹ Ibid. Hatherton to Ward, 27 Dec. 1843.

⁷² Ibid. Ward to Hatherton, 8 Nov. 1838.

⁷³ Ibid. Final Remarks on the Accounts of the Trust, R. Craig
and J. H. Benbow (Benbow's son), 22 Jan. 1858.

Lord Ward's attitude to his employees? Miners and ironworkers in the Black Country were, in general, exposed to extremely difficult and dangerous working conditions, and exploitation by their masters. This was not the case on the Dudley estate, during or after the trust period, either on properties worked or leased by the estate. On other large estates, a similar benevolent approach was adopted towards employees. On the Wentworth Woodhouse estate of Earl Fitzwilliam, the estate was closely involved in local industry and pursued a policy of good housing, free coal, sickness, widows' and injury benefits, and occasional feasts for employees and their families⁷⁴. All of these policies were pursued by the trustees and Lord Ward - with the possible exception of good housing - which, although initially cheap on the Dudley estate, had resulted in exploitation by middlemen. On the occasion of his being created Earl of Dudley in February 1860, tenants in the Quarry Bank area of Brierley Hill presented him with a congratulatory address:

'this evidence of a Royal Favour has been most judiciously conferred upon a nobleman, the management of whose property throughout this entire district justly entitles him to be ranked amongst the kindest, most liberal and best of England's landlords in whom an industrious and well-conducted tenantry always find a protector, friend and patron ... (and) your Lordship proves by great liberality your anxiety for the religion and moral welfare of the people ... granting, in this mining country where land is so valuable, ground for the erection of a church, churchyard, parsonage and gardens.'⁷⁵

Under his Will of 12 June 1878, the earl granted

'To each Clerk ... employed at the time of his death and for two years previously in the offices of his Mining and Land Agents, one years Salary.'⁷⁶

⁷⁴ J. T. Ward, 'West Riding Landowners and Mining in the Nineteenth Century', Yorks. Bulletin of Ec. and Soc. Research XV, p. 64.

⁷⁵ B.H.P.L. County Express, 7 Oct. 1911.

⁷⁶ D.P.L. 9/E, The Will of William, Earl of Dudley, 12 June 1878.

Chief and sub-agents' salaries and men's wages have already been indicated: in addition, chief mineral and land agents lived rent free in estate property and received free coal. Workmen too were fairly treated by the trust and Lord Ward - William's basic sense of justice was probably strengthened by the work of Loch, Hatherton, and Smith. Loch early on had criticised the way in which men at the Level Store Yard were paid by Durose, the manager, from a lump sum paid to him covering all expenditure: Loch urged the introduction of a

'pay list with the acknowledgement of the men themselves that they have got their wages.'⁷⁷

Pensions were regularly paid throughout the period 1833-45 - a practice inherited from the first earl. At the time of his death, 'charitable allowances' totalling £1,089 10s. 3d. per annum were being paid to

'his Tenants - but the greater number are aged work people formerly employed in his Lordship's Mines and Works and Estates'⁷⁸:

individual pensions varied from 8/- to £4 4s. per month. In 1836, it was agreed that legacy duty should be paid on pensions over £20 per annum. During the trust, the number of pensioners, as well as other dependents, increased. These are shown in a report submitted by Smith to the Midlands Mining Commission in 1843⁷⁹, set up to examine the causes of strikes and riots which occurred during the depression of 1842. His figures were based on payments for 1842.

⁷⁷ Loch's Second Report on the Trust Accounts, 1835, p. 20.

⁷⁸ S.C.R.O. D260/M/F/5/19/11, Opinion of Sir William Horne, Lincoln's Inn, 7 April 1836. There was some dispute as to whether legacy duty was payable.

⁷⁹ Midland Mining Commission, 1843. Return of Medical Relief and Pensions Paid to Wounded and Superannuated Miners and Widows by the Trustees of the late Earl of Dudley, 1842, p. lviii.

	<u>Thick-coal miners</u>	<u>Ironstone and thin- coal miners</u>	<u>Limestone</u>	<u>Total</u>
Sick relief				
paid	£105 17s.6d.	£64 14s.6d.	£178 3s.6d.	£349 5s.6d.
by estate	80 18 6	32 7 3	59 11 2	
by miners' club	24 19 0	32 7 3	119 2 4	
Widows Pensions (379)	51 3 0	59 16 6	132 17 0	243 16 6
Superannuated Miners' Pensions	96 17 6	-	270 10 0	<u>367 7 0</u>
			Total	960 9 0

Sick relief was paid at the rate of 7/-, 6/- and 5/- per week for married thick-coal miners, ironstone and thin-coal miners, and limestone miners respectively while single thick-coal miners received 6/- per week. Boys employed in the same mines received 4/-, 3/- and 2/6 per week respectively. To this total of £960 9s., paid to miners and their widows must be added pensions paid to employees on the landed estates: in 1836 these amounted to £405 3s. 4d.⁸⁰ Because of the nature of the thick-coal mines, many injuries and fatalities were caused by roof falls. An additional, severe hazard was the effect of limestone dust, in the quarries and mines at Wren's Nest and Castle Mill, which caused bronchial illness and blindness. To accommodate the latter miners, the earl constructed a blind asylum in Tipton Road near the Castle Mill quarries in 1860. This subsequently became the Dudley Guest Hospital. High pensions were paid to former agents: Downing received £500 per annum after his retirement in 1841⁸¹.

⁸⁰ Loch's Third Report on the Trust Accounts, Bateman's Accounts, 1836, p. 64.

⁸¹ Loch's Report on the Final Accounts, 1838-1849, Benbow's Account for 1844.

One of the major causes of social distress in the Black Country, was the truck system. It was particularly prevalent in this district because the small size of pits and shortage of landowners' capital had encouraged the practice of using butties and their capital to work the pits - it was the butties who trucked the miners. Even after the Truck Act of 1831, miners in the Black Country were still trucked by their employers, the butties. This act was Huskisson's work but it was E. J. Littleton, M.P. for Staffordshire, who presented the bill in March 1830⁸²: this was the Littleton who became a trustee to the Dudley estate. Support for the bill had come mainly from the major employers bent on putting down their lesser rivals who were securing a cost advantage out of the truck system. Littleton believed that truck impoverished independent employers who did not use the system, and reduced wages beneath their nominal level. Opponents of the bill claimed that truck was necessary to enable employers to adjust to deflation and depression. A leading Wolverhampton coalmaster, J. Hanbury Sparrow, declared that he would have 'been in the Gazette'⁸³ a long time ago but for the truck system. The Select Committee on the Payment of Wages, headed by Lord Shaftesbury, supplied information which led to the Mines Act including penalties for payment of miners' wages in public houses⁸⁴. This was widely abused and the 1843 Mines Commission found that trucking practices still continued on a wide scale - probably increased by the recent slump in the iron trade. The Walsall Truck Preventative Society, formed as late as 1851, petitioned parliament and the quarter/sessions to prevent payment of wages in goods.

⁸² G. W. Hilton, The Truck System, 1465-1960 (1960), p. 104.

⁸³ Mid.Min.Com. 1843, p. 1.

⁸⁴ Hilton, op. cit., p. 119.

The society claimed that the 1831 act was defective on various grounds and that men refusing to accept truck were forced to leave their jobs. The act was defective because:

1. It allows payment by 'checks' payable at local banks. As the men had no account, they are acceptable only in the employers' shops.
2. Workers have goods on credit and pay back the credit to employers' shops when paid at the end of a fortnight.
3. It applies only to employers: owners subcontract to mastermen who employ the men who have to use a shop kept by the owner.
4. Pressure is put on workers to use a particular shop.
5. Penalties are too small and truckers run risks⁸⁵ because profit on a shop is from £2,000-£3,000.

The petitioners urged the removal of these loopholes and urged the weekly payment of wages. On the Dudley estate, truck had never been used as a method of paying miners employed directly by the estate, that is, since Beaumont's reforms of 1797. After 1836, when the policy of negotiated leases for the mines was introduced, Smith and Hatherton had insisted that lessees working the pits on royalty - and who might employ butties themselves, should pay the men weekly in cash, and also forbade payment of the men in public houses⁸⁶.

It was probably because the Dudley estate, and Lord Ward himself, condemned the truck system for its effects on the men, that the Reverend C. Girdlestone, vicar of Kingswinford, published a pamphlet in April 1855, dedicated to Lord Ward who had

'so often responded nobly to the local demands on your pre-eminent position ... and the interest you have often proved yourself to feel in the welfare of that large number of our fellow creatures to whom you stand in a relation so pregnant with each kind of privilege, both rights and duties, as that of Lord of the Soil.'⁸⁷

⁸⁵ S.C.R.O. Staffs. Quarter Sessions, 1851. Petition from Walsall.

⁸⁶ Mid.Min.Com. 1843, p. 45. Evidence of R. Smith.

⁸⁷ B.H.P.L. H16/1, Pamphlet on the Social Condition of the Colliery District of South Staffordshire, Rev. C. Girdlestone, April 1855.

This followed a meeting held on 20 April at the Court House, Kingswinford⁸⁸, under the chairmanship of Richard Smith. The iron and coalmasters wished to reduce the miners' wages by 1/- per week on the grounds that the price of iron was £2 15s. per ton whereas the price had been £5 10s. per ton when the wages were last fixed at Christmas 1852 - the meeting was called between the masters and men to end the strike which had resulted. The 1/- drop in wages was successfully negotiated and

'The committee of workmen expressed themselves satisfied with the manner in which they had been received and listened to by the masters.'⁸⁹

Most of their wrath was directed against the butties and the truck system. Girdlestone's pamphlet contained a number of letters which he had sent to The Times in which he stated that, although truck had ended, in the form of payment by provisions and clothing, more beerhouses were being opened by the butties who

'will be able to draw their men there in the evening and if a man solicits employ he knows that the most effective way is to go to the beerhouse.'⁹⁰

He asserted that the masters were responsible for the way in which agents or butties treated their workmen and urged Lord Ward to use his influence to persuade other owners to adopt similar practices to those in operation on the Dudley estate. Amongst the various suggestions he made for improvements, his most significant was that, after their regular quarterly meeting, the iron and coal masters should meet representatives of the men to consider the state of trade.

In spite of their relative prosperity, colliers and ironworkers could earn up to 6/6 per day and the former

⁸⁸ The Times, 23 April 1855.

⁸⁹ Ibid.

⁹⁰ Girdlestone, op. cit., p. 6.

received one ton of free coal per month⁹¹, Black Country iron and mine workers lived in conditions

'that did not fail to excite considerable attention'⁹² from the various commissions of enquiry in the 1840s. Neither the Dudley trustees nor Lord Ward were responsible for the bad living and working conditions - it seems likely that the degree of general exploitation in the area would have been greater but for the benvolent and just approach adopted towards its employees by the Dudley estate. The estate was, moreover, a positive force for good in the sense that Richard Smith, and later Lord Ward, tried to influence their fellow iron and coal masters to adopt a better approach to the men. It may be that E. J. Littleton - Lord Hatherton - had much to do with moulding Lord Ward's character in this respect. The violence which occurred at the time of the slump and the strike in Staffordshire, which necessitated the dispatch of troops there, was mainly confined to the northern part of the county. Smith's reputation for fair dealing probably did much to lessen tension in the southern areas of the county.

iii. As a Social, Economic and Political Force in the Area

In view of the size and wealth of the Dudley estate in the Black Country, it inevitably exercised an influence on the social, economic and political development of the area: certain aspects have already been indicated. Lord Ward's activities and involvement in local affairs resembled those of Lord Burlington, later the Seventh Duke of Devonshire, who played an active role in the economic development of the Furness district and the town of Barrow in the 1840s⁹³.

⁹¹ Girdlestone, p. 5.

⁹² W. White, Directory of Staffordshire (1851), p. 60.

⁹³ S. Pollard, 'Barrow-in Furness and the Seventh Duke of Devonshire', Econ.Hist.Rev. 2nd ser. VIII (1955), p. 213.

The extent to which such paternalism and public generosity were the result of a sense of moral and social obligation, or the desire to maintain a contented working population in the interests of the estate, is debatable. In the case of the Dudley estate it is probably true to say that all these motives were present, but Lord Ward's sense of justice and the moral influence of Hatherton and Smith suggest that there was a genuine sense of social and moral obligation behind many estate policies at this time. Where the estate involved itself in local politics, it was for the interests of the estate: such influence was wielded by many great landowners until the 1850s⁹⁴.

The wretched conditions of life and work in the Black Country have already been indicated - in spite of the relatively high earnings of the colliers and ironworkers. Various reports continually underlined the nature of society in the area. It was stated in 1842 that the main characteristic

'is a deep and almost universally pervading sensuality.'⁹⁵
Wages of miners, even in a depression, were 16/- a week
'and (they) might earn more if they would consent to work six days in the week. When trade is good a thick-coal collier earns 20 - 30/- a week ... and the thin-coal miner 20 - 24/- a week,'

but this was spent mainly on gambling and drink:

'The recklessness and extravagance with which these sums are spent have been commented on in all the reports on the habits of the mining population yet published.'
Indebtedness and the truck system completed the degradation of the local population - even after the Truck Act of 1831.

⁹⁴ Thompson, op. cit., pp. 202-8.

⁹⁵ Report of the Commissioners for Enquiring into the Employment and Condition of Children in Mines and Manufactories, 1842, as quoted in White, op. cit. p. 60.

As the leading employer of labour in the district, the Dudley estate was a positive force against truck and used its power to force all butties to give up the practice in pits leased from the estate.

Ignorance and illiteracy tended to stabilise the situation and retard any hope of removing abuses and improving the quality of life. The estate did a great deal to promote education in the area at all levels. Even the majority of the mine agents were illiterate, as indicated in the mines report of 1850⁹⁶: perhaps with this in mind, Lord Ward and Smith sponsored the establishment of a Mechanics' Institute at Dudley in 1848. Before this date, there was no library or scientific institution in Dudley⁹⁷. As early as 1821, the fourth viscount had established a Sunday school⁹⁸ at Kingswinford: this had become the National school in 1829. This interest in education was further promoted and extended by the trustees and Lord Ward. By 1835, the estate was paying annual subscriptions amounting to £36 10s. for the maintenance of local church schools at Himley, Kingswinford, Redhall Hill, Brierley Hill, Coseley, Dudley, and Sedgley⁹⁸ - all of which had been built on land donated by the estate. Free coal was also conveyed to the schools from estate collieries. New schools were also erected in 1845 on estate property at Dudley, and at Pensnett in 1846. A similar policy was also applied on the newly acquired estates:

Erecting new school (Kidderminster)	£189		
One year's salary to Rushock Schoolmaster	5	10	99
Annual subscription to Martley School	10	0	99

⁹⁶ See Section III, Chap. 2, Part A.

⁹⁷ D.P.L. 12/A. Public address by Viscount Ednam, 29 Jan. 1927.

⁹⁸ Loch's Third Report on the Trust Accounts, 1835, Bateman's Accounts.

⁹⁹ Loch's Report on the Trust Accounts from 1838 to 1849, Matthews Accounts for Kidderminster and Witley, 1839.

Another school was built at Witley in 1844 at a cost of £400: this was after a representation from Queen Adelaide, then the tenant of Witley, informing the trustees that

'the neighbourhood of Witley is entirely without means of instruction for the Children of Lord Ward's peasantry.'¹⁰⁰

Land and money were also donated for church construction: Hatherton suggested in 1841 that the trustees should

'announce a repetition of our former £300, Lord Ward gave £100 also ... to our triennial Diocesan Church Building Society Meeting.'¹⁰¹

Requests for land came in particular from areas where large concentrations of population were developing around mining and ironworking centres, such as Coseley, Quarry Bank or Pensnett, away from the older centres at Sedgley and Kingswinford. These were all granted in 1845-6 and Lord Ward became patron of 15 livings. When it was constituted as an ecclesiastical parish in 1844, Pensnett had a population of 4,000. Charities too were supported by the estate: a total average of £68 per annum was paid to institutions such as the Stafford Lunatic Asylum, Birmingham Deaf and Dumb Institution, Birmingham Dispensary, Birmingham General Hospital, and Wolverhampton Dispensary. Self-help was encouraged in the form of local sickness benefit societies, such as the Stewponey Society and Becher Club, formed in 1842. In 1845, this had 516 members and received an income of £1,074 4s. 10d. of which £617 16s. 3½d. was expended in payments - Lord Ward was vice-president of the society. Lord Ward was also a trustee of the Kingswinford Savings Bank founded in 1834

'For the Parishes of Kingswinford, Stourbridge, Dudley and Their Vicinities.'¹⁰²

¹⁰⁰ S.C.R.O. D260/M/F/5/19/11, Lord Howe to the Bishop of Exeter, 5 Sept. 1843.

¹⁰¹ Ibid. Hatherton to Benbow, 5 Nov. 1841.

¹⁰² B.H.P.L. H7/1, Depositor's Check Book and Rules of the

The estate was also involved in town improvements and local government development, especially in Dudley. Since the Dudley Town Act of 1791, the town commissioners had governed the town: the inadequacy of their administration as the size and needs of the town expanded, were revealed by a special enquiry instituted by the Central Board of Health in 1852 after a particularly severe cholera epidemic¹⁰³. This found that the average age of death was 16 years 7 months and that 69.8 per cent of the population died before reaching the age of 20: these figures were far higher than the national average. Apart from the overcrowded tenements of the central areas in Dudley, a major health hazard was the absence of clean, piped water: many Black Country families took their water from the canals. It was to remedy this deficiency that Lord Ward and Smith actively worked for the foundation of the South Staffordshire Waterworks Company in 1856: both were present when the construction of reservoirs was begun near Lichfield to hold the water pumped from beneath the sandstone measures. Other pumping stations were opened by the company beyond the western boundary fault of the coalfield and reservoirs were constructed locally throughout the Black Country. Richard Smith was elected a member of the Dudley Board of Health in 1853.

The measure of Lord Ward's influence on the development of the local economy is illustrated by the fact that, although estate policy with regard to the construction of the narrow gauge South Staffordshire Railway was defeated, the parliamentary act for the Oxford, Worcester and Wolverhampton Railway was sympathetic to estate interests with regard to the route, freight charges for private waggons, and the

Kingswinford Savings Bank.

¹⁰³ G. Chandler and I. C. Hannah, Dudley As It Was and As It Is Today (1949), p. 145.

construction of narrow (standard) gauge lines through the area. It is probably true to say that, whereas the Dudley estate had always played an important part in regional economic development, after 1836, because of its policies with regard to transport and leased integrated ironworks, it took the lead in moulding the economy of the area. This can be seen in the general value of enterprises such as the Pensnett Canal and Railway, mine drainage schemes, and the provision of credit to ironmasters and coalmasters which was especially valuable in maintaining industrial and mineral operations, and the level of employment, during and after the slump of 1841-2. Since the late eighteenth century, south Staffordshire ironmasters had met on quarter days at Birmingham, Stourbridge, Walsall, and Wolverhampton to fix wages in relation to the selling price of iron - this traditional gathering formulated a constitution and set up the South Staffordshire Association of Ironmasters in 1871¹⁰⁴. From the outset, Lord Dudley had usually attended these meetings and either Lord Ward or Smith represented the estate after 1836. While it is true to say that the estate had always exercised a powerful influence all along, the change of policy which made the estate a producer of iron on its own account after 1839, increased its influence and involvement. This trend was particularly significant after the opening of the reconstructed New Level Furnaces in 1845 and the Round Oak Iron Works in the 1850s. Another factor of increasing importance was the way in which the estate dominated local supplies of minerals after the 1840s to such an extent that coal prices and miners' wages throughout the whole area came to be determined by coal prices offered by the Dudley collieries¹⁰⁵.

¹⁰⁴ Vic.Hist. of Staffs. p. 129.

¹⁰⁵ Walsall Free Press, 21 July 1877.

Such a commanding position in the regional economy was not unusual for a great estate as the estates of the Earl of Durham and the Duke of Devonshire indicate. However, in one respect - political influence - the Dudley estate was less involved than other large aristocratic estates, until Dudley became a parliamentary borough in 1832 and the Witley purchase of 1839 which offered scope for considerable political influence in Worcestershire elections. A significant feature of local politics in the 1830s and 1840s was that, although radicalism and chartism were strongly supported in the area, these movements were not directed against the Dudley estate - although Downing personally was a target for abuse, probably because he had assisted in the formation of a society 'For the Suppression of Blasphemy and Seditious in this Town and Neighbourhood' in 1819¹⁰⁶. The estate was to incur criticism after the mid-1840s, when Benbow offered himself as a parliamentary candidate, but mainly on grounds of electoral influence rather than as an exploiter of the oppressed. Benbow had been ambitious for a parliamentary seat on his own account since 1837. When approached to offer himself as a candidate 'in the Conservative Interest'¹⁰⁷ for Wolverhampton in 1837, he wrote to Lord Ward asking for his support. Both Ward and the Bishop of Exeter expressed their 'greatest pleasure' at this development but Hatherton regretted

'to perceive from the correspondence that you seem to entertain the ambition of representing Wolverhampton:'¹⁰⁸ amongst other reasons, he cautioned that

'A Parliamentary connexion with the District of a large Trust Estate, is ... never desirable'

106 D.P.L. 9/J, Society for the Suppression of Blasphemy and Seditious, Dec. 1819. Minutes 1819-21.

107 S.C.R.O. D260/M/F/5/19/6, Benbow to Ward, 9 Mar. 1837.

108 Ibid. Hatherton to Benbow, 13 Mar. 1837.

but the real reason was his own political conviction, whig, and connection with politics in south Staffordshire and Wolverhampton. Benbow indignantly retorted that Hatherton's letter implied that

'under certain Circumstances I would possess no Integrity or Independence of Character'

and that

'It would be superfluous to refer your Lordship to Instances'

of trustees at present occupying parliamentary seats. Only a small part of the Dudley estate lay within the Wolverhampton parliamentary borough - this was in Sedgley. Eventually, Benbow's attempt to secure the seat was defeated but his determination to obtain the Dudley seat was intensified.

The Dudley Political Union, founded in 1819, had merged with the local Chartists in 1838 to promote the interests of socialism and parliamentary reform in the town¹⁰⁹. There was no real clash with the Dudley estate until 1844: then, Benbow's decision to seek election, and the involvement of the Bishop of Exeter - who in 1840 raised the question 'of making Socialism illegal,'¹¹⁰ focussed the attention of the popular political movement on the trustees of the Dudley estate. From 1834 to 1844, Major Thomas Hawkes of Himley, tory, had been M.P. for Dudley. Smith had raised the question of the political situation in Dudley as early of February 1840¹¹¹ and Benbow urged positive action in 1843:

'I cannot but feel great dissatisfaction at the Conduct of Mr. Hawkes ... in short I have no hesitation in saying that the Interests of our Trust may be materially affected by the want of that Aid which the Member for Dudley ought to afford. Mr. Hawkes professes to act upon the wishes of Lord Ward and it strikes me that his Trustees should join in requesting his Lordship to call upon Mr. Hawkes either to attend or resign.'¹¹²

¹⁰⁹ G. Barnsley, The Dudley Working Class Movement II (1966), p. 19.

¹¹⁰ Ibid. p. 9.

¹¹¹ S.C.R.O. D260/M/F/5/19/11, Smith to Hatherton, 22 Feb. 1849,

Hatherton, as a whig, may have had no particular liking for Hawkes and agreed that Lord Ward should 'insist' on his attendance at Westminster: Ward's relations with Hawkes were complicated by the marriage of his brother Dudley Ward to Miss E. Hawkes at this time:

'The incompatibility of my duty as a Trustee - and of my political Bias make me very averse to interfering in the affairs of the Borough of Dudley ... but ... the approaching end of our duties as Trustees and Lord Ward's continued absence abroad, seem to render your return to Parliament ... desirable.'¹¹³

Although he had personally supported the 1832 Reform Act, Hatherton believed it was Lord Ward's 'legitimate' right to use his influence in Dudley.

Pressure was obviously brought to bear on Hawkes who resigned in August 1844 announcing that

'I rejoice to hear that Mr. Benbow has been encouraged to come forward to solicit your Suffrages.'¹¹⁴

Benbow addressed himself to the electors as

'a Conservative in the genuine sense ... anxious to maintain the ancient Constitution ... yet ready to engraft on it any Improvements which tried practical Wisdom shall desire ... and as a supporter of Trade and Commerce.'¹¹⁵

At the bye-election, Benbow defeated Rawson, chairman of the Anti-Corn Law League, by 388 votes to 175: the total registered electorate was 937 and it is recorded that

'The prevailing influence in the borough is that of Lord Ward.'¹¹⁶

In the 1847 election, Benbow defeated a chartist, Linney, from Bilston, and popular criticism of the 'Castle influence' began to develop. The influence which the estate might wield was not based on cottage tenants - Loch had indicated that as no political advantage was involved, cottage plots could be sold. It would apply where estate tenants of all

112 Ibid. Benbow to Hatherton, 11 Jan. 1843.

113 Ibid. Hatherton to Benbow, 1 June 1844.

114 D.P.L. 5/15, Letter to the Electors of Dudley, Thos. Hawkes, 2 Aug. 1844.

115 Ibid. Letter to the Electors of Dudley, J. Benbow, 3 Aug. 1844.

kinds were enfranchised - but was probably also exercised indirectly in the sense that popular support at the hustings could readily be channelled for or against rival speakers by Lord Ward's mineral agents, and the threat of mob action against property was always a factor in Black Country elections.

Lord Ward's political influence was severely tested when, in 1854, he renounced his support for the Tories and supported the combination of Palmerston's Whigs and the Peelites: he had long admired Peel's commercial policies. Benbow had retired from politics because of ill-health and Lord Ward transferred his support to Sir Stafford Northcote, a Liberal Conservative, in the 1854 election. This produced a mass of political pamphlets condemning the 'feudal' control exercised by Lord Ward: but, estate political influence persisted into the late 1860s. In the divisions on the bill to repeal the Corn Laws, Lord Ward had

'sent to Mr. Benbow his Proxy to be used for Sir Robert Peel.'¹¹⁷

while he himself voted with Hatherton on the 'Navigation Laws' in support of Peel

'for which my Party do look upon me coldly.'¹¹⁸

It is evident that Ward, possibly influenced by Hatherton, became actively involved in local and national politics. He also used his influence at Witley: an entry in Matthews' accounts for 1845 records the item 'Election Expenses £73 3s. 3d.'¹¹⁹ for the Bewdley elections.

During the trust period, the Dudley estate increased its influence on economic, social, and political developments in the area. It had always played an important role in shaping

¹¹⁶ The Parliamentary Companion for 1846 (1846), p. 143.

¹¹⁷ S.C.R.O. D260/M/F/5/19/6, Exeter to Hatherton, 6 May 1846.

¹¹⁸ Ibid. Ward to Hatherton, N.D. July 1846?

¹¹⁹ Loch's Report on the Trust Accounts, 1838-49, Matthews' Witley Accounts, 1845.

the regional economy - especially under the second viscount from 1774 to 1788. However, it became the dominant influence after 1836 because of the policies pursued with regard to the iron and mineral trades, and the expansion of transport facilities. Policies which had a beneficial effect on social developments were also more vigorously pursued or initiated by Lord Ward and the trustees. The welfare of employees and the working classes in general benefitted from the anti-truck policy of the estate and its involvement in education and town improvements. Full acknowledgement of the earl's contribution to local improvements was included in his obituary:

'nearly all the land on which church property now stands in Dudley, Sedgley, Cosely, Tipton, Kingswinford and Wordsley has been freely given to the public ... in educational matters, Lord Dudley was always ready to lend a helping hand, when he saw that a good reason for his aid was established ... He presided at a public meeting in Dudley (3 Feb. 1853) and complained of "the general want of a spirit of progress in the town" and also dwelt on the want of a proper system of sewerage: it may be assumed that the establishment of a Board of Health later in the same year, as well as the subsequent town improvements ... owed their achievement to the speech in question.'¹²⁰

These policies may have been pursued in the interests of a satisfied tenantry and working population - and thus, the estate's interest, but there was also a genuine desire on the part of Ward, Hatherton, and Smith to improve living and working conditions on moral grounds. The mines report of 1850 states that

'For many years after the population began to accumulate in this district, very little was done by the members of the Church to supply the increasing want of clergy or to set on foot schools at all adequate either in number or efficiency.'¹²¹

¹²⁰ Obituary, Dudley Herald, 9 May 1885.

¹²¹ Report on the State of the Population in the Mining Districts, 1850, p. 31.

In these respects and in terms of the general welfare of the district, the estate's work and influence assume considerable significance.

iv. Living Standards

In many respects, Lord Ward's activities recall circumstances which were more typical of the eighteenth than the nineteenth century landed aristocrat. Gambling debts had considerably declined as a charge on large estates by the nineteenth century but Lord Ward's weakness in this respect did involve the trustees in temporary difficulties after 1839 because of large commitments to pay off newly purchased estates. Also, most of the large country houses had already been built by 1790: this too declined as a charge on aristocratic incomes although the need to establish a new house or the desire to build in the new gothic style did persist as a means of demonstrating family status¹²². During the trust period, the inconvenience to Himley from the neighbouring ironworks produced the need to purchase a new family residence, and the estate was also involved in some expenditure on alterations and improvements to the amenities of the new properties. All of the new estates were considered as investments although the Hendwr purchase was strongly motivated by its sporting facilities: the Invergarry estate purchased by Lord Ward was also probably intended as a sporting estate rather than an investment.

Although Himley Hall itself, built by William Atkinson, was in a poor state of repair according to Loch in 1835 - particularly the roof - the household enjoyed considerable luxury. Repairs costing £1,869 were carried out. There had been a resident house steward since 1796 at least, whose duties were quite separate from the other chief agents and

¹²² Thompson, op. cit. p. 87.

stewards of the manors. When the late earl's personal effects were disposed of by the trustees, the sale of wine alone realized £1,819 16s. 4d. Amongst the large household maintained at Himley was a librarian and a House Physician whose salary was £500. The park at Himley was fairly extensive and consisted of 487 acres. The family's London residence was Dudley House in Park Lane: this was insured for £25,300 in 1836, including furniture.

In spite of its proximity to the industrial districts, William was fond of Himley and, even before his father's death in 1835, attempted to improve the game on the estate. He was prepared to pay up to £400 per annum

'on Salaries to Keepers for the preservation of the Property.'¹²³

William himself enjoyed an income of £8,000 per annum under the Will when he attained his majority in March 1838: this was more than doubled by his income from Ednam, Glengarry, and that portion of Witley purchased by him after 1839¹²⁴. His liking for Himley is evident from the fact that he was so anxious to purchase the Oak Farm property from Sir Stephen Glynne, in order to prevent mineral exploitation which might affect Himley Hall. Even after the Oak Farm Iron Works had developed on the property, he still hoped to purchase it and close down the works:

'The Times for Iron are not so good as they were ... £100,000 would buy them out.'¹²⁵

However, because of his gambling debts, William allowed Himley to fall into disrepair and failed to pay his bills. He created further friction with the trustees when he barred his mother from Himley and threatened to close it unless he received £4,000 per annum for the upkeep of the house¹²⁶.

¹²³ S.C.R.O. D260/M/F/5/19/7, Littleton to Benbow, 23 April 1834.

¹²⁴ See Section II, Chap. 6, Part B.

¹²⁵ Ibid. Ward to Hatherton, Sept. 1837.

¹²⁶ Ibid. Ward to Hatherton, 30 Mar. 1843.

This was partly because of a deficiency in the Will, which made no specific provision for the upkeep of Himley Hall, and ultimately the trustees made the money available.¹²⁷

Considerable outlay was incurred on the new estates: the remittances from the Welsh estate were persistently low 'from the outlay required to fit it for Lord Ward's residence.'¹²⁸

Amongst other additions, £201 were spent on the gardens, £688 on new stables, and £654 on new kennels. Heavy expenditure also occurred at Witley on fountains and gardens costing £397. A measure of the luxury of Witley Court is indicated by the fact that Queen Adelaide was the tenant of the house from 1838 to 1841 - this was presumably done to assist the trustees over the very difficult financial hurdle which faced them between 1839 and 1843. Lord Ward resided for various periods of the year at Himley, Witley, Crogen, Ednam, and Glengarry: the upkeep of so many households was only possible because of the mineral income derived from the Black Country estate. This enabled him to gamble and get into debt in anticipation of his future revenue after 1845 and to indulge such fancies as the purchase of Shetland cattle at a cost of £7 a head

'as they are a great ornament to the Park.'¹²⁹

After 1846, the main household was moved from Himley to Witley because of the growing inconvenience from mineral and ironworking activities in the vicinity of Himley Hall. Lord Ward spent over £250,000 on improvements to Witley Court and additions to the park including the magnificent ornamental 'Golden Gates' purchased at the Paris Exhibition in 1862. In addition, large fountains were designed and erected by

¹²⁷ See Section I, Chap. 3, Part B.

¹²⁸ Loch's Fourth Report on the Trust Accounts, Turnor's Account for 1838.

¹²⁹ S.C.R.O. D260/M/F/5/19/11, Ward to Hatherton, Nov. 1838.

James Forsyth, one of which is reputed to be the largest in Europe: it consists of 1,200 tons of Portland stone and took 50 masons over eight years to build and carve on site.

Throughout the trust period, Lord Ward maintained a close interest in the conduct of affairs. His relations with trustees were often strained by his own personal weaknesses but, in general, he co-operated with the main policies of the trust and, benefitting from the influence of men like Hatherton and Smith, developed a keen sense of business in addition to his own sense of justice. The latter characteristic is evident in his dealings with his tenants and employees, and, during the trust, the Dudley estate pursued a policy of general paternalism which was beneficial to the estate and the area as a whole. This, together with the growing economic and political influence exercised by the estate, made Lord Ward extremely powerful in the area. His own standard of living was considerable during this period, but did not attain the height of luxury until after he inherited the full title to the estates in 1845.

C. Systems of Book-keeping and Accounts

At the commencement of the trust¹³⁰, estate records and accounts were totally inadequate in so far as they failed to provide a clear picture of the true profitability of particular aspects of estate enterprise - merely indicating the overall position, and they were inefficiently administered. Of the various advances in book-keeping and accounting techniques which had developed by the end of the eighteenth century, only one had been introduced on the Dudley estate. This was the departmental allocation of costs whereby estate enterprises paid a land rent to the estate and purchased

¹³⁰ See Section I, Chap. 2, Part D for an examination of accounts used 1774-1833.

goods and materials from the Level Store Yard. Other developments such as double-entry forms, capital accounting, and the break-down of accounts to provide specific information such as net profit on individual concerns, administrative expenses, debts outstanding, or receipts from investments, were not introduced until James Loch and Richard Smith became involved in the administration of the Dudley estate. The appointment of the experienced Loch¹³¹ as auditor of the trust accounts was one of the most valuable provisions of the late earl's Will. To Loch, efficiency and improvement were a moral duty. Accordingly, he spent over a year revising the estate accounts in order to provide the information he considered necessary for the trustees to conduct the business of the estate with efficiency:

'I have at last got the Dudley Accounts into a shape to have them re-copied ... It was necessary to new moddle entirely and to transpose Downing's accounts after a careful examination of his books.'¹³²

As he was the land and the mineral agent, Downing's accounts covered almost every aspect of estate enterprise. Over the next few years, Loch maintained his vigilance, and insisted on accuracy of detail and the introduction of the various improvements in accounting which had been in use elsewhere from the beginning of the century.

Downing's mine accounts merely recorded the chronological payment or receipt of money under three headings - 'coal', 'limestone', and 'miscellaneous', showing an annual balance: payments were made to various bailiffs for expenses incurred, without an adequate system of recorded receipts. Loch proposed that, in future:

'the accounts should present a statement Dr. and Cr. of each separate pit or work, carrying to the credit side of the account the quantity of Mine got ... with the expence of getting the same, supported by monthly

¹³¹ See Section I, Chap. 3, Part A for Loch's career before 1833.
¹³² S.C.R.O. D260/M/F/5/19/11, Loch to Hatherton, 10 Aug. 1835.

'vouchers of payments ... to be signed by two of the clerks in the office whose duty it shall be to ascertain at the monthly settlement of accounts, that the men have been paid by the Mine Bailiff. The Debit side ... should confirm the manner in which the Mines so got have been disposed of under such heads as ...

To sold for ready money
To sold on credit
To delivered to furnaces
To remaining in stock
The furnace account must be made out on a similar principle.

There are some payments and transactions ... which must be charged to the works generally. In this way (as payments on account ... cannot be dispensed with) the money so advanced will be ... at the personal risk of the Mine Agent, who will of course look to his own security in granting such accommodation and the care of keeping the necessary memorandums ...

The account should contain a summary ... of all persons who have purchased Mines (minerals) on credit arranged ... thus.

1. The arrears due at the end of the preceding year
2. Debts contracted during the current year
3. Sums received during the year
4. Amount of arrears due.

A separate Stock Book must be kept showing the receipts and disposal of the same.'¹³³

These recommendations were not fully implemented until after December 1836 when Smith became the mine agent and added his support to Loch's campaign for a more efficient system of book-keeping and accounts. Initial attempts to follow Loch's advice produced confusion as the traditionally inclined agents and clerks of the Dudley estate grappled with more detailed and intricate systems. Loch visited Himley in the spring of 1835 and found that:

'the Accounts were not arranged under distinct heads. They did not connect properly with those that preceded them. The profit and loss on each work was not exhibited

¹³³ Ibid. Loch's First Report on the Trust Accounts, 18 July 1834.

'and sums that had been omitted before now made their appearance without explanation ... and above all the Traders' Accounts, (mainly ironmasters purchasing minerals) perhaps the most important of them all, did not connect the arrears given up against them in the new account with those in the former one ... The Ledgers are too numerous in consequence of the Old Ledgers not being closed at the end of every year ... and the Journal, which ought to be the Principal Book and the foundation of the whole system is a mere memorandum Book ... Any person connected with Book keeping must know that the real nature of every transaction should be entered in the Journal of which the Ledger shows the result.'¹³⁴

One final complication in securing an accurate statement of the estate's total income and expenditure was the fact that the mine accounts terminated in December, the landed accounts at Ladyday, and the executor's accounts 'somewhat later'. As the main source of income came from mineral exploitation, Loch proposed that all accounts should be closed annually at the end of December:

'The Mining Concern ... is more in the nature of a Commercial Concern and having large dealings with other persons ... who terminate their transactions and Balance their Books at the end of the year ... As it is of consequence that the Accounts should all terminate at the same period ... I am in favour of terminating the Accounts at the end of the year.'¹³⁵

This proposal was accepted by the trustees. Loch's visit to Himley early in 1835 was also intended to secure information for the trustees concerning

'a list of charges under the different heads of Management, Rent Charges, Taxes, County Rates, Poor Rates, Church Rates, Tythes, Pensions and Subscriptions ... in one view.'¹³⁶

As these were scattered throughout the various accounts at the time, he found it impossible to secure the information he required. Accordingly, he undertook to 'proceed in making out such an Account'. His final proposal was an attempt to

¹³⁴ Ibid. Loch's Second Report, 1835, p. 56.

¹³⁵ Ibid. p. 77.

¹³⁶ Ibid.

establish an accurate record of capital invested in the various enterprises:

'An Account of the value of all the Articles and Machinery, including the Cost or Value of the Pits themselves at each work should also be taken annually with such additions or the contrary as may have occurred ... and a certain sum per cent should be written off yearly on Account of the loss for Tear and Wear.'¹³⁷

This proposal was supported by Smith and Liddell in their mines report and was subsequently incorporated in Smith's reforms introduced in 1836. A similar practice had been operated by certain local ironmasters, such as William Matthews, for a number of years. He considered

'the profits of the iron trade as part of the interest of capital'¹³⁸

and took account of capital costs as part of gross profit.

Loch's visit to Himley was a traumatic experience which led him to propose that his head clerk, Hathorn, should stay there in order to examine all the estate books and accounts so as to introduce a complete 'new system of Books'. This mammoth task occupied Hathorn and Loch until August 1835, but Loch was determined to

'have the Accounts kept in the way I think best for the right understanding of the Concerns, the benefit of the Remainder Men and the security of the Trustees.'

By 1836, the records of the estate reveal that all Loch's proposals with regard to the mineral and iron enterprises, were in operation.

Similar weaknesses existed in the administration of the landed estates, and the purchase of distant properties increased the need for accurate and full accounts. Loch criticised the practice whereby the land agents remitted

'only Balances, after paying for Repairs etc. instead of remitting the entire Rents.'¹³⁹

¹³⁷ Ibid.

¹³⁸ Sel.Com. on Manufactures, 1833, Q. 9647. Evidence of William Matthews: as quoted by D. Spring, 'The English Landed Estate in the Age of Coal and Iron, 1830-1880',

This left expenditure too much to the discretion of sub-agents. Within the vicinity of Dudley, the various land agents

'did not shew any Account of the Timber cut on the estate and applied to repairs.'¹⁴⁰

Moreover, he condemned the local agents because

'large sums for timber, ironmongery, glass, plant etc. ... are carried to the Account of the Level Timber and Iron Store Yard ... but no Statement of the application of any of these, Materials could be furnished.'¹⁴¹

Loch remedied this by introducing a stock book for the Level Store Yard, which recorded stock in hand and all transactions with estate enterprises. This was to be kept at the chief land agent's office at the Priory, and stock could only be drawn from the store yard by an order from the Priory office. Durose, the surveyor in charge of the store yard, was condemned for his lax conduct of affairs in supplying goods and materials without adequate records, and, in Loch's opinion, his function should be merely that of 'an executive Servant'. He was subsequently dismissed.

By July 1835, Loch had established the form and various types of accounts which he approved of, and with the approval of Hatherton, Exeter, and Benbow, insisted on their being used. Apart from the detailed aspects of book-keeping and accounts which he advocated, certain guide lines were laid down for all the chief agents responsible for the mines - Downing, the Himley estates - Bateman, and the Welsh estates - Turner. An annual account was to be presented showing the agent in account with the trustees and giving the net profit of each concern for which he was responsible, thus providing a figure showing the total net profit. A second

The Journal of Economic History, XI, 1951, p. 237.

¹³⁹ S.C.R.O. D260/M/F/5/19/11, Hatherton to Benbow, 7 July 1836.

¹⁴⁰ Loch's Third Report, 27 Oct. 1836.

¹⁴¹ Ibid.

series of accounts showed the agent in account with each individual concern including all cash and credit forms of income and expenditure. The last account was to show the expenses of management in terms of salaries, travelling, stationery etc. These forms of accounts, together with innovations already considered, were used throughout the period of the trust and thereafter. Additional accounts and practices were introduced as the scale and variety of estate operations increased. For example, after Smith introduced the practice of extensive leasing of the pits in 1836, two new accounts were opened by him to show receipts from rents and royalties: he also opened accounts to record the income from various estate pumping engines. These accounts enabled him to discover which lessees had failed to produce the minimum royalty assessed for each leased pit and whether or not a particular engine should be kept in operation in the interests of the estate and its tenants. Although the estate was not liable to pay compensation for surface damage to property in areas enclosed by the Pensnett Chase Enclosure Act, all lessees of estate pits after 1836 had to pay compensation for surface damage to estate property: this was recorded in a new account entitled 'Damaged Land Account'.

It was fortunate for the trustees that systems of book-keeping and accounts did improve over the period of the trust. Because of the amount of credit allowed by Richard Smith to local ironmasters and estate lessees¹⁴², during and after the depression of 1842, total arrears due to the trustees at the termination of the trust in March 1845 amounted to £80,000. They were able to recover all but a small proportion of this while maintaining the confidence of Lord Ward and the Court of Chancery that everything was under control.

¹⁴² See Section II, Chap. 3, Part B.

Accounting for and safeguarding actual cash receipts by the trustees on behalf of the estate, created a major problem in view of the large sums involved. Fortunately, a directive in the Will allowed the trustees to invest estate profits in government bonds - although this might be considered too illiquid or susceptible to adverse market fluctuation should it be necessary to sell, until suitable landed property might be purchased. However, it was unavoidable that the local agents should have some dealings with banks, in the normal course of affairs before estate income could be transformed into government bonds. In December 1833, £45,150 was deposited at the Dudley bank of Dixon and Co. Loch criticised this and advocated its transfer as quickly as possible from the 'Country Bank' to the London bank of Messrs. Hammersley. After July 1834, although the chief mine and land agents continued to use the local bank, the bulk of their deposits were swiftly transferred to the trustees' account with Hammersley and Co. - prior to the purchase of bonds, as the late earl's Will demanded. The wisdom of this policy of investing rather than accumulating bank deposits is proved by an entry in Benbow's account for June 1841:

'By Amount of Balance in Mr. Hammersley's Lands on his death and insolvency on 19 Sept. 1840 £9154 14s. 5d.' ¹⁴³

The trustees received 10/- in the £ on this sum and, after the failure of Hammersley and Co., placed their account in London with Messrs. Gosling and Sharpe.

A similar policy of banking with a local country bank was pursued by the chief agent at Kidderminster - with Messrs. Farley and Turner, and by the Welsh agent - with the North and South Wales Bank. However, the failure of Dixon and Co. in 1843 created a crisis between the trustees over the choice

¹⁴³ Loch's Final Report, 21 June 1849.

of local bank to be used by the chief agents at Dudley.

Smith and Benbow felt that:

'the preferable course will be to open an account with the Birmingham Branch, Bank of England, in which all receipts paid in Bills shall be deposited, and as Cash arises upon them, a portion for current expenses should from time to time be transferred to the Joint Stock Bank in Dudley, such portion never to exceed £5,000.'¹⁴⁴

This was the Dudley and West Bromwich Bank which had been opened in 1834 and Smith considered it desirable for the Dudley estate to maintain an account in the area where the bulk of its mineral revenue came from. Hatherton disagreed and proposed that the Dudley chief agents should bank at Forster's Bank in Walsall. C. S. Forster was a political and business associate of Hatherton and it was probably on these grounds that Benbow rejected the proposal. Apart from this, Benbow pointed out the special circumstances of the local trust account:

'All the Funds come into the Banker's hands in the first place in the shape of Bills - and the points to be most attended to are ... to incur no responsibility by indorsement of the Bills - to watch their conversion into Cash and to limit the amount of it - and above all, to insist that the Bankers shall not put any Bill into circulation.'¹⁴⁵

In view of the amount of arrears owed to the mine agent in 1845, Benbow's fears were understandable. Moreover, in view of local business practice in the iron trade, bills were rarely settled before a lapse of six months and depressions served to increase the amount of money owed. Smith, however, preferred to extend the period of credit rather than insist on payment and risk the loss of goodwill and local customers through bankruptcy. Ultimately, Hatherton succeeded in having the bill account placed at Walsall and a small current

¹⁴⁴ S.C.R.O. D260/M/F/5/19/11, Benbow to Hatherton, 13 Aug. 1843.

¹⁴⁵ Ibid. 8 Aug. 1843.

account was maintained at Dudley. The dilemma of the trustees over the question of banking policy illustrates not only the problem, common to all trustees, of safeguarding sums of money for which they were responsible, but also the problem of having to rely on uncertain country banks for the practical purposes of everyday expenditure.

During the trust period, the systems of book-keeping and accounts had been radically overhauled, brought up to date, and efficiently administered. There is little doubt that, apart from Downing, the trustees would have worked to this end spurred on by the need to safeguard their own pockets against loss of funds for which they were responsible. However, Loch's involvement in the administration of affairs ensured that the tremendous task of systematizing the haphazard accounts of the extensive interests of the Dudley estate, was accomplished speedily and very efficiently. Most of the practices introduced by him were continued after 1845 to the long-term benefit of the estate. An auditor's report on estate accounts in 1871 observed that

'The Ledgers, Journals and Cash Books required in the business are all that can be desired both as to detail as well as in accuracy and neatness.'¹⁴⁶

The cautious policy of maintaining only a relatively small current account in a local bank for practical and diplomatic purposes, while the main account was placed elsewhere, was also continued.

D. The Trustees

i. Their Individual Contribution to the Success of the Trust

The diversity between the character and experience of the four trustees has already been indicated in an account of

¹⁴⁶ D.P.L. 12/L, Report Upon the Examination of the Earl of Dudley's Accounts, Mines Department, for 1871.

their careers before 1833¹⁴⁷. Benbow, a London solicitor, had been employed for over 30 years by the Dudley estate and was, in many ways, conservative in outlook and, to a certain extent, responsible for its deficient system of administration. Downing was a local landowner who achieved the positions of chief land and chief mineral agent by 1826, mainly through length of service and the liking of the third viscount for agents from the ranks of the minor gentry. Downing had been a clerk to the land agent in the 1790s employed in the collection of cottage rents at the time of Charles Beaumont's reforms. He was particularly responsible for the continuation of out-moded practices on the landed estates and in the mines. The Bishop of Exeter, a personal friend of the late earl, was noted for his antagonism towards political and social radicals. Of the four trustees, E. J. Littleton (Lord Hatherton) had the greatest breadth of experience both in national affairs, as an M.P. for Staffordshire, and in the administration of a landed estate exploited for its mineral wealth - this was his own property at Teddesley near Wolverhampton. He was progressive and liberal in his attitude to business administration and politics, and took an active part in social and economic reform through parliamentary legislation. His was probably the most valuable and constructive influence on the success of the Dudley trust and on the character of Lord Ward.

From the outset, he insisted that trust affairs should be conducted with the utmost care to safeguard the income and interests of the Dudley estate:

'With regard to the Accounts, I have not now time to make any other than one general observation ... that every shilling of the income of the Estate, from whatever source, passes through the Bank, Messrs. Hammersley, and that it is drawn out again for disbursements.'¹⁴⁸

¹⁴⁷ See Section I, Chap. 3, Part A.

¹⁴⁸ S.C.R.O. D260/M/F/5/19/7, Littleton to Benbow, 30 Nov. 1833.

His own feeling of moral obligation to the late earl is clear from his comment to Benbow, when warning the latter against precipitate action in resorting to legal action to prove Lord Ward (1833-5) in an unsound state of mind:

'As regards the Trust, I am prepared at any cost and¹⁴⁹ risk, to join in its defence to the last extremity.'

This reluctance to arouse unnecessary hostility, which might endanger the smooth-working of the trust, was a valuable counter to the impulsive counsels of Benbow and Exeter. Hatherton's personal relationship with the young Lord Ward, who inherited the title at the age of 18 in 1835, and his sympathy with and understanding of William's problems, probably did much to mould his outlook which had lasting beneficial effect for the estate and the area until William's death in 1885. Attempts to discipline William in a negative, punitive manner - as advocated by Benbow, the bishop and friends of the family, were discouraged by Hatherton who warned against sermonizing. The problems created for the trustees by William's behaviour have already been considered. A total breakdown in relations was prevented only by Hatherton's careful handling of the situation so that, in the long run by the early 1840s, William adopted a far more responsible attitude to the conduct of his affairs showing a well-informed interest, a keen business sense, and a liberal attitude to his employees. Throughout the trust period it was Hatherton who, from time to time, roused his co-trustees to take action:

' I wish you could fix a time for coming to Himley and spending some days there ... the Interests^{of} the Estate are suffering from want of personal attention to matters on the spot ... three years have now elapsed since Lord Dudley's death and not one meeting of the Trustees for business has been held on the spot.'¹⁵⁰

¹⁴⁹ Ibid. 6 Dec. 1833.

¹⁵⁰ Ibid. Hatherton to Benbow, 6 Sept. 1836.

Even Benbow was moved to acknowledge that Hatherton was

'the only Trustee who has always taken a more than equal share of Trust Business upon yourself - and this without the slightest return.'¹⁵¹

On the contrary, the Bishop of Exeter was reluctant to journey to London or to Himley to participate in business discussions. His eagerness to travel to Worcestershire and Herefordshire in 1838 to examine the property of the Witley estate, prior to purchase, produced a sharp retort from William that he had no intention of allowing the bishop to make a leisurely trip through the west midlands at his expense. The bishop's hostility towards organised political and social reform movements led him to raise the question in January 1840

'of making socialism illegal'¹⁵²

In view of the strength of chartist and radical organisations in the Black Country, it is likely that Exeter's contact with the area would have produced hostility towards the Dudley estate. That this did not occur in the 1830s and early 1840s was probably due to the relatively good working conditions and relations established by Smith: opposition to the estate developed only after 1844 when Benbow offered himself as the Conservative candidate for Dudley. In all, the Bishop of Exeter contributed very little to the successful working of the trust.

Benbow, in spite of his longstanding connection with the Dudley estate and his conservative outlook, did bring professional dedication and absolute integrity to the conduct of trust affairs. He was appointed manager at the outset by his co-trustees and devoted himself to his task. However, in the early years of the trust, his attitude to the others created friction:

¹⁵¹ Ibid. Benbow to Hatherton, 17 July 1844.

¹⁵² Barnsbey, op. cit., p. 9.

'I am by no means satisfied with the manner in which the affairs of the Trust are proceeding. Benbow has been so much used to have his own way, that he is too fond of managing without consulting others ... I mean on Saturday to speak to him in very plain language on the subject.'¹⁵³

There was no question of his integrity and efficiency: in Loch's opinion, Benbow's accounts were 'clearly stated and accurately vouched'¹⁵⁴. As London agent to the late earl, Benbow's salary was £500 per annum: this was increased to £1,000 in 1834, after his own request for a reconsideration in view of his increased responsibilities under the trust. He expected £800 per annum but, at Loch's suggestion, the sum was fixed at £1,000. After the purchase of the Foley estates, Benbow estimated the value of his 'sacrifice of time' to the trust affairs at £1,500 a year. That his colleagues appreciated the extent of Benbow's labours is indicated by their consent to pay him a salary of £2,000 per annum from June 1840 to March 1845.

Whereas the Bishop of Exeter's contribution to the success of the trust was very limited, because of his laziness and ignorance of business affairs, Downing's contribution was, on occasions, positively deleterious to the interests of the Dudley estate. The extent of the shortcomings of his administration of landed and mineral affairs, before 1833, has already been indicated, and it is not surprising that his influence and official power as a trustee provided a stumbling block for the progressive measures proposed by his colleagues. The results of his attitude are illustrated in a letter from a local coalmaster who hoped to lease part of the Dimmocks, one of the estate's pits in Bilston, the lease of which Downing had promised to his uncle:

'If Mr. Downing can succeed in destroying the Confidence of the Trustees by his underhand play, the Field would

¹⁵³ S.C.R.O. D260/M/F/5/19/7, Littleton to Lady Ward, 8 July 1834.

¹⁵⁴ Loch's Second Report, 1835, p. 1.

'be his now and he would once more be lord of Dudley.'¹⁵⁵
Downing resented the policy, introduced by Smith, of leasing the pits to the highest bidders. The steward of the local manors, Bourne, was Downing's brother-in-law and he evidently assisted the latter in opposing the trustees:

'I have received so many Objections from Mr. Bourne to the Power of the Trustees, and to the mode proposed by them to let the Mines, that I feel it ... necessary to be prepared with the best legal Opinions.'¹⁵⁶

In spite of Downing's resistance to change, new policies were introduced by Smith when he became mineral agent. The decision to replace Downing by Smith was forced upon his co-trustees by their colleague's attitude:

'Mr. Downing' is so thoroughly impracticable in his transactions with Mr. Smith that I believe it will be necessary ... to define more particularly the Duties of each. I perfectly coincide with your Lordship ... that he is so feeble in Judgement and indecisive in conduct that little essential assistance is to be expected from him.'¹⁵⁷

Smith became mineral agent early in December, 1836:

Downing retained the responsibility of collecting mineral royalties and debts due to his office at the time of his resignation.

However, he did remain a trustee and, no doubt embittered by his experience, continued to obstruct the business of the estate. Benbow urged Hatherton to take action with him on the matter of Downing's trusteeship in 1839:

'His conduct is not merely annoying but seriously injurious - and it is really become necessary to put an End to it. I cannot reconcile it to my feelings or ... sense of Justice that this Gentleman should receive a very large Salary with other important Advantages, for literally doing worse than nothing.'¹⁵⁸

Richard Smith was moved to express his feelings in a more

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- 155 S.C.R.O. D260/M/F/5/19/11, Williams to Benbow, 4 Jan. 1837.
156 Ibid. Benbow to Hatherton, 21 Oct. 1836.
157 Ibid. 15 Dec. 1836.
158 Ibid. 15 Feb. 1839.

graphic manner:

'The Trust of this Estate is like a Carriage with four wheels heavily laden: three work well - but the fourth is badly hung and will not go round - but is a Drag to the Carriage ... The loss arising from it falls upon Lord Ward.'¹⁵⁹

The Bishop cautiously agreed that something must be done:

'An enquiry into the alleged neglect is due, in common justice, before we cashier one of our Trustees.'¹⁶⁰

It was Downing himself who resolved the situation by resigning from his trusteeship and taking out the lease of a mineral property owned by the trust at Parkfield near Wolverhampton in June 1842. The reason for this extraordinary decision is not clear: he no doubt felt justified in resigning from the trust in which he was the focus of so much discord, but his decision to work mines on his own account may have been motivated by a desire to prove himself to the trustees. Everything seemed to be in his favour: he was allowed to choose the particular trust property he wished to lease and the terms of the lease were

'at his request made in some instances more favourable for himself.'

By September 1843 he was bankrupt, with debts amounting to £20,000. Smith set out the facts for the trustees and suggested that, in view of Downing's lengthy service, some charitable gesture should be made:

'It would be idle to enquire ... how Mr. Downing could possibly have spent his income of £1,250 for eight years (as mine agent) and his legacy of £4,000 by the late Earl, to have contracted debts of near £20,000 having enjoyed his house rent free, with coal and other advantages, and also received money upon the sales of the produce of the mines.

Mr. Downing now appears to rely upon the bounty of Lord Ward and his Trustees.'¹⁶¹

159 Ibid. Smith to Benbow.

160 Ibid. Exeter to Hatherton, 20 Feb. 1839.

161 Ibid. Smith to Hatherton, 20 Oct. 1843.

No doubt the depression of 1842, which produced adverse trading conditions, and the failure of Dixon's Bank in 1843, to which he owed £12,000, forced him to give up the mine. But, the extent of the catastrophe can only be attributed to his own inadequacies. The trustees agreed with Smith and, although Downing was obliged to vacate the mansion at the Priory, which he had continued to occupy in spite of the fact that he had ceased to be mine agent in 1836, he received an annual pension of £500 from Lord Ward's estate. He died in November 1857.

Loch's valuable contribution to the success of the trust has already been indicated. Although not a trustee, the late earl's Will had appointed him auditor and it was in this capacity that he was able to give constructive advice on the existing state of affairs and administration. Whereas Loch, as chief agent of the Sutherland estate, was

'the prime-mover in their affairs'¹⁶² and wielded the authority necessary to implement his policies, he could only advise the Dudley trustees. It is a measure of his reputation and the force of his arguments that so many of his recommendations were carried out by them to the permanent advantage of the estate. The only criticism that may be levelled against him is the fact that, in his capacity as Superintendent of the Bridgewater Trust, he offered the post of manager of Lord Egerton's canals and collieries to Richard Smith in 1837, at a salary of £1,200 per annum and a house. This annoyed the trustees but calm councils prevailed and Loch was retained as auditor. Smith's salary was increased to £1,200 a year, and his son became deputy superintendent to Loch and later general manager of the Egerton mineral properties.

Many of the reforms in agricultural policy, cottage

¹⁶² Richards, op. cit. p. iii.

properties, and accounts which he proposed to the trustees, were similar to policies which he himself had already carried out on the Sutherland and other estates. He was always forthright and even ruthless in his determination to enforce his ideas for improving the state of affairs. He once remarked on a visit to Brighton that he had never seen such

'shocking farming as there is in this quarter ... if they only starved themselves there would be no great harm done.'¹⁶³

Even Lord Hatherton was sharply reminded of the need to adopt Loch's suggestions:

'May I ask if you have read my former Reports. I had taken some pains with them, and made some suggestions which were worthy of discussion. I would submit also that the remarks made upon the agents' accounts should be communicated to them.'¹⁶⁴

This attitude, no doubt, provided the necessary steel for Hatherton to carry his co-trustees along with him in the more efficient conduct of affairs.

Faced with the reform and management of so complex an estate, and in view of the diversity of character amongst them, it is no surprise that the trustees were frequently divided over decisions of policy. These began at the outset over what should be done about Lord Ward's interference in affairs, and continued over mineral policies until Downing's resignation from the trust in 1840. Political involvement in the area was inevitable and Benbow's allegiance to the Conservatives antagonised Hatherton, a Whig, in the matter of the Wolverhampton election¹⁶⁵. However, in spite of his support for the Reform Act, Hatherton had no objection to Lord Ward exercising his 'rightful' influence to secure the Dudley seat for Benbow in 1844. There was some dispute over

¹⁶³ S.C.R.O. D260/M/F/5/19/11, Loch to Hatherton, 11 Sept. 1841.

¹⁶⁴ Ibid. 7 Sept. 1841.

¹⁶⁵ See below.

the policy of purchasing distant estates for Downing advocated that only local property, preferably with minerals, should be purchased. These and other issues such as what to do with William, Lord Ward, the choice of banks, and the purchase of stocks after 1845 produced disputes from time to time. However, the main stabilising element was Hatherton's sense of moral obligation to his friend the late earl, and his determination to ensure the successful discharge of the trust's responsibilities. This, together with the professional dedication of Loch and Smith, ensured that, in spite of the individual weaknesses of the trustees, the period of the Dudley trust was wholly beneficial to the estate both at the time and in the long run.

ii. Conflicts of Interest Between the Trustees and Lord Ward

In spite of the overall success of the trust in fulfilling the terms of the late earl's Will, there were several issues on which there was a real clash between Lord Ward's and the trustees' interests. One of the sources of friction concerned the local political activities of the Dudley estate: this arose out of Hatherton's allegiance to the Whig party and the support given by Benbow and Lord Ward to the Tory party. Hatherton felt obliged to discourage and, ultimately, to oppose Benbow's attempt to secure the seat for Wolverhampton in 1837. Benbow asserted that the invitation to him to offer himself as a candidate

'could only have proceeded from my Connection with your Estates, or my position as a Trustee'¹⁶⁶

and requested the support of Lord Ward and his co-trustees. Lord Ward expressed his 'greatest pleasure' at this development and the Bishop of Exeter considered it 'most important to the House of Himley'. Apart from the general advantage of

¹⁶⁶ S.C.R.O. D260/M/F/5/19/19, Benbow to Lord Ward, 9 Mar. 1837.

a member of the trust holding a seat at Westminster, there was a more direct interest as part of the Wolverhampton constituency lay in Sedgley manor where the estate possessed extensive property. Hatherton's comments are of particular interest, in view of subsequent developments at Dudley, and throw light on the political attitudes of the most ardent supporters of the 1832 Reform Bill.

'I deeply regret to perceive ... that you seem to entertain the ambition of representing Wolverhampton. I regret it, because ... to go through an arduous contest ... striving continually to maintain your Interest there, would destroy your independence and usefulness as a Trustee. Every Act of yours would be attributed to partiality and mention of Private Interest and Complaints without end would be addressed to me ... and the business of the Trust could no longer proceed amicably.

A Parliamentary connexion with the District of a large Trust Estate is never desirable ... in the person of any Trustee ... And it is still more objectionable in the case of one appointed by his Co-Trustees, all of whom do not agree with him in political opinion, the Acting Manager of the Trust.'¹⁶⁷

Hatherton had represented south Staffordshire for 23 years as an M.P., and was closely connected with affairs in Wolverhampton by political interest and the location of his extensive landed and mineral property (13,000 acres) within and around that constituency. Benbow pointedly asserted that Hatherton was inconsistent and rejected the implications that:

'under certain Circumstances I would possess no Integrity or Independence of Character ... If I have been correctly informed that your Lordship has no direct Interest in the Borough, you must appear, by supporting the present Members as a Trustee, to have a Patronage over it and thus to act inconsistently with your own Arguments and in Opposition to the Feelings and Interests of those for whom we are Trustees - of the majority of your co-Trustees and of the Tenantry, the proper and natural supporters of

¹⁶⁷ Ibid. Hatherton to Benbow, 13 Mar. 1837.

'the Family. I need not tell your Lordship how much ... the more wealthy and intelligent part of the Community feel ...dishonoured ... by the Return of Persons who have no Sympathy for a Connexion with any but the popular Party in the Borough.'¹⁶⁸

The correspondence became more acrimonious during the election campaign with accusations that Benbow was threatening estate tenants with eviction if they voted for Thornely and Villiers, the whig candidates, and Hatherton was accused of deliberately working against the trust interests. Hatherton told his political associates that he would not publicly work for the whig candidates - but, in announcing that no tenant of Lord Ward need fear to vote according to his conscience, he effectively influenced the voting returns. He had been strongly urged to make speeches in support of the whig cause

'as it would be a disgrace ~~if~~ that one of the newly enfranchised Boroughs should return two Tories.'¹⁶⁹

Fortunately for the trust, Benbow was defeated although he remained embittered towards Hatherton for some time afterwards.

The decision of the trustees to secure the seat for Dudley in 1844 by replacing Hawkes, a tory, by Benbow, has already been considered¹⁷⁰. On this occasion, although Hatherton pointed out that

'The incompatibility of my Duty as a Trustee - and of my political Bias make me averse to interfering in the affairs of the Borough of Dudley,'¹⁷¹

he conceded that

'For Lord Ward's Interest, you are doing the best thing ... It will give you advantage and weight in the administration of his affairs.'

He raised no objection to a trustee seeking a local seat on this occasion. This would suggest that, on the matter of the

¹⁶⁸ Ibid. Benbow to Hatherton, 13 Mar. 1837.

¹⁶⁹ Ibid. Barker (party agent) to Hatherton, 12 July 1837.

¹⁷⁰ See Section III, Chap. i, Part B iii.

¹⁷¹ S.C.R.O. D260/M/F/5/19/11, Hatherton to Benbow, 1 June 1844.

Wolverhampton election, Hatherton had discouraged the Dudley estate not only on political grounds - for the seats were held by whigs, but also because of his personal economic interest in the area which was also, presumably, a market for his own minerals. He had no such commitment to Dudley. Apart from this episode, Hatherton always placed his responsibilities as a trustee first in political matters. When Benbow was approached

'for a Subscription from Lord Ward and the Trustees for the support of the Association for the Protection of Agriculture in Worcestershire,'¹⁷²

Hatherton agreed:

'I feel I ought not to object to your fixing a Subscription (which I suppose will not exceed £50) in the general form of "The Trustees of the Earl of Dudley" ... But I am an Advocate for moderate Protection.'

The other major source of friction between the interests of Hatherton and the Dudley trust arose out of his position as Chairman of the Staffordshire and Worcestershire Canal. Two new canals¹⁷³ were proposed by Smith and Benbow to improve the transport facilities in the Himley-Gornal area of Pensnett Chase where estate and other mineral interests were expanding rapidly in the 1830s. One, proposed in November 1839, would link the area with the Staffordshire and Worcestershire Canal at Hincksford: this would be about 10 miles from the junction of the through canal with the Birmingham Canal at Aldersley. The second, proposed in 1840, was intended to link the Stourbridge Extension Canal at Shut End, via Gornal, Himley and a tunnel at Sedgley, with the Birmingham Canal at Tipton Green. This lay on the eastern side of the ridge about six miles from the junction at Aldersley. Hatherton opposed them both: in the case of the

¹⁷² Ibid. Benbow to Hatherton, 5 Feb. 1844.

¹⁷³ See Section II, Chap. 4, Part B.

Hincksford Canal it is difficult to see how the interests of the Staffordshire and Worcestershire would be adversely affected and it may be that Hatherton was anxious to prevent additional competition with his own venture - the Hatherton Branch, cut between April 1839 and April 1841, to link his own mines at Cannock with the Staffordshire and Worcestershire Canal. This area was eventually tapped by an extension of the Kingswinford Railway. In the case of the proposed through link by a tunnel under the Dudley ridge to the Birmingham Canal, barges would save time and tolls by using the new route, as opposed to the traditional connection at Aldersley. Hatherton argued - unconvincingly - that there would be too little support for another through route. Although the proposal was dropped - probably to the long-term advantage of the estate, a better connection was established with the eastern side of the ridge by extensions to the Kingswinford Railway, the cutting of the Fensnett Canal (Lord Ward's Branch), and the railway tunnel at Dudley - all constructed in the 1840s. In view of the growing pressures on canal interests, one can sympathise with Hatherton in the dilemma which his various responsibilities forced upon him. However, apart from the matter of the two canals, Hatherton always laboured unstintingly to fulfil his obligations to the Dudley trust.

The Bishop of Exeter was less likely to become involved in a personal clash of interests with the trust. However, on two occasions, he created friction by his own actions which arose out of an attempt to use his influence as a trustee in the interests of his relatives. He supported and encouraged his brother's abortive application to convey and sell the sugar, produced on the Dudley estate's property in Jamaica, at Gloucester rather than London¹⁷⁴. This contract had been

¹⁷⁴ See Section II, Chap. 1, Part B.

handled for many years by Messrs. Hibberts. Although the bishop asserted that

'I have no personal wish on the subject,'¹⁷⁵
he himself submitted his brother's proposals to the trustees. One of the largest mineral leases granted by the trustees had concerned unworked thick coal at Pensnett: this had been granted to Messrs. Philpotts and Plant in December 1839. Philpotts was the bishop's son and this relationship caused embarrassment after March 1845 when considerable royalty arrears accumulated on this lease. Hatherton was anxious in case the impression should arise that

'your Son's position as a Lessee ... of Lord Ward has hitherto induced you to be less urgent ... In this Neighbourhood, the circumstances of your Son's Lease, granted some ten years ago, is sure to be referred to as a cause of your Embarrassment ...'¹⁷⁶

These debts were ultimately paid and, although Exeter may have used his influence to allow his son time to pay off the arrears, royalty arrears were not uncommon on the Dudley estates at this time following the difficult years of 1842-4.

In general, it seems that the trustees did not abuse their positions to further their own interests. The few occasions when Hatherton may be considered to have been motivated by considerations other than those best serving the Dudley trust, were forced upon him by the fact of obligations contracted before the trust was formed. The bishop's digressions from duty were more the result of personal considerations than in the furtherance of rival interests.

iii. Problems Relating to the Administration of the Trust

During the course of the trust and the subsequent period of 13 years when trust affairs were being wound up, a number

¹⁷⁵ S.C.R.O. D260/M/F/5/19/11, Exeter to Hatherton, 7 Sept. 1835.
¹⁷⁶ Ibid. : Hatherton to Exeter, 4 July 1848.

of major administrative problems confronted the trustees. At the outset in 1833, a serious situation had arisen from conflicting interpretations of the late earl's Will, which resulted in Chancery proceedings over Lord Ward's claims on the trust and the guardianship of his son William. These were all satisfactorily resolved in the trustees' favour by 1835¹⁷⁷.

One of the general criticisms of the practice of strict entail is that the life tenant was unable to incur obligations for his successor in the form of debts: this created problems when estates were faced with a shortage of capital. This was precisely the problem which confronted the Dudley trustees. Under the terms of the Will they were obliged to use the profits of the estate to purchase landed property. When the Foley estates at Witley came onto the market, the trustees could not realize sufficient capital from the sale of government bonds to purchase these desirable estates without negotiating a mortgage:

'with the Rents and Profits received and with the personal Estate of the Testator, the Trustees have purchased and contracted for Estates to near £300,000 ... These large Investments have exhausted the present Funds and the means ... for future Purchases must of course depend upon the Profits and Mines of the Estates.'

The Hurcot and Kidderminster estates had already been purchased and the trustees, with Lord Ward's concurrence, were anxious to purchase the Witley estate, containing Witley Court, as a satisfactory residence to replace Himley which was being ruined by neighbouring industrial activities. Counsel, R. D. Craig, advised that no action should be taken without the consent of the Court of Chancery, and that

¹⁷⁷ See Section I, Chap. 3, Part B.

¹⁷⁸ Loch's Fourth Report, 11 May 1838. Opinion of Counsel Relative to the Purchase of Lord Foley's Estates, 6 June 1838.

permission to contract an obligation to pay off debts from future revenue, to be derived both before and after the termination of the trust in March 1845, might be secured on the grounds that, an alternative residence was necessary, considerable advantages would arise from the union of the two estates, and the bulk of the debt would be paid off by 1845. The dangers of the situation are evident from the fact that:

'the Trust Estate would for a considerable time be called upon to pay annually ... a much larger Sum (interest) than the Income to be derived from the purchased Estates - for example the Interest ... for the first year would be £27,000 and upwards - and the Income of the Foley Estate about £11,000 Nett ...'¹⁷⁹

Chancery permission was secured, although the purchase was divided into two portions in order to reduce the debt contracted by the trustees. Half was to be purchased by the trust and paid for by March 1845, the remainder was purchased by Lord Ward with payments commencing after March 1845, although interest was to be paid by him before that date, from his own personal income¹⁸⁰. Smith's services to the trust and to Lord Ward assume an even greater significance in that he not only maintained but increased the profits from mineral enterprise and enabled these capital and interest payments to continue. However, the gamble nearly failed because of Lord Ward's irresponsible behaviour in contracting debts on his own account, and the slump in the iron trade in 1842 which drastically cut the mineral income for a time.

A further problem which produced a crisis after 1845 was Benbow's tardiness in presenting his annual account as executor, which showed the overall financial position of the trust: Until 1838, Benbow regularly submitted his account to Loch but failed to present another annual account until after 1845. The reason for this is uncertain: it may

¹⁷⁹ Ibid.

¹⁸⁰ See Section II, Chap. 6, Part B.

be that Benbow became unco-operative as a result of his experience over the Wolverhampton election but, in view of the continued satisfaction of Lord Ward and the other trustees with his services, this is unlikely. The probable explanation is that ill health, and the sheer pressure of work in carrying out his everyday tasks while transacting the frequent purchases of land and stock, prevented him from presenting his annual account. Although this vital account, which showed all receipts and expenditure handled by Benbow on behalf of the trust, remained unaudited after 1838, all other accounts from the various agents were regularly submitted to Loch. However, the situation assumed a more serious nature after the termination of the trust and, under pressure from Hatherton and Exeter who were anxious to have the trust wound up as quickly as possible, Benbow assured Hatherton

'that all the Accounts unaudited to June 1844 shall be in the hands of Mr. Loch within a Month.'¹⁸¹

The passage of time presumably increased Benbow's problems in making out accounts over a period of six years, for Loch complained in April 1846 that he had still not received the accounts.

This news induced Hatherton and Exeter to seek legal advice, and the facts of the situation were set out in a letter to Exeter's solicitors - Clarke, Fynemore and Co.:

'The Bishop of Exeter and Lord Hatherton have not however any certain knowledge of the pecuniary affairs of the Trust since 1838 - Mr. Benbow having been allowed, from their perfect confidence in him, to receive and pay all monies by his own order ...

During the period of eight years (1836-46) ... a sum of not much less than £1,000,000 of Trust Money must have passed through his hands, (and) it is a subject of much anxiety that ... they should possess copies of all his Accounts duly settled ...

In April 1845 ... Lord Hatherton met Mr. Benbow at the House of Lords and, expressing his surprise that he had never received any communication ... relative to

¹⁸¹ S.C.R.O. D260/M/F/5/19/11, Benbow to Hatherton, 15 April 1845.

'closing the Trust Affairs, was assailed by the most violent invective by Mr. Benbow who exclaimed that that appeal was the result of Lord Hatherton's dissatisfaction with Mr. Benbow on other Accounts (some Railroad affairs). But he soon moderated and assured him ... that everything would be wound up in six months.'¹⁸²

Apart from the pressure of work, which in itself does not excuse Benbow's failure to submit his accounts from 1838, the situation was also created by the mutually stubborn attitudes of Benbow and Loch: the former sent on all the agents' accounts to Loch but not his own

'because I wished that they should contain Receipts to the latest period (and) ... from an Idea that they were of no possible use to Mr. Loch until he had investigated the Accounts ... before him.'¹⁸³

Loch, for his part, refused to present an annual report until he had received Benbow's accounts, which are

'the accounts ... of most importance'¹⁸⁴.

Benbow further defended himself by asserting that he was unwilling to submit his accounts until all arrears, which amounted to £80,000, were collected - most of which concerned mineral leases. Richard Smith, while appreciating Benbow's motives, resisted all attempts to force payment of arrears:

'notwithstanding any effort on my part ... there are still many debts due ... and you must allow me to say that in all Mercantile Transactions (to say nothing of the Extent of our Dealings) this difficulty is always experienced.

... I trust they (the Trustees) will allow something to my discretion otherwise I may inflict a severe injury upon Lord Ward by destroying old connexions and exposing his Lordship to great unpopularity.'¹⁸⁵

Hatherton and Exeter rejected this argument and insisted on the immediate collection of all debts contracted between 1838 and 1844. It was precisely these debts that iron and

¹⁸² Ibid. Hatherton and Exeter to Clarke, Fynemore and Co.

¹⁸³ 24 April 1846.

¹⁸⁴ Ibid. Benbow to Hatherton, 27 April 1846.

coalmasters found difficult to pay off as trade was only just recovering from the adverse conditions of 1842-3.

By 1848 Hatherton's anxiety was extreme:

'I cannot find words to express the sense I have of my own unworthiness as a Trustee in permitting the present state of things to continue ... If this shall become known, our conduct will be increasingly condemned. I know that Mr. Craig (his legal adviser) would not consider us safe in further Abstinence from compulsory proceedings (against Benbow).'186

The bishop wished to avoid chancery proceedings which would 'probably last longer than Mr. Benbow's life and leave us to fight in the dark with his representatives.'187

He made one last plea to Benbow which had the desired result:

'the close of our Trust is essential. Life is advancing with all of us ... It is not to be endured that Mr. Loch should again leave London for his distant engagements (Sutherland) without giving us the result of his investigation of the accounts.'188

All the required accounts were placed in Loch's hands on 1 August 1848 and audited by 21 June 1849.

Some debts remained outstanding, amounting to £26,812 19s., including £13,489 19s. 6d. owed to the mineral account and £8,892 owed to the trust by Lord Ward. Smith had successfully resisted attempts to make him force the lessees to pay off their debts at once in 1845 and allowed them to pay when trade improved: for example, in 1842-3 he paid £5,000 to Benbow and £76,944 in 1846. It was not until 1858 that the final accounts of the trust were settled. After John Benbow's death in February 1855, his affairs were handled by his son J. H. Benbow: the latter was informed by Hatherton in April 1856 that he was surprised

184 Ibid. Loch to Hatherton, 23 April 1846.

185 Ibid. Smith to Benbow, 13 Feb. 1846.

186 S.C.R.O. D260/M/F/5/19/12, Hatherton to Exeter, 4 July 1848.

187 Ibid. Exeter to Hatherton, 10 July 1848.

188 Ibid. Exeter to Benbow, 10 July 1848.

'at your continued silence about the Audit of the Dudley Trust Accounts'¹⁸⁹.

With the assistance of R. D. Craig of Lincoln's Inn, the final accounts were submitted and audited in January 1858: Loch died shortly before this date.

'We have ascertained that the Accounts of the Mine Agents and the Estate Agents ... have been duly and finally closed. The whole of the late Earl's personal estate has been properly and fully realized with the exception that 20 Shares in the Stratford and Moreton Railway Company and 20 Shares in the University College London have not been sold and that a small unascertained sum due ... the Parkfield Colliery has not been got in.'¹⁹⁰

In spite of the fact that the time taken to wind up the affairs of the trust lasted one year longer than the trust does not indicate inefficiency on the part of the trustees in general. The situation arose, to some extent, out of the stubborn attitude of Benbow and Loch. Although this was occasioned by a professional dedication not to submit or audit incomplete accounts, the real reason lay in the complexity of trust affairs and the adverse conditions in the iron trade and in agriculture in the 1840s.

Further problems were created for the trustees after March 1845 by Lord Ward's attempt to use estate income for his own purposes. Craig advised the trustees to retain all estate income arising from transactions carried out before the end of the trust, in their own names, and to retain

'nothing in the Bank, but to order Investment till the money is wanted.'¹⁹¹

Benbow had made a loan of £35,000 of trust money to Lord Ward: this was repaid on 13 November 1846¹⁹², after pressure from Exeter and Hatherton on the advice of Craig, but a further £90,000 had been

¹⁸⁹ D.H.L. 9/J, Hatherton to J. H. Benbow, 14 April 1856.

¹⁹⁰ S.C.R.O. D260/M/F/5/19/13, R.D. Craig's and J.H. Benbow's Final Remarks on the Accounts of the Dudley Trust, 22 January 1858.

¹⁹¹ S.C.R.O. D260/M/F/5/19/12, Craig to Hatherton, 18 Oct. 1846.

'paid for on account of his Lordship ... since he attained his Majority.'¹⁹³

These sums had all been recovered before the presentation of the final accounts in 1858.

Conclusion

Before the commencement of the trust, the administration of the Dudley estate had been deficient in many respects. As the trust inherited the agents and administrative practices of the late earl, it seemed likely that the estates would continue to be inefficiently administered, and that out-of-date practices would persist. Moreover, two of the trustees, Benbow and Downing, were responsible for this state of affairs before 1833. However, in general, the period of the Dudley Trust saw the eradication of traditional attitudes and practices - largely through the professional policies of Loch and Smith and the keen sense of responsibility which Hatherton felt in his determination to fulfil his obligations to the late earl. The managerial revolution, which had been taking place since the 1790s on other estates, had barely begun before 1833 on the Dudley estate: by 1845 business was efficiently administered in the most up-to-date manner.

After 1833, the quality of agents was improved with the replacement of Bateman, Downing, Durose, and others with more professionally able men such as Maughan, Smith, Matthews, and Turnor. Under these chief agents, the general quality of the administrative staff improved. Greater centralisation and overall control were established by the appointment of Benbow as manager-in-chief while greater cost control was exercised by Loch in his function as auditor. The only major weakness in the structure of the administration

¹⁹² Ibid. Benbow to Hatherton, 13 Nov. 1846.

¹⁹³ Ibid. Benbow to Lady Ward, 7 Oct. 1846.

was the fact that Loch lacked any executive powers to enforce his recommendations: this frequently resulted in a time lag before the trustees took up his suggestions. In the early years of the trust, administrative problems were also created by the interference in affairs of William Humble, Lord Ward 1833-5, and irresponsibility of his son William. These difficulties were overcome largely by Hatherton's tact and strength of character and, although William annoyed his trustees from time to time by his apparent flippancy and selfishness, under Hatherton's guidance he adopted a more responsible attitude and took a constructive part in the conduct of affairs whenever the opportunity arose. He continued active in the administration of his estates and, in this respect, was typical of the aristocratic landowner of the mid-nineteenth century.

In view of his family background and his personal inclinations, William might have ruined himself and the Dudley estate. That he did not was due to his own strength of character and Hatherton's guidance. He adopted a liberal attitude towards his agents and employees: the practice of truck was forbidden on his estates, even by lessees, generous sickness benefits and pensions were provided for his own employees, and good working conditions were established. This approach set a desirable standard which public opinion and official reports sought to extend to the Black Country in general. Lord Ward also showed a sense of social responsibility in the provision of land and capital for churches, schools, and public charities in the area. He personally involved himself in public works - especially the provision of an adequate water supply. All of this ensured that a good relationship existed between the Dudley estate and the local population, and there were few, even at the time, who would claim that these policies were a palliative for bad living and working conditions - by the standards of the day and the

area, the Dudley estate was a benevolent employer.

It was inevitable, and fortunate, that the estate assumed a dominant position in the local economy. The policy of leasing extensive minerals, introduced after 1836, enabled fully integrated ironworks to develop on the estate - this was in the interests of the lessor, the entrepreneurs, and the working population. Other estate policies such as improvements to the local transport system and the introduction of co-operative mines drainage schemes were all mutually beneficial. During the slump in the iron trade in the early 1840s, the extensive credit allowed by Smith to local iron and coalmasters enabled many enterprises to remain in business when the collection of arrears would have resulted in bankruptcy and unemployment. This policy was adopted not simply in the interests of the estate, because new lessees could easily have been found when trade recovered, as the Dudley estate owned a large proportion of the minerals remaining in the Black Country. The policies of the estate probably account for the relative lack of criticism from local chartist and radical elements until the Dudley election of 1844 when a chartist opposed Benbow for the parliamentary seat. Even then, the criticisms made concerned allegations of political abuse of power rather than the exploitation of the working population.

Along with the improvements in the quality of agents, systems of book-keeping and accounts were radically overhauled and the most up-to-date practices were introduced. Not only the obvious improvements were made, such as a common date for the closing of annual accounts for all branches of estate enterprise and the introduction of a double entry system, but there was also a breakdown of accounts so as to provide accurate information on all aspects of business enterprise. Loch, his chief clerk Hathorn, and Richard Smith were

responsible for this achievement. A particular policy was also adopted with regard to bank accounts: the bulk of estate income was held in the form of government stock but cash accounts had to be maintained for practical purposes. These were established in various local banks in the vicinity of the different estates and the main trust account was opened at a London bank. The wisdom of this policy of maintaining small accounts only in a number of banks, as well as the weakness of the banking system at that time, are indicated by the failure of two of the banks with which the trust was concerned.

Of the four trustees, Hatherton made the most valuable contribution to the success of the trust, in spite of the clash of interest which even he experienced. Although some criticism may be levelled at the trustees for allowing the presentation of Benbow's account to fall in arrears, there are other considerations to be taken into account such as the economic circumstances of the time. In general, the evidence suggests that the unqualified success which the trustees had in greatly expanding the capital interests and profitability of the Dudley estate between 1833 and 1845 is matched by the improvements made in the administration of affairs. In both cases the beneficial effects of their policies were enjoyed by the estate long after the termination of the trust.

CHAPTER 2. THE ORGANISATION OF IRON
AND MINERAL ENTERPRISE

As the main source of trust income derived from the iron and mineral trades, their organisation merits particular attention. The fact that there were serious deficiencies in the administration before 1833¹ was clearly indicated in Loch's early reports on the trust accounts, and by the mines report drawn up by Smith and Liddell in 1836. Some indication of the reorganisation and administrative reforms subsequently carried out by the trustees has already been given when considering the increase in the scale and profitability of the iron and mineral enterprises between 1833 and 1845². The proposals of the late earl's Will, the recommendations made by Loch and Smith, and the extent to which they were put into effect with regard to the administration of iron and mineral enterprise, will now be considered in detail.

A. The Agents

As early as 1804³ there had been a mines department with a considerable number of staff employed. This may have been established as early as the 1780s by the second viscount when he began the intensive exploitation of the minerals but, in view of the weaknesses of administration by the mid-1790s, it was probably one of the reforms introduced by Charles Beaumont in 1797. The growing importance and status of the mineral agent is indicated by Lord Dudley's proposal to construct a new mine agent's house in 1823. He consulted the

¹ See Section I, Chap. 2, Part D.

² See Section II, Chaps. 2 and 3.

³ See Chart 7.

agent, Roberts, and the land agent, Downing, who proposed that the house should be erected at Barrow Hill at a cost of £4,550⁴. This was a prominent position on Pensnett Chase - and was, significantly, to the south of the Dudley ridge in the area where the greatest potential of the mineral estates lay. However, the house was subsequently erected at the Priory, Dudley and incorporated offices used by the land and the mineral agent after 1826. This was a more central point in relation to the estates as a whole.

Although the scale of mineral enterprise had continued to expand on the Dudley estate until the early 1830s, the quality of management was inadequate to efficiently administer such extensive interests. This was not unusual in the area as it was not until the second half of the century that a managerial class emerged in the Black Country⁵. An impetus was given by the foundation of the South Staffordshire and East Worcestershire Institute of Mining Engineers in 1867. The situation in general is indicated by a government report of 1850 which commented on the work and calibre of the mine agents:

'they are about 60 in number ... and have the supervision of all the coal and ironstone pits; they lay them out for work and ventilation ... the greater part have been workers within the last 12 years ... and about 15 cannot read or write. I should think that out of the 60 there may be 25 who are educated men; the rest, say about 20, are in a sort of intermediate state as regards intelligence.

It is a serious loss to all the iron and coal works of the district, and to the capital employed in them, that the whole of the mine agents are not equal in point of education to the minority abovementioned.

Many mine bailiffs cannot read a plan and work without one. They measure the work done ... and keep it in their minds ... They also peg it down on the surface ... Fourteen years ago (1836) there were scarcely any regular

⁴ D.P.L. 10/K, Downing and Roberts to Lord Dudley, May 1823.

⁵ V.C.H., p. 101.

'plans made of the workings in this district.'⁶
This description was equally applicable to the state of affairs on the Dudley estate before Smith assumed control in 1836. Downing would, no doubt, have been classified as 'educated', but his methods were as out of date and rule of thumb as the typical Black Country agent of 1850.

Smith and Liddell concluded their report on the mines and ironworks in 1836 by a recommendation concerning the management of affairs:

'The only way to effect this object (efficient control) is to place the responsibility of this Department on a professional Mine Engineer who is well acquainted with every locality, has a thorough knowledge from long experience in thick and thin coal mining and in working and getting all kinds of Ironstone, Limestone etc., he accountable to the Manager in Chief (Benbow) ... and, who shall regularly record the underground Surveys.'⁷

Although the report expressed the hope that the

'very respectable Gentleman who has so long been at the head of these important Concerns ... will not attribute to us any intention to disparage the merit so justly due to him,'⁸

Downing was bitterly resentful. After maintaining a stubborn silence for a month, he attacked the report:

'It is with extreme reluctance that I enter upon the subject of the "Mine Report" considering it to be characterized by a disposition to find fault founded in some cases on mere speculative opinions and in others evincing a deficiency of knowledge.'⁹

Nevertheless, the remaining trustees approved the report, and Hatherton noted in his diary that Downing had been informed that

'though a Trustee, he was also our Agent, and that the majority must appoint another person.'¹⁰

The post of mine agent was offered to Richard Smith in

⁶ Sel.Com. on The State of the Population in the Mining Districts, 1850. Report on Staffordshire, p. 33.

⁷ Mines Report, 1836, p. 59.

⁸ Ibid. p. 60.

⁹ S.C.R.O. D260/M/F/5/19/11, Downing to Benbow, 30 May 1836.

November 1836 and he took up his responsibilities at the beginning of December. Downing was allowed to retain his salary of £1,250 per annum and his residence at the Priory, and was given the title of General Superintendent of the Mineral and Landed Estates. He continued as a trustee and assumed responsibility for the collection of mineral royalties derived from the new policy of leasing the pits. However, his new title was merely a sop to injured pride: and effective executive authority was wielded by Smith, as mine agent, and Maughan, as land agent. Downing resigned in 1840, after obstructionist tactics to the exasperation of all his colleagues, and became a mineral entrepreneur on his own account which ended in his financial ruin by 1843.

The type of agent recommended by the mine report was an accurate description of Richard Smith himself. Born in Tipton in 1781, he had considerable experience of the iron and mineral trades and had been a coalmaster as early as 1805 and an ironmaster in 1808 in partnership with Samuel Fereday¹¹. Their enterprise went bankrupt in 1816 during the post-war slump in the iron trade. After this, Smith had managed mines on Baron Rothschild's estate near Ruabon, and in Portugal between 1820 and 1827. His prestige as a mining engineer is evident from his appointment as manager of the General Mining Association's activities in Nova Scotia from June 1827 to May 1834. Such was Smith's background and experience - in contrast to Downing, when he was engaged by Hatherton, an old acquaintance, to report on the Dudley mines and ironworks with Liddell, a Northumberland mining engineer, in May 1835. After his appointment as mine agent to the Dudley estate in November 1836, he lived at Himley until Downing vacated the Priory in 1843 - here, in a rent-free

¹⁰ S.C.R.O. D260/M/F/5/26, Lord Hatherton's Diary, 29 Sept. 1836.

¹¹ R. P. Fereday, The Career of Richard Smith (1783-1868), Manager of Lord Dudley's Mines and Ironworks, M.A., Keele, 1966, p. 12.

mansion set in 44 acres of spacious grounds and gardens, Smith lived the life of a gentleman and entertained distinguished guests who came to visit the Dudley enterprises as their fame grew, until his retirement in 1864.

His salary was fixed in accordance with his services - and recalls the commission calculated on profit paid to Charles Beaumont. In addition to a basic salary of £1,200 per annum he received a payment of 2½ per cent on net profit above £35,000. Net profit for 1836 from all mineral and iron sources was £25,005 8s. 4d., but the minimum figure beyond which commission would be paid was fixed at £35,000, both as an incentive and in anticipation of an increase in income from the new policy of leasing the pits on royalty introduced in December 1836. Between 1 January 1837 and 6 March 1845, total net income amounted to £509,202 16s. 3d.: Smith was paid commission on £222,969 18s. 9d. - a total of £5,574. His income per annum from commission increased after the termination of the trust as the long-term benefits of his policies took effect. Total net income between 6 March 1845 and 31 December 1859 amounted to £1,542,391 1s. 9d. and Smith's total commission was £22,618 1s. 4d.¹² The trustees fully appreciated Smith's services to the estate and, as early as February 1838, Benbow expressed his apprehension because the mine agent was

'dangerously ill. If we lose him my hopes are gone - for nothing favourable can be expected if we are obliged to return to Mr. Downing.'¹³

The fact that the payment of the debt incurred by the Witley purchase was dependent on future mineral income, increased their appreciation of Smith's services.

By the time of his retirement in August 1864, Smith had established a favourable reputation not only with his

¹² D.H.L. 8/L, Richard Smith's Accounts With the Trustees From 1 January 1837 to 6 March 1845 And With Lord Ward From

¹³ 6 March 1845 to 31 December 1859.
S.C.R.O. D260/M/F/5/19/11, Benbow to Hatherton, 13 Feb. 1838.

employers, but also with his employees, with the population of the district as a whole, and with the various government commissions of enquiry which visited the Black Country during this period. The benevolent attitude which Lord Ward adopted towards his employees in terms of pensions, sickness benefits, and public amenities was complementary to Smith's philosophy of firm but humane management. Through his own sense of fair play and his attention to safety measures in the pits, he had established a good personal relationship with the men. An article on the Nine Locks Pit disaster, when flooding had caused some loss of life, recorded that:

'The pit ... is one of the largest on the estate of the Earl of Dudley and the whole of the extensive plant and machinery is of a kind not to be seen in the mining district of South Staffordshire, being of the very best and most costly description. The safety of the men has been consulted in the highest degree.'¹⁴

The Midland Mining Commission of 1843 reported that Smith was an 'upright and humane' employer and that, although work in the thick-coal mines was particularly dangerous, pits on the Dudley estate had the best safety record in the district¹⁵.

His death on 21 July 1868 produced obituaries in the local press which all paid tribute not only to his services to the Dudley estate but also to the district as a whole.

The Dudley Herald¹⁶ printed the various testimonies of the mayor and the agents presented to Richard Smith at the time of his retirement four years earlier. The mayor spoke of

'the great benefits which had been conferred on the town and district by Mr. Smith's management'

and the agents recorded their appreciation

'of the kindness which had always characterized Mr. Smith's intercourse with his employees'.

¹⁴ County Express, 20 Mar. 1869.

¹⁵ Midland Mining Commission, 1843, p. lv.

¹⁶ Dudley Herald, 25 July 1868.

On that occasion, Smith had expressed his sentiments on the question of management and remarked that

'the state of things ... in the neighbourhood was very different in 1836 ... The large tracts of mines of coal, limestone and ironstone which now find employment for so many working men were ... for the most part undeveloped, and the facilities for developing them were not nearly so numerous as at present ... Old ways had to be reformed and the men convinced that their employers' interests were identical with their own.'

In an age which was not characterised by enlightened management, especially in the mineral and iron trades, Richard Smith was an exceptional agent, both in the extent of his enlightened attitudes and the efficiency of his administration. These qualities persisted on the Dudley estate after 1864 under Richard's successors: first of all under his younger son Frederick, 1864-70, and later under his grandson Edward Fisher Smith, 1870-86.

B. The Iron Trade

After Smith's appointment in November 1836, the reorganisation of estate properties engaged in the various aspects of the iron trade followed the recommendations set out in the mines report of 1836. Unlike the collieries, the blast furnaces, forges and rolling mills on estate property were not worked by the estate before 1836. They were leased

'to parties most of whom consume Coal, Ironstone, and in cases even Limestone from Collieries and Quarries not belonging to the Trustees.'¹⁷

This situation resulted from the practice of allowing iron-works and collieries to be worked by tenants-at-will or by lessees on terms which failed to secure the best interests of the estate. Whereas the estate had established a dominant position in the local iron trade during the 1790s¹⁸, by

¹⁷ Mines Report, 1836, p. 28.¹⁸ See Section I, Chap. 2, Part C iv.

judiciously worded leases, by 1836, it was failing to take advantage of its position even during boom conditions. To overcome this situation, Smith and Liddell suggested that leases should be

'granted of a more permanent nature to lessees on condition that they either agree to consume certain quantities of mineral produce per annum or connect with the works certain tracts of Mine, at royalties to be agreed upon with Covenants binding the parties to raise a given number of tons of Coal, Ironstone and Limestone per annum, or pay for the same.'¹⁹

This would not only guarantee the estate a regular income from raw materials supplied to tenants from its own mineral enterprises, but also from leases where estate pits were attached to an ironworks and worked under the same lease. These vertically integrated concerns would ensure the most profitable returns both for the ironmasters and the estate:

'The Capital now in the shape of Iron Works would be made advantageously subservient to the working of the Mines. Whereas in its present form it does not appear to us to make a return commensurate with its perishable nature and value.'²⁰

That is, the decline in the capital value of the iron works would be offset to some extent by increasing their profitability to the estate as their operations would be closely linked with the output of estate pits leased to the ironmaster. Of the ironworks leased by the estate in 1836²¹, only one was leased on royalty based on the iron produced: the remainder merely paid a fixed rent which did not reflect the increased value of a particular concern. Another major defect of the existing organisation of the mineral trade on the estate, was the fact that although the technological advances of the eighteenth century - involving the application of steam power and mineral smelting - had enabled all the processes of iron manufacture to take place at one site

¹⁹ Mines Report, 1836, p. 28.

²⁰ Ibid.

²¹ See Chart 10.

(prior to this, the location of the forge and the furnace had been dependent on the availability of water power and charcoal fuel), such vertical integration had taken place elsewhere in the Black Country but not on the Dudley estate because of the haphazard nature of mineral and ironworks leases. Under the proposals made by the report, the estate would benefit from increased mineral sales and from the probable increase in the output of leased ironworks by basing rents on iron produced.

In the same month that the mines report was submitted, Smith made detailed recommendations concerning the more important leased ironworks, most of which were subsequently carried out after his appointment later in that year. He made the observation that:

'In ordinary times, when the Iron and Coal Trades are not attended with such unprecedented prosperity as they now experience - the former is generally looked upon as an appendage of the latter for the purpose of consuming the Ironstone, Limestone and inferior Coal. The great difficulty of disposing of the refuse Coal which the Staffordshire and Worcestershire Mines produce has given birth to many Iron Works which would not otherwise have been established - and which serves to prove that the Capital expended in the erection of such Works, is done more with a view to making the best of the Mines, than for direct advantage to be derived from them independent of the Mines ...

In letting the Mineral Property on Royalty ... the Trustees (should) ... connect with certain portions of it, certain of the Iron Works to consume the Limestone, Ironstone and such parts of the Coal which is not suitable for domestic use.'²²

The failure to exploit the iron trade as such was certainly true of the Dudley estate, and Smith's comment with regard to the establishment of many of the local ironworks is of particular interest in view of the multiplicity of small concerns which had developed in the area and their

²² S.C.R.O. D260/M/F/5/19/4, Smith to Benbow, 5 May 1836. Letter in Loch's Fifth Report, 11 May 1836.

susceptibility to collapse during periods of recession. Small, broken coal or slack, was produced in large quantities by the manner of working the thick coal: this had a limited market value except as fuel for steam engines and furnaces - either in re-heating processes or as coke, and explains why Beaumont had been so anxious to reduce the amount of broken coal produced.

Smith advised that the furnaces at Coneygre, together with adjacent mines, should again be let to

'Mr. Parker ... who ... surrendered these Works to the Trustees at Lady Day last because he could not have a proper Term of Years granted to him. He is a person of large Capital and able to extend the Mines and the making of Iron. They are now let to Tenants at Will of very limited means (Messrs. Payton and Hopkins).'

The Level Iron Works also required immediate attention:

'they were let in bad Times at low Rent, and ... Iron has doubled or nearly so in price since that time. The Trustees work the Engines and keep them in Repair ... the Iron Works do not produce an Income commensurate with the value or risk.'

Either the Park Head or the Dudley Wood Colliery could be advantageously linked to the Level Iron Works by a common lease, and the Netherton Iron Furnaces, then let to the British Iron Company, should be linked with the Windmill End Colliery. He again urged that

'The proper Mode of letting is to connect Ironworks and Mines together - the Mines on Royalty - and the Iron Works ... at a price per Ton on the Iron made - to fluctuate according to the selling price of Iron.'²³

These policies were carried out by the trustees and, as Smith forecast, there was an increase in the number of ironworks leased and in the profit derived by the estate from the iron trade:

²³ Ibid. Mineral royalties were also to be calculated on the selling price of the various types of coal and ironstone.

'If the Public were to be informed that the Property ... was to be let on Leases for 20 or 30 years by Tenders made to yourself, I think you would be surprized at the number of applications.'²⁴

After the mines report was submitted in May 1836, tighter control was exercised over leases, even before Smith assumed responsibility for the mines and ironworks in November - it is likely that Benbow, as manager of affairs, was acting on his advice in anticipation of the managerial revolution. This is indicated by a complaint submitted to the trustees in January 1837 by Samuel Hodgson, a spade and shovel manufacturer of Oldswinford. He protested that the terms of an agreement made in December 1835 between himself and Samuel Bateman, the land agent at Dudley, concerning the lease of Wollaston Mill on the Stour near Stourbridge, had been drastically altered in a written lease drawn up and communicated to him in October 1836:

'when the draft of the Lease was sent for the perusal of your Memorialist ... in October 1836, it was found ... to differ from the terms of the agreement ... and forgo many advantages which the agreement offered to him and to submit to various restrictions ... particularly the exception of Coal and other mines with power to the Lessors to enter and get the same during the Lease.

That by the agreement the tenant had the option to remove at the end of the term all new erections by him ... or to be paid for them as he should determine whereas the lease gives the option to the Lessors either to allow the Tenant to remove such erections or to take to them at a Valuation and the Tenant is restricted from removing all erections not put up expressly for the purposes of Trade ... By the Lease the Tenant is very strictly bound²⁵ to repair all erections whereas the Agreement contains no such provision except as to certain parts of the machinery.'

It is evident that the former agreement - probably verbal, was typical in its loose wording, of agreements and leases for agricultural, mineral, and industrial property on the

²⁴ Ibid. See Section II, Chap. 2, Part B ii for a discussion of the income from leased ironworks, 1833-45.

²⁵ S.C.R.O. D260/M/F/5/19/8, Memorial to the Trustees from Samuel Hodgson, January 1837.

Dudley estate, before the reforms of the trustees. The more precise wording of the lease, and the greater care exercised in safeguarding the best interests of the estate, are equally typical of subsequent arrangements made by the trustees after the mines report of May 1836.

Apart from improvements and innovations, the other major aspect of the reorganisation of the iron trade on the estate was the decision that the estate should once more make pig iron on its own account. Although the mines report of 1836 had made no reference to this possibility, it was logical that in view of the Dudley estate's possession of all the necessary minerals, the expanding demand for Black Country iron, and Smith's recommendation that the iron trade should be pursued for its own profits rather than as an 'appendage' of the mines - estate enterprise should be vertically integrated to the point of pig iron production and distribution. An opportunity occurred in 1839 for Smith to persuade the trustees on the desirability of such a policy. Messrs. Payton and Hopkins, who had remained as tenants of the Coneygre Iron Works, had modernised and extended the plant since 1835: their bankruptcy in 1839 led to the works being taken over and operated directly by the estate. Shortly afterwards, Messrs. J. and B. Gibbons relinquished the tenancy of the New Level Iron Works and transferred their activities to the new works erected by them at Corbyn's Hall, Pensnett. Between 1844 and 1845 considerable improvements were made to the New Level plant: furnace capacity was increased and the quality of iron was improved by the construction of a hot blast. This development was directly concerned with the extension of the estate's steam railway from Shut End, across Pensnett Chase to the Level where Smith utilised the fall of the ground to supply materials to the furnace tops without the expense of winding machinery or inclined planes. The

final, logical development occurred at the site when the Round Oak Iron Works was constructed to convert estate pig iron into wrought iron for distribution to the local manufacturers of finished iron goods. This occurred in the mid-1850s²⁶ and marked the crowning achievement of Smith's reorganisation of the iron trade on the Dudley estate.

If Smith was correct when he claimed in May 1836 that, in the past, the Black Country iron trade was regarded as an 'appendage' of the mines, then it is reasonable to assert that, by the termination of the trust, the local iron trade was expanding overall and in the scale of individual enterprises to the extent that the local mineral trade became, if not an 'appendage', very dependent on the fortunes of the local iron trade. By 1850²⁷, the Black Country produced one-third of the national output of wrought iron, and local pig iron production increased by 300 per cent between 1830 and 1858. The fact that many of the large producers, such as the British Iron Company, were tenants of the Dudley estate - which owned a large part of the remaining raw materials in the area, suggests that the reorganisation carried out by Smith made a significant contribution to this healthy state of affairs both for the estate and the area in general.

C. Mineral Enterprise

Although the period of the trust produced a new approach to the iron trade and a great increase in revenue from this sector, mineral enterprise remained the main source of estate income²⁸. One of the main tasks given to Smith and Liddell was

'To consider ... the propriety and expediency of changing the present system ... of working the Mines, and of substituting the Plan ... of letting the same.'²⁹

²⁶ See Section IV, Chap. 2 iii.

²⁷ See Section II, Chap. 2, Part B i.

²⁸ See Section II, Chap. 3.

Under the terms of the late earl's Will, the trustees had been empowered to grant leases of minerals up to 40 years. Since the reforms of Charles Beaumont in 1797-8, when the butties had been dismissed, the estate itself had worked the mines. Such leases as had been granted were for small properties or sections of 'broken mines' where the thick coal had already been worked by the estate³⁰. However, Beaumont's policy of exploiting the mines to secure the maximum immediate advantage had been replaced by a policy of regarding the mines

'in the light of investment to improve in value by the lapse of time.'³¹

Smith and Liddell advised that, in view of the existing heavy demand for coal and ironstone 'at high prices', and the development by Lord Dartmouth of new pits of thick coal under the sand stone at West Bromwich, the mines should be exploited for their immediate advantage. Apart from this new approach, they also recommended radical changes in the organisation of mineral enterprise on the estate. They recommended the trustees

'to let the thin Mines where they can do so with ... advantage and without part of the Estate being to the detriment of another - The thick Mines admit of a different view, they are capable of being worked (by the estate) or let to advantage, but like the Limestone, they may be overheld and injured by discoveries ... of Mines in unexpected Quarters.'³²

Production and capital costs would be higher when working the thin seams of coal and ironstone which lay under the thick coal - these should therefore be leased. It is significant that, while advising that the estate should continue to work the thick coal, because of its lower production costs

²⁹ S.C.R.O. D260/M/F/5/19/2, The Trustees Instructions to Messrs. Smith and Liddell, 1835, p. 6. See Chart 8.

³⁰ See Section I, Chap. 2, Part C v.

³¹ Mines Report, 1836, p. 26.

³² Ibid. p. 57.

and greater market value, the report cautioned against adopting this as an exclusive policy and indicated that a balance must be maintained between the immediate income of the estate, best served by working the thick coal, and its long-term interests, which would suffer if large areas of more profitable thick coal remained unworked from being 'overheld', should any adverse change occur in the local supply and demand for thick coal. This was valuable advice in view of developments after 1860 when the local iron trade began to decline.

Where mineral leases were granted:

'we recommend their being let on royalty: indeed the Trustees are now to a certain extent acting upon this mode ... (but) the parties to whom the Mines are let ... at various rates per ton and by the Superficial Yard ... are only Tenants at Will and ... it is not likely they will either spend Capital corresponding with the necessity of each particular lease or push works with the same energy as they would do if they received possession ... for Twenty or thirty years ... In some cases ... Capitalists might be induced to plant powerful Engines and by sinking the present Old Shafts into the lower Mines, would obtain a great supply of Coal, Slack, Coke and Ironstone, and ... be likely to erect extensive Ironworks such as Furnaces, Forges, Mills etc.'³³

In order to discourage the existing situation whereby tenants of ironworks on the estate were purchasing limestone from Dudley Port (Tipton), Walsall, or Caldon Low (north Staffordshire), the report proposed that:

'The Limestone Quarries (should) ... be divided into a variety of separate takes ... and ... let to great Consumers: such parties would have an interest in supplying themselves with all they used.'³⁴

On the question of what royalty should be charged, Smith and Liddell advised that all the mines should not be leased at once:

'but rather as the demand for Mines calls for them by the Public understanding that the Lordship Mines are in the Market ... in this way they will be likely to produce

³³ Ibid. pp. 26-7.

³⁴ Ibid. p. 28.

'their maximum value.'³⁵

As regards Staffordshire in general, the current practice with regard to letting was:

'to take a certain proportion of the Sale Price: in some instances $\frac{1}{8}$ in others $\frac{1}{7}$ and $\frac{1}{6}$ and as high as $\frac{1}{5}$ even for Maiden Mines where the Lessees have to incur all the expences of plant etc. attendant thereon the Lessor finding no Capital whatever.'³⁶

In view of the scarcity of thick coal throughout the Black Country and the relative shortage of local coal to the north of the Dudley ridge - pending the opening of new fields at Cannock and West Bromwich, the report recommended that all leases negotiated by the Dudley estate should be based on a royalty calculated on $\frac{1}{5}$ of the selling price. Under this system, coalmasters and ironmasters leasing the estate pits would work and sell (or consume) the minerals themselves, meet all working costs - and the capital costs of opening new seams or extending existing workings, and pay a proportion of the total income (based on sales) to the Dudley estate. The lessees could either work the pits themselves or resort to the traditional chartermaster or butty system whereby the lessee paid charter to the butty calculated on production. As already indicated, none of the Dudley lessees were allowed to employ butties who trucked their miners, The introduction of royalties marked a further stage in the development of mineral enterprise on the Dudley estate. Prior to 1797, the estate had employed butties and marketed the coal itself. Beaumont introduced the practice of working the pits directly by miners employed by the estate. By 1836, estate enterprise on this basis had largely disappeared, and the bulk of mineral income came from tenants of 'broken mines' who worked and sold the minerals paying a rent to the estate based on production or the area leased. Under the royalty system, lessees would work and sell the minerals but their payments

³⁵

Ibid. p. 29

³⁶ Ibid.

to the estate would be based on the selling price per ton and therefore reflected the advantageous market conditions of the time.

To demonstrate the value of leasing the mines on royalty, Smith and Liddell drew up a specimen account³⁷ for Park Head Colliery in Dudley, comparing current profit with profit estimated from royalty. This was also intended to explain how their proposals would work

Dr.	Park Head Colliery			Cr.
	£	s.	d.	
To Royalty at $\frac{1}{5}$ of Sales				By Profit from 31st March to 31st December 1834
£15,587 6s. 5d.	3,115	0	0	6,595 3 2
Balance carried down	<u>3,480</u>	<u>3</u>	<u>2</u>	
	6,595	3	2	<u>6,595 3 2</u>
Surface Rent				Balance brought down
Interest of Money				3,480 3 2
Destruction of Land				
Allowance for annual decrease in the value of the First Outlay				
Bad Debts				
Discount and Bank Expences				
General Management				

'When the above Items are properly estimated (Surface Rent etc.) and the total Amount deducted from £3,480 3 2 the remainder would be the Coal Master's Profit supposing this Colliery had been let on lease. Rent of Land in Collieries is generally estimated at £4 and £5 an acre, exclusive of Levies and Taxes.'

Under the existing system, all of these expenses were incurred by the estate - although the various totals were not calculable from existing accounts as no attempt was made to take account of them:

'the valuation of the Stock taken at the death of the late Earl, only comprises movables etc. and does not

³⁷ Ibid. p. 44.

'comprehend the necessary outlay in dead work ... for instance ... sinking a Shaft, Bricks, Curbs etc.'³⁸

Therefore, the present apparent profit shown as £6,595 3s. 2d. should be reduced, presumably below the real figure of £3,115, which would be the estate's profit on the same amount of trading, if leased on royalty. The estimate 'for annual decrease in the value of the first outlay' would cover such expenses as:

'sinking Pits, forming Roads, making Reservoirs, cutting Canals and such like; all such contingencies are necessary to a working Colliery, but of no use or value, when such Colliery is worked out.'³⁹

In the opinion of Smith and Liddell, this capital outlay and its depreciation in value, as well as working costs and other expenses, should be borne by the lessee. A clear distinction between landlord's and tenant's capital had, in general, evolved by 1830 for agricultural leases - although not on the Dudley estate, and it was particularly desirable that this distinction should also be drawn for mineral leases because of the limited period for which the property could be exploited. The policy of leasing the pits on royalty would also bring the estate in line with large mineral landowners in general at this time.

If working pits were leased, the problem of existing capital costs already incurred by the estate, would have to be considered. The report estimated that these, together with book debts, amounted to £100,000 by 31 December 1834⁴⁰ and proposed a charge on the lessees of such properties to recover these costs:

'It is generally accepted that money in trade will pay at least 10 per cent ... it will be right to charge trading Interest upon the floating Capital always more or less at risk ... which ... is equal to £10,000.'

These recommendations constituted a plan for the radical reorganisation of mineral enterprise on the Dudley estate

³⁸ Ibid. p. 25.

³⁹ Ibid. p. 53.

⁴⁰ Ibid. p. 51.

and, while they reveal the out-of-date practices in operation up to 1836, they also indicate current attitudes and practices amongst the better informed mining engineers and agents. By the 1830s, landowners leased their minerals on royalty in most of the coalfields - except in Durham and Northumberland⁴¹. A proportion of Yorkshire coal was worked directly by landowners throughout the nineteenth century and, as late as 1890, probably one-eighth of the total output came from this sector⁴². In the Staffordshire coalfields, most of the minerals were worked by lessees on charter or on royalty from the outset - except in such cases as the Lords Dudley and Stafford. After 1821,⁴³ Lord Stafford's mines were leased on royalty. Professor Thompson has shown that the tendency for landowners to avoid the risk of industrial undertakings - particularly in the case of the coal industry, resulted in a situation whereby only 5 per cent of all collieries in England were owned and worked by landowners in 1869⁴⁴. Most of these belonged to the aristocratic estates of the Duke of Devonshire, the Bridgewater Trust, the Marquess of Londonderry, and the Earls of Dudley, Durham and Lonsdale. However, by 1890 a growing proportion of the Dudley estate's mineral income came from royalties⁴⁵ although the greater part was still derived from estate enterprise.

Loch proved a powerful advocate in support of the proposals made by Smith and Liddell:

'I have read the Report upon the Mines ... and I concur generally in the recommendations it contains ... to let on lease the smaller and more distant Mines and those that are much intermixed with the Property of other Persons. A too extended Management never can be carried

⁴¹ D. Spring, 'The Earls of Durham and the Great Northern Coalfield, 1830-1880', Canadian Historical Review, XXXIII (1952), p. 239.

⁴² J. T. Ward, 'West Riding Landowners and Mining in the Nineteenth Century', Yorks. Bulletin of Economic and Social Research, XV, p. 63.

'on as economically as one which is more concentrated - least of all in the hands of a Landlord. I say this from my experience of two similar Concerns of vast magnitude with which I am connected.'⁴⁶

These were the Stafford and the Bridgewater estates. In spite of Downing's hostility, the trustees proceeded to act on the report and advertised their intention to let some of the mines. Amongst the first to negotiate leases were

'Mr. Philip Williams, perhaps the most respectable man in the Iron Trade ... Mr. Whitehouse ... tenant of our Wallbrook Furnaces ... and Mr. Matthews of Corbyns Hall ... a Gentleman of considerable respectability and credit in the Iron Trade.'⁴⁷

In order to facilitate matters, plans and surveys were made at once as numerous offers were made to lease the mines:

'Saw other parties who made offers for Mines ... we shall increase the estate at least £7,000 a year. But we have not yet seen many parties who wish to deal with us.'⁴⁸

Smith had to evolve new forms of accounts to record the income and expenditure for each colliery: parts of a particular colliery might remain under estate exploitation while other sections and shafts within the same colliery might be let to various tenants on royalty. A comparison of the accounts for Park Head Colliery in 1834 and 1837 illustrates the more complex organisation evolved by Smith to meet this situation⁴⁹. During 1837, the monthly disbursements paid out by the bailiff to miners employed by the estate decreased from £1,325 10s. 10d. in January 1837 to £392 4s. 6d. as the estate worked fewer sections of the colliery which were then leased to entrepreneurs. The

⁴³ Richards, op. cit. p. 180.

⁴⁴ Thompson, op. cit. p. 264.

⁴⁵ See Section IV, Chap. 3 and Appendix 6.

⁴⁶ S.C.R.O. D260/M/F/5/19/4, Loch to Benbow, 6 June 1836.

⁴⁷ Ibid. Hatherton to Benbow, 6 Sept. 1836.

⁴⁸ Hatherton's Diary, 30 Sept. 1836. See Chart 17.

⁴⁹ See Charts 18 and 19.

various lessees are indicated by the valuation put upon the sections leased to them - for the purpose of calculating the 10 per cent charge on capital costs: in the case of this colliery, all the lessees were ironmasters who leased iron-works from the estate such as Gibbons, Evers and Martin, and Izens and Co. The new account for 1837 records the income from cash and credit sales of minerals worked and sold by the estate: the income from rents and royalties was recorded in other accounts opened by Richard Smith in January 1837. The royalty account recorded the various lessees, the type and quantity of minerals worked and the royalty to be paid to the estate: it also recorded expenses incurred by the estate - these merely consisted of wages paid to the bailiff and weighing-machine clerk. This indicates that, although many parts of a colliery might be let, the overall management was closely controlled by the estate which appointed a bailiff whose responsibility was to ensure that the lessees worked their sections according to the practices and standards laid down in the leases, and that all minerals sold by the lessees were carefully recorded by weighing machines owned and controlled by the estate. The former practice of recording transactions of the Mines Department on a manorial basis was replaced by a system based on a few large colliery units - such as Park Head, Kingswinford or Coneygre Collieries, which incorporated all activity in that particular area - whether by the estate or by lessees. This enabled the colliery manager and his section bailiffs to organise that particular mineral unit in the most efficient manner.

In such a complex administrative structure - necessitated by the trustees' decision not to lease all the minerals but to continue to exploit the more valuable seams, confusion and friction might easily develop between those sections worked by the estate and those by the lessees. That this did

not occur was the result of the carefully worded leases and plans introduced by Smith which clearly stated the mutual rights and obligations of the lessor and lessee and the royalties charged on the various types of minerals. A typical lease for an undeveloped mining property, including thick coal, was that concluded with Messrs. Philpotts and Plant on 31 December 1839⁵⁰. The main recommendations of the mines report are all included in this lease together with more specific clauses added by Smith: the lease ran for 21 years and, to secure efficient control of operations, quarterly accounts were drawn up, both the accounts and the workings were open to inspection by Lord Ward's agents without notice, and all operations were to be conducted only after consultation with the mineral agent. Royalties payable on the various minerals, and standard weights and measures were clearly set out: these were all linked to the selling price and it is significant that the royalty was as high as 33 per cent on the best thick coal.

In order to encourage maximum output, a minimum royalty of £350 per quarter was paid whether or not thick coal to that amount had been sold, and a minimum of £150 was paid for heathen coal. Penalty clauses were inserted for selling thick coal as heathen coal - in order to pay a lower royalty, for surface damage, the late rendering of accounts, and the sale of coal which did not conform to the scale of weights laid down in the lease. As late as 1864, there were three different weights in use in the Black Country, each called a 'ton'. These were, the statute weight of 2,240 lbs, the long hundred of 2,400 lbs. (20 cwt x 120 lbs) and the 'boat load' or 'lease weight' of 2,880 lbs (24 long hundreds): some coal was 'sold land sale ... at statute weight, a greater portion is sold by the fair lease weight of 2,880 lbs.'⁵¹

⁵⁰ D.P.L. 9/K, Lease of Minerals in Pensnett to Messrs. Philpotts and Plant, 31 Dec. 1839. See Appendix 4 for a summary of the main clauses.

⁵¹ B.H.P.L. 554.24. Proceedings of the Dudley, Midland and

To avoid confusion and loss of revenue, Smith laid down his own standard ton: this was 2,280 lbs for land sales and 2,520 lbs for 'water sale'. Presumably the former would attract custom being larger than the statute ton, while the latter, although smaller than the usual 'water sale' ton would consist entirely of good coal without the usual high proportion of slack. Agents on the Dudley estate used these measurements until Frederick Smith introduced the use of the statute ton only, in 1868. Surface damage was penalised where the surface was estate property: however, under the terms of the enclosure acts, the Dudley estate was not liable to pay compensation for surface damage to former commons and waste - whoever owned the surface! To ensure the efficient working of the coal, all slack not required in the pits, for supporting the roof, was to be raised to the surface. As this fetched the lowest selling price - and, therefore the lowest royalty per ton, the lessees would be persuaded to work the thick coal as carefully as possible so as to reduce the quantity of slack produced. As the minerals were situated in the area drained by the Pensnett engine, an annual payment was made for 'water ease' calculated on the total mineral royalty paid. At the end of term, the lessees were to leave all the machinery and equipment installed by them and to receive fair compensation - this would enable the estate to lease or work the pits without delay or further capital outlay: in the mines report, Smith had suggested that lessees might be allowed to remove their own machinery.

The value of this lease alone is indicated by the royalties paid for 1847: a royalty of £8,984 13s. 11d. on 68,149 tons of coal and 3,886 tons of ironstone. In addition, pumping charges of £289 8s. 7d. were paid for drainage by the Pensnett engine⁵². This lease was typical

Geological Society: a paper by R. Kettle, 1864.

⁵² D.P.L. 9/J, Richard Smith's Mine Accounts for 1847.

of those granted by the estate after December 1836 for unworked minerals. The only variation for sections of mines already partly worked was the insertion of a clause binding the tenant to pay an annual charge of 10 per cent on the capital already invested by the estate. Not only the principles on which the lease was based, designed to secure the maximum income for the estate as well as its long-term interests, but also, several of the clauses, resemble the standard form of charter agreement introduced by Beaumont in September 1797⁵³ before he began to work most of the pits by labour directly employed by the estate. However, the payment of royalty to the estate, as opposed to charter paid by the estate to the lessee, was the main difference. Smith's form of lease remained essentially unaltered in principle until the decline in mineral activity on the Dudley estate during the twentieth century. Whenever possible, Smith leased the minerals on royalty: however, some traditional forms of rent - in general use on the Dudley estate before 1836, were retained for very small properties or sections of mines where very little coal remained. These forms were usually a fixed rent per acre of coal let or by the superficial yard, when small quantities or pillars were being worked. Such leases ran until the exhaustion of the minerals: most of Smith's larger leases ran for 21 years.

In many respects, the new form of Dudley leases resembled current practice elsewhere. Landowners in the West Riding⁵⁴ coalfield increasingly derived an income from royalties related to selling price after 1826, as opposed to an annual fixed rent, and demanded a minimum or 'certain' rent. When royalties failed to meet this figure the balance was met by the payment of 'shorts' to the amount due from minimum rent. However, many landowners continued to base

⁵³ See Appendix 3 for the details of this form of agreement.

⁵⁴ Ward, op. cit. p. 62.

the income from mineral leases on the acreage of coal let - this was the exception on the Dudley estate after 1836, although the practice was used in certain circumstances as indicated. Lord Durham's tenants were also pressured into sensible working of the coal by non-renewal of leases: Richard Smith negotiated a water-tight lease in the first place and ensured adherence to it by constant supervision. Until the eighteenth century, coal leases in Staffordshire had also been based on a fixed annual sum on a given acreage⁵⁵. By 1800, these were being replaced by a royalty based on selling price which related income to output. It has been suggested that the royalty demanded 'was high by later standards'⁵⁶ and, as late as 1817, one-sixth was regarded as a fair mine-rent in the Potteries. In 1836, the mines report asserted that, in Staffordshire, royalties ranged from one-eighth to one-fifth. The fact that leases on the Dudley estate, such as that granted to Philpotts and Plant in 1839, paid a royalty as high as one-third indicates their relative value in relation to the market for coal and ironstone in the Black Country iron trade. By the 1840s, it was usual for tenants to meet the capital costs of opening a pit in south Staffordshire⁵⁷ and there were nearly 400 collieries

'each on average representing a capital commitment of no more than £3,000, producing some 15,000 tons of coal annually, and giving employment to between sixty and seventy men and boys.'⁵⁸

The scale of operations by many of the Dudley lessees was far more extensive than the average Black Country pit and the form of lease introduced by Smith ensured not only

⁵⁵ Staffs. V.C.H. (1967) p. 97.

⁵⁶ Ibid.

⁵⁷ S.C. on the Employment of Children, 1842, p. 2.

⁵⁸ A. J. Taylor, 'The Sub-Contract System in the British Coal Industry': in Studies in the Industrial Revolution (1960) p. 217.

the maximum profit to the estate but also brought greater safety, efficiency, and income both to tenants and to the miners themselves. By comparison, other local collieries were under-capitalised, inefficient, and dangerous - mainly because of the use of butties, who worked the pits for the maximum short-term profit and expended as little capital as possible on lining the shafts, shoring the workings, or on the installation of modern machinery:

'not more than half of them (butties) could write and some could not read. Yet these men make important contracts to work the coal and ironstone ... and on them the moral tone ... of the working men to a great deal depends ... I should imagine it to be unparalleled ... that such vast undertakings should be dependent on men in so low a state of instruction ... The whole system ... compared with most of the other great seats of mining ... would seem to be greatly below the vast development which the iron and coal trades have assumed of late years in this country.'⁵⁹

This general situation in the area contrasts with Smith's remark in 1846 that

'the Machinery in the (Dudley) Mines is ... in good condition ... and that the Mines are in a state to work to the utmost,'⁶⁰

and with the situation in the Dudley mines which the report of 1836 condemned as 'retrograding'.

There can be no doubt that the period of the Dudley trust transformed mineral and iron enterprise from a state of stagnation, incompetence, and low profitability to one of rapid expansion, coupled with modernisation and administrative efficiency, which enabled the estate to exploit all of its advantages as the Black Country iron trade and the general level of economic activity expanded in the area. Improvements to the administration and organisation of this sector of estate activities were complementary to the

⁵⁹ S.C. on the State of the Population in the Mining Districts, 1850, p. 12. Report on Staffordshire.

⁶⁰ S.C.R.O. D260/M/F/5/19/12, Exeter to Hatherton, 12 May 1846.

improvements in the administration of landed properties and estate affairs in general.

Conclusion to Section III

Before the start of the trust, the management and administration of the Dudley estate had been deficient in every respect. The fact that the trustees inherited the agents of the late earl provided a major obstacle to reform - especially because Benbow and Downing were, to a large extent, responsible for the existing state of affairs. However, administrative improvements would serve the interests of all the trustees in view of the scale of their responsibilities. Over the period of 12 years, the quality of the agents was improved and modern systems of accounts were evolved to record estate affairs accurately. Particular difficulties existed with regard to the banking of estate income and, in the earlier part of the trust, because of the Lord Ward's activities. However, by 1845, the management of the estate in general, and especially in the case of iron and mineral enterprise, had ceased to be essentially eighteenth century in outlook and became as modern and efficient as any other comparable estate. The men chiefly responsible for this were Loch, Hatherton, and Smith: after 1845 the principles and standards established by them were continued by Smith, and members of his family who succeeded him, and by William, Lord Ward who maintained the active and 'informed' interest in the conduct of estate affairs encouraged in him by Hatherton. The effects of these changes were not only to benefit Lord Ward, his lessees and employees, but also the area in general. Conditions of employment on the Dudley estate set an example to be followed while the Black Country iron trade benefitted from the availability of local coal, ironstone, and limestone and the sympathetic attitude adopted by Richard Smith in his dealings with local ironmasters.

SECTION IV. PEAK PROFITABILITY AND THE DECLINE AND BREAK-UP
OF THE ESTATE, 1845-1947

Introduction

So far the economic development and organisation of the Dudley estate have been examined in detail up to the termination of the trust in 1845. The agricultural and industrial changes of the eighteenth century resulted in a period of rapid but haphazard expansion as the second viscount responded to the opportunities created by regional and national developments. By 1833, the profitability and influence of the Dudley estate were in decline. This process was arrested and reversed by the actions of the trustees between 1833 and 1845 to the extent that the affairs of the estate were conducted on an unprecedented level of efficiency and profit. In this section, the main sectors of economic enterprise will be examined to discover whether or not the retrenchment and reorganisation of the trust period continued to produce high and increasing returns in the years after 1845.

Two other themes must be considered in conjunction with the affairs of the Dudley estate after 1845. First of all, in what way did the estate react to changes¹ in the structure of the regional economy as its traditional basis, the iron trade, declined after 1860?² The number of pits declined from 400 in 1860 - producing seven and a half million tons of coal, to 276 in 1900 with a production of three million tons³. Production of pig iron fell from a peak of 743,000 tons in 1854 to 190,000 tons in 1905. Secondly, what was the effect

¹ G. C. Allen, The Industrial Development of Birmingham and the Black Country (1929), p. 60 et seq.

² See Appendix 5.

³ British Association, Birmingham and Its Regional Setting (1951), pp. 250 et seq.

on the Dudley estate, of growing pressures on the landed aristocracy towards the end of the nineteenth century and after 1900? In general, the Dudley estate continued to derive a high income from its traditional sources until the end of the century - long after the decline of the Black Country iron trade had begun. It is possible that this decline was retarded by the activities of the estate. In the long run, the response of the estate to changes in the local economy was also influenced by the growing pressures on other estates of this kind. There was a gradual decrease in the income, the scale of enterprise, and the area of the Dudley estate from 1880 onwards⁴. After 1918, this resulted in the structural reorganisation of the estate's financial interests and the disposal of property - most of which was sold by 1947, although portions of the remaining estate have been sold in recent years. By 1947, the estate had largely ceased to play the role of entrepreneur or rentier and had become primarily a supplier of capital. These developments are also considered in this section.

Up to 1860, the traditional relationship between Birmingham and the Black Country remained unchanged: industries producing highly manufactured goods were concentrated in the former area while the Black Country continued to produce pig and wrought iron, cruder articles, and semi-manufactured goods. However, new industries were beginning to move into the area attracted by the availability of raw materials, accumulated know-how, and improved communications: a notable example was the development of the metal tube industry at Wednesbury. But, there were adverse repercussions from the expansion of railways into the area during the 1850s, while the exhaustion of the best mineral seams - especially the limestone deposits, created problems for the local iron trade even before the impact of the Bessemer Process made

⁴ See Appendices 6 and 7.

itself felt after 1856. Just as the Black Country was born out of technological progress by the union of mineral smelting techniques with steam power in the 1760s, so its decline was hastened by technological progress with the advent of Bessemer steel. This was increasingly used in preference to wrought iron, and Black Country production fell as the local minerals were unsuitable to the Bessemer Process.

However, the extent of the threat was not clearly evident as costly improvements were made to the existing local canal system during the boom years of the 1850s, and additional railway links were constructed which improved long distance communications with the Black Country. Although the London and North Western Railway had secured a controlling interest in the Birmingham Canal Navigations in 1846, new canals were cut in the area. These further improvements to local canal communications were carried out because the existing network was so extensive, and provided transport facilities to most of the mines and iron works in the area, that the cost of constructing an equally effective network of railways was prohibitive. The main improvement as far as the Dudley estate was concerned was the cutting of a new tunnel under the Dudley-Northfield ridge which linked the Netherton and Birmingham Canals⁵. When proposals were first made in the early 1850s, Richard Smith ordered an independent survey to be made by G. Taylor, one of the surveyors employed at the Priory. He reported in 1854 that the estate should give the strongest support to this venture and to the cut intended to link the southern end of the tunnel at Oakham with the Dudley Canal near Round Oak - this was to be known as the Two Locks Line and would remove the need to climb the locks to the mouth of the Dudley Tunnel at Park Head where the Dudley Canal joined the Netherton Canal. This new link between the two sides of the ridge was necessary

⁵ See Map 4.

because the Dudley Tunnel was even more congested than in 1844, as revealed at the time in evidence submitted to the enquiry on the proposed Oxford, Worcester and Wolverhampton Railway. Canal barge traffic was increasing with the continued expansion of the regional economy, and the existence of the main line railway tunnel did not really provide any attraction for the coal and iron trade between enterprises within the Black Country itself - it was far cheaper and less wasteful to transport materials directly to their destination by barge. The Netherton Canal Tunnel was opened in August 1858 and ran from Tividale (Tipton) to Oakham (Netherton). Its construction illustrates the advances in canal technology when compared with the Dudley Tunnel constructed in the 1790s: it was 3,027 yards in length, 17 feet wide, had double towpaths and was lit by gas. This enabled an uninterrupted flow of traffic in both directions and provided a quicker route from the main estate mines in the Kingswinford area to Birmingham.

In spite of his support for these new local canals, Smith remained convinced that it was in the interests of the Dudley estate to support main line railway connections⁶. After the termination of the trust, Dudley was linked with the Midland Railway at Alwre was by the standard (narrow gauge) South Staffordshire Railway of which Smith was a director. Communications to the south and west were improved by the construction of the Oxford, Worcester and Wolverhampton line between 1846 and 1854 - by then, the narrow gauge had been extended to Bristol. Extensions were also made to the private railway owned by the Dudley estate. In 1845, this consisted of the Kingswinford Railway, constructed in the 1820s, and the Pensnett Railway, constructed from Shut End to Round Oak as part of the comprehensive reconstruction of the New Level furnaces between 1843-5. Additional sections

⁶ See Section II, Chap. 4, Part C.

of track were laid throughout the nineteenth and early twentieth century as new colliery enterprises were expanded and additional distribution points were established by the estate. The main branches served the mines at Barrowhill and Himley - these were constructed in the 1850s, Baggeridge Colliery - opened in 1912, the Castle Mill Engineering Works - connected via the new railway tunnel in 1854, and nine 'landsale' wharves where minerals were distributed to the local market. By 1912, up to 100 miles of track and sidings had been laid and the system connected with public railways at Cradley Heath, Gornal, Round Oak, and Castle Mill. Numerous sidings were also linked to the canal system - the main ones being at Ashwood on the Staffordshire and Worcestershire Canal, Bromley on the Pensnett Canal, and Round Oak on the Dudley Canal.

As a result of these improvements to the local and private systems of communication, the Dudley estate was in a position to exploit the local market quickly and efficiently at every point - while the demand for minerals of all kinds remained. Local competitors were at a disadvantage not only because the more productive seams were still worked directly by Lord Ward, but also as a result of the lower transport costs enjoyed by the estate. Moreover, as the estate expanded the scale of its own activities as a manufacturer of finished iron - in spite of the general decline in the Black Country iron trade - it increasingly supplied markets on a national and, ultimately, on a world-wide basis. Richard Smith was actively involved in these improvements until his retirement in 1864. The quality of management remained high under his successors: first of all his younger son, Frederick Smith, who was manager of the mineral and industrial affairs of the estate from 1864-70, and subsequently under his grandson, Edward Fisher Smith who held the position from 1870 to 1886.

As the wealth, importance, and public benefactions of the Dudley estate increased, further titles and honours were accorded to the family while royalty, including Edward VII, frequently visited Witley Court. William, Lord Ward, received the earldom of Dudley in 1860 - although his critics alleged that this was in return for his desertion of the conservatives and the support he gave to Palmerston and the Liberal interest in the/^{Dudley}elections of 1854 and 1857. He did not play so active a part in national politics as his uncle the first earl had during the 1820s, although he was attached to Earl Granville's special mission to Russia in 1855. In 1883, his annual net income was stated to be £123,176 and was drawn from estates totalling 25,554 acres:

'Though Lord Dudley's acreage is not a quarter of that of most of the 28 noblemen ... who possess 100,000 acres, his income is only exceeded by 6: (Buccleugh, Devonshire, Northumberland, Bute, Sutherland and Fitzwilliam), ... which fact is attributable to the extensive coalmines on his property.'⁷

On his death in May 1885, he was succeeded by his son William Humble Ward who held government office as Parliamentary Secretary to the Board of Trade, 1895-1902: his main achievement was to pilot the Workman's Compensation Act through the House of Lords. He was subsequently appointed Lord Lieutenant of Ireland, 1902-5, during which time he created a stir by asserting that

'Ireland should be governed according to Irish ideas' and by his support of Wyndham's scheme for the devolution of power in Ireland⁸. After this he served as Governor General of the Commonwealth of Australia, 1908-11.

The late earl, who succeeded to the title in 1932 and died in 1969, was elected M.P. for Hornsey, 1921-4 and for Wednesbury, 1931-2. His connection with industry brought him

⁷ Burke's Peerage IV, p. 491.

⁸ Birmingham Post, 14 April 1908.

the presidencies of the Society of British Gas Industries, 1926-7, the British Iron and Steel Corporation, 1935-6, the Federation of Chambers of Commerce of the British Empire, 1937-45, the Birmingham Chamber of Commerce, 1937-9, the British Iron and Steel Institute, 1938-40, and the vice-presidency of the Institute of Directors, revived in 1949. On this occasion, the local press remarked that

'though his Lordship's interests in coal and railways have been nationalised, he is still a power in iron and steel.'9

Unlike his predecessor, the late earl played an active part in the management of estate affairs and the companies connected with the estate - especially after the reorganisation of the estate in 1924 and the disposal of the Himley estates in 1947. He was chairman of the British Federal Welder and Machine Co. Ltd., the British Iron and Steel Corporation, Round Oak Steel Works Ltd., the Earl of Dudley's Baggeridge Colliery Ltd., Baggeridge Brick Co. Ltd., Edgehill Ltd., and Governing Director and Chairman of Himley Estates Ltd. During World War II, the earl was Regional Commissioner for the Midlands until 1946. This is testimony to the continued interest and involvement of the family in the affairs of the area in general.

9 *Dudley Herald, 30 April 1949.*

Chapter 1. The Landed Estates

As a result of the policies pursued by the trust, with regard to agricultural properties, the estate benefited more in the long run than before 1845. The traditional, inefficient and wasteful management of the landed estates had been replaced by more up-to-date agents and a new form of lease which clearly defined the obligations of landlord and tenant. However, capital expenditure on improvements by the estate and the granting of long leases did not produce real benefits for the estate until after 1845.

One feature of the trust period had been the enormous increase in the area of the estates to be administered. After 1845, there was no attempt to purchase further landed estates. Whereas the trustees had been bound to invest estate profits in government stocks pending the purchase of property, in future, estate profits were either invested in government securities or absorbed by the expansion of estate collieries, railways or ironworks. After 1850, the land market in general was more active as confidence returned with a rise in agricultural rents - especially after 1853, and demand pushed up land prices until a peak was reached in the early 1870s¹. The property of the Dudley family had been extended at a time when land prices were relatively low and it may be that increasing prices deterred further purchases after 1850. However, the family, in spite of its great wealth, had never possessed extensive landed estates before the earl's Will in 1833 laid down the policy of investment in real estate. After the trust, the failure to increase the area held by the family was probably due more to a return to

¹ F. M. L. Thompson, 'The Land Market in the Nineteenth Century', Oxford Economic Papers, Vol. 9 (1957), p. 294.

traditional attitudes and satisfaction with the amount of property belonging to the estate, than with the increased price of land. Nor did the estate at once reflect the general tendency after 1878 to sell agricultural property as falling rents, mounting arrears, and accumulations of unlet farms convinced owners of the need to sell portions of their estates. The bulk of the agricultural properties owned by the Dudley estate were not sold until the period between 1917 and 1924². Such property as was sold before 1917 was mainly mineral property of limited value.

The income from agricultural leases after 1845 is not consistently shown by the surviving records. Such figures as are available are included here for comparative and illustrative purposes - they are not necessarily turning points in the economic development of this sector of estate enterprise. Between 1853 and 1878, agricultural rents in general tended to increase, but decline thereafter by as much as 50 per cent by 1898³. In the case of the traditional Dudley estates in and around the southern and western fringes of the Black Country, total rents due amounted to £18,487 12s. 4d. in 1850 and £20,660 13s. 6d. in 1924⁴. No records are available for the intervening period but these figures relate to estates which remained unchanged in area and were the last of the major agricultural properties to be sold by the family in 1947. By 1935, receipts had increased to £26,992 7s. 11d. and it may be that their increased value, as well as their proximity to the west midlands conurbation, persuaded the family to retain these properties for so long. The total income from these estates in the 1930s consisted of:

² See Section IV, Chap. 4, Part B.

³ Thompson, Land Society in the Nineteenth Century, p. 303.

⁴ See Appendix 9.

	<u>1930</u>			<u>1932</u>			<u>1935</u>		
	£	s.	d.	£	s.	d.	£	s.	d.
Great Rents	25,795	10	1	25,540	18	0	26,992	7	11
Cottage "	1,992	2	3	1,807	16	3	1,075	10	1
Mines Office									
Sundries	1,141	19	5	1,221	10	4	1,190	13	2
Rents for									
Damaged Land	1,050	7	8	1,014	6	6	908	5	3
Sporting	525	0	0	500	0	0	500	0	0
Sundry	33	17	11	21	3	4	35	11	5
	<u>30,538</u>	<u>17</u>	<u>4</u>	<u>30,105</u>	<u>14</u>	<u>5</u>	<u>30,587</u>	<u>9</u>	<u>10</u> ⁵

The increase in rents has already been indicated while the decrease in cottage rents is explained by the continued sale of cottage properties which had been initiated by Lord Ward's Estate Act of 1847. Rents for damaged land were received from mine tenants mainly in Himley, Kingswinford, and Sedgley, where surface land was required for mining operations. Sporting rents were derived from the Blackhills Estate, developed for this purpose near Wombourn after 1918. Total income from the local landed estates had fallen to £27,820 7s. 11d. by 1942. Timber sales continued to provide a regular income after 1845 but ceased in 1935: receipts for 1930 were £2,971 16s. 5d. and £2,116 18s. 2d. in 1932. There are no records available for the other estates in Worcestershire, Scotland or Wales which show the rents received during the period 1852-1924 when the last of these properties was sold. However, the national trend of a recovery and increase in total rents by 1853 is reflected in the Witley rents for 1838 - £21,680, and 1852 - £30,906 8s. 4d.

Net income from landed property is difficult to calculate because of the scarcity of records but it is possible to work out the figure for 1930⁶ for the local estates. Out of a gross income of £30,538 17s, 4d., of which £25,795 10s. 1d.

⁵ D.P.L. 6/B, Himley Estate Accounts, 1930-1942.

⁶ Ibid.

came from farm and accommodation rents, general repairs amounting to £7,013 1s. 3d. and the expenses of wages and management were paid - these amounted to £4,797 0s. 10d. Net income from rents would therefore be £18,720 15s. 3d. in 1930. In the same year net income from mineral enterprise - based entirely on royalties since 1924, was £20,861⁷: not since extensive exploitation of minerals on the Black Country estates was begun by the second viscount in the 1780s, had the net income from these two sources been approximately equal. At the peak of estate prosperity, net mineral income had been £169,096 15s. 8d. in 1854: gross rents from the Black Country estates were £18,487 12s. 4d. in 1850.

Of the various landed estates, the only available information concerns the local estate. In 1883, this consisted of 11,216 acres distributed throughout the various parishes:

<u>Parish</u>	<u>Estate Property</u>	<u>Estate Mining Property</u>	<u>Acreage of Parish</u>
Himley	1,160	214	1,185
Kingswinford	2,635	1,345 383 Mineral rights allotted under Pensnett Chase Enclosure Act but not the surface	7,315
Penn	125	1,345	3,890
Dudley	1,818	1,818 278 Ditto under Dudley Wood Enclosure Act	3,536
Dudley Castle Hill	72	72	72
Rowley Regis	724	724 100 Ditto under Rowley Regis Enclosure Act	3,670
Tipton	195	195	3,020
Sedgley	3,250	2,878	7,366
Wombourn/Swindon	<u>1,237</u>	<u>-</u>	<u>3,185</u>
	11,216	8,007	33,243 ⁸

Where estate property was divided to show the proportion containing minerals, this indicated the parishes through which the Western Boundary Fault of the South Staffordshire Coalfield passes⁹: the fault runs in a north-south line through Sedgley, Himley, and Kingswinford. Agricultural properties were situated throughout the earl's property in all the parishes, but in these three, extensive mining operations were carried out under properties which lay east of the fault.

There was no substantial change in the area of the local estates which consisted of 10,623 acres in 1924¹⁰. The decrease in area is accounted for by sales of small cottage plots and scattered mineral properties. Redmayne's survey of 1924 describes the Himley estate as:

'a large agricultural and mineral estate ... including Himley Park. A considerable portion ... has a value much beyond agricultural value and it is expected by judicious sales to considerably increase the revenue.'¹¹

The gross rental was £23,516 and net rents, before allowing for the expenses of management and income tax, amounted to £20,352. The various items in the rental consisted of:

		£	s.	d.
36 farms on yearly tenancies	5,101 acres	7,910	10	4
47 smallholdings under 50 acres on yearly tenancies	842 "	2,021	14	6
Accommodation land	1,608 "	4,008	7	1
18 houses on yearly tenancies		1,723	10	0
21 houses and warehouses on yearly tenancies		1,171	12	0
210 small houses and warehouses on half yearly tenancies		1,727	13	0
36 houses on weekly tenancies		299	11	0
3 public houses on yearly tenancies		180	10	0
Wayleaves, window lights etc.		115		
Sporting tenancies (3)		650		
Cottage rents: 1358 cottages: tenancy at will				

⁷ See Appendix 6.

⁸ D.P.L. 32/6, Survey of Himley Estates, the Property of the Earl of Dudley. Statistics given to the British Iron Trade Association, Feb. 24 1883.

or 6 months notice	465 acres	2,339	6	6
Woodlands (gross rateable value)	961 "	335	8	0
Home Farm, Himley Hall and Park, Keepers' Houses (gross rateable value)	<u>686</u> "	<u>1,033</u>	<u>4</u>	<u>0</u>
	9,663	23,516	6	7

Average repairs on all property over the last seven years was estimated at £3,164. After taking this figure into account, together with the expenses of management and income tax, the net rental was given as £15,000.

In spite of the near exhaustion of minerals under their property, the earls of Dudley retained possession of these traditional estates until 1947 - probably because of their increased value as demand for building land in the area grew. This demand is reflected in the increased rents for the 1930s. However, one small portion was sold in 1936 for building purposes, at Golthorn Hill between Sedgley and Wolverhampton. Post-war developments in the area and changes in the position of the landowning aristocracy in general, led to the disposal of the bulk of the local estates in 1947, although small plots were retained until recent years. By 1967, the Ward family ceased to own any property in the area from which the bulk of their fortune had been drawn.

⁹ See Map 2.

¹⁰ D.P.L. 23/6, Survey of the Himley Estates by Sir Richard Redmayne. Particulars of Security for a Loan of £252,000, 7 Feb. 1924.

¹¹ Ibid. See Chap. 4, Part B below for the disposal of property.

Chapter 2. The Iron Trade

The Black Country iron trade had evolved because of the availability of coal, ironstone, and limestone in the area. It was largely based upon the primary processes of pig iron and wrought iron production, which mainly served the secondary and finishing trades manufacturing all manner of iron goods, ranging from rails, plate, bars, girders, anchors, tubes, and boilers in the larger ironworks, to nails, locks, chains, and other such items in the numerous small ironworks and workshops throughout the district. Peak prosperity was attained during the Crimean War and the Franco-Prussian War when pig iron production reached 743,000 tons in 1854 and 726,000 tons in 1871 - the last occasion when Black Country production passed 700,000 tons. Since 1860¹, however, the general trend had been downwards and after the brief recovery of the early 1870s, the traditional structure of the local iron trade contracted rapidly as pig iron production fell after 1875. There were many contributory factors to this 'collapse', and the fortunes and policies of the Dudley estate - closely bound up with mineral and iron production - were caught up in the process. In the long run, the area remained a centre for the iron trade, but diversification and the import of finished iron were necessary before the transformation to engineering and finished iron goods could be accomplished.

The main cause of the decline in the traditional Black Country iron trade was the exhaustion of the more productive and the shallower seams of minerals - particularly ironstone. In 1860, it was calculated that local ores

¹ See Appendix 5.

were sufficient for 40 years but this was far too optimistic as the best seams ran out, or became flooded, long before 1900². Scrivenor noted the growing shortage of local ore to meet the expansion of the local iron trade as early as 1854:

'Is this as regards South Staffordshire, the beginning of the end?'³

But for the advent of railways, it is possible that, in view of the growing imports of raw materials, the area would have declined sooner than it did - although, the railways were also to hasten the downfall in some respects by the imposition of high freight charges. As early as 1866, the Black Country produced only 50 per cent of the ironstone consumed by the local iron trade, and 300,000 tons of pig iron were annually imported from Wales and Derbyshire in the early 1860s⁴. Later in the century, cheap, quarried iron ore was being imported from Northamptonshire and Oxfordshire. Even local limestone was in short supply and the area had to rely on imports from the Dee valley near Llangollen. As production costs increased, Black Country blast furnaces were blown out: however, the Dudley estate continued to enjoy a privileged position and by 1883, the Earl of Dudley's works were the only ones in the area still making pig iron from local ore. By then the earl was manufacturing pig iron and wrought iron on his own account. One special feature in this process of decline was that the pig iron industry declined more rapidly than the wrought iron sector: in 1856, the area produced 777,000 tons of pig iron - 22 per cent of the national total and, in 1860, 470,000 tons - 12 per cent

² G. R. Morton and M. Le Guillou, 'The Rise and Fall of the South Staffordshire Pig Iron Industry', The British Foundryman (1967).

³ H. Scrivenor, 'History of the Iron Trade' (1854), p. 299.

⁴ Allen, op. cit., p. 100.

of the total production. During the 1860s, the Black Country continued to supply 33 per cent of the national production of wrought iron because of the heavy concentration of skills in the area and the growing imports of pig iron⁵.

However, the apparent continued prosperity of the wrought iron industry was also doomed - apart from the fact that its prosperity was, to a large extent, geared to the fortunes of the local pig iron industry. Technological developments were equally responsible because of the introduction of Bessemer's acid converter after 1856. This led to a rapid expansion in the use of cheap mild steel which was increasingly used by the iron industry in preference to wrought iron: for example, ship construction changed from iron to steel in under a decade. This process was not taken up in the Black Country for two reasons: capital costs of converting the existing ironworks would be prohibitive and local ore was unsuitable because of its high phosphoric content. A few Black Country firms did turn to the production of mild steel - including the Earl of Dudley in the 1890s, but this was after further advances in iron and steel technology following the application of the Gilchrist-Thomas process in 1879. This would have enabled local ironstone to be used but came too late for the Black Country in general.

Other factors too contributed to the difficulties of the area. One of the main traditional markets for Black Country iron was the United States: however, the financial crisis of 1857 led to the imposition of high import duties which drastically reduced the demand for Black Country iron. Another factor, perhaps because of the approaching exhaustion of local minerals, was the reluctance of ironmasters to invest capital in new plant

⁵ Ibid. p. 89.

and machinery. The prevalence of old practices in south Staffordshire, except in a minority of enterprises such as Sir Alfred Hickman's at Bilston, Messrs. Cochrane's at Woodside (a tenant of Lord Dudley) and the Dudley estate's works, was condemned in a paper entitled 'Hot Blast and Economy in the Blast Furnace', given to the Staffordshire Iron and Steel Institute in 1884:

'I am quite satisfied that if Staffordshire is to hold her own in the manufacture of pig iron, some further steps will have to be taken to improve her blast furnace practice.'⁶

A further disadvantage was the high cost of railway freight: the journals of the institute record the first discussion on the subject in 1885 when proposals were made to improve the Grand Junction Canal,

'One of the only canals that was not held in pawn as it were, by the railway companies,'⁷

so that steamers of a reasonable size might travel from Birmingham to London. In the same year, the Wolverhampton Chamber of Commerce stated to the Royal Commission on Depression of Trade that:

'The most important circumstance affecting the trade of this district is the unfair, unequal, and excessive railway rates which are charged upon all its productions ... It is served by three ... railways ... and three canals; but instead of these producing the natural effect of competition, the railway companies have bound themselves not to reduce any rates without the consent of each other ... (and) Control of the principal canals has been acquired by the railway companies.'⁸

This improvement scheme fell through and, as late as 1896, the journal of the institute observed that

'it cost more to send freight from South Staffordshire to London than from London to Amsterdam.'⁹

⁶As quoted by W. M. Larke, The Blackcountryman (1968), p.41

⁷ Ibid.

⁸ Royal Commission on Depression of Trade, Q.10, Evidence given by Wolverhampton Chamber of Commerce.

In the light of these developments after 1860, the work of the trustees assumes an even greater significance. It was fortunate that the policy of conservation of the minerals was replaced by one of maximum output in 1836 which enabled the estate to work the bulk of the minerals before the local iron trade collapsed. Involving the estate in the production of pig and wrought iron brought considerable profit during the years down to 1880, while the existence of integrated ironworks, able to use the estate's systems of transport, gave an advantage to estate tenants. This probably helped to maintain the level of employment in the area and may have slowed the pace of the decline of the Black Country iron trade. In the 1880s, most of the furnaces in blast were situated west of Dudley where minerals were still available from estate collieries. Many of the tenants were amongst the more progressive ironmasters in the area but, it was during the period of decline that the Earl of Dudley himself attained a leading reputation, both in national and international markets, as a manufacturer of good quality iron and steel.

This expansion of estate production was carefully balanced by a policy of contraction in capital invested in leased ironworks. The general trend was clear and, as early as 1868, Frederick Smith initiated a policy of selling ironworks with land and working mines attached, so as to enable purchasers to work the enterprise on an integrated basis. Most of the sales at this time were east of the Dudley ridge where the minerals had been worked for a longer period. But, by the 1860s, it was evident that even estate mineral properties were nearing the point of exhaustion reached by other producers in this part of the Black Country before the 1840s. Two of the more important ironworks sold were the

⁹ Journal of the Staffordshire Iron and Steel Institute, 1895-6, XI, p. 75.

Tipton Iron Works - some of the earliest mineral blast furnaces established on the Dudley estate as long ago as 1783, and the Dudley Port Iron Works - founded in the 1790s. Both were sold as going concerns with land and mines in November 1868. The Rent Account for 1871 and 1872¹⁰ illustrates the extent of the contraction of leased pits and ironworks: this account recorded surface rents of leased pits and ironworks. Receipts for 1871 were £29,606 and, in 1872, £8,420: this sharp drop would also be accounted for by the closing of completely worked-out pits. Ironworks west of the ridge continued to flourish where the more productive estate seams remained. These too were eventually sold, probably in the 1880s. By 1924, even the complex of ironworks at the Level and Round Oak were leased to the Earl of Dudley's Round Oak Works Ltd. which had been established in 1897. However, the earl retained all the share capital until 1924, and as this enterprise played a major part in the re-structuring of estate affairs, this development will be considered elsewhere¹¹. Apart from share income, the estate derived a rent of £7,500 per annum until the nationalisation of steel in 1951. Properties leased to the Round Oak Works consisted of the Level New Furnaces, Coneygre Foundry, Limestone mines, Pensnett Railway and Canal, and the Castle Mill Repair Depot¹². Some sections of the railway remained under the direct management of the estate.

Throughout the period of decline, the Dudley estate increased its overall capital commitment to enterprises owned and managed by the estate although income and capital in this sector were increasingly concentrated at Round Oak. Until 1845, integration of estate enterprise had proceeded

¹⁰ D.P.L. 12/C, Auditor's Report Upon the Examination of the Earl of Dudley's Accounts, Mines Department, 1871-2.

¹¹ See below and Chap. 4, Part A.

only as far as the mining and distribution of minerals and the manufacture of pig iron at Coneygre and the reconstructed New Level Furnaces. During the 1850s, the process was taken a stage further with the construction of the Round Oak Iron Works designed to convert estate pig iron into wrought iron. Further developments at this site included the construction of a chain works and the manufacture of steel in the 1890s, and, at Coneygre Foundry, the manufacture of castings for the motor trade after 1914.

In terms of mineral supplies, the estate continued to mine sufficient of its own coal, ironstone and limestone until the 1890s although, as early as 1883, no other Black Country iron manufacturer was exclusively using local minerals. The beginning of steel manufacturing at Round Oak necessitated additional sources of iron ore being found and, in 1899, the earl negotiated a lease of iron ore at Hook Norton near Chipping Norton where ore could be quarried cheaply and transported direct to the furnaces at the New Level. The lease¹³ ran for 21 years from 29 September 1899 and the earl paid various royalties per ton of 2,352 lbs.

Raw ironstone	4d. per ton
Calcine "	6d. " "
Building stone and sand	3d. per ton
Minimum royalty	£100 for the first year £300 for subsequent years
Wayleave	1d. per ton of raw stone and raw iron ore.

This lease may have been the beginning of a connection between the Dudley estates and the ore quarries of the area which led to the development of a large mining company, Edgehill Ltd., of which the Earl of Dudley was president. Estate quarries and mines were able to supply Round Oak

¹² Redmayne's survey, Feb. 1924.

¹³ D.P.L. 7/A, Lease of Minerals Granted to the Earl of Dudley by Mr. B. Round at Southrop, Hook Norton, 29 Sept. 1899.

with sufficient limestone and coal until after 1900 but production at the Wren's Nest limestone mines ceased altogether in 1924: stone had been imported in increasing quantities since 1908. However, estate collieries continued to supply all coal used at the steelworks until nationalisation removed all connections with ^{the} Dudley estate.

After the period of the trust, the estate owned and operated two other ironworks under the direct management of the Priory office: these were at Coneygre and Castle Mill. After the trustees had assumed control of the two furnaces at Coneygre in 1839, they were overhauled and improved: both remained cold blast furnaces with a total production of 100 tons of pig iron per week. As the local demand for iron expanded, a third furnace was constructed in 1850: raw materials were readily available from adjacent pits operated by the estate and from the Wren's Nest quarries which were connected to Coneygre by a horse mineral railway. A survey of 1882¹⁴ records that Coneygre produced hot blast strong forge pigs and castings, and was served by four and a half miles of private railway which connected the works with Coneygre Colliery and Castle Mill. One locomotive and 300 coal trucks are listed in the stock. However, the fall in demand for wrought iron led to the blowing out of all three furnaces for the first time in 1879. When this recurred in 1895, the estate decided to give up the works and, as there was no bid to lease the enterprise as a going concern, the plant was dismantled and sold in 1896. Minerals and iron had been worked on the Coneygre estate from the outset and it was here that the first steam engine had been erected by Newcomen in 1712 to drain Lord Dudley's pits¹⁵. However, this was not the end of the estate's connection with Coneygre because the foundry continued to produce castings for the

¹⁴ D.P.L. 12/A, Mines Department's Statistics, 1875-1886.

¹⁵ See Section I, Chap.1, Part B.

earl's engineering works at Castle Mill. During the 1914-18 war, production increased as motor vehicle parts were manufactured for Austins¹⁶. The foundry was closed down and sold by the earl in April, 1925: however, it remained a going concern and is still in operation to-day.

The Castle Mill Engineering Works had been established on the Tipton side of the ridge by Richard Smith between 1845 and 1850 to replace the Store Yard which had functioned at Round Oak since the 1780s. This took over the construction and repair of steam engines, rails, mining machinery, locomotives, and other equipment formerly carried out at the Level Store Yard and, with the rapid expansion of estate activities, increased the amount of machinery supplied to the estate. It had excellent communications with the whole of the area as the Dudley Canal Tunnel emerged within the property and, after 1854, it was connected by a siding to the Oxford, Worcester and Wolverhampton Railway which enabled estate trucks and engines from the Pensnett and Kingswinford Railway to reach the works. In 1871¹⁷, Castle Mill supplied machinery worth £24,573 12s. 4d. to the Dudley estate. Particulars collected by W. D. Curzon for the mines commissioners provide a detailed account of the Castle Mill Works at the peak of activity in 1882: they were

'connected to the G.W.R. with a siding from Dudley Station and ... fully adapted to the requirements of His Lordship's Mining Estate ... consisting of fitting, turning and erecting shops with first class machines by Whitworth, Nasmyth, Glasgow, and Hutton and Macdonald all driven by 15 H.P. horizontal engines. There is a large smiths' shop - 3 double and 2 single hearths, cranes and 10 cwt steam hammer: extensive iron, oil, chain and pattern stores: large carpentry and wheelwrights' shop: locomotive erecting and wagon building shed containing double sets of rails with back and front entrances: oliver shops and boiler sheds: shoeing shops: hinge, round and flat

¹⁶ W.K.V. Gale, The Coneygre Story (1954), p. 18.

¹⁷ Auditors Report, 1871.

'chain shops: with convenient general and drawing offices. These works afford employment for about 120 men. The whole of the plant on the estate has been made and maintained at these works.'¹⁸

This was a remarkable enterprise which established a reputation for a high quality of workmanship in many fields. It was leased to the Round Oak Works in 1924 and remained a property of the Dudley estate until the break-up of the local estates in 1947. The earl retained a financial connection with the property which now operates as the British Federal Welding Company.

Increasingly after 1845, there was a policy of concentrating the estate's interests in the iron trade in the integrated concern at Round Oak where eventually, by 1890, pig and wrought iron, heavy wrought iron manufactures, and steel were all made by the estate. This process of integration had begun in the last years of the trust when Richard Smith had reconstructed, enlarged and modernised the blast furnaces at the New Level Iron Works¹⁹. The three furnaces were designed to produce a total of 330 tons per week, and were supplied with coal and ironstone from estate mines by an extension of the Kingswinford Railway across Pensnett Chase, and with limestone from estate quarries at Wren's Nest by the Dudley Canal. In 1855, the process of integration was carried to its logical conclusion when the Round Oak Iron Works was constructed beside the recently completed Oxford, Worcester and Wolverhampton Railway, on the opposite side of the canal from the New Level Furnaces. The Pensnett Railway already crossed the Dudley Canal by a bridge and, because of the fall of ground, supplied the furnace tops directly without the need to construct an incline. However, an incline was built from the furnace hearths up to the level of the canal and the trucks of pig iron were hauled up by a

¹⁸ W. D. Curzon's report, April 1882: Mines Department's Statistics, 1875-1886.

¹⁹ See Section II, Chap. 2, Part B iii.

stationary winding engine. From here, locomotives conveyed them across the canal by another bridge, to the new ironworks for the manufacture of high-grade finished bar iron. Compared with other Black Country ironworks, the scale of this undertaking was enormous: it contained 28 puddling furnaces, 2 hammers, 2 forge-trains, and 5 mills:

'The typical Black Country ironworks of that age consisted of from ten to twenty puddling furnaces, a balling-up furnace, a hammer, a forge-train, two to three reheating furnaces and two sets of rolling mills.'²⁰

The new Dudley enterprise was almost twice as large and employed 600 men when it commenced operations in August 1857. Many local ironmasters regarded this development with anxiety as it was acknowledged that

'These works will be the best in the district both for design and construction, as well as in the character and quality of the apparatus employed.'²¹

Apart from the fact that Round Oak would directly promote estate interests by providing a market for estate minerals and pig iron in the production of finished iron at minimum cost, Richard Smith always asserted that he had the interests of the Black Country iron trade in general at heart when promoting the new works. This may well be true because the introduction of the hot blast in the 1830s, while reducing production costs, had enabled low-grade ore to be used which resulted in a poorer quality of iron. In its obituary on Smith, the Dudley Herald asserted that:

'Mr. Smith has frequently stated at public meetings that these works were erected for the purpose not of competing with the other ironmasters of the district but of maintaining the character of South Staffordshire for good iron ... Specimens of iron made at these works were exhibited ... at the International Exhibition at London (1862) for which he was awarded a gold medal.'²²

²⁰ C. Knox, Steel at Brierley Hill (1957), p. 65.

²¹ The Engineer, 9 May 1856.

²² The Dudley Herald, 25 July 1868.

The paper also quoted a prominent metallurgist, Dr. Percy, who had criticised the poor quality of iron made in Britain at the time:

'the Earl of Dudley's magnificent collection at the International Exhibition ... was the only one which worthily sustained - I may say vindicated - the reputation of this country in the estimation of the world.'²³

Because of the scale of the enterprise - a fourth furnace was added in 1868 - four grades of bar iron together with hot and cold blast pig iron were produced. The highest grade of bar iron was made from cold-blast pig

'and soon became acknowledged a superior quality in the trade and commanding a premium price.'²⁴

Production had begun in 1857 at a difficult time because of the slump in trade following the Crimean War. However, as demand increased, extensions were made to the Round Oak Works between 1865 and 1868. A fourth furnace, 2 forges and 26 puddling furnaces were added and productive capacity was increased to 550 tons of finished iron per week. Two years later, a supplementary blast-engine, designed and constructed at Castle Mill, was installed to maintain the efficiency of the furnaces. This expansion was the work of Frederick Smith, Richard Smith's son and successor as general manager of the earl's mineral and industrial affairs. Richard's grandson, Edward Fisher Smith pursued a similar policy of expansion and added a fifth furnace at the New Level in 1877. The last additions, before the conversion of the ironworks to steel production after 1892, were made in 1889 when number one furnace was modernised, and a chain works was constructed: when operations began in 1891, it was capable of producing 50 tons of chain and cable per week and a three-year contract was received from the admiralty. The probable

²³ Ibid.

²⁴ B. W. Berry, 'The Level New Furnaces', The Acorn (house journal of the Round Oak Steel Works), 1961-2.

reason for the expenditure on increased capacity was the desire to work as great a quantity of estate minerals as possible before the local and national markets for wrought iron disappeared altogether. In fact, after 1877, the productive capacity of the New Level Blast Furnaces outran the production of bar iron at the Round Oak Iron Works and increasing quantities of cold-blast pig iron were sold under the famous brand of 'DUD LN Fces' (Dudley New Level Furnaces).

However, it was on the basis of the wrought iron produced at Round Oak that the reputation of the Dudley estate as a manufacturer of high-grade finished iron was first established - especially after the triumph at the London Exhibition in 1862. A contract was established with the admiralty - which was to be retained throughout the century - as early as 1861 when Round Oak supplied iron for the construction of early ironclads such as 'H.M.S. Achilles'. Overseas markets in America, Japan, China, and Russia were also supplied with Round Oak iron in an increasing variety of forms including bars, angle-iron, rods, plates, girders, nuts and bolts. While demand persisted, the range of bar and manufactured iron was supplied to Black Country ironworks engaged in the manufacture of iron goods. In addition, as the manufacture of pig iron from local materials fell, the estate supplied larger quantities of pig iron to the larger wrought iron manufacturers, the largest of which was the Bloomfield Iron Works of William Barrows and Sons. Although this enterprise had no minerals or blast furnaces of its own, its productive capacity was 1,000 tons of finished iron per week - the highest in the area²⁵. The reputation for high-grade cold-blast pig iron was based upon the use of the best local ore and sulphurless thick coal from estate pits. After being processed at the Round Oak Iron Works, four grades of

²⁵ Allen, op. cit. p. 205.

wrought iron bars were sold under the brand name of L 'Crown' W RO (Lord Ward Round Oak): these were 'ordinary marked bars', 'best', 'best best' and 'triple best'. Marked bars from Round Oak were always sold at 12s. 6d. per ton over the price of other Black Country producers. This was because of the superior quality of Round Oak iron - although, had it been in the interests of the estate, competitors could have been undercut because of the lower production costs resulting from total integration.

Surviving records do not give a clear picture of the profitability of the various enterprises at the Level and Round Oak. However, there is some indication of receipts for the boom years of 1854 and 1871, and for 1889, the last full year in which the Round Oak Iron Works operated under that name. Coneygre Iron Works - consisting of a foundry and three blast furnaces, made a net profit of £9,264 1s. 0d. in the year ending December 1854²⁶ and the Level New Furnaces made a profit of £10,936 14s. 10d. The corresponding figures for 1871²⁷, when detailed records are available, were, for Coneygre, a net profit of £78,743 14s. 8d. and for the New Level, £73,654 6s. 5d. Total net profit from all the iron-works operated by the estate was £315,825 3s. 11d.²⁸ This was the last great boom in the Black Country iron trade when production of pig iron, 726,000 tons, exceeded 700,000 tons for the last time. Production figures for estate enterprises reflect the boom of 1871 and the declining demand for finished iron when this trend was resumed in 1872: falling figures for the production of estate finished iron, ironstone, and limestone all indicate the trend which assumed the proportions of a rapid 'collapse' in the local iron trade between 1875 and 1882.

²⁶ D.P.L. 12/H, Profit and Loss Account, Mines Dept. Accounts for Year Ending in December 1854.

²⁷ Auditor's Report, 1871. ²⁸ See Chart 21, p. 479.

Chart 21. Production Figures for Iron and Minerals on the
Dudley Estate, 1871

<u>Production</u>	<u>Fitting Shops</u>		<u>Coneygre</u>		<u>New Level Furnaces</u>		<u>Round Oak Ironworks</u>	
	<u>Tons</u>	<u>Cwts</u>	<u>Tons</u>	<u>Cwts</u>	<u>Tons</u>	<u>Cwts</u>	<u>Tons</u>	<u>Cwts</u>
Pig Iron	-	-	19,919	10	17,722	10	-	-
Finished Iron	-	-	-	-	-	-	22,347	-
Castings	-	-	2,561	12	452	3	-	-
<u>Receipts</u>	<u>£24,573</u>	<u>12s. 4d.</u>	<u>£91,325</u>	<u>6s. 0d.</u>	<u>£83,420</u>	<u>9s. 4d.</u>	<u>£209,313</u>	<u>5s. 0d.</u>
Stores sold	-	-	1,528	15	757	15	8,823	18
<u>Total receipts</u>	<u>24,573</u>	<u>12</u>	<u>92,854</u>	<u>1</u>	<u>84,178</u>	<u>5</u>	<u>218,137</u>	<u>3</u>
<u>Payments</u>								
Wages	8,209	1	8,984	16	7,613	3	37,806	10
Salaries	873	-	404	6	252	12	2,334	14
Tradesmen	<u>8,135</u>	<u>10</u>	<u>4,721</u>	<u>4</u>	<u>2,658</u>	<u>2</u>	<u>21,924</u>	<u>18</u>
	17,217	11	14,110	7	10,523	18	62,066	2
Net Income	7,356	1	78,743	14	73,654	6	156,071	1
<u>Total Net Income: £315,825</u>	<u>3s. 11d.</u>							

Mineral production in 1871: figures in brackets for 1872

	<u>Dudley Estate</u>		<u>Black Country</u>	
Coal	1,189,980	tons	(1,193,218)	(9,000,000)
Ironstone	101,832		(63,767)	(642,000)
Limestone	102,201		(71,986)	
Fireclay	14,868		(16,855)	
<u>Iron Production</u>				
Pig Iron	37,642		(37,927)	726,000
Finished Iron	22,347		(16,936)	

Chart 21 (continued)

Estate Mineral Income (Net)

Estate Pits	£141,680	14s.	1d.
Royalty	<u>26,146</u>	<u>3</u>	<u>2</u>
	167,826	17	3

During the 1880s²⁹, production at the Dudley ironworks continued to decline but they did remain in operation at a time when higher production costs were forcing many closures in the district. From a total of 37,642 tons of pig iron produced at Coneygre and the New Level in 1871, production fell to 30,718 tons in 1880 and 17,716 tons in 1886. Two other developments were associated with this decline as demand for wrought/^{iron}was replaced by demand for mild steel. Production of pig iron came to be concentrated at the New Level and increasing stocks of iron built up. In 1886, when two furnaces were out of blast, Coneygre produced 2,587 tons of pig iron and held a stock of 2,524 tons: production ceased here in 1887 after the stock had increased to 5,300 tons. At the New Level, production was 15,129 tons in 1886, three furnaces were out of blast and the stock held amounted to 4,746 tons. A year later, production fell to 5,403 tons and stocks increased to 9,500 tons. By this time, the earl's managers and advisers had begun to consider changes in the structure and organisation of the iron trade on the Dudley estate. This led to the closure and disposal of the Coneygre blast furnaces in 1895, the introduction of an experimental open hearth steel furnace at Round Oak in 1888, and the foundation of a public company in 1890 to convert the bulk of production at Round Oak from wrought iron to steel, using pig iron which the earl continued to supply from the New

²⁹ D.P.L. 32/6, Statistics and Analyses, 1866-1915.

Level Furnaces.

The time had come for a change of policy as net profit on the Round Oak Iron Works had declined from £156,071 1s. 6d. in the boom year of 1871 to £15,489 6s. 4d. in 1889³⁰. It is possible that the second earl decided to sell the works rather than attempt to construct a new enterprise under the management of the estate because of the risks involved. The iron and steel trades in general were depressed at this time and, apart from coal, raw materials would have to be imported to Round Oak in increasing quantities. However, a public company was prepared to undertake the risk and use the name, goodwill, and brands of the existing ironworks in an attempt to establish a similar reputation for high-grade steel. Ultimately, through force of circumstances, the new enterprise was to be repossessed as part of the Dudley estate and remained so until the nationalisation of steel in 1951.

The company was formed to take over the existing Round Oak Iron Works under the new name of the Earl of Dudley's Round Oak Iron and Steel Works on 15 September 1890. Details of the value and market of the existing ironworks were set out in the prospectus of the company issued in April 1890. The declared intention of the company was to continue to maintain the sale of iron under existing brands but to concentrate production on the manufacture of steel

'of which the higher grades are in great demand'³¹. Because of the adverse conditions of the time, the company took the precaution of having the venture underwritten by the Lancashire Trust and Mortgage Insurance Corporation Ltd. before inviting subscriptions for the issue of share capital worth £202,000. Because of the high reputation of the earl's brands of iron, valuable markets had been established:

³⁰ B.H.P.L. 8/1, Prospectus of the Earl of Dudley's Round Oak Iron and Steel Works Ltd., April 1890.

³¹ Ibid.

'they are in favour with the British and Indian and Foreign Governments, as well as with the chief Engineering Firms and Railway Companies at Home and Abroad ... and command the highest price.'³²

In addition, a three year contract had been won in 1889 to supply the admiralty with chain and cable from the recently erected chainworks at Round Oak. Although he was selling the Round Oak Iron Works, the earl would maintain a link by selling pig iron, produced by the estate blast furnaces at the New Level, to the new company,

'on terms which the Directors regard as favourable.'

He also undertook to supply fuel

'for a period of 30 years on the lowest terms upon which fuel of the like description may for the time being be sold by His Lordship for similar purposes in the neighbourhood and to deliver it into the works at a fixed rate of 6d. a ton, which is to include truck, Line and other charges.'

The value of the

'machinery, buildings, railways, sidings, brands, goodwill, the valuable concession made by His Lordship, freehold and favourable situation'

was estimated at £190,000 by W. Blakemore, who was engaged by the Lancashire Corporation Ltd. It was in the earl's interest to offer reasonable trading terms for his pig iron and coal as he still possessed considerable quantities of minerals in the area and selling in an assured local market would produce the highest profit margin for the estate which was geared to supply Round Oak by its private railway network. The purchase price was agreed at £160,000 of which the earl received £60,000 in cash, £50,000 remained on mortgage and £50,000 remained 'on mortgage or Mortgage Debentures at his Lordship's option'. Both securities carried an annual interest of 5 per cent and the principal sum was to be reduced by yearly instalments of £5,000 commencing in January 1893.

³² Ibid.

Blakemore estimated the cost of a new basic steel plant at £50,000 and that net profit in future would be £41,000. Estimated annual production would be 56,800 tons of steel, 21,600 tons of finished iron, 2,400 tons of cables and 1,200 tons of steel strip. The production capacity of the existing works was 500 tons of finished iron, 30 tons of cold rolled strip, 100 tons of steel and 50 tons of chain and cables per week. Steel had been manufactured only on a small scale in south Staffordshire after 1856, but

'the new discovery of the "Thomas Gilchrist" process of Basic Steel manufacture, and especially the open hearth basic system, has placed it in the front rank for making good and cheap "Mild Steel" by this process, which has been in operation at these works for the past 12 months.'³³

Ingot steel was being produced at Round Oak

'for £3 10s. per ton, the slag being sold for agricultural purposes for 7/- per ton. A new £50,000 steel mill could turn out 800/1,000 tons a week of steel bars at less than £5 per ton.'³⁴

The early optimism of the prospectus was undermined by the first report to the directors submitted on 14 September 1892³⁵. Prominence was given to the growing demand for Round Oak chains:

'the manufacture of chain ... has made considerable progress. Chain produced by the Company is already in considerable favour with the British Admiralty, with whom a second contract has been secured ... A second important contract has been secured with the Mersey Dock and Harbour Board for the whole of the Board's requirements for a further twelve months.'

But, the main object of the company, the manufacture and sale of steel bars and strip, was not progressing satisfactorily.

The most remunerative sector remained the production of

'the celebrated brand of L."Crown" WRO bar iron and Directors hope for an increase of this business in the future.'

³³ Ibid.

³⁴ Ibid.

³⁵ B.H.P.L. 8/1, First Report to the Directors of the Earl of Dudley's Round Oak Iron and Steel Works Ltd., 14 Sept. 1892.

A new contract for this product had just been made with the India Office. During 1891 it had become apparent that

'until the Company can get the new Steel Works in operation and effect other structural economies in the Iron Works, the business in the present state of trade could not be carried on at a profit.'

In the circumstances, the earl had

'agreed to modify the conditions under which the Company have covenanted to purchase Pig Iron from his Lordship. It is now proposed to proceed with the erection of the Steel Works as fast as possible.'

In view of the depressed state of trade, the share capital subscribed only amounted to £135,000 and this probably explains the lack of progress, before September 1892, in erecting the new steelworks. This undertaking, when finally completed consisted of three open hearth basic furnaces, one cogging mill, and one finishing mill. The first steel was tapped in August 1894: three months later, the company went into liquidation. It has been suggested that this failure was the result of the general depression in the iron trade and the fact that the

'contracts taken over from the Earl of Dudley were unfavourable to the company.'³⁶

This seems unreasonable in view of the fact that the new company's prospectus stressed the demand for iron manufactured at the earl's works, and the report of 1892 referred to contracts to supply chain to the admiralty at 'remunerative' prices, and an 'important and satisfactory' contract to supply iron to the India Office. Falling demand for wrought iron had led to the earl's decision to sell Round Oak Iron Works to a company whose intention was to concentrate mainly on the manufacture of steel. Its failure was due more to the general lack of confidence and the fact that, although the required share capital was fixed at £202,000, no more than

³⁶ Knox, op. cit. p. 67.

£135,000³⁷ was subscribed. This was insufficient to meet the purchase price let alone the capital costs of constructing the steelworks. As the mortgagee, the second earl once more assumed control of the ironworks and chainworks together with the newly constructed steelworks. Until 1897, these were all managed on the traditional basis from the Priory Office by the earl's cousin and general manager, Gilbert Claughton.

After considerable debate on the question of what should be done with the enlarged enterprise - whether to sell it or continue to operate the plant under the direct control of the estate, a compromise policy was decided upon. A new company was established in 1897, The Earl of Dudley's Round Oak Works Ltd. - all the share capital, £100,000 was held by members of the Dudley family. A new managing director, G. Hatton who was experienced in the manufacture of steel, was appointed and the chairman was Gilbert Claughton. Under vigorous management, the new enterprise overcame the disastrous start of the late public company, and production increased as a reputation for the manufacture of steel, comparable to that for wrought iron, was established after 1900. The lease of iron ore at Hook Norton was negotiated in 1899 to maintain the supply of raw materials. Productive capacity was increased by the installation of larger and more modern open-hearth furnaces in 1907³⁸ and production costs were reduced by the construction of a railway to carry molten pig from the blast furnaces directly to the steel furnaces. A slag-grinding plant was installed in 1905 to utilize the basic slag.

Several experimental processes³⁹ were pioneered at the earl's works such as the manufacture of 4 per cent silicon steel in open hearth furnaces: this was in great demand for

³⁷ Ibid.

³⁸ Allen, op. cit. p. 287.

³⁹ I am indebted to Mr. W. H. B. Hatton of Broome House, Stourbridge for this information. He was employed at

electrical transformers and, after patenting it, the process was used by other steelworks who paid royalty to the Round Oak Works. Other innovations were the manufacture of Edrow Rust Resisting Steel, and modifications to gas producers. Of particular value was the licence obtained to operate the Bertrand-Thiel process: this was developed in Austria, and was used by only two works in Britain, Round Oak and the Brymbo Steel Works. Both companies purchased the right to operate this process which increased the weekly output of the furnaces by a third. Among the more valuable contracts awarded to Round Oak before 1914 was one to supply steel for the construction of the Victoria and Albert Museum and for the Calcutta Port Pier. A particularly specialised branch of the steel trade in the midlands was dominated by Round Oak: this was the supply of rolls to manufacturers of steel. Round Oak chain was still supplied to the admiralty and after the Trinity House contract was awarded to the company, the largest chains in the world were manufactured here, and there was a resident inspector until the demand for chain declined in the 1920s. The works continued to flourish until the post-war slump which closed down all/^{but four of} the local furnaces. This reduced income to the point where there was insufficient capital to finance a policy of modernisation: it was this situation which, in 1923-4, produced a radical reorganisation in the management of estate affairs and the influx of outside capital to finance the improvements⁴⁰. Share capital was increased from £100,000 to £600,000 and an immediate loan of £252,000 was negotiated. Under the chairmanship of Viscount Ednam (the late earl), the works were modernised and extended

Round Oak from 1899 to 1950 and was secretary of the company 1924-36, and managing director 1936-50. The new processes were introduced by his father, Mr. G. Hatton, managing director from 1897 to 1924.

⁴⁰ See Section IV, Chap. 4, Part A.

and continued to flourish. Ownership of the property by the Dudley estate ceased when the works were nationalised in 1951: after denationalisation in 1953, they were valued at 'almost £6,000,000'⁴¹ and were taken over by Tube Investments Ltd.

This area known as the Level and Round Oak, had been developed for industrial purposes since the 1770s when the second viscount had established a timber yard at Round Oak and leased land to William Crofts at the Level for the erection of a blast furnace. All the technological advances in the iron and steel trades have been in operation at the ironworks which subsequently developed at the Old Level, the New Level and, on the opposite bank of the Dudley Canal, at the Round Oak Iron Works, the Earl of Dudley's Iron and Steel Works Ltd., and Round Oak Steel Works Ltd. Just as the estate had played a major part in the development of mineral smelting in the Black Country during the late eighteenth century, so, during the period of decline after 1860, the increased efficiency and productivity on the part of the estate helped to maintain the level of employment and the reputation of the area in general for the manufacture of finished iron. Estate enterprise became totally integrated at a comparatively late date, but the benefits of this were considerable as the estate was able to participate in the boom years of the Black Country iron trade and more effectively resist the pressures making for a contraction in the level of economic activity in the local iron trade after 1860.

⁴¹ Knox, op. cit.

Chapter 3. Mineral Enterprise

A. Introduction

The fortunes of mineral enterprise on the Dudley estate after 1845 must be examined against the background of regional and national influences. Primarily, the decline in the Black Country iron trade, which reduced the local market for minerals, was not replaced by a comparable expansion of the steel industry. To some extent, the decline in the iron trade was related to, but was not directly the result of, the decline in local mineral production. Minerals were still available but production costs were increasing as a growing proportion of minerals came from deeper or thinner seams after the exhaustion of the more productive seams. Another important local factor was the growing problem of drainage. During the twentieth century, labour problems, the question of mineral royalties, and the threat of impending nationalisation all influenced the policies adopted by the Dudley estate.

Until 1883¹, the estate made no attempt to sell mineral property in the area. This was distributed throughout the local parishes on the same basis as in 1845 when the last purchase of mineral property had been made by the trustees. Most of it lay south and west of the Dudley ridge. Local mineral production in general tended to decline after 1855², in spite of a temporary recovery in the late 1860s and early 1870s. Coal was never in short supply - particularly after the opening of Baggeridge Colliery in 1912, although production fell by 50 per cent between 1872 and 1900, from 9,000,000 tons to 4,500,000 tons. Ironstone was available in the district but, as early as 1860 when 785,000 tons

¹ See p.462 for estate property held in the various parishes.

² See Appendix 5 for local output and Appendix 6 for estate output.

were mined locally, 500,000 tons had to be transported in from north Staffordshire and Northamptonshire³. Even the Earl of Dudley had to import ore after 1899 to supply the Round Oak enterprise. By 1900, local ironstone production had fallen to 51,000 tons. On the Dudley estate, production from estate enterprises alone declined from 1,189,980 tons of coal and 101,832 tons of ironstone in 1871, to 705,000 tons and 17,028 tons in 1899. Limestone was quarried at the Wren's Nest until 1924 but local demand was increasingly met by material imported from other districts. The total of men and boys employed at the mines throughout the area fell from 25,000 in 1865 to 14,000 in 1900⁴. During the boom years of 1871-2, employees in the Dudley pits totalled 10,000 men and boys out of the total Black Country labour force of 28,000⁵. From a comparison of the regional and estate figures for coal and ironstone production in 1872 and 1900, it is clear that production declined at a slower rate on the Dudley estate than in the Black Country as a whole. Estate coal output declined by 41 per cent - as compared to the regional figure of 50 per cent: and estate ironstone output fell by 83 per cent - compared to the regional figure of 91.5 per cent.

This declining trend in the Black Country contrasts with the national situation which indicates an increase in coal output from 133 million tons in 1875 to 287 million tons in 1913⁶. Within this period there were several sharp depressions - especially in 1885. It was at this time that the Dudley estate began to reduce the scale of mineral enterprise on its own account and increase the proportion of

³ British Association, Birmingham and its Regional Setting (1951), p. 235.

⁴ Allen, op. cit. p. 281.

⁵ Sel. Com. on Coal Supply, H.C. 313, QQ. 2536-7 (1873) X.

⁶ Ed. D. H. Aldcroft, The Development of British Industry and Foreign Competition, 1875-1914, p. 37.

estate pits leased on royalty. However, this was in response to local factors, as indicated by the sale of leased ironworks at this time, rather than national trends. In two other respects, mineral activity on the estate did not conform to the national pattern - in terms of managerial efficiency and the effect of private ownership of minerals. Prof. A. J. Taylor has shown⁷ that, even down to the 1870s, the quality of management was low and most collieries remained small. This situation was improved with the increased size of enterprises and the imposing of a better management structure during the 1880s. Similar developments had been initiated on the Dudley estate during the late 1830s when Richard Smith had improved the systems of management and control, and grouped all the pits into five large colliery units for practical purposes and administrative efficiency. In general, the system of private ownership of minerals in Britain had not been conducive to the establishment of large-scale units of production⁸. In this respect too, the Dudley estate was unusual - probably because of the extent to which it owned minerals in large, homogeneous areas, as a result of local enclosure acts, and the availability of capital for exploitation of the mines.

It has been suggested that the exhaustion of the best seams to the north and east of the ridge in Tipton, together with the growing drainage problem, gave the southern half of the coalfield its opportunity after 1850 - especially with the cutting of the Netherton Tunnel, and resulted in the 'revitalization' of the Stour valley. This seems to be misleading as all of these factors had operated in the 1830s, as the mines report by Smith and Liddell indicated. Moreover, the Stour valley, which included the Kingswinford estate, had been intensively exploited by the trustees since 1836, while

⁷ Ibid. p. 60.

⁸ Ibid. p. 66.

schemes to drain estate and neighbouring pits - by the Pensnett, Deepfield and other engines, had been operated by the estate long before 1850. In 1854, colliery owners in Tipton made a common effort to drain their pits and in Old Hill (near Stourbridge) a joint-stock company was formed for the same purpose: both failed. In a report to the Select Commission on Coal Supply in 1871, the local commissioner, J. Hartley, referred to his report of 3 March 1868 in which he

'adverted to ... circumstances which encumbered the enquiry ... particularly the broken condition of these coalfields and ... the great body of water by which a considerable proportion is inundated ... The early workings ... were not conducted under any scientific system of management ... and the absence of reliable records ... and the subdivision ... into numerous small collieries ... has rendered difficult the acquisition of accurate statistics ... and the large volumes of water, ... until drained by some voluntary system ... must continue.'⁹

This description further underlines the wisdom and value of Beaumont's and Smith's work with regard to mining and drainage techniques. Compulsory action was at last taken when a Mines Drainage Act was passed in 1873 which established a Drainage Commission to levy money from mine owners and undertake the drainage of the pits. Lack of co-operation and refusal to pay the levy on pits temporarily closed by a slump in the trade, led to the failure of the scheme and by 1900¹⁰, 40,000,000 tons of coal were waterlogged. In 1920, the Drainage Commission wrote off Tipton as a 'water-logged rabbit warren'¹¹ and mining virtually ceased in that area.

With declining demand for coal, considerable hardship and unrest resulted amongst the miners. In 1851¹², the thick-coal miner earned 20/- to 30/- per week and the thin-

⁹ Sel.Com. on Coal Supply No. 5 (1871) XVIII.

¹⁰ V.C.H. Staffs. p. 91.

¹¹ Sel.Com. on Mines Drainage, South Staffs. (1920), pp. 10-12, XXI.

¹² W. White, Directory of Staffordshire (1851), p. 60.

coal collier 20/- to 24/- per week: the former always earned higher wages because of the greater dangers and higher output. When the butties reduced the miners' daily wage by 1/- in 1858, because of the depression in the iron and mineral trades following the boom of the Crimean War period, strikes and riots were widespread throughout the district. Union activity was slow to develop because of the small size of most pits and the rivalry between them. However, there was some attempt to unite the colliers by mass meetings and pamphlets such as the 'Colliers' Lament'¹³. Unrest continued on such a scale that the Riot Act was read at Wolverhampton and a troop of yeomanry was called out¹⁴. The men remained on strike from July to October: Richard Smith wrote to Hatherton on 4 October that he hoped

'most of the Colliers will be at work tomorrow on the West side of Dudley (where estate pits were numerous). Many of them are not mixed up with the strike, and but for the Oldbury men, the Kingswinford men would have remained quiet, and have been satisfied with the reduced wages.'¹⁵

Along with the trade in general, wages in the estate pits had also been reduced - but, because of the provision of benefits and the absence of truck, Lord Dudley's miners were more likely to comply peacefully with Smith's decision. The men did return to work in Wednesbury, Bilston, Kingswinford and Rowley Regis by 16 October - only Tipton, Oldbury and West Bromwich pits remained idle.

Further developments were the decision to work an eight-hour day after 1 July 1872 and the introduction of a sliding-scale in 1874 whereby wages were linked to coal prices, with a minimum wage of 3/6 per day for thick-coal miners 16

¹³ S.C.R.O. D260/M/F/5/6/2, 'The Colliers' Lament on the Shilling Drop'.

¹⁴ Ibid. Mayor of Wolverhampton to Deputy-Lieutenant of Staffs. 5 July 1858.

¹⁵ Ibid. Smith to Hatherton, 4 Oct. 1858.

¹⁶ S.C.R.O. D260/M/F/5/6/2, Miners' Wages and Coal Prices in South Staffordshire, by Thomas Mansell, General Secretary

The Earl of Dudley's agent, Edward Fisher Smith was instrumental in making this agreement between the Miners' Association and the coalowners. However, before the establishment of the sliding-scale, local wages had been based on the coal prices charged at the Dudley estate's pits¹⁷. Before the system began in 1874, the local pits had been enjoying the tail-end of the boom created by the Franco-Prussian War. However, the price of furnace coal fell from 19/- in March 1873 to 16/- in March 1874. Thick-coal wages were reduced from 5/6 to 4/6 per day and thin-coal wages from 4/- to 3/3 (west of Dudley), and from 3/9 to 3/- east of Dudley. The miners began a strike which ended on 16 July 1874 in a victory for the masters. The sliding-scale was introduced on 24 July and by October 5, the price of coal had fallen to 13/- and wages to 4/6, 3/3 and 3/- per day respectively. As demand for coal fell with the decline in iron production, the owners renounced the sliding-scale, in 1877, by taking out the minimum wage agreement. By May 1879 with the price of coal at 8/- per ton, wages had fallen to 2/9, 2/4½d. and 2/1½d. per day respectively: this represented a reduction of 40-50 per cent since March 1873. It was against this background that the Dudley estate tried to maintain the level of profits attained before 1845 and, after 1883, began to dispose of its mining property.

In general, the management of mineral enterprise on the estate successfully maintained and increased profits until the early 1870s. Frederick Smith not only extended the Round Oak Iron Works, but improved the administration of the pits - particularly with regard to the introduction of the standard ton. He was accorded similar praise and affection at the time of his retirement in 1870, as his predecessor, Richard Smith:

¹⁷ of the Miners' Association, Great Bridge, Tipton.
V.C.H. Staffs. p. 103.

'Mr. Smith-Shenstone, the past chairman of the Ironmasters' Association, and the retiring chief agent of the Earl of Dudley, received a gift of 1,000 ozs. of silver and an address in Dudley ... at a dinner at which the Earl ... presided and made the presentation ... The plate ... priced at £750 ... had been purchased with the contributions of all classes of persons connected with Lord Dudley's property, from the royalty masters to the ordinary miner, and from the manager to the puddler. The whole proceedings were quite an ovation of Mr. Smith-Shenstone, alike as an agent, an employer, and a man.'¹⁸

It was left to his successors¹⁹ to grapple with falling demand and the disposal of mining property. The mine agency remained with the Smith family until the retirement of Edward Fisher Smith, Frederick's cousin, in 1886 and, thereafter, estate interests were well served by qualified men such as W. F. Clark - mining engineer to the G.W.R. and the Birmingham Canal Navigation, until 1947.

B. Leased Properties

A major decision of the trustees had been to work the mines vigorously after 1836. Estate enterprise was increased, particularly with regard to the more lucrative coal and ironstone seams: thinner, deeper or partially worked seams were let on royalty. However, after 1836, extensive areas of valuable unworked mines were also let on royalty - usually to an ironmaster. The greater part of mineral income was derived from estate-operated mines rather than mines let on royalty until the early 1900s. By 1890 the question of royalties had become a matter for parliamentary concern: rates charged on royalty had tended to fall after 1850. The royal commission, appointed in 1890 to enquire into mining royalties, reported in 1893 that royalties had not retarded

¹⁸ The Engineer, 1871, XXXI, p. 15. Frederick changed his name to Smith-Shenstone at the time of his retirement.

¹⁹ See Appendix 1.

development²⁰. This was certainly true of the Dudley estate where mining leases, initiated by Smith after 1836, had been designed to effect maximum output and workmanlike practices. In Lancashire, Yorkshire and the Midlands, royalties were usually charged on acreage and often varied with the thickness of a new seam: the fall in royalty rates generally is illustrated by the Duke of Norfolk's estate. In 1875 he let 1,300 acres of Barnsley coal at a minimum rent of £5,000 and a footage royalty (per acre) of £50. Because of the depression in trade, these rates had fallen to £3,000 and £30 respectively by 1883²¹. By this time, royalty rates were beginning to fall on the Dudley estate also, and royalty based on selling price, the practice established by Richard Smith, was being replaced by other arrangements. The extent to which minerals had been exhausted on the estate is indicated by a change in the form of agreement as to the reservation of minerals under land sold by the estate. Before 1885, Lord Dudley always reserved the right to work minerals under property sold by him, whether from adjacent mines or from the surface of the property, and he disclaimed any liability for damage done to surface property. After 1885²², perhaps an indication of the new policy of selling local mineral and other property, he still reserved the right to enter the property and work the mines but undertook liability for all damages. However, under the terms of the various enclosure acts, he was still entitled to work all minerals under enclosed common land without payment of damages whoever owned the surface.

As the output of leased pits declined, there was a greater variety in the form of royalty paid - many of which

²⁰ J. T. Ward, 'West Riding Landowners and Mining in the Nineteenth Century', Yorks. Bulletin of Economic and Social Research, XV, p. 74.

²¹ Ibid. p. 62.

²² D.P.L. 9/L, Sales of Property, 1850-1948, Vol I: printed memo. inside cover.

resemble forms used elsewhere, but which had been uncommon on the Dudley estate after 1836 when royalty based on selling price had been introduced. The growing variety in royalties also reflected the varying conditions under which leases were taken out: some related to unworked seams, others to broken mines of thick coal, or to 'pickings'. This last form related to the lease of pits after the pillars of thick coal had been removed by a lessee. The remaining coal was then removed, after a period of time to allow for subsidence. Many of the conditions inserted in the large leases negotiated by Smith after 1836 were also omitted: minimum rents, inspection of accounts, supervision of the workings by estate agents etc. were superfluous in terms of many of the leases after 1870. Many of the leases granted were for periods ranging from 4 to 21 years and, increasingly, until the pit or section was totally exhausted²³. An indication of the stage reached in the exploitation of estate minerals is the lease of thick-coal pickings at Foxyards Colliery, taken out by Hyde and Winchurch in 1905 at a royalty of 20/- per week. Another lease was taken out by Wilkinson and Vaughan to work thick-coal pickings at Park Lane, Tipton at a royalty of £120 per acre. Average charges elsewhere in the late nineteenth century were²⁴:

£120-£375 per acre for Barnsley Bed coal (high-grade)
£25-£30 per foot per acre for Silkstone coal (south
Yorkshire)
£50-£300 per acre in west Yorkshire
£20-£40 per foot per acre in west Yorkshire.

As the Dudley lease refers to a pit in the very last stage of production, £120 per acre seems a high figure in comparison. Basing royalty on the foot thickness of the seam per acre was a refinement of the late nineteenth century to allow for

²³ D.P.L. 11/G, Record of Mine Leases, 1867-1907.

²⁴ Ward, op. cit., p. 62.

variations in the depth of the seam. Mineral owners had tended to ignore this and base the lease on the greatest thickness - their failure to maintain this practice probably reflects their growing loss of independence as other factors influenced the demand for their coal, and because of the relatively exhausted state of their minerals. Even the Dudley estate was forced to operate the practice of basing royalties on the foot thickness of a seam after 1900. By the late nineteenth century, it was common practice in south Staffordshire²⁵ to calculate royalty on the acreage worked.

The falling demand for coal as the local iron trade declined - as well as the growing number of totally exhausted pits, is reflected in the number of new leases granted after 1875. Up to 1880, approximately ten per year were negotiated, from 1881 to 1897 this fell to four per year and, from 1898 to 1917, approximately one only per year. Most of them concerned the working of ribs, pickings or the clay which lay under the lower seams of coal. By the 1930s, royalty rates on the Dudley estate had fallen still further but the rate still depended on the working conditions of the seam and its market value:

28 Nov. 1931: J. Clarke and Sons, Park Head 7 acres 2 roods 16 perches: minimum royalty £50, Brooch Coal £50 per foot per acre: Ironstone 1/6 per ton.

20 July 1929. F. C. Dyke, Saltwells 16 acres 1 rood: minimum royalty £100, Thick Coal pickings £75 per acre Heathen Coal £30 per foot per acre.

10 November 1926. S. Bagley, Upper Gornal, Sandstone £12 per perch.

24 March 1832. Gibbons Ltd. Upper Gornal, 21 years. minimum royalty £170, 39 acres. Top Fire Clay £300 per acre Stinking Coal £120 per acre.

1 Oct. 1926. King Bros. Ltd. Stourbridge, minimum royalty £600, 8 acres 3 roods. Fireclay £1600 per acre.

10 July 1930. E. J. and J. Pearson, Delph. 30 years. minimum royalty £500, 42 acres. Old Mine Clay £450 per acre. New Mine Clay £100 per foot acre.

1 June 1931. Midland Slag Co. Ltd. Barrow Hill.
£1000 minimum royalty, 21 years. 42 acres 3 roods. 26
Ragstone 6d. per ton.

Brooch and heathen coal were deeper and thinner seams than the thick coal - this explains the lower royalty rate: the highest clay royalty was for best fireclay mined at the Thorns near Stourbridge. Only one lease concerned ironstone by this time and no limestone was mined. In addition to the traditional minerals of coal, ironstone and clay, increasingly after 1900, quantities of sand and ragstone were quarried. Sand was found in abundant quantities south and west of the Dudley ridge, particularly beyond the western fault of the coalfield, while ragstone was quarried from the dolerite outcrops at Barrow Hill, Pensnett and Rowley Hills between Dudley and Birmingham²⁷. These commodities were supplied to the building trade and for road construction.

During the Second World War, an attempt was made to introduce a mineral lease which closely resembled that established by Smith after 1836 in terms of the principles and obligations concerned. This followed a proposal by the earl's chief mining engineer, F. B. Clark, in January 1942²⁸, to improve the standard form of mining agreement negotiated by the estate. The new agreement was to be called a licence and was mainly designed to safeguard the legal interest of the Himley Estates by replacing the general, simplified agreements negotiated between the estate and its mining tenants - usually for small leases - after 1870. The new form of agreement probably applied mainly to clay mines which were very productive in the area as the local refractory industries expanded. Surface rent, £5 per acre, was the same as that charged in 1836 and minimum rents were inserted.

²⁶ D.P.L. 12/A, List of Properties Subject to Succession Duty on Mineral Royalties, 1932.

²⁷ See Map 2.

²⁸ D.P.L. 12/D, F. B. Clarke to F. Margetts, Mines Office, Dudley, 27 Jan. 1942. See Chart 21.

Chart 22. New Form of Mining Agreement, 27 January 1942

Document to be called a licence.

1. Licencee may let down the surface land - but pays compensation to property.
2. Damage to surface tenants' property must be compensated.
3. By royalties - quarterly. Earl's mineral agent to have access to mines and books.
4. A minimum rent - quarterly.
In the case of any strike by workmen whereby the said mines are prevented from being worked and which said strike shall be of more than 1 months duration, such Minimum Rent shall be held in abeyance during any such period.
5. If quarterly minimum rent is not got in minerals, licensee may make up the deficiency in a subsequent quarter.
6. Licensee must work mines according to the most approved practice of mining in the district and pay royalties on all mines which are workable in the agent's opinion - even if the licensee is unable to through his own neglect or bad workmanship. In the event of dispute as to whether mines are workable at a profit - the licensee may refer to arbitration.
7. (a) Rent of £5 per annum per acre for all surface land entered upon.
(b) Licensee shall pay £5 per annum per acre for all surface land damaged by subsidence or working the mines and restore damaged land at the expiration of the licence - or pay compensation.
8. Licence for 7 years: renewable.
9. Licensee must fence pits and crownings in.
10. Earl able to work mines under this surface without payment of damages 'provided that the Earl shall not in the exercise of this right do any damage which can be avoided by taking reasonable precautions.'
11. At expiration licensee shall fence, dome over or fill in pits as the Earl's agent directs.

Chart 22 (continued)

12. Licencee to pay all rates and taxes except landlord's property tax, mineral rights duty and royalties welfare levy.
15. Non-payment of money due may result in termination of licence after 30 days.
18. Licensee may not under-let the mines except on terms approved by the agent.
20. At expiration, licencee shall deliver up the mines and surface lands in 'good and substantial repair and condition'.

D.P.L. 12/D

In the same year a quarry was opened at Turners Hill on 30 October, by the Midland Slag Co. Ltd. of which the Earl of Dudley was a director. The terms of this lease resembled earlier granite leases granted after 1931 with a minimum royalty of £250 per annum.

One last attempt was made in 1935 to re-open the Wran's Nest limestone workings which had ceased operations in 1924. A Birmingham contractor, H. B. Skelland, claimed that a section of the hill could be re-opened for quarrying, 'without danger to property', and that the material was suitable for roadstone and suggested a royalty of 4d. per ton. He hoped to sell stone to the local authorities and insisted that the estate's demand for a royalty of 6d. per ton was too high in view of the fact that the use of limestone for roadstone was 'entirely new' to the district and, therefore, considerable effort would be needed to convince the local authorities of its value³¹. Ultimately, a 'short

³¹ D.P.L. 12/A, 8 Jan. 1936, Skelland to Clark.

agreement' was made on 20 March 1936 - on the estate's terms. Dudley Corporation offered to purchase Wren's Nest Hill from the earl in March 1937 but this was rejected on the grounds that a better bargain could be obtained by leasing the quarry to Skelland. Output increased from 281 tons in July 1937 to 1,268 tons in September: total production for 1938 was 19,678 tons. Output declined thereafter and, in December, 1943, the mines office considered the possibility of selling the Wren's Nest for building land while retaining Skelland as tenant because the loss of a tenant 'producing £100 to £125 per year'³² would push up the selling price of the land. Production finally ceased in 1944 when the royalty received totalled a mere £2 18s. 11d.

Income from leased mineral properties did not exceed revenue from estate-operated pits until about 1900. Leased pits produced a total royalty of £70,542 12s. 3d. in the boom year of 1854: of this, minimum royalties accounted for £15,059 18s. 11d.³³ The scale of the boom is indicated by the extensive difference between minimum royalties from negotiated leases, and actual receipts. Pits managed by the estate produced a net profit of £98,554 3s. 5d. in the same year. Royalty receipts had fallen to £26,146 3s. 2d. in 1871³⁴ in spite of the boom conditions at that time. As total mineral income was £167,826 17s. 3d., it is evident that the increase in local demand was met by an increase in the output of pits managed by the estate rather than leased properties. Mineral leases continued to decline in value, and by 1886, minimum royalty due had fallen to £6,855 16s. 9d. per annum. This fall in the number and value of leased properties is also reflected in the totals of mineral

³² Ibid. 16 Dec . 1943, Clark to Margetts.

³³ D.P.L. 12/H, Profit and Loss Account, Mines Dept., 1854.
See Appendix 6.

³⁴ D.P.L. 12/L, Accounts of the Mines Dept., 1871.

property owned by the Earl of Dudley and the area included in the South Staffordshire Mines Drainage District established in 1873. The earl owned a total of 8,007 acres of mineral-bearing land in 1872: in 1873, only 4,864 acres were included in the drainage districts for the purposes of financial contributions to the new authority³⁵. Of this latter total, the estate worked 3,596 acres and lessees occupied 1,268 acres. Presumably, certain sections of the main collieries had been worked to such an extent that the cost of contributions would be uneconomic in terms of their output - these would be left in a waterlogged state. The decline in leased properties is also indicated by the number of weighing machines operated at the various pits³⁶ by the estate. West of the Dudley ridge 28 were in use in 1889: east of Dudley, only 18 out of 26 were in use. This suggests that the older pits in the Tipton area were the first to be abandoned by the estate - both as leased and estate-operated units. After 1920, practically all mining ceased in Tipton because of the prohibitive costs of drainage. It is likely that, after 1889, the estate steadily reduced the number of pits managed by the Mines Department as production costs increased and leased or³⁷ sold them while a demand for local minerals still existed.

The last phase in the mineral history of the Dudley estate followed a report compiled by R. A. S. Redmayne in 1924³⁸. This assessed current and future output of the pits and recommended a course of action which resulted in the cessation of mining activities by the estate itself and a reorganisation of the remaining leased mineral properties.

³⁵ D.P.L. 12/A, Mine Dept. Statistics, 1873-1886.

³⁶ Ibid. ³⁷ See below.

³⁸ D.P.L. 11/G, Report on the Mineral Resources of Lord Dudley's Settled Estates in South Staffordshire and East Worcestershire, 11 April 1924: by R. A. S. Redmayne.

It is likely that growing drainage problems, together with the mounting labour troubles of the mining industry in general, occasioned the report which gives a detailed analysis of the various sources of mineral income in 1924. The largest unit of production was the Baggeridge Colliery Co. Ltd. (between Himley and Sedgley) which held 55 acres of land at £5 per acre per annum for 60 years from 29 September 1911: in addition, the company could work all the coal, ironstone and fireclay under 5,067 acres, 3,687 of which lay west of the boundary fault. Although the total minimum royalty was £8,000 per annum, individual royalties indicate that the Dudley estate could no longer command such exceptionally high royalties as $\frac{1}{3}$ of the selling price for thick coal which had been received in the 1840s and 1850s: royalties were

- thick coal - $\frac{1}{12}$ of the selling price
- all other coal - £30 per acre per foot thickness
- gubbin ironstone - £40 per acre
- other ironstone - 6d. per ton raised
- fireclay - 6d. per ton raised.

It is interesting to compare this lease with that³⁹ negotiated with the Duke of Sutherland in 1908 to enable Baggeridge Colliery to mine under 270 acres of land in Penn - adjoining the earl's property, at a minimum rent of £400 per annum. Royalty on coal was paid at the rate of $3\frac{1}{2}$ d. per ton - much lower than that paid to the earl by his lessees at this time: fireclay and ironstone paid a royalty of 6d. per ton. A similar lease⁴⁰ was negotiated in 1916 with Miss Shaw-Hellier to mine 97 acres of minerals under property adjoining the Himley estate at Baggeridge: royalty on thick coal would be

³⁹ D.P.L. 11/G, Lease of Minerals by Duke of Sutherland to the Earl of Dudley's Baggeridge Colliery, 1908.

⁴⁰ Ibid. Lease of Minerals in Sedgley and Wombourn, by Evelyn Shaw-Hellier to the Earl of Dudley's Baggeridge Baggeridge Colliery 1916.

4d. per ton, £20 per acre for brooch, heathen and other coal, 6d. per ton and 8d. per ton for ironstone and fireclay respectively. In both cases royalties tended to fall below those payable to the earl by Baggeridge Colliery. This was, however, reasonable because minerals under adjoining property were unlikely to be mined by their owners because of the relatively small area concerned and the depth of the seams: a certain income was made available to them by the Baggeridge enterprise. Redmayne asserted that the average selling price of Baggeridge coal, 17s. 6½d. per ton, was likely to rise because

'the miners are certain to receive an advance of wages' and local demand would remain high in view of the high maintenance cost of older collieries in the area which would force them to close. Of the 5,067 acres of thick coal at Baggeridge, only 120 acres had been worked with an annual production of 188,000 tons: an output of 109,000 tons was sufficient to meet minimum royalty requirements. With additional facilities, Redmayne estimated that if production increased to 1,000,000 tons per annum, 'a not unlikely eventuality', the resources of thick coal would last for over 100 years. These figures give some indication of the scale and potential of the Baggeridge enterprise. There were evidently a number of deficiencies in management and construction: the coal was conveyed to the shaft by one main haulage road only 'instead of being fed from two or three sides of the pit' (this recalls one of Beaumont's proposals to increase productivity in 1798) and the upcast shaft was only 12 feet in diameter, thus the winding capacity was small. This excluded other mineral seams at the colliery: up to 1924 only 37 acres of brooch coal (the shallowest seam) had been worked and only 10 acres of heathen coal. Neither the white nor the gubbin ironstone were being worked at the

time: the former had too low an extraction rate and
'as things are now ... it is not a commercial
proposition'

while the deeper gubbin ironstone

'could probably be worked to a profit at the same time
as the Heathen Coal is being worked.'

The usual fireclays were also present at Baggeridge

'and will be worked to some extent for brickmaking ...
but not very extensively whilst the shallow mines ...
especially in the high-class area in the south-west of
the exposed coalfield are more than able to meet the
local requirements.'

It is evident that Baggeridge Colliery was not working to
capacity - even in terms of the thick coal. The colliery's
true potential would not be reached for some years to come -
until the pit had been worked to such an extent that the
deeper seams could be worked at a variety of levels without
fear of fracturing unworked seams above, and output of rival,
more shallow, claypits began to decline. Baggeridge Colliery
was closed on 2 March 1968 by the National Coal Board, because
of high production costs, leaving extensive deposits of
minerals still untapped. In 1924 the estate held 2,000 of
the 25,000 shares issued by the Baggeridge Colliery Co. Ltd.
and debentures worth £1,900: income was also derived from
royalties (minimum £8,000) and surface rents (£275).

The second remaining mineral area still active in 1924
was at Himley. This was about 1800 acres in extent and seven
small leased pits were working the coal, ironstone and clay
seams. However, drainage problems were considerable as the
area had been extensively worked over a long period and it
was estimated that remaining reserves would last for 26 years
with an annual production of 60,000 tons. In 1924 the area
was leased to Baggeridge Colliery Ltd. on the same royalty
basis as minerals extracted at Baggeridge: minimum royalty
was put at £400 per annum. Another sector of the mineral
estate which was nearing exhaustion was the Sätwells area

between Round Oak and Stourbridge. Two leased pits only were at work and these operated under a verbal agreement or licence to work the thick-coal 'pickings'. The lessees were paid so much per ton by the estate which then marketed the coal at 13 'landsale' wharves on the Pensnett Railway. This arrangement recalls the situation recorded by Beaumont in 1797 whereby the estate paid charter to the contractors and marketed the coal. Gross profit on No. 35 pit was 2s. 1.56d. per ton and, on No. 36 pit, 4s. 8.68d. per ton in 1923 and the total trading profit was £6,700 on an output of 33,544 tons of coal and slack. The landsale wharves⁴¹ were located throughout the Black Country and it is likely that the estate sold coal to merchants for household consumption. Redmayne estimated that at the present rate of extraction, production at Saltwells would cease after ten years. In June 1924, Viscount Ednam leased Saltwells Colliery to Baggeridge Colliery Ltd. at a royalty of 9d. per ton on all fuel sold.

In addition to Himley and Saltwells, there were small leased pits and quarries scattered throughout the Black Country mining coal, clay and stone producing a total royalty of £5,704 in 1923. This sum added to the minimum royalty from Baggeridge and the current income from Himley and Saltwells produced a total mineral income of £19,308. The various small leases were

	<u>Acres</u>	<u>Minerals</u>	<u>Royalty</u>
H. S. Pitt and Co.	5	thick coal pickings and thin coal	1,175
N. Hingley and Sons	1	" " "	409
King Bros. Ltd.	1	clay	1,300
E. J. and J. Pearson	3	"	567
John Hall and Co.	1	thick coal pickings	337
Harris and Pearson	1	clay	88
Doulton and Co.	1	"	250
B. Gibbons Junior Ltd.	2	clay and some coal	201

⁴¹ See below.

	<u>Acres</u>	<u>Minerals</u>	<u>Royalty</u>
J. H. Waterfield	1	clay	100
J. & S. Baggott	1	"	160
Coneygre Brickworks	marl hole	"	157
Rowley Regis Quarries		ragstone	800
Various stone quarries (5)		sandstone (Gornal)	<u>160</u>
			£5,704

The small scale of these enterprises illustrates the extent of the decline in the Black Country mineral trade and the near-exhaustion of the seams. Redmayne criticised the lack of system in the past which had

'militated against my being certain of some of the details'.

Many of the properties were held under 'permissive leases' the terms of which had been conveyed by letters which were not always available. Because of the varied nature of the properties in terms of working costs, the royalties were equally varied: for example, old mine clay was leased in some cases at £2,000 per acre and in others at £450. In one respect, however, the royalty remained unchanged from that levied in 1780 by the second viscount: brick manufacturers still paid a royalty of 1s. Od. per thousand bricks. The report concluded with a reference to the fact that sandstone quarries could be opened up anywhere on the estates beyond the western boundary fault and that, when trade was good, numerous requests were received to work small areas of coal and clay. In the 1930s and 1940s, the estate operated a number of sandstone quarries, while small mineral leases were taken out until the disposal of property in 1947.

A report by W. F. Clark in 1931⁴², mine agent since 1923, indicates that mineral income had in fact increased

⁴² D.P.L. 32/6, Report on the Earl of Dudley's Mines and Minerals by W. F. Clark, 1931.

temporarily to £25,179 10s., largely due to increased output at Baggeridge and Himley. Production had ceased at Saltwells and the two pits at Himley would be worked-out by the end of the year. The report also considered the action to be taken in view of an unpublished circular issued on 21 November 1929 by the Mineral Owners' Joint Committee, concerning the government's proposals for 'the Acquisition of Minerals',⁴³. The circular advised that, as the proposed bill would leave lessors free to enjoy existing royalties until the termination of leases, all mineral owners should ensure that

'the lengths of their leases are sufficient to secure the working of the coal'.

Any coal not let would be valued by the state, and the owner would be compensated. Clark feared that

'with a Socialistic majority the mines will be acquired on some short cut-and-dried system of valuation, which may mean that the Baggeridge Colliery royalty may be acquired upon a basis of the royalties paid to the other lessees, something less than 3d. a ton compared with 1s. 1d. the present Baggeridge royalty to Lord Dudley.

Is it possible to make provision against such a catastrophe?'

This circular probably explains the subsequent mineral policies of the estate. Two small leases of minerals had been made to Baggeridge Colliery by landowners in the vicinity - their rates of royalty were considerably less than Lord Dudley's. The estate's response was to speed up the sale of mineral land which had already been partially worked, so that current market values would be received rather than the compensation price to be offered by government valuation, which it was assumed would be lower. Conversely, the estate began to operate a number of sand and gravel quarries, no doubt because under the terms of the proposed bill,

'owner workers are to be left in full employment of their freehold.'

Production costs in such quarries were low and demand was rising: therefore continued ownership and direct management offered a better arrangement for the estate in the long term. The income from leased pits continued to decline as the estate tended to sell the property as agreements ended. In 1936, the income from royalties was:

coal	£14,190	15s.	0d.
bricks	275	17	5
sand	nil		
stone	1,802	14	7
clay	2,750	5	6
ironstone	37	13	9
	<u>19,057</u>	6	3

By 1942, total income had fallen to £8,602 14s. 9d.⁴⁴, and the 'Damaged Land and Royalty Accounts' finally ceased in 1950.

Since the termination of the trust in 1845, the mineral activities of the Dudley estate had moved full circle. At that time, production and income from estate-operated pits exceeded that from leased pits to an increasing degree until the 1870s. From this time onwards, changing circumstances and factors of production led to a decline in estate mineral income from all sources, with estate-operated pits declining more rapidly - not from inefficiency but through a policy of shifting the emphasis to leasing all the pits. This point was reached in 1923 when estate production ceased. Thereafter, mineral income declined still further and more pits were sold until, at the time of nationalisation, the estate was left in possession of a fraction only of the mineral property held at the turn of the century. The main compensation made to the Earl of Dudley in 1947 was for minerals worked by Baggeridge Colliery Ltd. where production remained high - in contrast to the numerous small properties which had been sold at current market value as the opportunity had arisen during the 1930s.

⁴⁴ Ibid.

C. Estate Enterprise

After 1845, the earls of Dudley - along with a minority of large landowners, continued to operate pits on their own account. By 1869, not more than five per cent of the collieries in England were owned and managed by landowners and most of these belonged to estates such as those of the Duke of Devonshire, the Earl of Lonsdale, the Bridgewater Trustees, the Marquess of Londonderry, the Earl of Durham and the Earl of Dudley⁴⁵. This situation represented a late stage in a long decline but the Dudley estate was unusual in continuing to work collieries into the twentieth century, and the last colliery to be worked - at Himley - was not leased until 1924. However, to the extent that production in estate-operated mines declined in the last three decades of the nineteenth century, the trend was typical of other comparable aristocratic estates. Nevertheless production remained relatively high until 1908 when estate enterprises sold a total of 423,395 tons of coal, 6,094 tons of ironstone, 17,708 tons of fireclay and 37,048 tons of limestone. This continuing commitment to the mineral and iron trades had produced a considerable investment of capital in the area by the estate and this was beneficial to the economy of the area as a whole. Although the area of the Dudley mineral estates, 8,007 acres, was much smaller than those of the Duke of Norfolk, 15,270 acres near Sheffield, Earl Fitzwilliam, 19,164 acres and the Earl of Durham, the income from pits operated directly by the Dudley estate compares favourably with them.

⁴⁵ Thompson op. cit. p. 264.

	<u>Dudley</u> <u>estate</u>		<u>Duke of</u> <u>Norfolk</u>		<u>Earl</u> <u>Fitzwilliam</u>	<u>Earl of</u> <u>Durham</u>
1834	£28,133	7	11	-	£2,576 (1831)	£31,438
1847	83,045	1	5	-	8,991 (1850)	11,695
1854	98,554	3	5	-	-	84,207 (1856)
1871	141,680	14	1	-	37,210	-
1872	394,750	0	0	231,354 (1873)	-	380,000 ⁴⁶ (1873)

Not only did the Dudley estate continue to work collieries on its own account long after comparable estates had begun to lease all minerals - such as the leasing of the Whitehaven collieries by the Earl of Lonsdale in 1888, but an increasing proportion of total net income was derived from estate pits rather than pits leased on royalty⁴⁷. This trend was probably maintained until the mid-1880s when the estate began to sell or lease many of the pits which it currently worked. Nevertheless, the scale of estate operations remained considerable and, from time to time, legal actions resulted from damages claimed by surface tenants and owners. Under the terms of the Pensnett and Dudley enclosure acts, the Earl of Dudley was perfectly within his rights, but the spirit of the late nineteenth and early twentieth centuries was not in accordance with the circumstances enjoyed by the lord of the manor at the time of the enclosures in the 1770s and 1780s⁴⁸.

One of the more significant developments of the late nineteenth century as the more productive coal seams neared exhaustion - even on the Dudley estate - was growing speculation that thick coal would be found at a workable ⁴⁹ depth below the sandstone measures west of the boundary fault.

⁴⁶ Ward, op. cit. p. 63: Spring, op. cit. p. 250.

⁴⁷ See Appendix 6.

⁴⁸ See Section I, Chap. 2, Part A for a discussion of complaints against the enclosure acts, 1850-1923.

⁴⁹ See Map 2.

As early as 1871, a paper delivered at Dudley Mining Institute considered the question

'Does Coal Exist Under the Red Sandstone Between the South Staffordshire and the East Shropshire Coalfields?'⁵⁰

Under the direction of John Hughes, mining engineer to the Dudley estate, a trial borehole was sunk in 1896 by Vivian's Boring and Exploration Co. of Whitehaven. The site chosen was in Baggeridge woods on the northern edge of Himley Park in Sedgley parish: this was relatively remote from the traditional areas where the thick coal outcropped or lay at shallow depths - within a four-mile radius of Dudley castle - and was approximately half a mile east of the western boundary fault. The ^{estimated} cost of the borehole - £3,000 to a depth of 2,000 feet, was totally inadequate because of problems presented by water and exceptionally hard rock. The ultimate cost was £30,000 because pump engines capable of removing 60,000 gallons per minute were installed. Thick coal was discovered at 580 yards and the first shaft was begun in February 1899. It is significant that, because of the contraction of estate mining operations and personnel, the shaft was sunk by Wainwright's of Tipton. Until the 1880s, all sinking had been carried out by estate engineers.

Throughout the area, this 'act of faith' was hailed as a beneficial development:

'at last ... an extension of the famous coalfield is an accomplished fact. This event, the importance of which can scarcely be over-estimated ... (is) ... one of the most important ... in the history of the Black Country ... The extension and prosperity of nearly all the varied manufacturers for which the Black Country is famous depends upon a continuance of a plentiful supply of cheap fuel.'⁵¹

A second shaft was begun in 1910 and production commenced in 1912. The scale of the undertaking is indicated by the cost

⁵⁰ Paper by Mr. Parton, F.G.S. Reported in The Engineer, 3 Feb. 1871.

⁵¹ Birmingham Post, 4 July 1902.

of plant installed - £150,000: this included ten steam boilers, supplied by Danks of Oldbury, and four electricity generating plants. After the presence of the coal had been proved, a public company was formed to follow up the successful initiative taken by the estate. The terms of the lease taken out by the Baggeridge Colliery Co. Ltd. in September 1911 and the earl's minimum royalty have already been considered, together with the estimate of the colliery's true potential given in Redmayne's report of 1924. When estate mining operations (other than sand and gravel) ceased in 1924, the collieries at Himley and Saltwells were taken over by the Baggeridge Colliery Co. Ltd. leaving only small, independent, mineral lessees at work throughout the estates.

However, the main outlet for the transport of Baggeridge coal, the Pensnett Railway, remained an estate enterprise. This was extended from Shut End to Baggeridge so that coal could be transported not only to the main individual customer - Round Oak Steel Works, but also to the 13 landsale wharves throughout the Black Country and to the main canals. Redmayne's report shows that the wharves served by the Pensnett Railway in 1924 were:

1. Baggeridge
2. Wellington Road - Dudley: alongside railway
3. Dawley Brook - Wall Heath: " "
4. Racecourse - Pensnett: " "
5. Coneygre - Tipton: " canal
6. Himley No. 6 Pit " "
7. Waltons Pool - Pensnett " "
8. Cradley - closed last December
9. Ashwood - alongside railway and canal.
10. Himley No. 7 Pit - used for occasional quantities of sand only
11. Saltwells No. 35 Pit - Quarry Bank
12. Saltwells No. 36 Pit
13. Brockmoor - Pensnett: temporarily closed.

At Baggeridge Junction, near Shut End, the estate mineral line also connected with the Kingswinford branch of the G.W.R., constructed 1855-8 from Brettell Lane on the Oxford, Worcester and Wolverhampton Railway to Gornal. After 1913,

this line was extended from Gornal to Wolverhampton - the opening of Baggeridge Colliery was probably a major factor determining the construction of this through line. All minerals using the Baggeridge branch of the earl's Pensnett Railway paid freight charges to the Mines Office at the Priory. The private railway had been continually extended after 1845 when the Shut End to Round Oak section was constructed: numerous colliery branches were added, apart from the extensive sidings constructed when Round Oak Iron Works was built in the 1850s. About 40 miles of track existed in 1872 when freight charges amounted to £20,345 13s. 9d.⁵²: operating costs were £7,152 5s. 4d., salaries £308 10s. 0d. and wages £8,175 0s. 1d., leaving a net income of £4,709 18s. 4d. By 1911, nearly 100 miles of track and sidings had been constructed and, in spite of the restructuring of estate activities after 1924, the railway remained the private property of the estate until the sale of property in 1947.

The extent to which the period of the trust laid the foundations for peak prosperity in the 1850s and 1870s has already been considered. Total net income from minerals increased from £32,888 9s. 7d. in 1834 to £157,990 5s. 9d. in 1847: after the boom year of 1854 - £169,099 15s. 8d., income declined to £110,734 4s. 3d. in 1859. However, the proportion of net income derived from estate operated pits tended to increase after 1847:

	<u>Estate Pits</u>			<u>Royalties</u>		
1847	£83,045	1	5	£74,955	4	4
1854	98,554	3	5	70,542	12	3
1871	141,680	14	1	26,146	3	2

This trend was reversed by 1900 as a result of increased sales of estate mineral property, although actual receipts from royalties may not have overtaken income from estate pits

⁵² D.P.L. 12/L, Mines Account, 1872.

⁵³ See Appendix 6.

until as late as 1921. At the time that the mines drainage districts were set up in 1873, 4,864 acres of minerals were being worked on the Dudley estate: of these, 1,268 acres were leased on royalty and 3,596 acres were worked by estate pits. Output was high in the early 1870s especially in the years 1871-2: in 1871, estate pits - excluding leased properties - raised 1,189,980 tons of coal and slack, 101,832 tons of ironstone, 14,868 tons of fireclay and 102,201 tons of limestone. Total Black Country production in 1872 was: coal, 9,000,000 tons and ironstone 642,000 tons. Thereafter with the exception of fireclay, output steadily declined. By 1908, the last year when full statistics are available, the respective figures were 423,395 tons, 6,094 tons, 17,708 tons and 37,048 tons⁵⁴. There was a similar reduction in the size of the labour force directly employed by the estate from 4,168 men and boys in 1871 to 1,218 in 1890, and a reduction in the number of pits at work from 109 out of a total of 243 in 1867 to 31 in 1890⁵⁵. A significant feature of this decline in the scale of operations was the more rapid run-down of estate enterprise in the older sector of the coalfield east of the Dudley ridge:

		<u>1867</u>	<u>1890</u>
Pits at work:	east	43	9
	west	56	22
Pits not at work:	east	84	not stated
	west	50	" "

Presumably, the first mineral properties to be sold would be east of the ridge and, as the total labour force was 4,000 in 1882, the period of rapid decline would be 1883-90 during which the total labour employed declined to 1,218.

It is difficult to discover the exact capital commitments of the mineral sector of the estates because of the

⁵⁴ Ibid. For Black Country production see Appendix 5.

⁵⁵ D.P.L. 32/6, Statistics and Analyses 1866-1915.

practice of incorporating all industrial, railway and mineral investments into one consolidated 'Mines Account'. However, the total value of mine engines, buildings and pit shafts was calculated to be £41,654 19s. 6d. in 1872⁵⁶. Total capital administered by the Mines Department in that year was itemised thus:

	£	s.	d.
Good debts	85,909	16	10
Cash and bills	207,498	5	7
Plant and machinery	626,943	12	7
Stock of goods	114,872	1	6
Total	1,035,223	16	6 ⁵⁷

However, much of the plant and machinery such as canals, railways, rolling stock, etc. would serve the mineral interests of the estate as well as the iron trade. Probably, at this time, the largest single capital investment was in the Round Oak Iron Works. In spite of regional trends, capital investment increased and was put at £658,971 15s. 8d. in 1887, with a convertible stock of £74,484 12s. 8d.⁵⁸

As the estate's mineral operations were contracting during the 1880s, this increase in capital was probably accounted for by extensions to the Pensnett Railway and to modifications and new plant at the New Level Furnaces and Round Oak Iron Works. Estate operations continued to decline until the last coal pit was leased in 1923. However, it seems likely that the estate last produced ironstone, fireclay and limestone on its own account as early as 1908 when all records stop⁵⁹ (except for coal and slack). Since 1899 when the lease of the Hook Norton ironstone quarries had been secured, the estate had been forced to import the bulk of its iron ore - following the trend forced upon its local competitors in the iron trade at a much earlier date.

⁵⁶ Ibid.

⁵⁷ D.P.L. 12/L, Report Upon the Examination of the Earl of Dudley's Accounts, Mines Dept. for 1872 by A. Wilson.

Similarly, the productivity of the Wren's Nest limestone quarries could no longer meet even the estate's demands and the Level furnaces became dependent on imported material. Quarries on the eastern flank of the Wren's Nest ridge had been exhausted as early as 1886 but the western mines and quarries remained active until 1924 - probably as leased enterprises after 1908.

After 1923, the estate's connection with mineral production ceased to be primarily that of entrepreneur and assumed the role of supplier of capital - along with others, in the vast undertaking at Baggeridge. This connection, together with the growing question of nationalisation dominated the estate's mineral activities until 1947: both will be considered in connection with the reorganisation of the estate after 1923⁶⁰. However, there was increasing investment in the quarrying of sand, gravel and slag (for roadstone), as the estate expanded its activities in this sector until the disposal of property in 1947. This development is probably explained by the relatively low production costs involved - unlike the coal seams there was no drainage problem and materials could be worked by surface quarrying. Moreover, there was no threat of nationalisation and local demand for these materials was expanding. One of the earliest ventures of this kind was on the site of the former Russells Hall Iron Works in Dudley, where the Earl of Dudley's Slag Works was established to break up the industrial deposits for roadstone. Another slag works was

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- 58 D.P.L. 9/J, The Account of the Executors of the late Right Honourable William, Earl of Dudley for Year Ending 31 Dec. 1887.
- 59 D.P.L. 7/C, Output and Sales of Minerals at the Earl of Dudley's Mines, 1890-1911. See Appendix 6.
- 60 See Chap. 4, Part A below.

opened at Lye Cross while sand and gravel quarries were established at Hinksford near Wall Heath and at Blackhills near Wombourn - both were extensive quarries situated a mile or so to the west of the Western Boundary Fault. Net income from these sources and from estate timber was:

	<u>1930</u>			<u>1935</u>			<u>1942</u>			<u>1946</u>			<u>1947</u>	
	£	s.	d.	£	s.	d.				£	s.	d.	£	s.
Timber	1,427	2	6	1,337	13	2	-			2,003	8	7	3,194	13.
Sand and gravel	420	1	9	1,499	11	1	3,529	7	7	2,003	8	7	-	-
Slag	4,650	12	2	235	18	4	-			-			-	-
Tockey, ashes etc.	349	17	10	96	9	11	204	1	6	-			-	-
Scrap	182	6	0	148	9	8	28	18	0	-			-	61

These figures reflect not only the growing value of the sand and gravel quarries as an asset, but also the last stages of decline in the mineral and industrial activities of the estate as a declining income was drawn from the sale of old machinery and buildings, slag, and other industrial waste from a former era of high prosperity. On the other hand, while the estates were capable of yielding profit from a variety of sources, they were exploited to the full. When the extensive sand quarries at Hinksford were worked out, the plant and machinery were sold in 1940: only Blackhills Quarry remained operative. This was sold as a going concern in 1947 and is still active. The last enterprise to be established by the estate after 1923 was the Baggeridge Brick Company which commenced operations in 1936 as a private company. This is adjacent to the colliery and was intended to utilise the shale and marl which were deposited on the spoil heaps at Baggeridge. The first of the three large kilns was constructed in 1936 by F. B. Clark - who had established the Aldridge Brick and Tile Company.

⁶¹ D.P.L. 6/B Himley Estates' Accounts.

Despite the decline in mineral activity on the Dudley estate - both on the part of the estate and the lessees, the 'Damaged Land and Royalty Accounts' did not cease until the end of the midsummer quarter of 1950 when 12 lessees were at work, including the Earl of Dudley's Slag Works at Lye Cross. This date marks the end of the Dudley estate as an economic unit of production. The last stage had been prolonged - beginning in 1845 with the termination of the Dudley trust when the region attained its peak prosperity as a producer of minerals and iron. This peak was passed in the late 1850s and, thereafter, the regional economy declined and, ultimately, was transformed and diversified by 1914. In contrast, the Dudley estate drew increased profits from traditional mineral and industrial activities, reaching its peak in the early 1870s. In terms of mineral activity, the estate remained unusual in the extent to which the earls continued to exploit their minerals directly, and income from estate mines provided an increasing proportion of total mineral revenue until the 1880s. Thereafter, although income from estate pits continued to exceed income from leased pits until about 1923, the trend was reversed as estate activities contracted with the sale of mineral property to take account of growing production costs, falling local demand, and the threat of nationalisation. As traditional mining activities declined, the estate increased its involvement in quarrying other materials but the overall trend was a drastic reduction in the scale and profitability of mineral operations after 1923.

Chapter 4. Structural Reorganisation and the Disposal of Property

To a certain extent, common factors, such as fiscal pressures, produced the radical re-structuring of the Dudley estate's economic interests in 1924 and the disposal of landed property after 1918. Additional factors resulted from local developments and the situation in the iron and mineral trades in general. Estate property had been sold on a limited basis since Lord Ward's Estate Act of 1847 which empowered him to sell cottage properties. Since the 1880s, a number of ironworks and, on an increasing scale, mineral properties had also been put on the market. However these decisions had been taken in response to specific situations and did not mark the introduction of a policy to secure a drastic reduction in the scale of property held. This decision was taken in 1917-18 when the first major sale of landed property took place and began a trend which culminated in the disposal of the last major property, the original family estate at Himley, in 1947.

A. Reorganisation

This development took two forms on the Dudley estate: the introduction of outside capital, after 1897, into private companies associated with the estate, and, the re-settlement of the Dudley estate and the establishment of The Himley Estates Ltd. in 1923-6. Local factors such as the decline of the Black Country wrought iron and mineral trades have already been considered together with the decision of the second earl to dispose of the Round Oak Iron Works in 1890-1, and the subsequent failure of the public company which had attempted to finance a new steelworks at Round Oak in which the earl, with debentures worth £20,000, was a major share-

holder. The collapse of this public company resulted in the establishment of a private company by the estate in 1897 to operate the new steelworks. Another factor which produced structural reorganisation was the high level of personal expenditure incurred by the second earl as Lord-Lieutenant of Ireland after 1902, and as Governor-General of Australia 1908-11, when he spent lavishly on social entertainments. Shortage of liquid capital necessary for modernisation and expansion was a major factor in the administrative changes of 1923-6.

Local and national developments in the coal trade also influenced estate policy in the 1920s. By that time, the endemic problem of drainage had reached crisis point in the South Staffordshire coalfield. Giving evidence before the South Staffordshire Mines Drainage Committee in June 1920¹, the Earl of Dudley's mineral agent, Claude Tryon, stated that he was responsible for 11,980 acres of minerals divided into 13 districts - only four of which were productive at the time: these were Himley, Old Park, Saltwells, and Baggeridge. In these, as in all other districts, the problem and cost of providing adequate drainage were mounting. East of the Dudley ridge, areas such as Tipton were described as little more than 'a waterlogged rabbit warren'. Under-production from falling local demand and the rising costs of drainage presumably helped determine the Dudley estate to give up mining on its own account and to step up the rate at which mineral property was disposed of after 1923. Tryon also indicated that there was a scarcity of miners in the district at this time.

Long term prospects seemed equally bad on the national scale. Prof. F. M. L. Thompson² has indicated that, although

¹ D.P.L. 12/C. Minutes of Evidence Before the South Staffs. Mines Drainage Committee, June 1920.

² Thompson, op. cit. p. 338.

little is known of the non-agricultural incomes of the landowning classes in the period 1918-39, they probably declined, especially after 1929, because of increases in income tax and super tax. In particular, mineral incomes suffered from the troubles of the coal industry and the nationalisation of mineral rights in 1939. This event caused little stir - probably because taxes already dipped so deeply into mineral income. However, on the Dudley estate this last development had been foreseen and considered long before the event and there is little doubt that impending state legislation, with regard to the mineral industry, was also a determining factor in the rapid disposal of mineral property and the termination of mineral enterprise by the estate on its own account after 1923. As early as March 1919, Sir Richard Redmayne, an adviser to the earl, had submitted a proposal³ to the Mines Office

'based on the intimate knowledge I have acquired ... of the C.M.C. Agreement, on the statements made to me of considerably over 100 Directors, Agents, Managers and Secretaries and on the experience I have ... of the effect of the Minimum Wages Act by managing three "losing" concerns.'

His system would replace private ownership but was

'not nationalization or national purchase'.

The main proposals were that owners must retain the management of their present mines and that miners should have a voice in control of the industry at large but

'must not have a knowledge of the financial position and profit of any individual undertaking. Miners' wages should be left to the joint control of the state and the Miners' Federation and the pit head selling price of coal should be determined by the state and the consumer: Competition between owners would therefore disappear and co-operation between neighbouring concerns would be stimulated.'

³ D.P.L. 12/A. Sir Richard Redmayne to Mining Office. A Suggested System of Control to Meet the Miners' Demand for the Nationalization of the Mines, 25 Mar. 1919.

Coal (per se) should be nationalised and all leases granted by the government while a uniform 'courtesy royalty' of 6d. per ton - gradually diminishing to 1d. per ton in a number of years - should be paid 'by the concerns to the Lords of the Manor' through the government. Redmayne asserted that this system would be better than straight nationalisation or joint ownership as individual owners would have responsibility for working their own mines:

'individual management with dividends as an incentive will alone succeed in deriving means of counteracting the additional cost'

resulting from the proposed increase in wages. He also attacked the interim report of the Sankey Commission for not taking account of depreciation in comparing average profit per ton of coal in 1919 (1s. 2d.) and 1913 (1s. 0d.). Moreover, the report's proposals of wage increases, together with the introduction of a six-hour day, would result in a 20 per cent reduction in output. Many of Redmayne's opinions foresaw later government legislation such as the Coal Mines Act of 1930 which removed competition by setting minimum prices and allocating production quotas to individual collieries. This act also established the Coal Mines Reorganisation Committee which ultimately led to the nationalisation of royalties in 1939.

The Dudley estate was evidently abreast of current developments from the beginning of the post-war period. As already indicated above, W. F. Clark, mineral consultant to the estate, reported⁴ on a confidential circular issued on 21 November 1929 by the Mineral Owners Joint Committee concerning 'The Government's Proposals for the Acquisition of Minerals'. This circular reviewed various considerations then under discussion and advised that

'It would appear that it may be an advantage to present lessees and lessors to see that the lengths

4 D.P.L. 32/6.

'of their leases are sufficient to secure the working of the coal demised.'

This was in response to a proposal that the state should take over the lessor's interest on the expiration of any lease and make compensation. Clark feared that, under a socialist government the mines might be swiftly nationalised and the Earl of Dudley would receive compensation for the loss of the Baggeridge royalties on the basis of the royalties paid to its other lessees, that is, 3d. a ton to the Duke of Sutherland and Shaw-Hellier, rather than the 1s. 1d. paid to the earl.

In the event, the Coal Mines Act of 1930 was not such a drastic measure as the mine owners feared, and the Dudley estate continued to enjoy a high royalty from Baggeridge while disposing of mineral property - the circular had indicated that any legislation would probably make provision for the valuation of any unworked coal and the payment of compensation to the owner leaving the state to exercise the lessor's rights. Many of the Dudley leases in operation during the 1930s stipulated that the property should be worked until the exhaustion of the minerals. It is evident that not only local factors such as declining demand and increasing production costs, but also national developments such as unrest in the mineral trade, speculation regarding compulsory government legislation, and the growing burden of taxation influenced the Dudley estate into adopting the policies of reorganisation in the structure of economic enterprise and the sale of property in general.

Reorganisation of the economic interests of the Dudley estate had begun, in the iron trade, as early as 1891 when the second earl sold the Round Oak Iron Works. A public company, The Earl of Dudley's Round Oak Iron and Steel Works Ltd., erected a new steelworks on the site. The early bankruptcy of this enterprise has already been indicated and,

in view of mortgage payments (£100,000) owed to him, the earl took over the company and formed a private company in 1897 known as The Earl of Dudley's Round Oak Works Ltd., in which all the share capital was held by members of the Dudley family. The formation of the Baggeridge Colliery Company in 1911 is a further example of the new role of the estate in supplying capital to a private company established on estate property and supplemented by additional outside capital. In a report on the economic structure and prospects of the Dudley estate in 1924, it was stated that the original capital of the Round Oak Works, £100,000, had been increased to £600,000 by a debenture issue -

'£500,000 of which has been taken up by a Finance Company.'⁵

This refers to the reorganisation of the works which was carried out in 1923. Because of the slump conditions, there was insufficient income to finance modernisation schemes. Accordingly, Viscount Ednam (the late earl) consulted a number of acquaintances including James Rothschild, Dudley Docker (an industrialist and financier), and Sir Mark Webster Jenkinson (an accountant and adviser to the government during the war). The outcome of these negotiations was a loan of £252,000 from the Electric and Railway Finance Co. Ltd. and the formation of a new board, including Jenkinson, in 1923. Viscount Ednam became chairman of the company in 1924⁶.

The new board - referred to as the 'New Company' by Redmayne in his review of the Dudley estate in 1924⁷, also assumed control of the Pensnett Railway, but not the wharves which remained the property of the settled estate, and contracted to purchase 20,000 shares of £5 par value

⁵ D.P.L. 23/6, The Earl of Dudley's Settled Estates. Particulars of Security for a Loan of £252,000, 7 Feb. 1924.

⁶ C. Knox, Steel at Brierley Hill 1957, p. 67.

⁷ D.P.L. 11/G, Report on the Mineral Resources of Lord Dudley's Settled Estates, 11 April 1924.

invested in the Baggeridge Colliery by the estate. When the company had been formed in 1911, a total of 25,100 shares had been issued. During the reorganisation of 1923, the settled estates retained their investment of £38,000 of 5 per cent debentures in the Baggeridge Colliery Co. Ltd.⁸ This link between the colliery and the Round Oak Steelworks was mutually advantageous because the Pensnett Railway connected the two enterprises and Baggeridge supplied all the fuel consumed at the works. As a result of this reorganisation, the estate retained considerable influence over matters of policy and enjoyed a revenue from royalties and rents, and from shares invested in both companies which might otherwise have collapsed but for the introduction of large capital investments from other sources.

The other aspect of reorganisation at this time was the re-settlement of the estates in 1923 and the consolidation of its interests into a public company - the Himley Estates Ltd. in 1926. The re-settlement of the Dudley estate in 1923 was occasioned by a combination of circumstances such as increased death duties in 1909 and the heavy personal debts of the second earl. Action was taken under the Settled Land Act of 1882⁹ which had empowered life-tenants to sell their property. In addition to his high level of expenditure, the earl's estates were subject to the following charges in June 1923¹⁰:

- (a) jointure of £10,000 to the Dowager Countess of Dudley
- (b) a mortgage for £16,726
- (c) a mortgage for £10,797 to pay off portions created by the 1865 settlement
- (d) a rent charge of £3,000 per annum in favour of Lord Ednam
- (e) a mortgage on the Earl of Dudley's Life Interest of £142,000.

⁸ Particulars of Security, 7 Feb. 1924.

⁹ Thompson, op. cit. p. 319.

¹⁰ D.P.L. 11/G, Memorandum on the Reorganisation of the Estates, Sale of Life Interests etc., 17 June 1924: contained in Redmayne's report of 11 April 1924.

Other personal liabilities included a bank overdraft of £45,100 - the earl had also guaranteed the overdrafts of the Round Oak Works which amounted to £133,560, the Priory Office, £116,590, and loans to Baggeridge Colliery Ltd. His total indebtedness to Barclays Bank under these liabilities was £474,240. The Round Oak overdraft was incurred by costs of reorganisation at the works, and the Baggeridge overdraft by the initial capital costs of development. Finally, the earl had private debts of £15,000 and owed revenue for super tax amounting to £75,000. Extravagance had consumed much of the estate's income before 1914 and the adverse conditions of the iron and mineral trades in general after 1919, together with the particular problems of the Black Country, drastically reduced the main sources of income of the Dudley estate at a time when capital was needed for modernisation and to pay interest on loans negotiated in more prosperous times to develop the enterprises at Round Oak and Baggeridge, 1897-1911.

With a view to clearing up 'this most difficult position' the second earl sold the bulk of his estates to his son, Viscount Ednam, including £25,000 of 5 per cent debentures and 10,021 £5 shares in the Round Oak Works Ltd., 5,000 £5 shares and 112,200 5 per cent debentures in the Baggeridge Colliery Ltd. This exchange presumably enabled the earl to meet his liabilities, and preserved the Dudley estate from heavy death duty charges: these would have had a more severe impact on an estate already burdened with other financial charges. In the event, the estates remained intact after the earl's death and the gross value of his own personal estate at the time of his death in 1933 was valued at £3,688 4s. 8d.¹¹ A year after the settlement of June 1923,

¹¹ D.P.L. 9/F, Letters of Administration Concerning the Will of the Right Honourable William Humble, Earl of Dudley, 4 Jan. 1934.

Viscount Ednam entered into an agreement with the Earl of Dudley's Baggeridge Colliery Ltd. concerning those enterprises which the estate no longer intended to operate:

1. Saltwells Colliery: the Baggeridge Company assumed responsibility for management and sales meeting all costs and charges except mineral rights duty. Lord Ednam was to receive 9d. per ton. royalty on all coal sold.
2. Sand Beds: as above except for a royalty of 3d. per ton.
3. Locks Lane Pump: of value to Saltwells Colliery: to be managed by the company but all profits or losses to be credited or charged to Lord Ednam.
4. Land and Water Sale Wharves: these were available to the company at a royalty of ½d. per ton and a minimum royalty of £200 per annum. 12

In order to raise capital and to meet the costs of reorganisation, Lord Ednam sold the freehold of the property to the Round Oak Works Ltd. He then formed a public limited company in March 1926 registered under the name of the Himley Estates Ltd.¹³ Lord Ednam was its Governing Director and he sold to it the life interest of Lord Dudley - for £167,140 and his own reversionary life interest in the Dudley Settled Estates and investments - for £332,820. Excluded from this arrangement were Lord Ednam's 20,000 shares in the Baggeridge Colliery Co. Ltd.

From the surviving records, it is evident that the liabilities of the Himley Estates Ltd. - as well as its assets, were gradually reduced as income mounted steadily and mineral property was disposed of.

¹² D.P.L. 12/H, Proposed Arrangements to be Entered Into Between the Viscount Ednam - Settled Estate, and the Earl of Dudley's Baggeridge Colliery Ltd., 20 June 1924.

¹³ Memorandum, 17 June 1924.

	<u>Liabilities</u>		<u>Assets</u>	
	£	s. d.	£	s. d.
March 1930	417,466	2 6	453,928	5 11
1932	361,799	4 11	396,141	13 7
1935	325,814	18 1	358,716	15 1
1942	299,485	8 11	315,164	7 10
				<u>14</u>

Income was derived from mineral royalties, rents, and sales of sand, gravel, timber and slag.

	<u>Royalties</u>		<u>Rents</u>		<u>Timber</u>		<u>Sand</u>		<u>Slag</u>	
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.
1930	20,861	13 10	30,538	17 11	2,971	16 5	1,401	17 1	5,188	6 0
1936	19,057	6 3	30,641	15 6	2,922	4 9	1,499	11 1	486	17 11
1942	8,602	14 9	27,820	7 11	-	-	3,529	7 7	233	2 2

Net income for these years was £37,688 0s. 7d., £33,951 16s. 11d., and £15,596 0s. 10d. respectively. As income from local enterprise fell, investment income increased:

1930	£26,346 15s. 6d.
1932	£29,207 1s. 4d.
1935	£25,929 4s. 6d.
1942	£39,257 6s. 6d.

This broadened the basis of the economic interests both of the Himley Estates and the family, and safeguarded them against a collapse in the local economy.

14 D.P.L. 6/B, Himley Estates Accounts, 1930-42.

The establishment of the Himley Estates Ltd. in 1926 marked the final stage in the transformation of the Dudley estates from a primarily entrepreneurial role in the mineral and iron trades to that of a supplier of investment capital in a broader range of economic activities. Changes in the organisation and structure of estate economic interests had begun as early as the 1880s with the gradual reduction in estate mineral activity and the sale of ironworks and mineral property. Outside capital was brought into the two main undertakings on the Dudley estate, with the formation of the Baggeridge Colliery Co. Ltd. in 1911, and into the Round Oak Iron and Steel Works after 1923. Local and national developments had helped to bring about this change in the financing of estate interests, as in the case of the re-settlement and re-structuring of the estates in 1923 and 1926. Nevertheless, although absolute control and independence of action had been surrendered by the Dudley Settled Estates, the family retained a strong influence for the good on the boards of Round Oak Steel Works, Baggeridge Colliery, and the Himley Estates while continuing to derive royalties as well as share income from these and other enterprises.

B. The Disposal of Landed Property

Although the local Dudley estate had begun to enfranchise and sell cottage properties after Lord Ward's Estate Act of 1847, and to sell mineral and industrial property after 1883, these trends had been in response to local factors rather than turning points which marked the initiation of policies intended to break up the estate. Local factors continued to influence policies with regard to the disposal of property - in addition to developments in the mineral trade - and blocks of the local Black Country estates were sold periodically after 1930 as demand for building land grew. This last factor probably determined the retention of local

property long after the landed estates in Worcestershire, Wales, and Scotland had been sold. The sale of these other properties was, no doubt, the result of national trends and developments which placed the landed classes under increased pressure from the late 1870s onwards - although, the Dudley estate in general remained relatively intact until a comparatively later date.

Prof. F. M. L. Thompson¹⁵ has shown that numerous factors subjected the aristocratic landowning interest to a variety of pressures during the latter half of the nineteenth century. Perhaps the two most significant developments were, changes in the land laws and the decline in agricultural incomes after 1878. These, together with the tax proposals of the 1909 budget brought about the increased activity of the land market which ultimately influenced the Dudley estate. Agitation for a reform of the land laws had been mounting since the 1850s with demands for the abolition of primogeniture, entails, and settlements which would simplify land transfers and bring about a free market in land. Greater flexibility in land transfers did result from the Settled Land Act of 1882 which empowered the life-tenant to sell property. However, falling land prices and a relatively dull market accompanied the decline in agricultural incomes which fell by up to 50 per cent in the period 1878-98.¹⁶ Lloyd George's budget of 1909 increased death duties and introduced the Increment Value Duty and Undeveloped Land Duty. These developments persuaded many owners to realize their landed assets, 1910-14, as soon as market conditions were favourable although the

'beginning of the break-up ... may ... be seen as the natural culmination of the whole trend of the preceding generation.'¹⁷

¹⁵ Thompson, op. cit. pp. 283 et seq.

¹⁶ Ibid. p. 303.

¹⁷ Ibid. p. 325.

Between 1910-14 a total of 800,000 acres, valued at £20,000,000, changed hands.

The first major sale of Dudley property was in July 1918 when the Broome and Hurcot estates, between Kidderminster and Stourbridge were sold¹⁸. Prior to this, apart from sales of certain copyhold, mineral, and industrial properties, the only estates to be sold were those in Scotland and Wales. These were still held at the time of his death, in 1885, by William, First Earl of Dudley, and in May 1888 when considerable festivities occurred at Llandrillo and Ednam when the second earl attained his majority¹⁹. However, they had been purchased largely by the trustees, 1833-45, and tended to be regarded primarily as sporting estates by the earl. It is likely that they were sold as early as 1900, along with the Jamaica estates, because of their relatively limited value as a source of income, but none of the remaining records provide any clear information as to their fate. In contrast, the Broome and Hurcot estates did produce a reasonable income from agricultural rents. These estates were put up for sale on 30 July 1918 at a time when the land market had begun to pick up after four inactive years. This trend became an avalanche by the spring of 1919 when a 'revolution in landowning' was proclaimed and it was declared that 'England is changing hands'²⁰. The particulars of sale indicate that the Broome estate was 560 acres in extent and consisted mainly of three farms varying in size from 98 to 286 acres from which the estate derived an annual income of £960. The Hurcot estate of 2,682 acres consisted of 12 farms ranging from 42 to 460 acres and produced an annual income of

¹⁸ D.P.L. 8/M, Particulars of Sale of the Broome and Hurcot Estates, 30 July 1918.

¹⁹ Blocksidge's Dudley Almanac (1888), p. 99.

²⁰ Estates Gazette, March 1919, and The Times, 19 May 1919, as quoted by Thompson op. cit. p. 330.

£3,600. In particular, the sale catalogue stressed the potential value of the land for building development in the vicinity of Kidderminster. Unfortunately, it has not been possible to discover the price fetched by the sale but, in view of its potential, the price would probably be higher than the average of £35 per acre, the price for agricultural land 'in the good years'²¹.

The most extensive and valuable estate sold was the Witley estate: this was offered for sale by auction on 27 September 1920²². However, it is evident that the whole property had already been purchased by an unknown buyer, possibly a London 'syndicate', at an estimated price of £1,000,000²³. This was not an unusual feature at the time as many large estates were sold as one unit - often to a syndicate of speculators, who then divided it into lots and offered it for sale to the tenants²⁴ who generally objected to paying a middleman's profit. In the case of the Witley estate, the 8,500 acres of 'very rich freehold' were divided into 192 lots comprising:

'Pasture, fruit, hop and arable lands near Worcester, Stourport and Kidderminster ... consisting of 41 High Class Farms (some of the most famous in the County), several Capital Small Holdings, residences, 3 Licensed Houses, valuable accommodation lands, about 100 well-built cottages and finely grown woodlands.'²⁵

If the estimated cost to the syndicate was accurate, the earl received a price well above the average, which, at £35 per acre, would amount to £297,500. However, although it was more usual for a landowner to retain his country seat while selling the land, the earl had included Witley Court in the

²¹ Ibid. p. 332.

²² D.P.L. 8/M, Particulars of Sale of the Witley and Holt Estates, 27 Sept. 1920.

²³ Dudley Herald, 25 Sept. 1920. ²⁴ Thompson op. cit., p. 333.

²⁵ Particulars of Sale, 27 Sept. 1920.

sale and this, no doubt, would account for the abnormally high price for the estate as a whole. There were, in ²⁶ addition, several hundred acres of fine timber. Sale reports of the Witley auction indicate that proceedings were lively, as tenants of the various lots made only low bids - giving the high bank rate as the cause. The auctioneer, reportedly, frequently dismissed bids as 'ridiculous' and a spokesman for the tenants claimed that the 'London men' were not giving them a fair chance:

'The country wanted food and these men on the Dudley estate know how to produce it.'

The auctioneer protested that he had

'never been treated like this before. Let me make one point ... Lord Dudley did not give my clients this estate - we had to buy it.'

Unfortunately for many of the Witley tenants, demand was still high and they were forced to withdraw as the auctioneer was not prepared to accept their price²⁷. In view of this it seems likely that, whether or not the earl's selling-price was as high as £1,000,000, he had driven a good bargain as members of the syndicate were prepared to incur a good deal of adverse criticism in the press, and from the tenants, in order to recoup themselves.

After the disposal of Witley, the only large estate remaining in the second earl's possession was the original family estate in north Worcestershire and south Staffordshire - centred on Himley. Apart from the continuing sale of small mineral and copyhold properties which had reduced the size of the estate from 11,216 acres in 1883 to 10,600 acres in 1924, the first indication that a decision had been made to begin the disposal and break-up of this estate in general, was in 1926.

²⁶ Dudley Herald, 2 Oct. 1920.

²⁷ Ibid. Witley Court itself together with 1,100 acres was purchased by Sir Herbert Smith, a Kidderminster carpet manufacturer. After a fire seriously damaged the house, he

Records show that between July 1926 and February 1935, the value of sales of land negotiated by the Himley Estates Ltd. amounted to £462,237 8s.: annual rent lost was £6,977 19s. 9d. but interest on the sale money was £23,111 11s. 1d. at 5 per cent per annum. It is evident that, Lord Ednam's re-structuring of the estate's economic activities after the settlement of 1923 also included the phased break-up of the landed estate itself, so as to realize the maximum market value, and the decision to base the family income on investments alone. During the 1920s and 1930s, there was a considerable demand for land in the area for the provision of local authority and private housing: this was when the bulk of the local estates were sold. Typical of sales at this time was the purchase of 521 acres in the Priory and Castle Mill area of Dudley by Dudley Council - for £77,500:

'Dudley's land-locked condition will be greatly relieved by this purchase.'²⁸

Extensive council estates were constructed on this property after 1926.

Continuing demand for building land throughout the Black Country conurbation led to the auction of several blocks of estate property, in July 1935, valued at £80,000²⁹. Most notable was the sale of 50 acres at Goldthorn Hill between Sedgley and Wolverhampton: this land was

'restricted to the erection of £400 houses.'

In all cases, mines and all timber were included in the sale: generally, the mines at least had been reserved in all sales in the past. Prior to the sale, the area had already been divided into 114 freehold lots which would constitute the Goldthorn Park Estate. Presumably, because of the high demand

auctioned it, with the land, in September 1938.

²⁸ Dudley Herald, 23 Oct. 1926.

²⁹ Ibid. 20 July 1935.

for private housing in the area, this division would increase the price of the land. Other areas included in the 1935 sale were in Dudley, Tipton, and Kingswinford. By June 1939, total sales since 1926 amounted to £712,911, in addition to an annual interest on the sale money of £34,106 12s. 10d.: rent lost was £8,347 7s. 1d. Limited sales took place during the war and, by 1944, the total value of land disposed of amounted to £854,301. In general, the boom in land values had passed by 1925 and the number of sales dwindled. It is significant that the local Dudley estate fetched such high prices in the period 1926-44: most of the land sold was situated in the traditional mineral and industrial areas of the Black Country in Dudley, Sedgley, Tipton, and Brierley Hill and the demand for development land, no doubt, accounted for the high value put upon the land sold.

The remainder of the Himley estate was sold after 1945 - most of it, including Himley Hall, in 1947. Pre-war trends which had seen the emergence of dormitory areas in Sedgley and Kingswinford were now intensified as the post-war pattern of local housing developed. This consisted of a movement of population out of the old Black Country centres, such as Tipton, Bilston, Wednesbury, Dudley, and Brierley Hill, to live in the rural fringe areas of Sedgley, Wombourn, Himley, and Kingswinford - while retaining employment within the traditional Black Country towns. Census returns³⁰ indicate that, while there was only a marginal increase in the population of the older towns, 1931-61 - or, even a decrease in some cases, there was a relatively sharp rise in the population of the fringe areas.

³⁰ Census Returns, 1931, 1951, and 1961.

Black Country

<u>Towns</u>	<u>Acres</u>	<u>1931</u>		<u>1951</u>		<u>1961</u>
Tipton	2,167	35,814	pop.	39,382	pop.	38,100 pop.
Wednesbury	2,025	31,521		34,759		34,511
Dudley	4,064	59,583		62,526		62,965

Development

<u>Areas</u>					
Sedgley	3,948	19,262		23,114	27,912
Kingswinford	4,246	22,224		27,757	34,300
Seisdon R.D.C. (including Himley and Wombourn)	41,990	13,850		22,322	36,981

This was probably the main determining factor for the disposal of estate property in the fringe development areas in 1947.

There was, however, another more urgent reason in that, given the political situation, landowners such as the third earl might lose the minerals while retaining the surface freehold. This would reduce the value of the land for housing development. Accordingly, the bulk of the remaining estate was sold in 1947 in two separate auctions - probably to secure the best price, in January and July.

In January a total of 2,711 acres was sold including Himley Hall, the Home Farm, eight farms in Himley and Kingswinford - ranging from 56 to 233 acres, and three large houses at Holbeche, Dawley and Ashwood. The land offered contained woodlands and was

'accommodation land suitable for development'³¹.

Minerals, other than coal, were sold with the property

'except where the National Coal Board is acquiring under the Coal Industry Nationalisation Act of 1946.'

This applied to the Baggeridge mineral area only: the remainder of the unworked coal lay at a great depth west of the boundary fault and the earl reserved his rights here. The coal lies at such a depth that the surface would be left undisturbed should it become expedient to work it at some

³¹ D.P.L. 8/M, Particulars of Sale of Lands, 14 Jan. 1947.

future date. Therefore the sale price was not influenced by the earl's retention of his rights. Himley Hall and 200 acres of the park were purchased by the N.C.B. for £45,000: it was then converted into the regional office for the West Midlands area! Sir Ben Smith, chairman at the time, was criticised because of the cost of converting the property, but defended his action on the grounds that c.62 acres of thick coal - which would yield 2,000,000 tons, lay under the property. This could be worked and, at that price, he claimed that he had obtained 'a bargain for the nation'³². Timber-bearing land fetched particularly high prices: £8,250 was paid for the Himley Plantation of 49 acres³³. Including the Hall, total sales amounted to £191,902. A further sale occurred in July 1947 when parts of Himley Park, the agricultural and sporting Blackhill estate, 14 capital farms, various cottages and residences, and the sand and gravel quarries at Blackhill and Hinksford - both going concerns, were sold³⁴. In all cases minerals, except coal, were included. The sale was the largest yet, consisting of 3,104 acres, but the total price, £114,670, was less than the previous sale. This was probably because the schedule made no reference to accommodation land and, with the exception of the sporting estate and quarries, it was sold as agricultural land and, as the areas concerned are more distant from the Black Country, these properties remain largely agricultural to-day. The Blackhills Sand and Gravel Quarry was in fact withdrawn from the auction and was not included in the total sale price of £114,670³⁵. After the sale of Himley Hall, the earl lived at Ednam Lodge, Sunningdale: this too was sold in March 1949 when an estate

³² Dudley Herald, 9 May 1964. Obituary.

³³ Dudley Herald, 18 Jan. 1947.

³⁴ D.P.L. 8/M, Particulars of Sale of Lands, 9 July 1947.

³⁵ Express and Star, 9 July 1947.

was purchased at King's Langley in Buckinghamshire³⁶. The last auction of local property by the Dudley estate was in 1963 when 400 acres, containing land and buildings throughout the conurbation, were sold: the 42 plots realized a total of £167,970 - at £419 18s. per acre, the highest value yet reached in the disposal of the estates.

Total sales of Dudley property during the period 1918-63 were:

	<u>Acres</u>	£	s.d.	£	s.d.
July 1918: Broome and Hurcot:	3,200	200,000	0 0	62	10 0
				(estimate)	
Sept. 1920: Witley and Holt:	8,600	1,000,000	0 0	117	0 0
1926-44: Black Country in general	4,385	854,301	0 0	194	16 0
	(estimate)				
Jan. 1947: Himley Hall, Kingswinford, Sedgley:	2,711	191,902	0 0	70	8 0
July 1947: Himley Park, Wombourn, Swindon	3,104	114,670	0 0	36	18 0
Sept. 1963: Black Country in general	<u>400</u>	<u>167,970</u>	<u>0 0</u>	<u>419</u>	<u>18 0</u>
	22,400				
		2,528,843	0 0		

This excludes the value of the Jamaica, Scottish, and Welsh estates sold 1888-1900 and the Great Westwood estate at King's Langley sold in 1969 for c. £450,000. A comparison of the selling price per acre illustrates the fluctuations in the property market, local conditions, and the wisdom of the phased disposal of the Dudley estate between 1918 and 1963. During the period 1918-19, market values were high, reaching £35 per acre for agricultural land. As the Broome and Hurcot agricultural estates were sold at this time and, in view of their additional value as development land, it seems

³⁶ Dudley Herald, 12 Mar. 1949.

reasonable to assume that the 3,200 acres, which would have realized £109,970 at good average prices, would fetch rather more - perhaps as high as £200,000 - or £62 10s. per acre. The figure of £1,000,000 reported in the press as the sale price for the Witley estate, far exceeded the total at average prices - £297,500. Here again the value was increased by the proximity of Kidderminster which inflated the price as potential building land. Other factors which increased the value per acre were the inclusion of Witley Hall itself and extensive areas of timber in the sale. The crude average would be £117 per acre.

Local factors determined the high price realized by the disposal of property within the Black Country between 1926 and 1944. This was situated mainly within the Black Country boroughs where local authority and private housing development expanded considerably down to 1939. The total acreage sold has been estimated at 4,385 acres at an average of £194 16s. per acre. Redmayne's report of 1924 states that the local Himley estate consisted of 10,600 acres: the sales of 1947 and 1963 disposed of 6,215 acres leaving an estimated area of 4,385 acres. Because of its location, little, if any of this, would be sold as agricultural land. Post-war conditions presumably account for the fall in the average price per acre to £70 8s. in January 1947 and this includes Himley Hall, £45,000, and valuable timber land: e.g., Himley Plantation fetched £8,250 for 49 acres. Much of the land lay on the rural fringe of the Black Country in Sedgley and Kingswinford where housing development was just beginning. Average prices in the July 1947 sale probably fell to £36 18s. because the areas included lay further afield in Wombourn and Swindon. These areas remain largely agricultural to-day although property development has increased during the 1950s and 1960s. It may be that the decision to sell the bulk of the remaining Dudley estate in

1947 was a mistake. The rise in land values within the rural fringe has been phenomenal as extensive dormitory areas have been established in Wombourn, Himley, Kingswinford, Wall Heath and Wordsley since 1950. The last sale of Dudley property in 1963 is evidence of this as the value per acre was £419 18s. However, the scale and speed of property development within the fringe area as a whole were probably unforeseen in 1947. After 1963, the Earl of Dudley's main remaining property was the Great Westwood estate at King's Langley in Buckinghamshire. This too was sold in 1969. The estate, of 1,450 acres, was put up for sale as early as July 1966, when the asking price was £350,000 - £450,000³⁷, but, because of the financial 'freeze', was withdrawn in May 1967³⁸. Within the area of the traditional family estates, all that remains is a number of small, historic areas closely connected with the Dudley family, such as the ruins of Dudley Priory and the Garden of Memories at Himley Hall.

The decision to break up the landed estates was taken relatively late in the case of Dudley estate. Earlier sales between 1885 and 1900 concerned the more distant sporting estates rather than the agricultural properties. General trends which produced an expanding land market after 1878 did not really affect the Dudley family until 1918 when the first agricultural estate was sold. This, together with the Witley sale in 1920 marks the first move to dispose of the more valuable estates. However, the most radical decision was not taken until 1926 when the phased disposal of the Dudley estate in and around the Black Country began. This must be seen in connection with other

³⁷ County Express, 23 July 1966.

³⁸ Dudley Herald, 5 May 1967.

radical decisions regarding the economic structure and organisation of the Dudley estate, taken at the same time. The re-settlement of the estate by the second earl on his son, Viscount Ednam, in 1923 and the latter's sale of his life interest, the establishment of the Himley Estates Ltd. in 1926, the revival and expansion of the Baggeridge and Round Oak Companies, and the decision to end mineral enterprise on his own account all constitute a significant turning point in the history of the Dudley estate. The decision to begin the sale and break-up of the local landed estate must be seen as a major factor in the re-structuring of estate enterprise and the family's financial interests.

General Conclusions

For close on 200 years, the Dudley estate exercised considerable economic, social, and, at times, political influence in the affairs of the Black Country. During this period, beginning in 1774 with the accession of John, Second Viscount Dudley and Ward, and ending with the disposal of the remaining landed property within the area, the development of the estate reflects not only the changing fortunes and character of the Black Country, but also those of the landed aristocracy in general. However, the Dudley estate was unusual in both respects - for instance, in the extent to which it continued to derive a considerable revenue from traditional sources long after the local economy had begun to decline and change in character; also in the extent to which the estate was directly involved in mineral and industrial enterprise, and the retention of the bulk of the landed properties until a relatively late date. Although the Dudley family had acquired property in several parts of the country by 1845, the real basis of wealth lay in the traditional family estates in south Staffordshire and north Worcestershire. Factors beyond the control of the Lords Dudley determined the potential value of these estates. These were, the mineral deposits, technological advances in the manufacture of iron and the application of steam power after 1709, and the inherited rights of lordship in several local manors. However, the exploitation of all these factors was the work of the second viscount after 1774 and it is from this date that the transformation in the family fortunes and estates took place. Since then, the development of the estate falls into three distinct periods. Down to 1833, expansion was rapid but relatively haphazard resulting in

administrative chaos and low profits by the time of the first earl's death in 1833. This situation was removed by the reorganisation and expansion of estate interests during the period of the Dudley trust from 1833 to 1845. Thereafter, the estate realized its peak profitability and income, in spite of the decline and transformation of the regional economy, and mounting pressures on the aristocratic landowning interest in general. The estate reacted to these developments at a relatively late date with the restructuring of estate interests and the disposal of property after 1926.

The advantages accorded by the geology and location of the local estate were numerous. It has been suggested that the south Staffordshire coalfield, although relatively small, produced more coal than any other area of comparable size. This fact is accounted for by the presence of nine seams of coal - including the famous thick or thirty-foot seam. Additional deposits included two seams of ironstone, seams of clay and fireclay, and also within the area, limestone, sand, granite, and ganister stone. Situated ten miles west of Birmingham and in the centre of the country, the area could reach a wide range of markets. However, these natural advantages brought accompanying drawbacks: the thirty-foot seam, the presence of clay and the angle of dip in the limestone deposits created extraction or drainage problems: the hilly topography of the area which lies on the watershed between the Trent and Severn created a shortage of water and made canal construction difficult: finally, the existence of such raw materials which had determined the emergence of the Black Country through the concentration of iron manufacturing in the district also, in part, determined its eclipse as local ores proved unsuitable to the processes used in the manufacture of mild steel after the mid-nineteenth century.

However, the iron trade and mineral-working had existed in the area and on the estate long before the eighteenth century. A charcoal blast furnace had been erected at West Bromwich as early as 1561 while slitting mills, nailers, locksmiths, and glassworkers were also numerous by 1700. On the Dudley estate, coal was mined as early as 1272 and two blast furnaces were at work by 1610. At the commencement of the eighteenth century, the 1701 rental records a total income of £5,014 4s. 4d. of which £2,191 16s. 10½d. came from minerals. This trend was accelerated by numerous factors such as Darby's development of the mineral-smelting of iron ore - introduced into the area of the Dudley estate by John Wilkinson in 1766, the development by Cort in 1783 of the puddling and rolling process - to convert furnace pig into wrought iron, the construction of the Staffordshire and Worcestershire Canal and the Birmingham Canal 1766-72, and the development of steam pumping engines by Newcomen and Watt. The Black Country came into existence primarily as a result of these factors - particularly mineral smelting and the mass production of puddled wrought iron. Between 1774-88, John, Second Viscount Dudley and Ward, used the power and influence conveyed by his position and titles, to enclose and introduce transport improvements by act of parliament - as a prelude to the intensive exploitation of his estates in response to the opportunities provided by local and national economic trends. In general, the development of aristocratic estates in the eighteenth century had been determined primarily by marriage and family settlements, and also by the existence of credit and progressive stewards. But, in the case of the Dudley estate, there is no evidence of heavy borrowing because capital was readily available from existing mineral exploitation, while determined, progressive management was

provided by the second viscount himself.

As a result of the local enclosure acts and awards, the area of the Dudley estate was increased by about 150 per cent and Lord Dudley received 2,218 acres out of the total of 5,400 acres enclosed. Particularly significant were various rights conferred upon him as lord of the manor which entitled him to remove all the timber, construct canals or railways, and remove minerals from under the enclosed commons without being liable for damage. The enfranchisement of numerous copyhold properties, in return for the transfer of land equivalent to the value of the fine, marginally reduced his income from the annual rental, but because of the consolidation of these small plots into a few large units, increased Lord Dudley's income in the long run, from farming rents or mineral extraction. However, despite the opportunities provided for the sale of agricultural produce, by the urbanisation of the Black Country as traditional centres of population such as Stourbridge, Dudley, and Wolverhampton expanded, and with the emergence of industrial townships in Bilston, Tipton, Sedgley, Brierley Hill, Kingswinford, and Wordsley - all areas where estate property was located, agricultural properties were allowed to deteriorate by 1833. There had been some attempt to exploit newly enclosed land with improving leases in the 1780s, but these had lapsed by 1833 when farms were held on a tenant at will basis. Although rents per acre tended to increase after 1774, the rate of increase was less than the national average, which doubled between 1790 and 1816, and there was no attempt to rackrent during the war period, 1793-1815, although the Dudley rents did show a relatively sharp rise in 1811. Average rents in 1783 were 22/27s. per acre on established properties and 12/16s. per acre for recently enclosed land: by 1824, the average rent had risen to 41s.

per acre. Failure to exploit the landed estates was, presumably, the result of deficient management which plagued the Dudley estate in general after the death of the second viscount in 1788, and the fact that the mineral and industrial properties provided a considerable and expanding income.

After the initial impetus given to transport improvements, 1774-88, by the construction of the Stourbridge and Dudley Canals, loans to turnpikes, and road construction under the enclosure acts, further improvements were sponsored by the estate. These included the Dudley Castle Canal Tunnel, 1785-92, which linked the two sectors of the local economy east and west of the Dudley ridge, and the Kingswinford Railway which introduced steam locomotion to the area in 1829. However, in contrast to the growing involvement of many landowners in the management of their business interests, the third and fourth viscounts, 1788-1833, played little part in the management of their estates which were primarily administered by members of the local landed gentry whose background and qualifications were totally inadequate to deal with the organisation and development of an estate with such varied and complex interests. These inadequacies are reflected in the systems of accounts which, until 1833, followed traditional forms such as the land steward's 'charge' and 'discharge' account. Some innovations were made in the early 1790s: the rental ceased to be a statement of all sources of income and departmental allocation of costs was introduced, to a limited degree. However, general advances in book-keeping and accounts - such as double entry systems and specialised accounts introduced elsewhere by 1800, were not used on the Dudley estate until after 1836.

Nevertheless, the scale of economic enterprise on the estate continued to expand until the 1820s. Numerous

glass and pottery works developed on leased property as the clay and fireclay measures were exploited. However, except for the manufacture of bricks for the collieries, the estate was not directly involved in production. The most significant industrial development was in the production of pig and wrought iron and the manufacture of finished iron goods on leased properties. After Wilkinson's ironworks were established at Bradley, in 1766, many of the earliest mineral blast furnaces in Staffordshire were erected between 1779 and 1801 by lessees of the Dudley estate. Lessees contracted to purchase coal, ironstone, and limestone from estate mines - minerals were not usually leased to the ironmasters and vertically integrated ironworks were unusual on the Dudley estate before 1833. Despite its opportunities, the estate did not manufacture iron on its own account but, at the Store Yard at Round Oak, repairs were carried out to all mining machinery after 1798 and, by 1822, steam engines for estate collieries were made here. The manufacture of bricks and the repair and manufacture of mining machinery were, in fact, regarded as part of estate mineral enterprise.

This was the estate's main source of income and capital investment. Mineral exploitation was mainly by pits owned and managed by the estate with the actual extraction contracted out to chartermasters who brought the minerals to the surface where they were sold by the estate. Rapid expansion of this sector of the estate's interests after 1774 produced administrative confusion, falling profits, and low productivity by the mid-1790s. After the unusual expedient - for the Black Country - of appointing a Newcastle mining engineer, Charles Beaumont, to reorganise the pits in 1797, labour was employed directly by the estate and the butties were dismissed. In the case of the Dudley pits, the usual reason for the employment of butties - as suppliers of working capital, was

superfluous while the estate suffered from all the weaknesses of the butty system. The true potential of the Dudley pits in this early period, was only realised after 1797.

Beaumont introduced Newcastle methods of sinking shafts and cutting the coal, established the 26-cwt ton already used in London and the Warwickshire coalfield, and secured markets locally and along the main canals for 300,000 tons of Dudley coal per annum capable of providing a net income of £20,000. By the 1820s further mismanagement resulted in a decline in estate enterprise, and profits fell as production increasingly came from sections of thick coal already worked by the estate which were let to coalmasters who marketed the coal on their own account. At the commencement of the trust in 1833, the bulk of mineral income came from the leased 'broken mines' while estate production continued to fall despite rising demand in the Black Country during the early 1830s.

The early period of development ended in 1833 when the estate was put into trust by the Will of John William, Fourth Viscount Dudley and Ward and, since 1827, Earl of Dudley. There is a striking contrast between the chaos and declining profits of the estate by 1833 and the soundness of the Will: this suggests that the earl had been advised by James Loch and, perhaps, E. J. Littleton, auditor to the trust and trustee respectively. The estate was strictly entailed to be inherited, after a 12-year trust by the earl's nephew, William, while the earl's cousin was to enjoy only the Ward barony and the family home at Himley. In many respects, the motives for the entailing of the estate and the establishment of the trust, were typical of the period. But, in the case of the Dudley estate, additional factors were - the need to reorganise and improve the administration of affairs, the absence of a direct heir, and the earl's

wish to prevent the life-tenancy from falling into the hands of his cousin. The choice of trustees was evidently designed to maintain a measure of stability and continuity, while paving the way for innovations. Francis Downing had been land and mineral agent to the estate since 1826 and John Benbow had been London agent and solicitor to the earl and his father since 1801. The remaining trustees, the Bishop of Exeter and E. J. Littleton, M.P. were personal friends while the auditor, James Loch, was experienced in estate administration. Of equal importance to the choice of trustees were the various directives laid down by the Will for the administration of affairs and the employment of capital. It was the Dudley trust which ended the static situation which had evolved in all sectors of estate enterprise by the 1830s, following the initial impetus provided by the second viscount's policies after 1774.

The period of the trust, from 1833 to 1845, marks the second phase of development: the estate recovered the predominant position in the local iron and mineral trades which it had enjoyed in the 1780s, while the modernisation and reorganisation of affairs placed the Dudley family in a position to profit fully from the expansion of the Black Country iron trade to a peak between 1830 and 1860. In addition, agricultural leases were overhauled, further transport improvements were made, and the family became the owner of extensive agricultural and sporting estates in Worcestershire, Wales, and Scotland.

The agricultural properties benefited in particular from the policies of the trustees. In 1833, most estate farms were let to tenants at will, rents and farm units were very uneven, high expenditure was incurred from repairs, and the condition of the farms in general was worse than any previously encountered by the much-experienced Loch. He,

together with Hatherton, introduced a new form of written lease - for a term of 21 years, containing penalty clauses for misuse of land and placing the cost of repairs on the tenant. Rents and farm units were rationalised and, initially, the estate incurred great capital outlay in an attempt to carry out all necessary repairs and improvements. Estate enterprise remained confined to the exploitation of timber and, after the purchase of new estates, the sale of venison at Witley and of farm produce at Crogen.

All the traditional local industries continued to flourish under the trust. As the refractory industry expanded in the Stourbridge and Brierley Hill area, the number of glass, brick, and pottery works increased on property leased from the estate. Estate income rose from royalties, as the productivity of the clay measures increased and from the sale of coal to the works/^{by}estate pits under the terms of the various leases. Although the estate did not become involved in production in this sector, it did begin to manufacture iron on its own account for the first time since the days of Dud Dudley. The expansion of the Black Country iron trade to its peak in the 1850s, was already under way in 1833. Pig iron production in the area increased from 213,000 tons in 1830 to 743,000 tons in 1858, and wrought iron to 600,000 tons in 1850 - one-third of the national output. Ironmasters occupying estate property were directly benefiting from this trend in 1833 but, because of the run down of estate mineral enterprise and the decision not to enter into the iron trade, the estate was deriving little profit from the expansion of the local economy. in the early 1830s.

The trustees introduced specific long-term leases and linked rent to the amount of iron produced. Income was also derived from the supply of minerals and from steam engines owned by the estate which supplied power and blast at the

ironworks. After 1836, minerals were leased to ironmasters for the first time as a matter of policy, which enabled them to develop fully-integrated concerns. Production costs fell and output increased while the estate derived an income at all stages of production. In 1839 and 1844, the estate began the production of pig iron at the Coneygre and the New Level Iron Works - enterprises hitherto leased to ironmasters. Both were fully-integrated, and extensions and modifications were carried out to incorporate the most up-to-date techniques. The net income from each far exceeded the rent formerly received: annual rent from Coneygre was £250 in 1836 - between 1839 and 1846, total net income amounted to £15,439. Both continued to produce a high level of income until the 1880s - especially the New Level Furnaces which operated in conjunction with the adjacent Round Oak Iron Works after their construction in 1854.

Radical policies were also adopted after 1833 to revive the mineral estate. This suffered from falling profits and, except from 'broken mines', a decline in output - particularly in the case of mines operated by the estate as a result of inefficiency and a policy of conservation. Under Richard Smith's mineral agency, the estate began to exploit the thick coal and limestone to capacity, while a policy of leasing minerals on royalty was adopted including unworked seams of thick coal and ironstone. Valuable seams were leased to iron companies such as the British Iron Company and Bramah and Cochrane. Net income from minerals increased from £25,005 in 1836 to £142,000 in 1847 of which an increasing proportion came from estate operated pits. Apart from the sale of minerals, income was also derived from royalties, surface rents, and 'water ease'. During the trust, the administration of ironworks and mineral properties became closely linked and the total capital invested by the estate in

both sectors increased from £66,956 in 1837 to £219,990 in 1847. As total net income increased from £25,005 to £157,990, this represents a substantial rise in profitability, in terms of the return on capital, from 36.9 per cent to 71.75 per cent during this period. Over the same period, net income as a proportion of gross income increased from 26.7 per cent to 64 per cent. This achievement resulted from the increased output of estate and leased mines, the commencement of iron production by the estate, and the overall policies designed to produce greater cost effectiveness.

Further transport improvements were necessary after 1833 to cope with the increased volume of trade on the estate and in the area in general. Canals remained the basis of internal communications within the Black Country and the trustees constructed a number of wharves and a private canal - the Pensnett Canal, to serve the needs of the estate. However, the central geographical location of the area was becoming a handicap by the 1840s, and it was evident that a main line railway link with more distant markets and the ports was necessary. Although the trustees were defeated in their attempt to secure the standard gauge link proposed by the London and Birmingham Railway, the outcome was favourable to the estate because of extensions to the estate's own Kingswinford Railway and the compromise providing for both gauges to be laid by the Oxford, Worcester and Wolverhampton Railway from Wolverhampton through Dudley to Worcester. These developments provided the estate with links to the broad and standard gauge through routes on both sides of the Dudley ridge.

By 1833, cottage rentals were drawn from small annual ground rents and large fines when the copyhold changed hands. Initially, this had provided cheap housing for those who

moved into the area, attracted by employment opportunities as the estate's economic activities expanded after 1774. The total number of cottage plots rose from about 500 in 1776 to 1,056 in 1847: frequently, each plot contained more than one cottage. Average rents per plot increased from 9s. 10d. to £1 1s. 8d. over the same period. However, by the 1830s, most of the plots were held by middlemen - usually descendants of the original copyholder who took a weekly economic rent from each cottage while paying only a nominal annual rent for the plot. On Loch's advice, Lord Ward asserted the right to sell the copyhold by a private bill in 1847 and many plots were subsequently sold. No attempt was made to exploit the demand for accommodation in the area by the provision of housing. Average farm rents fell from 41s. per acre in 1824 to 39s. by 1850 when an additional allowance of 10 per cent was also being made on all properties. This rent was higher than the average for Staffordshire as a whole but, the policy of improvements initiated by the trustees and the proximity of an expanding market in the Black Country probably account for this.

Under the terms of the late earl's Will, the trustees were committed to the purchase of British government stocks to secure the profits from mineral enterprise, prior to the purchase of landed estates. By 1836, £69,000 had been invested in reduced annuities and consols. These stocks were sold when property was purchased in 1837 but, throughout the remainder of the trust, income was always invested immediately in government stocks rather than deposited in a bank. Apart from the greater security offered, such investments could always be converted into liquid capital without delay. In general, the land market was slack in the 1830s and 1840s, apart from a temporary recovery 1838-41. This presumably worked to the advantage of the trustees, and landed estates totalling £1,082,909 were purchased in

Worcestershire, Wales, and Scotland between 1836 and 1845. The largest single purchase was the Witley estate from Lord Foley - £668,000, and the bulk of the purchases were either agricultural or sporting properties, although some property was purchased in the Black Country - mainly mineral land. The degree of liquidity enjoyed by the Dudley estate is emphasised not only by the extensive purchases of land - all cash transactions except for the Witley estate, but also by the increase in capital investment in ironworks and mines already indicated. There is no evidence to suggest that, by purchasing landed property in pursuance of the directive in the Will, estate enterprise suffered from under-investment.

The possibility that strict settlement may have retarded the economic development of large estate does not apply in the case of the settlement and trust established by the first earl's Will in 1833. In every sector of estate affairs, progressive policies had eradicated the chaos and stagnation which obtained at the commencement of the trust. Total income was considerably higher and derived from a greater variety of sources, capital investment had increased, and the basis of the family's income and social position had been broadened by the purchase of extensive property in areas other than the Black Country. In the process of expanding estate interests in the traditional industries, such as the iron and mineral trades, the period of the Dudley trust also worked to the advantage of the local economy as a whole: this is particularly evident in the development of adequate systems of transport and the close link between the estate, as a supplier of raw materials, and the local iron trade at all stages of production.

Apart from its achievements in terms of increasing the revenue of the estate, the period of the trust was also significant in that the managerial revolution, which had begun before 1800 on many large landed and mineral estates, took

place on the Dudley estate. Agents and officials had been deficient in professional ability and qualifications before 1833: with the retention of Benbow and Downing as trustees, any improvements in administration seemed unlikely. However, changes did occur - largely through Hatherton's determination to honour his trusteeship to the full. In this, he was assisted by the professional experience and approach of Loch, the auditor appointed under the terms of the Will, and Smith, who was appointed mineral agent largely at the instigation of Hatherton. Thereafter, only men with adequate qualifications and experience were appointed as agents and officials.

Although, after 1800, it was more usual for aristocratic landowners to play a more active role in the management of estate affairs, the last incumbent of the Dudley title to do so had been the second viscount between 1774 and 1788. For the first half of the trust, William, Lord Ward, showed little inclination to involve himself constructively in the development of his property, and, by his own personal actions, jeopardised not only his own interests but also those of the trust. However, Hatherton's guardianship and William's basic sense of justice, personal judgment, and business insight, brought about a reformation in his outlook after 1839, and William played a more active part in the conduct of affairs establishing a reputation for justice and liberal thinking with all classes of society. He was a benevolent employer, rare in the Black Country at this time, who expended considerable sums of money on sickness benefits and pensions, and attacked the practice of truck, then prevalent in the Black Country despite the legislation of 1831. In matters of social reform he was a force for the good in the area as a whole. He gave money and land for the construction of churches of all denominations, and schools, subsidised local charities and

town improvements, and was largely responsible for the provision of an adequate water supply in south Staffordshire after 1856.

By 1836, the estate had recovered its leading role in the local economy: thereafter it dominated and influenced subsequent developments until the 1890s. The estate achieved this pinnacle because of the trustees' policies of transport improvements, the provision of leased integrated ironworks, mines drainage schemes, and the extension of credit to local ironmasters during periods of economic crisis. Inevitably, the establishment of Dudley as a parliamentary borough in 1832, involved the estate in local politics. However, this was relatively late and then not until Benbow's election in 1844 when it was considered expedient for the trust to have representation in parliament. Local radical opinion was critical of the estate only in terms of alleged political influence after 1844 - not from social grievance.

Systems of book-keeping and accounts were out of date and totally inadequate in 1833: all of this was swept away by the trustees on Loch's advice. Modern double-entry systems of accounts were introduced with separate accounts for every individual aspect of estate enterprise including farms, ironworks, collieries, pump engines, railways, etc. All accounts were terminated in December to facilitate annual audits and new, more sophisticated, forms of accounts were introduced to record profit and loss, capital depreciation, and the expenses of management etc. It was on Loch's advice that the trust used local banks in the vicinity of the various estates to maintain only a small current account for day-to-day transactions, while the bulk of estate revenue was quickly transferred to a London bank pending the purchase of stock - a small amount only was normally kept at this bank. This system provided the maximum of security for the trust income and safeguarded the trustees themselves against heavy losses

for which they would personally be responsible.

Of the four trustees, E. J. Littleton, later Lord Hatherton, rendered the greatest services to the Dudley estate. He defended the late earl's Will and the trust against all attempts to destroy them in the early days, influenced Lord Ward to his benefit in the long term, and pursued enlightened and constructive policies in general. However, his own personal connections as chairman of the Staffordshire and Worcestershire Canal, led to clashes of interest on occasions over railways and canals. But, in general, he was meticulous in the fulfilment of his obligations to the late earl. The Bishop of Exeter was lazy and unhelpful in the conduct of trust affairs while Benbow, although conscientious, was partly responsible for the state of affairs in 1833 while his puritanical outlook and political ambition produced a number of crises in his relationship with Lord Ward and Hatherton. Downing, on the other hand, was directly responsible for the chaos in mineral and landed affairs before 1833 and, until he resigned his trusteeship in 1840, his approach was not simply negative but positively injurious to the interests of the trust. Although not trustees as such, Loch as auditor, and Smith as mineral agent, provided the professional expertise which Hatherton - the main stabilizing factor, needed to achieve the radical changes in the management and conduct of affairs of the Dudley estate.

It was in the management of estate iron and mineral interests that the greatest changes occurred, after Smith replaced Downing as mineral agent in 1836. In 1833, the estate was failing to profit from the boom in the local iron trade and, in common with the traditional outlook in the area, tended to regard the ironworks as mere 'appendages' of the mines. By 1845, the reverse was the case: such was the

expansion of the iron trade on property leased from the estate - and by the decision of the estate to manufacture pig iron, that the mines were directly geared to the expanding fortunes of the Black Country iron trade. Ironmasters were encouraged to develop vertically integrated ironworks on estate property by the lease of land and minerals, while local ironworks in general became increasingly dependent on estate coal, ironstone, and limestone as other local supplies began to fail.

In addition to mineral leases granted in association with ironworks, the estate began to lease minerals on royalty - mainly the deeper, less productive, seams, but also unworked thick-coal seams. This decision to exploit the mines for immediate advantage by leases and estate enterprise was sound in view of the probable increase in working costs as pits became deeper encountering growing drainage problems. Moreover, attempts were already being made to calculate the remaining reserves of the south Staffordshire coalfield as early as the 1840s as speculation regarding future prospects grew. Royalties were calculated on selling price according to the value of a particular seam and lessees incurred all working costs and, in the case of new pits, all capital costs. In addition to royalties, lessees also paid a charge of 10 per cent on the value of capital already invested in a working pit by the estate. Leases were designed to secure efficient control by the regular inspection of accounts and the workings, a clear definition of weights and royalties, a guaranteed minimum royalty, maximum output, efficient working of the coal, and payment for 'water ease'. This resulted in the Dudley pits achieving a greater degree of efficiency and safety than elsewhere in the Black Country while royalties - as high as one-third in the case of the thick coal, reflecting the market value of the coal, tended to be higher than in other parts of Staffordshire. The estate also continued its

traditional policy - introduced by Beaumont - of working the more valuable seams, and income from this source tended to increase more rapidly and, after 1847, to exceed income from leased pits until the early years of the twentieth century. In general, it was unusual for aristocratic estates to work their own minerals after 1800 and, by the 1880s, even the main exceptions had ceased to work pits on their own account. Administration was improved by dividing the mineral estate into six colliery districts. Each was managed by an estate mineral agent with bailiffs in charge of different pits and sections whether or not these were worked by the estate or by lessees.

Without this corresponding improvement in the management and organisation of the estate, the policies of the trustees would have been less remunerative. Many of the administrative reforms were carried out initially to facilitate the work of the trust and safeguard the interests of the trustees. However, the estate continued to benefit from these reforms long after the termination of the trust in 1845 as the policies, outlook, and principles of the trustees continued to influence the agents and officials concerned. Apart from its long-term benefit to the estate, the efficient management of the trust itself and its successful conclusion, were no small achievements in view of the confusion prevailing in 1833 and the varied nature of the estate concerned.

After the termination of the trust in 1845, the estate was subjected to pressure from two factors beyond its control: these were, the decline of the Black Country wrought iron trade after 1860, and the increasing pressures placed upon the landed aristocracy by taxation and government legislation. Nevertheless, during the period 1845-1947, the Dudley estate attained its peak of prosperity before the disposal of the family estates began in 1918. From the foundations laid down by the trust, the estate continued to

profit from traditional sources of income long after the Black Country's economy had undergone considerable structural change and diversification. It is likely that the policies of the estate slowed down the rate of decline in the local iron trade. Ultimately, the estate too was transformed by local and national trends but these changes, which took the form of financial reorganisation, the re-structuring of estate interests, and the disposal of landed property did not begin until after 1897. It was during this last phase of development that the wealth and significance of the Dudley family brought recognition in the form of official appointments. William, Lord Ward - whose income was exceeded by only six other landed aristocrats at the time of his death in 1885 - was attached to Earl Granville's special mission to Russia in 1855 and was created First Earl of Dudley in 1860. His son, William Humble Ward, held the posts of Lord Lieutenant of Ireland, 1902-5 and Governor General of Australia, 1908-11, and the third earl was appointed Regional Commissioner for Defence during World War II.

After 1845, no further purchases of landed property were made, although demand was high in the land markets in general. It was probably felt that the purchases of the trust period had sufficiently broadened the basis of the family income and acquired property appropriate to its social standing. Moreover, as the return on capital invested in estate mineral and industrial concerns was far higher than from agricultural property, surplus capital would be better invested in these sectors. Estate agricultural properties remained efficient on the basis of the improvements and leases initiated by the trust. In spite of increased sales of landed property after 1878, the Dudley estate remained relatively intact apart from the disposal of cottage properties, begun in 1847, and the sale of some mineral and industrial properties after 1883. By 1930, the incomes from

land and from mineral enterprise were roughly equal: £18,000 and £20,861 respectively. Income from the latter source had been declining since the 1880s: since 1800, mineral income had exceeded land rents. These too ceased when the agricultural estates on the fringe of the Black Country were sold in 1947.

The local pig and wrought iron industry reached its peak in 1857 when 777,000 tons of pig iron were produced: thereafter, it rapidly declined to a relatively insignificant level by 1880 when production had fallen to 326,000 tons. Just as the Black Country had been born out of technological progress by the union of mineral smelting with steam power in the 1760s, so its decline was hastened by the technological advances of the 1850s whereby the Bessemer Process resulted in the replacement of wrought iron by cheap mild steel in most sectors of industry. Local ironstone was unsuitable to the new process, but, there were other contributory factors such as the loss of the American market, high railway charges, increasing production costs as deeper, thinner seams were worked, and the imminent exhaustion of the local coalfield. During these difficult years, tenants on the Dudley estate enjoyed several advantages over rival ironmasters arising out of efficient administration in general, estate canal and railway links with main line railways, and lower production costs from total integration. Although the manufacture of iron goods remained prominent, a more diverse regional economy had emerged by 1900.

It was during this period of regional decline that the estate achieved a national and international reputation for its own pig and wrought iron which, because of its quality, always fetched higher prices than other local brands. This resulted from the extension and modernisation of blast furnaces at Coneygre and the New Level between 1839 and 1845. Total integration was at last attained when the

estate constructed Round Oak Iron Works in 1855 to produce wrought iron bars and finished goods from estate pig iron. In 1889, a famous chainworks was added and experiments were made in the manufacture of steel. These enterprises did much to maintain the reputation of the area for good quality iron goods, and represented a considerable capital outlay on the part of the estate. To cope with this increased activity, the Castle Mill Engineering Works was established and extensions were made to the estate's private railway. The peak of prosperity was attained during the Franco-Prussian War when net profit from estate operated ironworks amounted to £315,825. However, as regional trends became more pronounced, the estate sold its leased ironworks during the 1870s. Further sales in 1890 included even the Round Oak and New Level enterprises and, in 1895, the blast furnaces at Coneygre. However, the failure of the new steelworks at Round Oak led to the reinvolvement of the estate in the iron and steel trade in 1897. This link was maintained until 1951 although the Round Oak enterprise had ceased to be entirely owned by the estate after 1897. In view of subsequent developments in the iron trade in general and in the Black Country in particular, it was a sound policy for the trustees to exploit minerals to the full and to involve the estate in the manufacture of iron. But for these developments, the Dudley estate would have been left in possession of a considerable amount of minerals, the value of which would have declined in proportion to the relatively rapid decline of the local wrought iron trade.

Closely related to the collapse of the iron trade was the decline in the output of local coal and ironstone pits - particularly the latter: respective figures for 1865 and 1887 were - coal, 9,000,000 tons and 6,000,000; ironstone 660,000 tons and 110,000 tons. After 1845, the output of

estate mines increased rapidly with profits from estate operated pits exceeding leased pits until the early 1900s. In the peak year of 1872, total net income amounted to £417,257 of which £394,750 came from pits worked by the estate. Until 1883, the estate made no attempt to sell mineral property - preferring to dominate the local market as long as demand remained high. Thereafter, not only partially-worked minerals but also unworked seams were sold. As the productivity of leased pits declined there was a growing variety in the forms of royalty charged - many of them in use elsewhere for many years. Leases also tended to be less rigorous and exacting after the 1870s as minimum rents, inspection of the workings, etc. were superfluous in the case of many of the pits as they neared exhaustion. The mining of coal, ironstone, clay and limestone by the estate, ceased altogether in 1924 and income came only from leased properties until 1947.

The Dudley estate had been unusual in the extent to which it was directly involved in mineral production after 1797. Most of the aristocratic estates which had continued to pursue a similar policy gave up the practice as early as the 1880s. However, production costs were low and demand was increasing for other materials on the Dudley estate. Consequently, sand and gravel were quarried in increasing quantities by the estate until 1947. Just as the life of the traditional Black Country wrought iron trade had been extended by the activities of the estate, so also was the mining of the valuable thick coal in the area. This resulted from the development of the Baggeridge Colliery by the estate on the western edge of the coalfield during the 1890s. Although this was established as a public company in 1912, the Earl of Dudley held a controlling interest until nationalisation. As a result of its policies, the estate had extracted the maximum profits from remaining minerals of all

kinds after 1845 despite the problems created by growing drainage difficulties, the declining local iron trade, increasing production costs, and impending nationalisation.

Local economic and national legislative developments did, ultimately, produce radical changes for the Dudley estate. These took the form of financial reorganisation after 1897 and, in the mid-1920s, the re-settlement and re-structuring of estate interests which transformed its role from that of entrepreneur and rentier to, primarily, that of supplier of capital. A major aspect of these changes was the systematic disposal of landed property after 1926. These trends were foreshadowed by the contraction in estate operated mines and ironworks in the 1880s culminating in the sale of Round Oak in 1890. Outside capital was introduced for the first time when this enterprise, reconstructed as a steelworks, reverted to the earl's ownership in 1897, as a private company. Additional capital was also subscribed to the Baggeridge Colliery Company in 1912. The need for capital to modernise Round Oak in the 1920s and the high level of personal expenditure of the second earl, together with fiscal and legislative pressures, led to the re-settlement of the Dudley estate in 1923. Viscount Ednam, as life tenant, brought in more outside capital and came to an arrangement with the Round Oak and Baggeridge Companies concerning estate pits, railways, and maintenance depots in 1924. He then formed the Himley Estates Ltd. in 1926 to invest estate income in local and other enterprises.

These arrangements preserved the family influence in Round Oak and Baggeridge and ensured a considerable income from rents, royalties, and shares, without exposing the estate to the full dangers of economic fluctuations in the iron and mineral trade. Conditions in these industries in general and in the area in particular no longer made the entrepren-

erial risks worth while. On the other hand, income arising out of these arrangements and the sale of landed property, enabled the family to widen the scope of its investments. Copyhold and mineral property had been sold since 1847 and 1883 - mainly in response to local factors, and the Scottish and Welsh estates, purchased mainly for their sporting facilities, were disposed of between 1888 and 1900 as the second earl developed sporting estates at Witley and Himley. Before 1918, relatively little landed property had been sold by the Dudley family despite the rapid rise in land sales after the agricultural depression of 1878 and the 1909 budget. However, 1918, or more probably, 1926, was the turning point for the Dudley family in terms of the decision to dispose of its estates. In many cases, the various properties fetched good prices as potential building land - particularly along the western fringe of the Black Country, as changes in the distribution of local population occurred. Despite the break-up of the landed estate, the traditional link between the Dudley family and the local economy remained strong, and it required government legislation by the nationalisation of coal and steel to finally break it by 1951.

It is evident that the development of the Dudley estate after 1774 is untypical of the history of the landed aristocracy in many respects, and differs also in matters of detail and timing. After the late eighteenth century, the bulk of its revenue was drawn from mineral and industrial enterprise rather than land or property rents. In the exercise of their influence and privileges, the Lords Dudley demonstrate the more constructive part played by the landed interest during the eighteenth century agricultural and industrial revolutions and their long-term repercussions. Local enclosures occurred largely because Lord Dudley had the wealth and opportunity to take the necessary steps. These

measures worked in his interest but also those of the local community in general as prior requisites for urbanisation and industrialisation. But for these measures, including improvements to local systems of communication initiated by the estate, the changes would have been more protracted. However, despite the pre-eminent position of the estate in the local economy and the great wealth derived from the area, the Dudley estate was not generally involved in policies intended to ameliorate social problems created by the relatively rapid industrialisation and urbanisation of the area. These problems were, in part, tackled during the period 1835-1885 by the activities of the estate in providing land and money for churches and schools, and the lead given by William, Lord Ward to bring about improvements in living conditions. Economically, the estate served as a buttress in times of depression - particularly in the extent to which it afforded credit to local ironmasters and mine tenants who would otherwise have gone into liquidation, creating further economic and social hardship. In an area which depended for its livelihood on such basic and complementary industries as coal and wrought iron, it was in the common interest that the Dudley estate derived its income from a broader basis and was prepared to cushion the effects of temporary economic depressions. Laissez faire for the employees of the Dudley estate meant regular employment, relatively high wages, safe working conditions, and no truck system: these factors served to influence other local coal and ironmasters to the good after the 1840s. Just as the emergence of the Black Country, as a centre of large-scale mineral and wrought iron production during the 1780s, was encouraged and facilitated by the activities of the Dudley estate, so its decline 100 years later was retarded and cushioned by the estate.

If it is true to suggest that the history of the estate reflects the changing fortunes and activities of the aristocratic landed interest in general over the last 200 years, it is equally true to assert that the history of the Black Country is, in many respects, the history of the Dudley estate.

Appendix 1. The Ward Family and the Leading Mineral Agents,
1740-1947

- 1740-1774 John, Sixth Baron Ward
Created Viscount Dudley and Ward, 1763.
Succeeded by his son
- 1774-1788 John, Second Viscount Dudley and Ward.
Seventh Baron Ward. Succeeded by his half brother
- 1788-1823 William, Third Viscount Dudley and Ward.
Eighth Baron Ward. Succeeded by his son
- 1823-1833 John William, Fourth Viscount Dudley and Ward
Ninth Baron Ward. Created Earl of Dudley, 1827.
Died unmarried, succeeded in the Ward Barony by
his second cousin. The earldom became extinct.
- 1833-1835 William Humble, Tenth Baron Ward.
Succeeded by his son
- 1835-1885 William, Eleventh Baron Ward. Created Earl of
Dudley, 1860.
Succeeded by his son
- 1885-1932 William Humble, Second Earl of Dudley.
Succeeded by his son
- 1932-1969 William Humble Eric, Third Earl.
- 1969 William Humble David, Fourth Earl.

Mineral Agents

- | | | | |
|--------------|--------------------------|-----------|--------------|
| c. 1788-1797 | Edward Cockshutt | 1923-1933 | W. F. Clark |
| 1797-1798 | Charles Beaumont | 1933-1947 | F. B. Clark. |
| 1798-1826 | Charles Roberts | --- | oOo --- |
| 1826-1836 | Francis Downing | | |
| 1836-1864 | Richard Smith | | |
| 1864-1870 | Frederick Smith | | |
| 1870-1886 | Edward Fisher Smith | | |
| 1886-1891 | C. Tylden Wright | | |
| 1891-1912 | Sir Gilbert H. Claughton | | |
| 1912-1923 | Claude Tryon | | |

Appendix 2. Charles Norton's Calculations and Proposals

Delivered 28th July, 1797

1. All useful materials for conducting his lordship's mines and all the Boats now employed be taken at a fair Valuation and revalued at the end of the Contract.
2. Present state of the Works to be valued and be revalued at expiration of the Contract and the difference of each work to be made good by either party.
3. Contractors not to be accountable for Rent or damage of Lands.
4. Liberty to make Bricks for use of Works without paying any Royalty.
5. Contractors to enjoy conveniences of roads etc. as his Lordship now receives.
6. All necessary offices to be found by Lord Dudley.
7. All new pits now sinking are to be completed by his Lordship with Water Engine, two working pits and Whimsies.
8. Where Engines are now planted in the wrong situation, his Lordship to remove it to such a place as may be thought most proper.
9. All Whimsies, Weighing Machines, Rail Roads and other Improvements which are intended to be done had his Lordship kept the Works in his own Hands, to be completed.
10. All Contracts and sales to be open to Lord Dudley and the Principal Agent.
11. Lord Dudley to deliver up the present Coal Pitts to the Contractors free from any Incumbrances of Workmen and Servants.
12. The average price of Coals sold from his Lordships Mines is 5/6 per Ton. We shall be enabled to give him a per centage of 5/- in every Pound's worth of Coals sold (exclusive of 5 per cent for Floating Capital) upon all large Coals, Lumps and small Coals at 1/10 per Ton.
80,000 at 5/6 per Ton £22,000: 5/- per pound: To Lord Dudley £5,500."

D.P.L. 6/K.

Appendix 2 (continued)

Charles Norton, a coal and limestone contractor, made this proposition to Lord Dudley. Charles Beaumont, the principal mine agent, declined it and drew up a standard contract which was far more favourable to Lord Dudley's interests.

Appendix 3. Articles of Agreement Between Lord Dudley and Benjamin Cartwright and Co., Butty Colliers, September, 1797.

"Articles of Agreement entered into the 8th Day of September, 1797 Between Benjamin Cartwright and Co. Colliers of the County of Stafford of the one part and Charles Beaumont in the County of Stafford on the other part for and in Behalf of the Right Honourable Viscount Dudley and Ward as follows viz. First the said Benjamin Cartwright and Co. for the Consideration hereby after expressed doth for themselves covenant Promise and agree to and with the said Charles Beaumont in behalf of the said Viscount that they the said Benjamin Cartwright and Co. or some of them shall work or cause to be worked at his or their pit at Brierley Hill belonging to the said Viscount under and subject to the control and direction of the said Viscount or his Agents or Bailiffs at time being, and shall and will conform to and pursue his and their directions without Opposition or Delay, and to work the Coal in the said pit and to be at every expence attending the same that to find and provide every material and Article whatsoever necessary for the same, viz. Horses, Skips, trucks(?), Iron Work and Blacksmiths, Bricks, Lime, Sand, Carpenters Work, Candles, keeping shafts in repair which are to be left in good Condition, Heading, Guttering, Downing, Gin, Raise, Lading or Pumping Water, and every other expence whatsoever attending the same and necessary for Working, and raising the said Coals and Slack and loading into the Waggon except Gins, Gin Ropes and Timber which are to be found by the said Viscount and to raise and deliver upon the Surface not less than two hundred Tons every Fortnight and as much more as the said Benjamin Cartwright and Co. shall think proper in a Workmanlike manner, as shall be directed for which they shall be paid every two Weeks or fortnight two Shillings and Elevenpence Halfpence per Ton

Appendix 3 (continued)

for the best Coals, which if sold above six Shillings and if falls under puts to fall in proportion the Charter, to raise in Proportion the Second best two shillings per Ton, and if this Coal runs above five shillings and 6d per Ton, the Charter to raise in Proportion, and if it falls under four Shillings and twopence per Ton the Charter to fall in proportion for the Inferior and Lumps to be paid one Shilling and sixpence per Ton, and Slack sixpence Paid on the Bank per Ton.

The said Benjamin Cartwright and Co. are to allow as many Hundred Weight, long Weight to the Ton, as his Lordship tells and allows to the Buyer.

If Whimseys are erected by the said Viscount to draw the Coals out of the said Pit, then four pence per Ton, to be taken off the different Charter Coals and Slack, which is all to be drawn to the Surface, which is not wanted below in the Pit, and furthermore his Lordship to find Clay, for to make bricks for the use of the said Pit, but not to be applied to any other Purpose or Use, for the Coals that may be Stacked upon the Bank or Wharf occasioned by the Canals being frozen, repairing want of Water etc. Money to be advanced for such Part of them as it is judged they will turn out in Weight by the said Viscount to the said Benjamin Cartwright each Party to bear the loss, which may be occasioned by stacking. The Term of this Contract to Continue so long as any Coals can be got out of the said Pit, unless the said Benjamin Cartwright and Co. shall not at all times and in a proper and Workmanlike manner as directed, carry on and execute the Work hereby undertaken, and which case it shall and may be lawful to and for the said Viscount or his Agent or Bailiffs into the Premises to enter take Possession of and turn out the said

Appendix 3 (continued)

Benjamin Cartwright and Co. and their Servants and Workman, and the same to have again in as large a Manner, to all intents and Purposes, as if these Presents had never been made and executed."

This is of particular interest, not only because of the comprehensive details it contains, but also because it is a printed form of agreement indicating that a standard contract was introduced at this time for contractors undertaking to work Lord Dudley's pits. In spite of Beaumont's dismissal in 1798, many features of this agreement were revived during the reorganisation of the Trust period.

P.R.O. C110/170.

Appendix 4. Lease of Mines and Minerals to Messrs. Philpotts
and Plant, 31st December, 1839

A summary of the main points.

1. Certain minerals reserved to lessor with right of entry to work them.
2. Lease of thick coal, heathen coal and the ironstone measures lying in and under them.
3. Lessees have right to get clay and make bricks - but not for sale.
4. Term of lease: 21 years from 31st December, 1839.
5. Surface rent: £5 per acre per annum.
6. Size and weight of different types of coal defined:
e.g. weight of lumps not to exceed 4 lbs each
" " " slack " " " 2 lbs "
7. A ton to be calculated at 2,520 lbs for "water sales" and 2,280 for "land sales".
8. Royalties were all based on the selling price of coal and ironstone:
e.g. thick coal: 2/6 per ton when S.P. did not exceed 7/6 a ton
 2/6 plus 1/3 when S.P. above 7/6
furnace coal: (small thick coal)
 1/9 per ton when S.P. did not exceed 6/-
 1/9 plus 1/3 of excess when S.P. above 6/-
 2/6 plus 1/3 when S.P. above 7/6
heathen coal: 1/2 per ton on lumps or slack
ironstone: (Gubbins and Grains - best)
 2/4 per ton
 2/- on Craddock ironstone.
9. Penal royalties for not observing royalties as set out:
e.g. (a) if lessees sell best coal as common or furnace coal: 1/6 per ton additional penal royalty.
(b) for selling slack of greater weight than the standard: 6d. per ton additional penal royalty.
(c) for not taking an account for the purpose of having royalty charged, lessees to pay in addition - 2/- per ton on coal or ironstone
 1/- on lumps
 3d. on slack.

Appendix 4 (continued)

10. Minimum royalties: lessees must pay royalty of at least £350 per quarter (excluding penal royalties) whether thick coal to that amount had been sold: a minimum of £150 per quarter for heathen coal.
11. Lessees' covenants: numerous clauses designed to secure maximum output, profit and efficiency:
e.g. (a) present quarterly accounts
(b) pay all taxes
(c) to work the mines to secure maximum output
(d) pay compensation for damage to surface tenants
(e) raise all slack from the mines (this would encourage careful working of the thick coal so as to reduce the quantity of slack created)
(f) lessor's agents to have free access to mines, equipment and accounts with notice being given and to weigh or gauge minerals
(g) lessor may use lessees equipment to work the reserved mines without charge
(h) at end of the term, lessees to leave all machinery and equipment and receive compensation (this would allow Lord Dudley to work the pit without additional capital cost - it was customary for the lessee to remove such equipment as he chose)
(i) to deliver to lessor free of charge 120 tons of thick coal a year for domestic purposes and 60 tons of heathen coal
(j) six months notice of termination required.
12. Lessor could stop the works within 14 days of non-payment of royalties and repossess after 30 days.

D.P.L. 9/K.

This lease is typical of the form of contract introduced by Richard Smith for all minerals let on royalty after 1836. It remained substantially unchanged until the decline in mineral activity. See Chart 22.

Appendix 5. Production of Pig Iron and the Total of Blast Furnaces in the Black Country, 1740-1939

	<u>Total</u>	<u>In Blast</u>	<u>Pig Iron Produced</u>	<u>Puddling Furnaces in Operation</u>
1740	2	-	2,000 tons (1717)	
1788	6	-	4,500	
1796	14	-	13,210	
1806	42	-	49,000	
1823	84	-		
1827	95	-	216,000	
1830	123	-	213,000	
1840	135	116	364,000	(1839)
1844	135	100	468,000	
1852	159	127	743,000	(1854)
1860	181	108	396,000	(1861)
1865	-	-	693,000	2,155
1867	-	-	516,000	
1870	171	114	726,000	(1871)
1880	137	46	326,000	(1879)
1886	107	28	293,000	(1887)
1894	c. 58	20	250,000	683
1905	c. 40	-	190,000	
1913	30	20	467,000	661
1922	29	4	-	
1939	-	13	300,000	
1952	5	5	-	

The rise and decline of the Black Country primary iron and mineral trades are closely linked throughout the period. After the erection of the Bradley Furnace by John Wilkinson in 1766, Black Country furnaces used mineral fuel in the smelting of pig iron.

Mineral Output of the Black Country, 1865-1950

	<u>Coal</u>	<u>Ironstone</u>
1800	840,000 tons	60,000 tons
1850	5,000,000	-
1855	7,323,000	-
1859	4,450,000	785,000 (1860)
1865	9,000,000 tons	660,000
1872	9,000,000	642,000
1887	6,000,000	110,000

Appendix 5 (continued)

	<u>Coal</u>	<u>Ironstone</u>
1900	4,500,000 tons	51,000 tons
1913	3,000,000	32,000
1950	900,000	Nil

Appendix 6. The Dudley Estate: Net Income from Minerals and the Quantities of Minerals Sold, 1704-1942

	<u>Pits Worked by the Estate</u>		<u>Royalties</u>			<u>Total</u>	
	£	s. d.	£	s. d.	£	s. d.	
1704		-		-	1,941		
1804		-		-	17,684		
1834	28,123	7 11	4,765	1 8	32,888	9 7	
1836	11,381	18 11	13,623	9 5	25,005	8 4	
1847	67,044	15 8	74,955	4 4	142,000	0 0	
1854	98,554	3 5	70,542	12 3	169,096	15 8	
1859		-		-	110,734	4 3	
1871	141,680	14 1	26,146	3 2	167,826	17 3	
1872	394,750		22,507		417,257		
1890	52,141			-		-	
1896	37,087			-		-	
1899	49,461			-		-	
1908	36,696			-		-	
1923	5,604		13,704		19,308		
1930	None worked		20,861		20,861		
1936	" "		19,057		19,057		
1942	" "		8,602		8,602		

Quantity of Minerals Sold - Excluding Leased Pits

	<u>Coal</u>	<u>Slack</u>	<u>Ironstone</u>	<u>Fire Clay</u>	<u>Limestone</u>
	<u>Tons</u>	<u>Tons</u>	<u>Tons</u>	<u>Tons</u>	<u>Tons</u>
1800	-	-	-	-	85,000
1834	-	-	-	-	77,625
1837	-	-	-	-	104,004
					(to ironworks only)
1845	1,400,000	(inc. slack and ironstone)			92,164
1847	-	-	-	-	187,613
1871	1,189,980	(inc. slack)	101,832	14,868	102,201
1877	268,306	390,310	50,958	10,679	-
1880	289,098	453,962	64,765	6,929	80,000
					(1882)
1890	624,828	(inc. slack)	15,005	19,237	65,126
1893	916,974	" "	13,710	17,301	62,784
1899	705,000	" "	17,028	12,073	60,395
1905	525,182	" "	8,661	13,790	37,661

Appendix 6 (continued)

	<u>Coal</u>	<u>Slack</u>	<u>Ironstone</u>	<u>Fire Clay</u>	<u>Limestone</u>
1908	423,395	(inc. slack)	6,094	17,708	37,048
1911	345,488	" "	-	-	-
1923	158,000	" "	-	-	-

After 1923, mineral production and profits came only from leased pits.

Appendix 7. Collieries Owned and Worked by the Dudley Estate,
1701-1924

	<u>Collieries</u>	<u>Total No. of Pits</u>	<u>Pits at Work</u>	<u>Employees</u>
1701	3			
1797	6			c. 200
1837	9			
1847	21			
1867	10	243	109	
1870				4,326
1882	9	370	79	4,000
1890	5		30	1,218
1920	4			
1923	1		2	
1924	0			Nil

This excludes leased pits.

In 1873, before extensive sale of mineral-bearing land began, the Earl owned 11,216 acres of land in the Black Country/^{of} which 8,007 contained minerals. However, various enclosure acts had granted him the right to minerals under a wider area. In 1920, the Earl's mineral agent claimed to be responsible for 11,980 acres of minerals - the increase may be explained by the discovery of minerals at a workable depth in the Baggeridge area, 1896-1911. After 1924, the estate did not work any pits. Most of the remaining minerals were leased to the Baggeridge Colliery Company and there were, in addition, about twelve small mineral properties leased to other contractors.

Appendix 8. Steam Engines and Stock Owned by the Mines
Department of the Dudley Estate, 1712-1900

Stock Account

	<u>Dead</u>			<u>Convertible</u>			<u>Total</u>		
1833	56,000								
1837	66,956	9	8						
1847	177,344	14	0	42,646	0	11	219,990	14	11
1854	245,399	1	5						
1871	586,173	1	9	119,604	13	6	705,777	15	3
1887	658,971	15	8	74,484	12	8	733,466	7	4

This list includes stock invested in ironworks and mines owned and worked by the estate: valuations represent current estimates after taking account of depreciation.

Steam Engines Erected at Mines and Ironworks Owned and Worked by the Dudley Estate

	<u>Mines</u>	<u>Blast</u>	<u>Forge</u>	<u>Total</u>
1712	1	-	-	1
1731	3	-	-	3
1740	4	-	-	4
1797	4	2	1	7
1802	16	3	1	20
1839	38	6	4	48
1844	- (including leased ironworks)	19	1	20
1867	92 (excluding engines at the ironworks)	-	1	93
1882	84	2	1	87

Between 1797 and 1822, Lord Dudley's Store Yard was developed at Round Oak to maintain and construct steam engines erected at his works. Richard Smith later constructed the Castle Mill Engineering Works at Tipton to fulfil this purpose - it was here that Lord Dudley's locomotives were also constructed and maintained.

Appendix 9. Rents Due to the Dudley Estate, 1768-1942

Estates in the Black Country

	<u>Cottage Rents</u>			<u>Great Rents</u>			<u>Total</u>		
	£	s.	d.	£	s.	d.	£	s.	d.
1701	26	0	0	2,084	19	11	2,110	19	11
1768	240	14	1	-	-	-	-	-	-
1779	-	-	-	-	-	-	5,491	11	10
1783	-	-	-	-	-	-	6,238	17	8½
1797	-	-	-	6,164	2	8	-	-	-
1803	-	-	-	-	-	-	8,096	6	11½
1810	540	10	2	-	-	-	-	-	-
1811	-	-	-	9,478	2	3	-	-	-
1814	-	-	-	-	-	-	17,452	11	2
1817	572	18	11	13,520	1	8	14,093	0	7
1824	-	-	-	14,798	5	9	-	-	-
1833	-	-	-	17,896	15	11	-	-	-
1836	797	9	3	19,616	9	6	20,413	18	9
1838	1,039	18	10	-	-	-	-	-	-
1850	1,227	11	11	18,487	12	4	19,686	17	1
1924	2,339	6	6	21,177	0	1	23,516	6	7
1935	1,075	10	1	26,992	7	1	28,067	18	0
1942	-	-	-	-	-	-	27,820	7	11

The area of these estates was:

1824 - 6,646 acres	1873 - 11,216 acres
1883 - 11,216 "	1924 - 10,600 "
1944 - 5,815 "	1962 - 400 "

Other Estates

	<u>Jamaica</u>		<u>Merioneth</u>		<u>Worcestershire</u>		<u>Scotland</u>	
	£	s.d.	£	s.d.	£	s.d.	£	s.d.
1833	4,415	7 0	933	4 0	-	-	3,396	3 0
			(Crogen)				(Ednam)	
1836	4,376	19 6	940	1 0	-	-	6,601	3 3
							(all)	
1837	-	-	-	-	6,637	4 0	-	-
					(Huroot)			
1838	-	-	2,240	1 10	21,680	0 0	-	-
			(Hendwr Crogen)		(Plus Witley)			
1845	-	-	2,032	19 0	-	-	-	-
1852	-	-	-	-	30,906	8 4	-	-

A policy of selling existing cottage plots was begun on the

Appendix 9 (continued)

Black Country estate in 1848. Estates in Scotland, Wales, and Worcestershire were sold in the period 1889-1920. The Black Country estate was largely sold between 1926 and 1947.

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