

BLUNDELL'S COLLIERIES, THE PROGRESS OF THE BUSINESS

BY D. ANDERSON, F.G.S., M.I.MIN.E., A.R.I.C.S.

DURING the first quarter of the twentieth century, Pemberton Colliery was the largest colliery in Lancashire. It was one of the 22 biggest out of the 2,670 collieries which Britain boasted in 1925. The only Lancashire collieries which approached it in size were Abram, owned by the Abram Coal Company, Mosley Common, owned by the Bridgewater Colliery Company, and Bickershaw, owned by Ackers, Whitley and Company. Mosley Common and Bickershaw are now very large units of the National Coal Board.

In 1925 Pemberton Colliery still belonged to the great-great-grandchildren of Jonathan Blundell, merchant and freeman of Liverpool, the founder of the colliery concern. Jonathan was the fourth son of Alderman Bryan Blundell, merchant and master mariner, one of the founders and chief benefactor of the Blue Coat Hospital in Liverpool, and said to be the greatest "Shallop Racer" from the Mersey to the West Indies. There are many entries in the Liverpool Plantation Registers of ships owned by Bryan and his family. According to J. A. Picton, the Liverpool historian, he was a Protestant descendant of the Roman Catholic Blundells of Ince Blundell. Jonathan and his brothers owned or were part-owners of several privateers during the eighteenth century, and old ledgers kept in the head office of the collieries at 7 Rumford Street, Liverpool, until the 1920s gave details of transactions in gold dust, ivory and slaves as well as coal. In a list of Liverpool Guinea Men for June 1752 the *Sammy and Biddy*, owned by Jonathan Blundell and Company and commanded by Robert Grayson, is described as bound for the Windward Coast with 120 slaves.

The first step taken by Jonathan towards a stake in the rich Wigan coalfield is recorded in a Winstanley estate deed:

"On or about 1774 William Earle the elder, Samuel Warren and Jonathan Blundell, together with Edward Chaffers of Liverpool agreed to become partners under the firm of Samuel Warren and Company in the buying of coal and cannel from the several mines near the River Douglas and carrying the same in flats, barges and other boats or vessels by means of that navigation and the Leeds and Liverpool canal for sale and disposal thereof at Liverpool. . . . About the month of April that year [they] entered into contract with Thomas Doncaster, James Hodson and Holt Leigh for all the cannel to be gotten during the term of

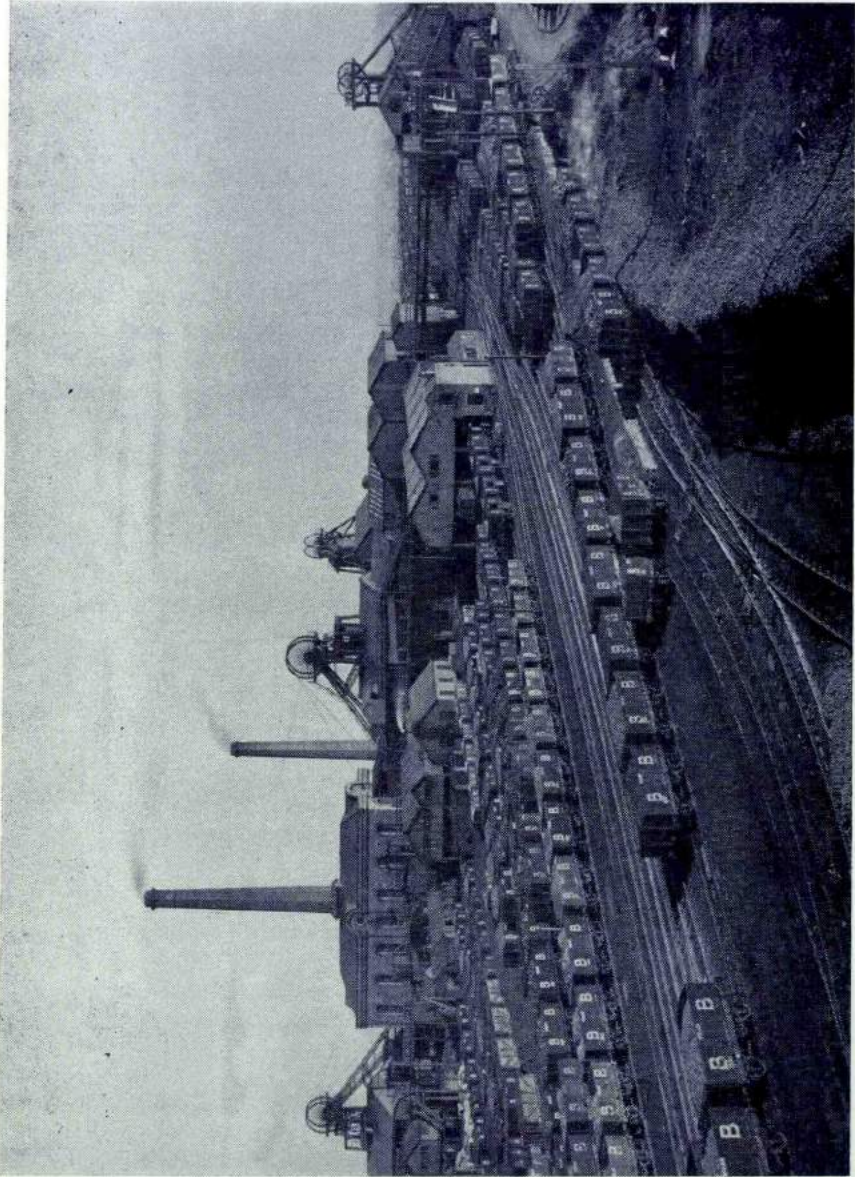


Plate 1. PEMBERTON COLLIERY, 1931

These were the first large iron lattice headframes in Lancashire. The shaft on the extreme right-hand side is the Bye Pit, which was sunk in 1815

7 years from September 1st. next in the estate of Kirkleys [Kirkless] in Aspull Ince and Wigan not exceeding 7,000 tons in the year at the rate or price of 5d. per basket."⁽¹⁾

Most of the baskets in use at that time in the district would seem to have had a capacity of $1\frac{1}{2}$ cwts. Thus 5d. per basket would give a price per ton of 5s. 6d. In November 1792 we are told "coals are sold [in Orrell] at 4d. per basket each $1\frac{1}{2}$ cwts.". This is equal to 4s. 5d. per ton. Buying coal from pits under other ownership was clearly much less profitable than producing and selling their own, and not long afterwards Jonathan and his friends became colliery owners. Michael Jackson, owner of Orrell House Farm and Colliery, leased the colliery to them in 1776, and when he went bankrupt in 1780 Jonathan bought him out.⁽²⁾ The colliery continued under the style of Warren and Company until 1783; then the firm became known as Blundell and Company and we hear no more of Warren, Earle and Chaffers. At that time it was the largest colliery in Orrell employing 13 colliers (hewers) in 1781, 16 in 1783 and 18 in 1784. The estate remained the property of the Blundell family until 1952, when it was sold after the death of Major Cuthbert L. B. H. Blundell.

In 1774 Jonathan and his partners purchased two closes of land at the north end of Old Hall Street, Liverpool, near the canal. Shortly afterwards Jonathan built a large house there, on the ground floor of which he opened his first coal office. Previously he had lived at Lark Hill, West Derby, a mansion he had built in 1769. He sold this to Heywoods the bankers, who were close friends of his family.

The coal mines apparently prospered, because the number of employees increased year by year. In 1789, according to the land tax returns, they were employing 24 miners, a number only exceeded in Orrell by Messrs. German and Company. By this time Jonathan's son, Henry, was helping to run the colliery business, and in 1791 he and his father took out their first lease of coal from Sir Robert Holt Leigh of Hindley Hall, who had a large estate in Orrell, and, after the death of James Hodson, took over the working of the Ince Cannel Works. The new lease from Sir Robert was for the Orrell four feet seam, under Edge Hall estate near the present-day Orrell Station and under Catterall's farm at Kitt Green. The next extension of Blundell's mining interests was the lease taken

⁽¹⁾ Communicated by Mrs. J. H. M. Bankes, who has been most helpful in the preparation of this paper.

⁽²⁾ The date stone is still in the garden of Orrell House Farm: John and Cicely Jackson 1737.

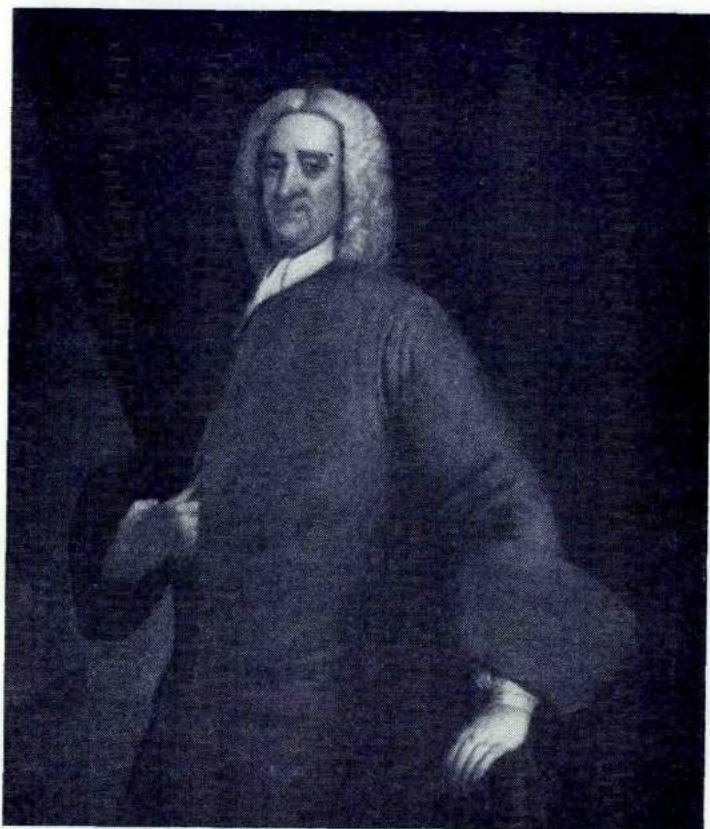


Plate 2.

BRYAN BLUNDELL

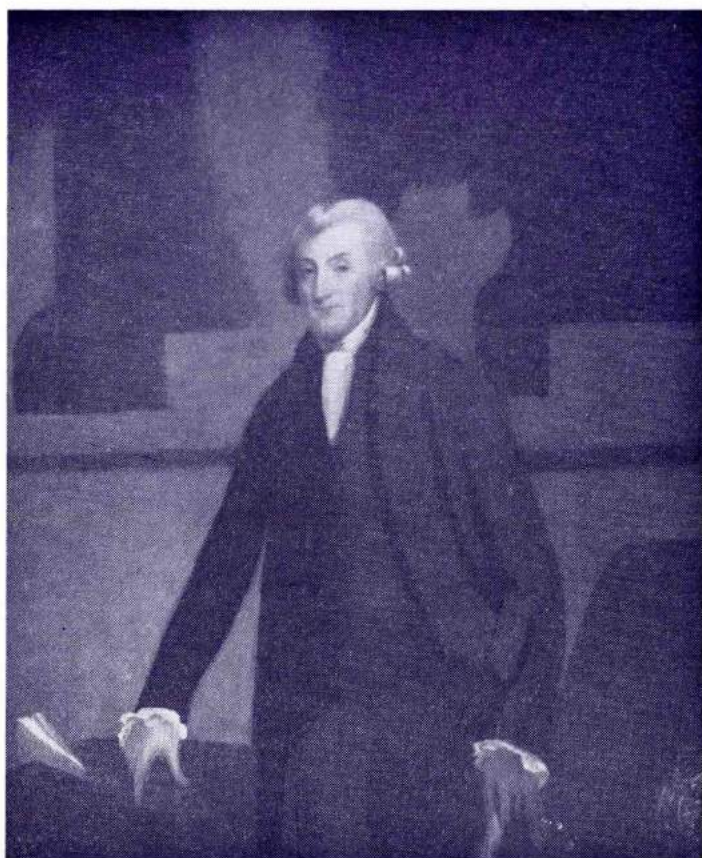


Plate 3.

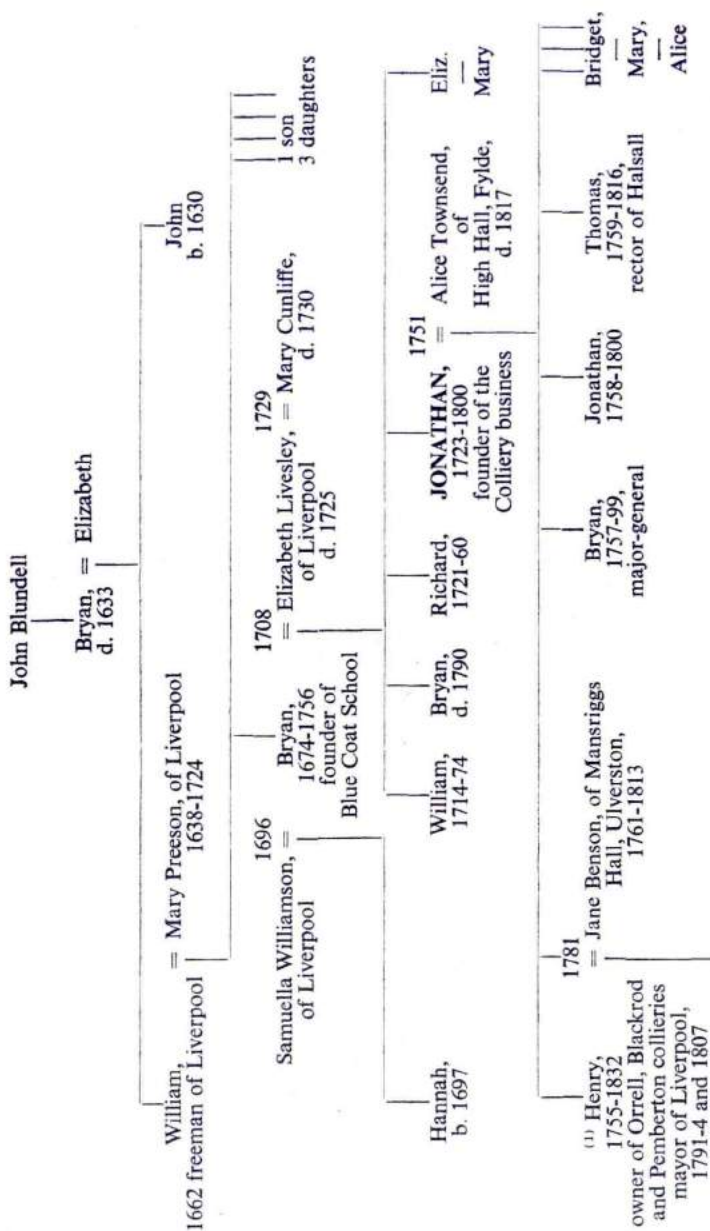
JONATHAN BLUNDELL

out by Henry Blundell and two partners, John Menzies of Liverpool, "Gentleman", and John Harvey of Orrell, "coal master", for 60 Cheshire acres of Orrell four feet coal under land belonging to the Rev. Thomas Holme and extending from Abbey Lakes on the east side of Dean Wood, to Orrell House Farm boundary. The colliery which the company subsequently worked here was known as the Chain Colliery, and it was from the Chain and Edge Hall, or Slycroft, Collieries that Blundell raised a company of pioneers to serve with the Liverpool Volunteers, in which he was a lieutenant-colonel, during the Napoleonic invasion scare.

The accounts for the Orrell Fire Engine Colliery on Sir Robert's estate, near the present Old Engine public house and adjoining Blundell's Chain Colliery, have been preserved and give us a good idea of the outputs produced at local collieries in the second half of the eighteenth century. In 1772 there were three pits and the output for the week ending 11 April that year was as follows: Higham's pit, 33 score 1 basket; Berry's pit, 32 score 12 baskets, and Park pit, 12 score 20 baskets; in all 78 score 7 baskets at 150 lb. per basket and 26 baskets to the score. This amounts to 137 tons for the week, and an annual output of about 7,000 tons. This was produced by twelve colliers. Assuming an eleven-day fortnight, these figures give an output per man shift on the face of two tons. There were also three winders, three browmen, one smith, one engine man and the auditor or manager. The overall output per man shift, therefore, would seem to have been about 24·0 cwt. From the fact that there was only one engine man, the pumping engine could only have worked one shift per day, which of course could have lasted from 10 to 12 hours. This pumping engine, probably a Newcomen engine, used 2 tons 5 cwt. of coal during the week, and 9 baskets were used to keep the brow fire burning at Park Pit, which was 42 yards deep. Concessionary coal was supplied to all workmen at two baskets per week.

A cash ledger of the last decade of the eighteenth century has recently been found among the Blundell family papers. It covers the activities of the Orrell Collieries and the Ince Cannel Works, and gives us a number of miscellaneous but interesting facts. Blundell sent practically all his Orrell coal to Liverpool either along the canal or the Douglas Navigation. His Liverpool sales increased from £9,737 in 1788 to £27,308 in 1800. He also sent cannel from Ince to Liverpool—his price varied from 8s. 4d. per ton in 1792 to 10s. 6d. per ton in 1799—and much smaller quantities of "sleck" and "coal charcoal". The wages and stores bill at Orrell Collieries rose rapidly from £2,077 in

THE FAMILY OF JONATHAN BLUNDELL



(1) By royal licence dated 9 September 1802, Henry assumed the surname Blundell Hollinshead for himself and his issue.

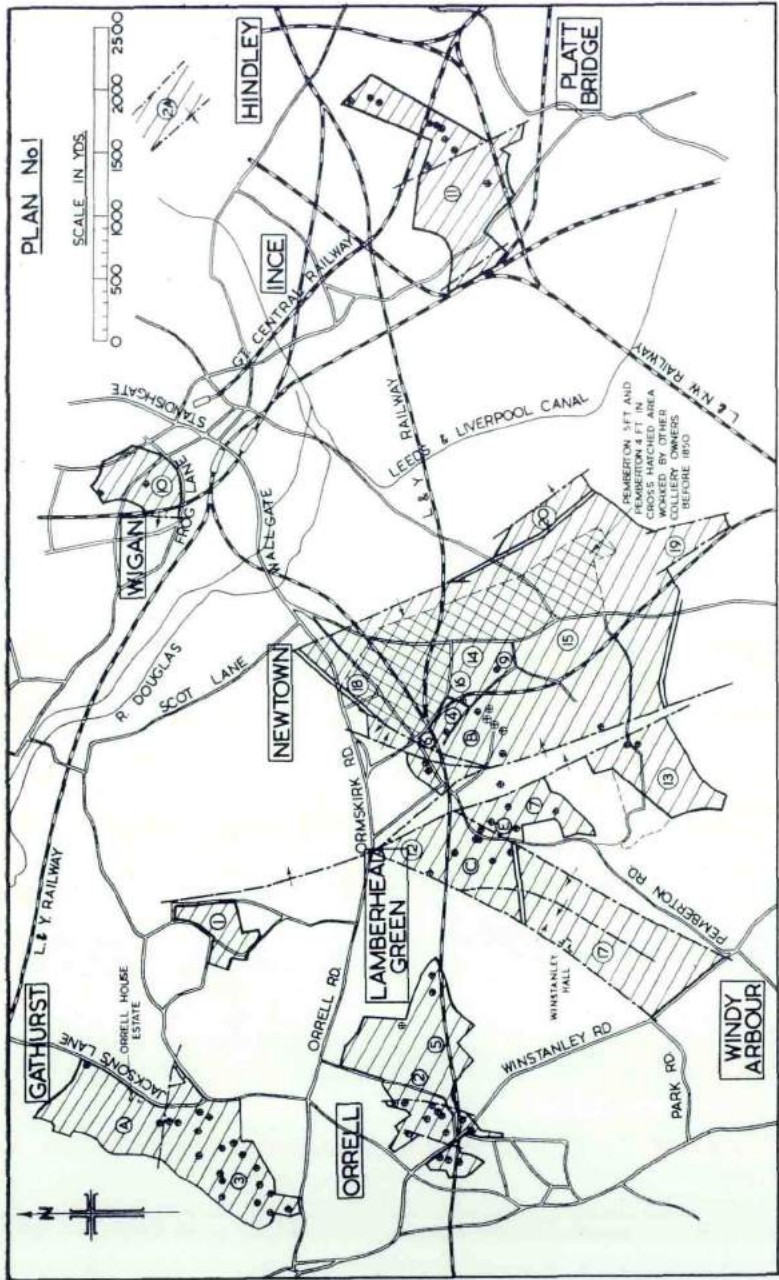


Figure 3.
COLLIERIES IN THE WIGAN AREA WORKED BY J. BLUNDELL AND SON

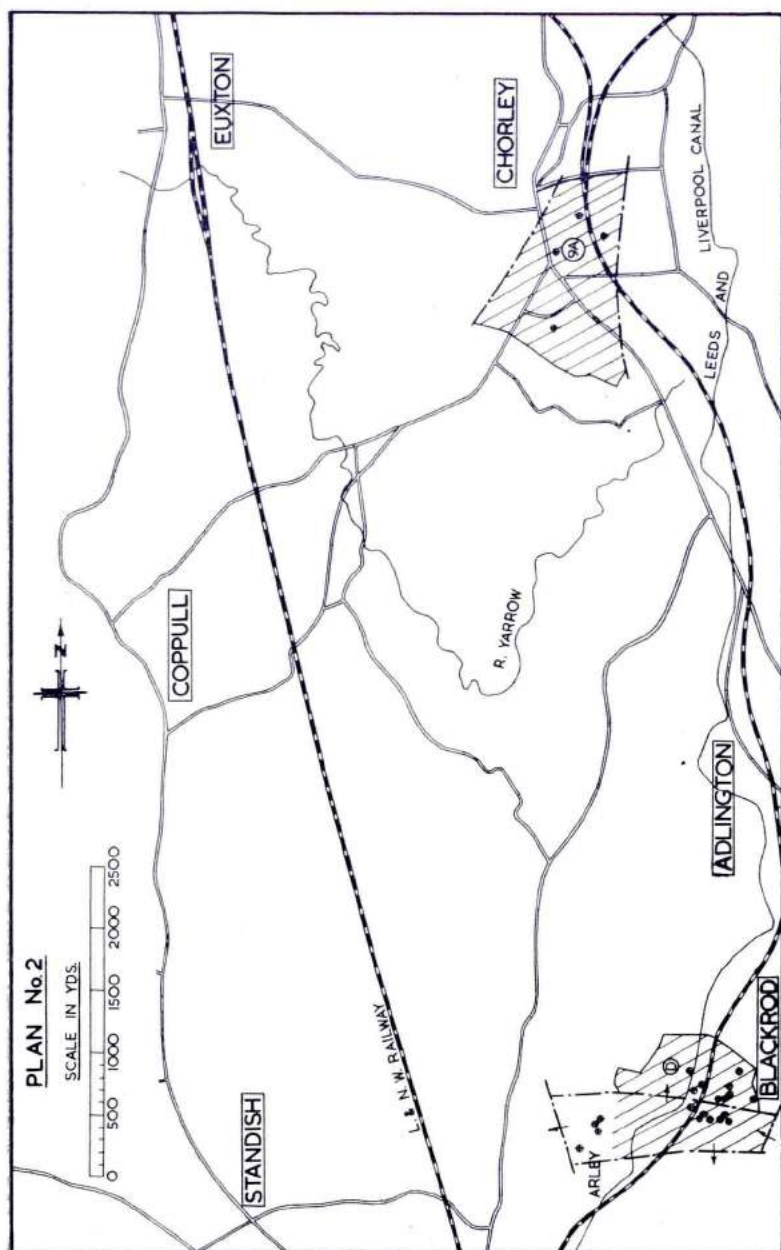


Figure 4.
COLLIERIES IN THE CHORLEY AREA WORKED BY J. BLUNDELL AND SON

1788 to £7,806 three years later. At Ince Cannel Works it varied between £1,229 in 1791 and £2,197 in 1800. When John Harvey, the manager at Ince, also took over the management of Orrell Collieries in 1796, he received a salary of £100 per annum. His sales agents in Wigan, John Martlew and Ralph Ackers, earned £50 each. These were considered to be reasonable wages, but Blundell's profits for the thirteen years from January 1788 to December 1800 totalled £12,687.

Jonathan Blundell, who had been in failing health for some time, left Liverpool in 1796 to take up residence at Blackleyhurst Hall, Billinge. He had followed his father and brother as treasurer and trustee of the Blue Coat Hospital at Liverpool, but when he went to Blackleyhurst he resigned the treasurer-ship. He died on 11 December 1800 and left £200 to the hospital, £100 to the "lunatic asylum", and £100 to "the Sunday School in Leather Lane, Liverpool". To each of his three daughters he left £5,000, and bequeathed the same sum to John Blackburne, the widower of his daughter Mary. To his son Thomas who had graduated at Brazenose College and was a clerk in holy orders, he left the advowson of Halsall church. To Henry he willed the rest of his estate with all the freehold and leasehold property.

Very soon after his father's death, Henry Blundell's colliery empire expanded again. John Hollinshead of Hollinshead Hall, Tockholes, died in 1802, and left his estate and colliery at Blackrod to Henry on condition that he assumed the name and arms of Hollinshead. He also bequeathed him £1,000 and his shares in the Grand Trunk Canal. To Alice Blundell, Jonathan's widow, he left £200. About this time Henry began to take an interest in Pemberton: he paid land tax on property there in 1800. He gradually bought more land, mostly in the Highfield district of Pemberton, and carried out a boring programme in the search for coal there. A record of "the sixth hole bored in the Great Long Hey in May 1814 in Mr. Hollinshead's estate in Pemberton" is preserved in Wigan Public Library. The sinking of the Pemberton Engine Pit and Bye Pit began about the year 1815. These formed the nucleus of the great establishment which was to develop on the same site and were in use until recent times. They were sunk to work the high grade Pemberton five feet and four feet seams. Very shortly afterwards, the Brickcroft Pits were put down to a fairly shallow area of Ince seven feet coal north of present-day Pemberton railway station.

Considerable amounts of water impeded the sinking of the Engine and Bye Pits through the 200 feet of sandstone known



Plate 4.

HENRY BLUNDELL HOLLINSHEAD

as the Pemberton Rock. Two large Cornish beam engines were installed, one a few years after the other, to work "lift" pumps in the shaft. The first of these was scrapped in 1873, but the second one survived until 1932. An inscription on the 30-foot long beam of the latter stated that it was made at Haigh Foundry in 1820. It generated about 160 horse-power, and, together with the foundations and all the pit shaft work, must have cost an enormous sum of money. According to a Haigh Foundry price list of 1819, now in the Crawford collection in the John Rylands Library, a 50 h.p. engine cost £1,870. Between 1815 and 1827 eleven shafts were sunk at Pemberton.

Up to 1827 all coal from the Pemberton collieries had been landsale, or had been carted to the nearest point on the canal at Seven Stars, Wigan. However, for 1827, a time book, preserved in Wigan Library, records a number of payments for the drilling of stone sleepers, and Blundell Hollinshead, as he was now known, began in that year to construct a railway from No. 6, or Wood, Pit, running past Bye Pit and Chain, or No. 7, Pit, to the Leeds and Liverpool canal at Seven Stars Bridge. It was later extended to the Farrymans and Venture Pits. The gauge of this railway was, from the evidence available, four feet, and the long straight length down what is now Victoria Street, Newtown, is shown on the 1846 O.S. map as an inclined plane. At the canal end of this railway a boat-yard was opened for the construction and repair of boats, because Blundells had their own canal boats.

Blackrod Colliery, fortunately situated on the banks of the Leeds and Liverpool canal north of Arley Hall, had no transport problem, and in Orrell, Blundell and Company had constructed a wagon road from Orrell House Colliery to the canal at Gathurst as early as 1776. Nothing is known of wagon roads to Blundell's other collieries in Orrell, but Clarkes and Hustlers railways ran close to these collieries, and it is possible that Blundell acquired running rights over them.

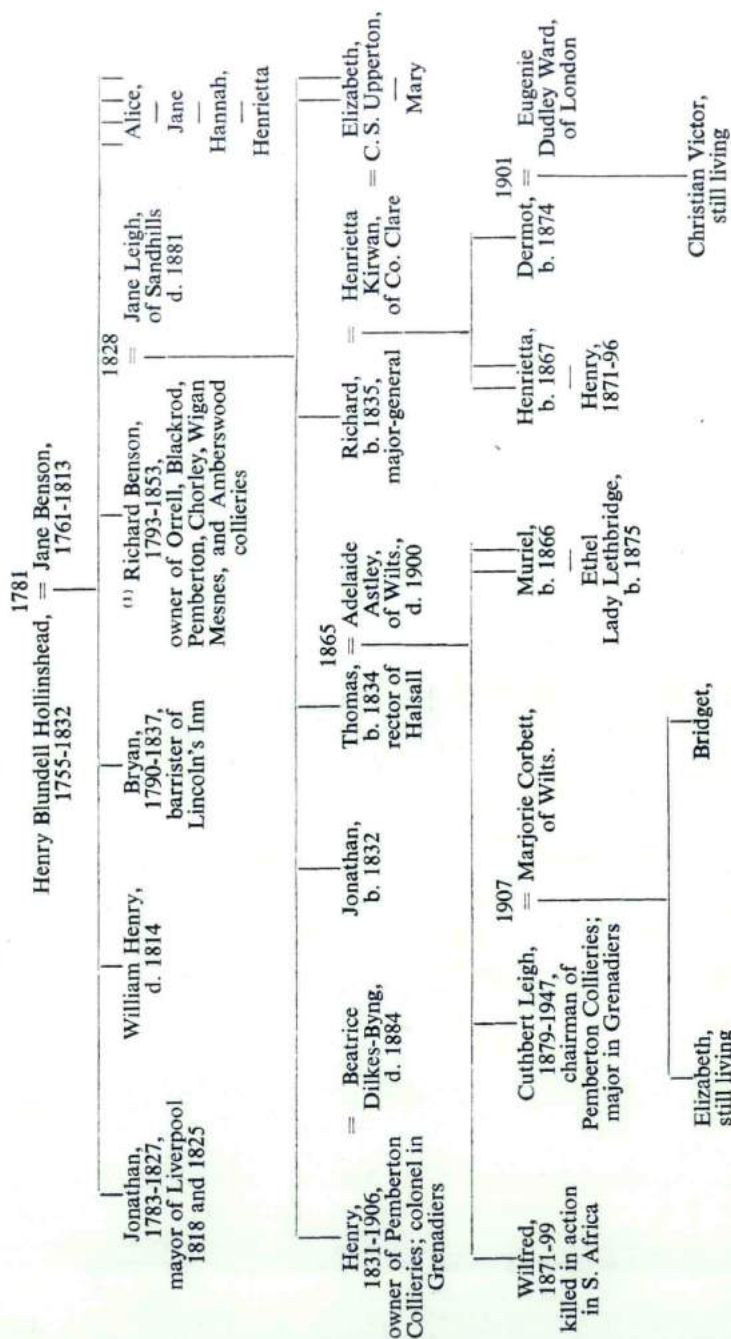
Henry Blundell Hollinshead died on 8 February 1832. He was buried at St. Nicholas Church, Liverpool. About 1811 he had purchased Summervale, later known as Deysbrook House, in West Derby, which was to be the family home for the next hundred years. His son Richard Benson Blundell Hollinshead took over the collieries and initiated major developments during the next few years. First, he completed the purchase of Highfield—Highfield House and the remaining eight Cheshire acres—from Bedford Kenyon, grandson and heir of Robert Kenyon, who had died at Highfield House in 1801. Bedford Kenyon had raised money on mortgage from



Plate 5.

RICHARD B. B. H. BLUNDELL

THE FAMILY OF HENRY BLUNDELL HOLLINSHEAD



(1) By royal licence dated 26 August 1836, Richard assumed the surname Blundell Hollinshead Blundell for himself and his issue.

time to time, and the need to meet contingent liabilities compelled him to part with Highfield. By this time the Orrell collieries had finished, but an extension of Edge Hall under the Bridgewater Trustees' estate in Winstanley, known as "Dukes", was still operating. Secondly, Richard Hollinshead, who resumed the name of Blundell by royal licence in 1836 and added it to Blundell Hollinshead, sank several new pits. Between 1839 and 1842 he sank Amberswood Colliery in the Walmesley estate on the Ince-Hindley boundary, the Mesnes Colliery to work the famous cannel mine under the glebe land in Wigan in the Mesnes Park—Market Square—Bull Hey—Frog Lane area, the Tanhouse Colliery under the Bridgewater Trustees' estate at Tanpits, Pemberton, and the Venture Pits near Summersales, Pemberton.⁽³⁾ Amberswood worked the Ince and Pemberton seams, Tanhouse and Venture Pits, the Orrell four feet and five feet seams. Richard also took over the Chorley Colliery from Messrs. John Whittle and Partners; this worked the mountain seam under Chorley town centre. But Blackrod was going through difficult times. An explosion there in 1836 killed 11 men, and a still more disastrous one in 1849 caused great destruction in the mine. Blundell decided to close it. In addition to his coal interests, Blundell was in business as a cotton broker under the style of Blundell and Tetley of Liverpool.

Richard Blundell died in 1853, and his son, Henry, who was still at Sandhurst had to take over the reins. Knowing little or nothing about the working of collieries, Henry engaged William Armstrong, an eminent north-country consultant viewer or mining engineer, to report on the state of the collieries. The report was very condemnatory, and Thomas Sherratt, the agent, was dismissed. His two sons who assisted him went with him. Armstrong advised the appointment of "a man from our district" and this was accordingly done with the appointment of William Greener of Durham. It had become the fashion to bring managers in from the north-east coal-field. Up to that time the pits in the north-east were deeper and more extensive and gassy than those in Lancashire, so presumably the owners thought managers from Northumberland and Durham would be more experienced than Lancashire men for working the deeper pits which the exhaustion of the shallower seams was making necessary. To mention only a few of these north-country men, there were Shortrede of Winstanley Colliery, Harbottle and Forster of Orrell Colliery, Gilroy of Ince Coal and Cannel

⁽³⁾ The plans are with the N.C.B., the leases with Messrs. Peace & Ellis, and France & Henderson, solicitors of Wigan, and with Bridgewater Estates Ltd.



Plate 6.

HENRY B. H. BLUNDELL



Plate 7.

HENRY B. H. BLUNDELL

A portrait carved in cannel from his own pits by G. Fouchard, one of his colliery workmen

Company and Greenwell of Ashton Moss. Very soon, however, the Lancashire pits were to exceed in depth and gassiness most of the Durham and Northumberland pits. Monkwearmouth Colliery, Sunderland, sunk to the Hutton Seam in 1846 at a depth of 574 yards, was then the deepest pit in Britain, but in 1869 Rose Bridge Colliery, Wigan, reached a depth of 815 yards. A few years afterwards Pendleton Colliery, Salford, was sunk to 924 yards and Ashton Moss to 940 yards.

From Armstrong's report⁽⁴⁾ we learn that the cost of producing one ton of coal at Pemberton Colliery in 1853 was 5s. 4d. The following table shows the break-down of that figure, and for comparison the latest figures for the north-west division of the National Coal Board are given on the right.

| PEMBERTON COLLIERY, 1853 | N.C.B. N.W. DIV., 1963/4 |
|--|--|
| Colliers and drawers | Wages, Holiday Pay, Sick Pay, Supplementary Injuries Benefit and |
| Datallers, onsetters and all other underground day wage men | National Insurance |
| Surface hands | Stores and Roof supports |
| Stores | Depreciation |
| Royalties | Power, Heat and Light |
| Horses, (surface and underground) | Surface Damage |
| Cottage and farm rentals, loss on Farrimonds farm and trespass on Mr. Blundells and other property | Repairs and Renewals |
| Renewal of pit and crab ropes | Salaries and Pensions |
| Renewal of railway sleepers | General expenses |
| Proportion of Mr. Sherratt's salary (Mr. Sherratt was the agent) and the wages of book-keeper and two clerks | Administration |
| Taxes and cesses | |
| Sundries | |
| <u>5s. 4d.</u> | <u>99s. 11d.</u> |

During the three months January, February and March 1853, the following coal sales were made at the different depots:

| | Round | | Slack | |
|--------------------|---------------|----------|--------------|----------|
| | Tons | Cwts. | Tons | Cwts. |
| Liverpool | 10,944 | 16 | 1,347 | 6 |
| Preston | 4,963 | 10 | 883 | 0 |
| Warrington | 1,711 | 14 | 1,354 | 7 |
| Manchester | 981 | 8 | 269 | 15 |
| | <u>18,601</u> | <u>8</u> | <u>3,854</u> | <u>8</u> |

⁽⁴⁾ The report is preserved at the offices of William Armstrong and Son, Collingwood Street, Newcastle-upon-Tyne.

The cost of running these depots and transporting the coal to them during the same period was £4,360 0s. 0d., or 3·84s. per ton. This was made up of:

| | £ | s. | d. |
|--------------------------------------|-------|----|----|
| Hauling and heaving | 444 | 6 | 3 |
| Carting and porters' charges | 513 | 9 | 5 |
| Tonnage | 1,703 | 14 | 9 |
| Tradesmen's bills | 81 | 4 | 11 |
| Rent | 200 | 0 | 0 |
| Taxes <i>etc.</i> | 42 | 12 | 9 |
| Commission and abatement | 144 | 10 | 6 |
| Bad debts | 134 | 4 | 0 |
| Salaries | 238 | 11 | 1 |

There were three horses at Manchester, three at Preston, two at Warrington and twenty at Liverpool which cost £280 for the three months. £50 was put aside for the locomotive renewal fund, but nothing was included for the wagon renewal fund as twelve new railway wagons had been constructed during the period. Sundries came to £6 2s. 6d.

The selling prices of Orrell coal and common coal were respectively:

| | |
|---------------|-------------------------------|
| at Preston | 11s. 3d. and 7s. 10d. per ton |
| at Warrington | 10s. 0d. and 7s. 8d. per ton |
| at Manchester | 13s. 0d. and 6s. 7d. per ton |
| at Liverpool | 13s. 0d. and 9s. 3d. per ton. |

Prices from 1 December 1854, set out in a notice⁽⁵⁾ signed by James Pickering, the new commercial manager who had succeeded Woolfal at the Liverpool Office at Canal Basin, were:

| | |
|----------------------------------|----------|
| Orrell coal, 1st quality | 13s. 6d. |
| Steam coal, 1st quality | 10s. 6d. |
| Steam coal, 2nd quality | 9s. 6d. |
| Nuts | 10s. 6d. |
| Smiths coal | 9s. 6d. |

These prices were for coal delivered by boat alongside Garston docks, or at Fleetwood. If delivered by cart on the quay of the Liverpool docks a moderate cartage was to be charged according to distance. Slack sold at prices varying from 2s. 4d. to 4s. 4d. The Ince Colliery showed a profit of 1·64s. per ton, but Pember-ton made a loss of ·97s. per ton, and Chorley the enormous loss of 4·16s. per ton.

Armstrong was appointed consultant mining engineer to Henry Blundell, and he and his son served in that capacity until Blundell, then a colonel in the Grenadier Guards, died in 1906. William Greener was the first of the remarkable family to be

⁽⁵⁾ The original notice is framed at the office of Rea Ltd., James Street, Liverpool.

entrusted with the management of the collieries until nationalisation in 1947. He soon put the pits at Pemberton and Ince on a more efficient footing and considerably increased the output of both. By 1863 the output at Pemberton Colliery alone had reached 200,000 tons per annum. Chorley Colliery was sold to James Darlington of Coppull Colliery. Because the cannel was exhausted Mesnes Colliery was abandoned, and the other seam in lease, the King, was not considered to be worth working. By 1858 coal prices had dropped. Greener was selling coal to the Railway Company for 6s. 0d. a ton and coke for 10s. 6d. At the same time Brancker of Orrell Colliery was offering best Orrell coal at 6s. 0d. per ton. Blundell's opened a new depot at Miry Lane, Wigan, both to distribute house coal in Wigan and to facilitate the loading of boats on the Leeds and Liverpool Canal. The company supplied many gas works with coal including Wem, Whitchurch, Lancaster, Oswestry, Warrington, St. Helens, Chester and Northampton, and shipped a large tonnage of coal to Ireland. Greener's diary for 25 November 1858 mentions a market still further afield "sending screened coal to New York". An extra outlet for the coal from Pemberton was provided by a new branch of the Lancashire Union Railway, which had been promoted by some of the Lancashire coal owners in 1866. Alfred Hewlett, John Lancaster and John Fletcher were among the first directors. This new branch connected with the London and North Western Railway and made it more convenient to send coal to Garston docks, Widnes, St. Helens and many other places.

The Venture Pit coal in Captain Blundell's freehold and the Bridgewater Trustee's coal adjoining it in the Summersales estate was nearing exhaustion, and after a lengthy negotiation, Blundell leased the Orrell four feet and five feet mines under Winstanley Park from Meyrick Bankes of Winstanley Hall. This kept the Venture Pits going until 1884, when they were abandoned. The royalty for this coal was £120 per Cheshire acre per foot thick, with a certain rent of £1,000 per annum. Between 1 June 1859 and 1 December 1870, Blundell paid Bankes £22,952 in royalties for the two seams.⁽⁶⁾

There was not a long life in either Amberswood Colliery, Tanhouse Colliery or the Venture Pits, and although there was an estimated 2,115,800 tons to the dip of the Engine Pit level at Pemberton, it could not be got without sinking another Engine Pit to the dip or, as was done later, by sinking the present one deeper and driving a long level tunnel to drain the dip area. Also of course it would be necessary to lease the coal in that

⁽⁶⁾ Winstanley estate papers.

area from the owners. It was known that there were eight workable seams of variable thickness and quality below the Pemberton four feet at the Bye Pit, and consideration was now given to the possibility of getting these seams. However, it was also known that the lowest seam of the middle coal measures—the Orrell four feet—lay at a depth of more than 600 yards, a great depth for those days, and that the expenditure required in sinking shafts so deep could not be justified unless the area of coal in Blundell's possession could be considerably extended. That meant either purchasing or leasing adjoining mineral estates. In 1865 Greener made a report to Henry Blundell advising that arrangements with the owners of the largest areas of coal adjoining his own freehold should be made first. These were Meyrick Bankes, R. G. B. Clayton and Sir Robert Gerard. Gerard's coal was a long way off, over the Ashton boundary, so Blundell was in no hurry to obtain it. Eventually, however, he lost the chance of getting it for Pemberton, for Messrs. Evans and Mercer of Park Lane Colliery took out a lease of it. By 1869 Blundell had succeeded in acquiring freehold coal rights covering 761 acres together with another 53 acres in lease. The chief transaction in this business was an exchange agreement with Bankes of Winstanley, who gave Blundell mineral rights under certain parts of his estate in return for the surface of the land Blundell had purchased previously, together with a balancing sum of £3,041 9s. 10d.⁽⁷⁾ The eastern boundary of the coal transferred to Blundell under this agreement was the Hawkley fault, which was a rather indefinite line and was to lead to an expensive action in the chancery court fifty years later.

William Greener met with a tragic end. He was killed on 9 July 1865 by a fall of roof, whilst on a visit to Rainford Colliery where he was consultant viewer. He was only 43 years old. He was buried at St. John's Church, Pemberton. His wife, who had borne him three children, had predeceased him seven years before. Armstrong appointed William John Laverick Watkin of Penshaw House, Durham, to succeed him. The new manager had been trained at Pease and Partner's collieries in Durham and had married a sister of Mr. Douglas of West Lodge, Crook, the general manager of those collieries.

The sinking of the two new shafts began in December 1867. This was a project of the first magnitude for the time and all the work was carried out according to the latest ideas and the best practice then known. Armstrong told Blundell that although the outlay was formidable "you will possess one of the finest

⁽⁷⁾ *Ibid.*

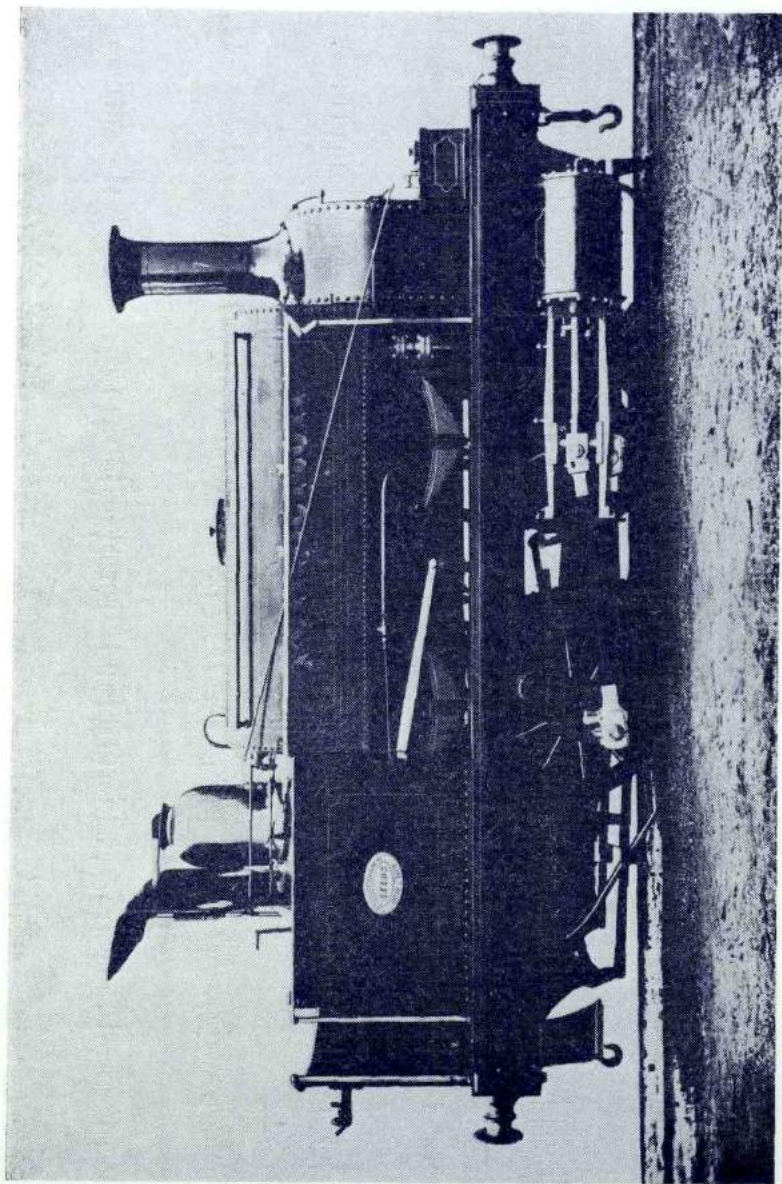


Plate 8. THE *PEMBERTON*

Together with the *QUEEN* it was purchased for the New Pits in 1872

collieries in the country". It was laid out to raise 400,000 tons a year and the expected average profit of 1s. 0d. a ton on that tonnage as well as on the 50,000 tons from the Bye Pit would bring in £22,500 yearly. The two shafts, with head frames, brows, screens, boilers, chimneys, winding engines and engine house, and sufficient sidings to commence operations with, cost £88,600. Additional expense was incurred by the installation of one of the largest fans in the country, large air compressors and the purchase and equipment of Wilde's cotton factory for central workshops, known later as the Foundry Yard. The whole project cost over £100,000.

Amberswood and Tanhouse Collieries were coming to a close and they were abandoned in 1871-3. Strangeways Hall Colliery, adjoining Amberswood, had been offered to Captain Blundell for £24,000 but he turned it down. The average profit of the colliery was stated to be £5,000 per annum. The new pits at Pemberton were named King and Queen, and they started raising coal at a time of scarcity and unprecedented high prices. The price of steam coal at Manchester had risen from 5s. 11d. per ton in 1869 to 17s. 2d. per ton in 1873. Unfortunately for Blundell, however, before the new pits had a chance to produce large outputs, the market collapsed and prices dropped catastrophically. Armstrong who was pessimistic about the situation told Blundell that he had "little doubt that the coal trade would pass through a period of low prices which will extend over a longer time than usually credited. The immense increase in production, the enlargement of old collieries and the sinking of new ones must as a necessity depress prices and the corresponding demand for men to supply these additional resources will tend to maintain a higher wage rate than is due to the value of the coal." He advised closing the King coal seam where the cost of production was high, and transferring the men to the thicker seams. Other economies proposed included a reduction of 15 per cent in wage rates to bring the cost of production down to 6s. 3d. per ton, which it was thought would be competitive.

Another blow was to fall. On 11 October 1877 a disastrous explosion occurred in the Wigan nine feet seam in the King Pit. It killed thirty-six men including Watkin himself, Cooke the underground manager and Laverick the under manager, all three of whom died in an heroic attempt to rescue the others. William Greener's son, William John, who had been trained under Watkin at Pemberton and who later had held positions at Pease and Partner's collieries and in Yorkshire, was appointed to be the new manager.

The Venture Pits were closed in 1884 after a dispute with Bankes' agent over payment for ungot coal. Trade had improved towards the late '70s, but prices had fallen again after 1878. Steam coal at the pit head was 6s. 0d. in 1878, 5s. 10d. in 1882 and 1883, and 5s. 1d. in 1888. After that there was a sudden jump to 8s. 3d. in 1890, after which it again fell to 6s. 0d. in 1895 and rose to 10s. 10d. in 1900. A price list of March 1885 gives selling prices at Pemberton as under:

| | |
|------------------------|-------------------|
| Orrell four feet | 8s. 6d. per ton. |
| Orrell five feet | 7s. 6d. per ton. |
| Wigan four feet | 5s. 10d. per ton. |
| Burgy | 4s. 3d. per ton. |
| Slack | 2s. 9d. per ton. |
| Coke | 9s. 0d. per ton. |
| Cannel | 16s. 0d. per ton. |

These prices were for coal put into wagons at the colliery or boats on the canal, all less $2\frac{1}{2}$ per cent.

The use of explosives was discontinued after the 1877 explosion except in the wet Pemberton five feet seam, and very remarkable results were achieved considering that all the coal was got by picks and wedges alone. In 1892 the pits wound 1,800 tons a day. This was produced by 1,277 work people giving an output per man shift of 28.9 cwts. The present figure for the north-west division (1963) is 30.2 cwts. In 1961 it was 26.2 cwts., and in 1962 28.9 cwts.

Like his father and his predecessor, W. J. Greener met with a sad end. Shortly after descending the Bye Pit to make an inspection on Monday, 1 February 1897, he was killed by the "burn" or set of tubs on the haulage road. He was 42 years of age, and left a widow and nine children. His successor was Ernest Douglas, Watkin's nephew and yet another manager trained at Pease and Partner's collieries. By this time safer explosives were available and shot-firing had been reintroduced. In 1898 the annual output rose to 516,732 $\frac{1}{2}$ tons, and the number of employees to 1,451. In 1898 Douglas began sinking a third deep shaft to act as the upcast for all the seams and to increase the winding capacity of the colliery. This was known as Prince Pit. Thereafter very large outputs were raised, especially with the introduction of simultaneous decking at King Pit in 1908.

Henry Blundell died suddenly on 28 September 1906, at the age of 75. His death was a great shock, for as the *Wigan Observer* recorded, he was "youthful in appearance and bore an erect carriage". He had been educated at Eton and Sandhurst and had taken his B.A. degree at Christ Church, Oxford,

in 1854. He was held in great esteem. The following obituary is preserved in Wigan Library:

"In grateful and affectionate remembrance of Colonel Henry Blundell Hollinshead Blundell C.B. Colliery Proprietor, Philanthropist and Politician, born 1831 died September 28th 1906 at London and was buried at Halsall near Ormskirk, Lancs.

He served his Queen and Country in the Crimea 1855, Canada 1860 and the Sudan, Egypt in 1884-86. He was Colonel in the Grenadier Guards, Adjutant of the Home District and Deputy Lieutenant of the County of Lancaster and a Free Burgess of the City of Liverpool; M.P. for Ince Division 1885-92 and 1895-1906 and a real friend to the poor."

Henry Blundell had been a great benefactor both to a large number of his poorer workpeople and to the whole district in general. In 1863 he had built the first school in Highfield, and in 1867 the "Iron Church" to act as church and girls' school and a house for the curate. His wife, Beatrice, was a daughter of Vice-Admiral the Hon. Henry Dilkes-Byng. She had been a maid of honour to Queen Victoria. She had died in 1884, and her husband had built St. Matthew's Church, Highfield, as a memorial to her. It cost £10,000 and replaced the "Iron Church". Afterwards he had built the girls' and infants' school at Highfield, and a club for the workpeople, with bowling greens and other facilities. He had also presented Pemberton Local Board with Alexandra Park and bowling greens at Newtown. Just before he died, he had opened the fine new building of the Blue Coat School at Wavertree. In 1900 Blundell had turned the colliery business into a private limited company composed solely of members of the family. His youngest brother, Major General Richard B. H. Blundell, who had commanded the Poona District of India and was made a director of the new company, very often accompanied him to the colliery.

Coke had been manufactured in beehive ovens at the colliery from the middle of the nineteenth century. In 1904 there were 118 of these ovens which were 11 feet in diameter. In that year, however, a new battery of 23 Semet-Solvay patent by-product ovens was erected to replace the beehive type. These produced metallurgical coke, tar and ammonia. In 1914 the number of coke ovens was increased to 30 and during the Great War at the request of the government 6 more ovens were added and plant was erected for the recovery of benzol and toluol, for the use of the Ministry of Munitions in connection with the manufacture of explosives, and for the extraction of sulphates and naphthalenes. In 1924, 4 more ovens were added, and gas engines were then installed to drive electric generators by using the waste gas.

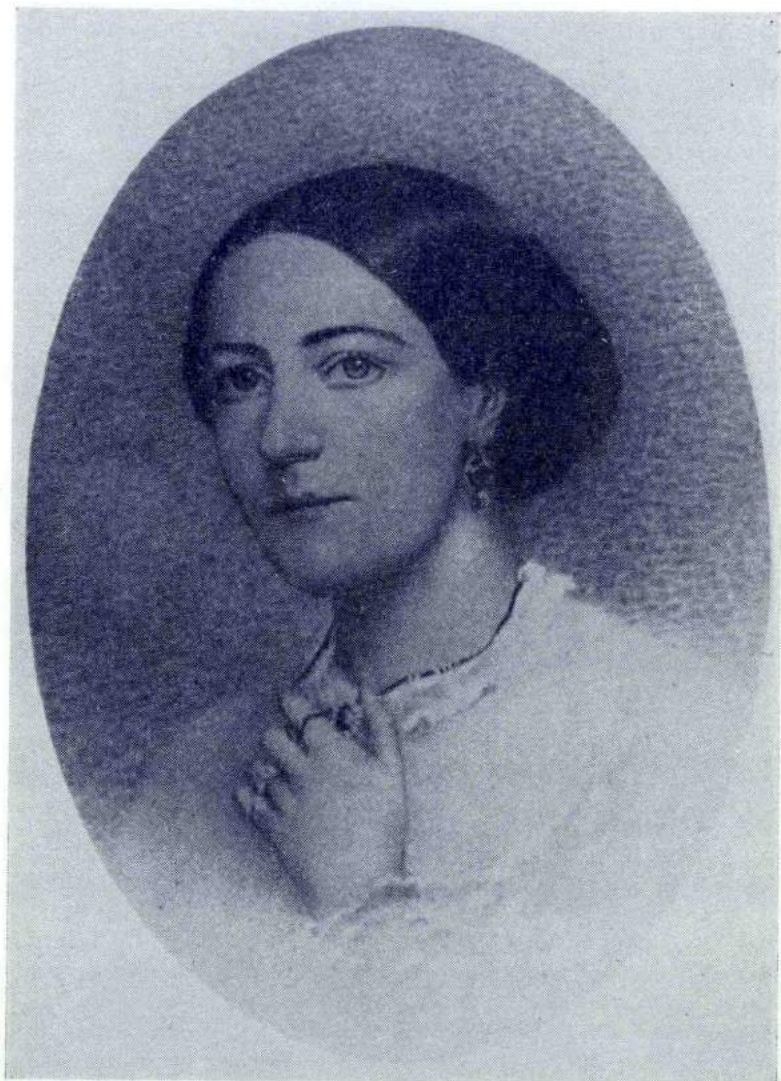


Plate 9.

BEATRICE B. H. BLUNDELL

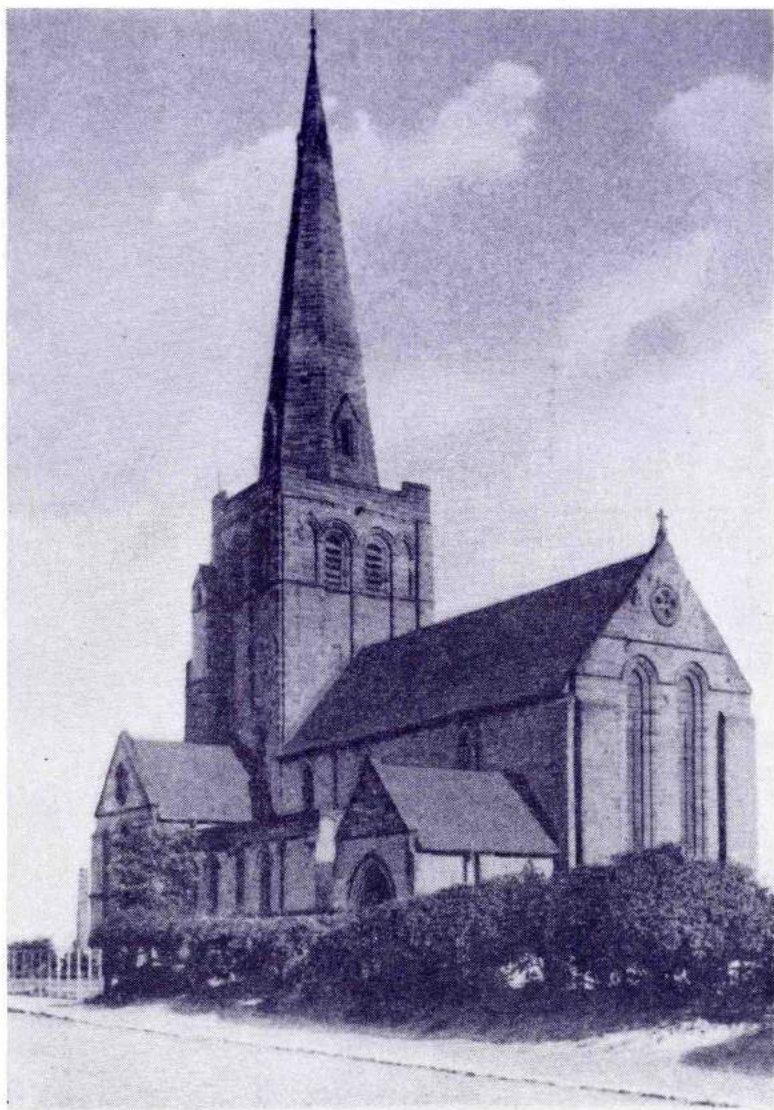


Plate 10. HIGHFIELD MEMORIAL CHURCH
(before enlargement)
Built 1894



Plate 11.

PRIZE-WINNING EXHIBITS AT WIGAN CARNIVAL

Pit pony and tub, and coal lorry, 1933

As coal output increased new sales offices were opened, and a very extensive house coal trade was built up in Liverpool, Wigan and surrounding districts. Besides the main depot at 171-6 Crown Street, there were depots in West Derby, Tuebrook, Huyton, Seaforth, Walton, Linacre, Waterloo and Blackstone St. (High Level). There were also three depots in Birkenhead and one in Seacombe. The old depots at Manchester, Preston and Warrington had been closed but a new one was opened in Bury. In Wigan there was an office in Standishgate, and a large sales yard and canal loading wharf at Miry Lane. There were ten horses in this yard and they supplied a large number of customers. Six of them carted washed slack to Taylor's cotton factories and other industrial works in Wigan, and the remaining four were employed on house coal rounds. Approximately 20,000 tons of house coal per annum was disposed of from this depot, and 50,000 to 60,000 tons a year of industrial fuel was despatched by canal. Some house coal was also sent by boat to merchants in Blackburn and other places. Apart from Taylor's cotton mills, the most important customers were Liverpool gas works which took over 20,000 tons of slack per year, Wigan electricity works which took 8,000 tons, Star paper mills at Feniscowles which took 4,000 tons, and H. & R. Ainscough, corn millers of Parbold and Burscough, who took 2,000 tons per year. At one period Eckersley's Swan Meadow mills at Wigan were supplied with 10,000 tons of washed slack a year. Miry Lane depot also delivered coke to brass foundries, forges, bakers, confectioners and nurserymen in the Wigan district, and Wigan Corporation heated their market hall with Blundell's coke. The horses at this depot were extremely well looked after and won many prizes in the May Day horse processions, which were customary in those days. Coke was supplied direct from the colliery to Mostyn and various other iron works. Very large shipments of gas, steam and house coal went to Ireland. Special box wagons, of which there were 200, were used for this trade. The boxes were lifted off the wagon and emptied into the ship's hold by special dock cranes. There were three boxes on each wagon, a type which was almost peculiar to Pemberton Colliery, although there were a few at Norley and Park Lane Collieries. Occasional shipments of coal were sent to South America and other countries. Many gas works in Lancashire, Yorkshire and the Midlands were supplied with gas coal, and washed slack was sent to various industrial concerns over a wide area.

After the short boom in 1900-1, coal prices dropped again from an average of 10s. 10d. at the pit head in 1900 for steam

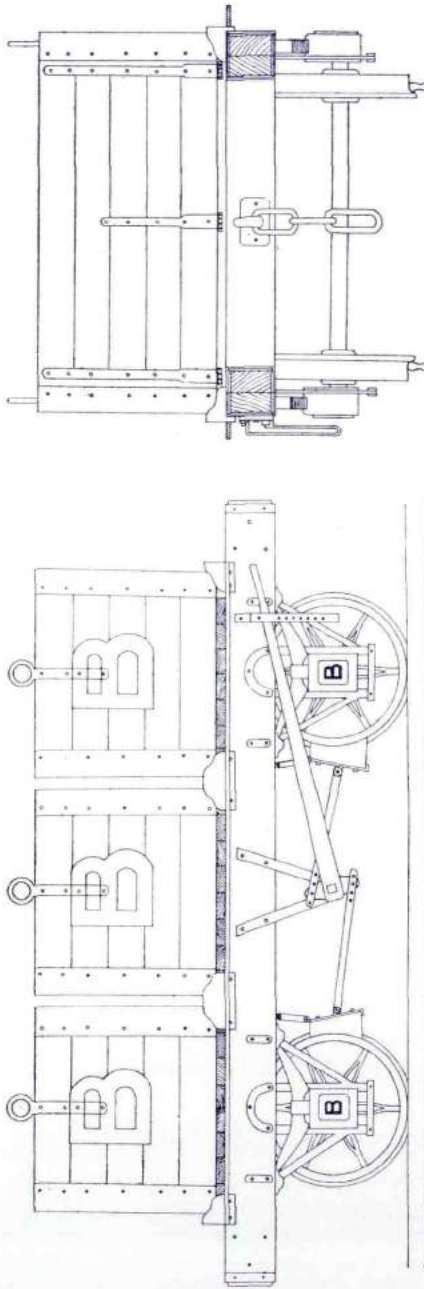


Figure 5.

TYPE OF BOX WAGON IN USE AT PEMBERTON COLLIERIES, 1880-90, FOR
COAL SHIPMENTS FROM LIVERPOOL

coal to 6s. 11d. in 1905. After that they gradually rose again until the average price in 1914 was 10s. 0d. During the Great War prices rose very steeply, for in 1920 the average price was 34s. 7d.

For many years bricks had been manufactured in open clamps on the colliery as and when they were required, but in 1910 kilns were constructed, and bricks and drain tiles, made out of shale and Pemberton yard seam fireclay, were manufactured for internal use and for sale to outside customers.

A scheme, which cost over £30,000, and which unfortunately, because of the thin section of the seams, came to nothing, was the New Venture Pit, sunk to work a very large area of the mountain mines and the Orrell yard seam in the old Venture Pit area. The coal from the yard seam was mined later by means of tunnels driven from the King Pit.

During the Great War the government had financial control of the mines but handed them back to the owners in 1921. The wage cuts which followed resulted in the 1921 strike, but after this there was a slight boom until 1925. Profits at Pemberton which had been around £60,000 per annum from the whole concern, including coke plant, brick works, *etc.*, suddenly dropped in 1925 to less than £8,000. In 1926 the general strike and the protracted dispute in the coal industry upset things considerably, and in 1927 there was very little recovery. The 1927 profit was only slightly larger than in 1925.

Proceeds from the sale of coal at Pemberton had dropped since the better quality Orrell four feet and five feet and Wigan four feet seams became exhausted in 1924, and they were half a crown less than the average for Lancashire and Cheshire. Between January 1927 and December of that year there was a catastrophic drop in proceeds of 3s. 11d. per ton of coal sold at Pemberton. There was a further drop in 1928. The resultant losses were disastrous, amounting in some months to 2s. 8d. a ton. The directors of the Company at that time were Major Cuthbert L. B. H. Blundell who had succeeded his uncle, Colonel Henry, as chairman, his sister Miss E. H. B. H. Blundell who later became Lady Lethbridge, and his two cousins, Major Stuart Upperton and Miss B. M. Upperton. They decided to sell out. No doubt they felt that the time had come to dispose of the colliery, because of the terrific losses they were making and the poor prospects for the industry. Another factor was Major Blundell's own declining mineral reserves.

Owing to excellent management and favourable geological conditions, Pemberton Colliery had been a very profitable concern up to 1924. The output per man shift had been con-



Plate 12.

CUTHBERT L. B. H. BLUNDELL

siderably higher than the average either for Lancashire or for the country. Mr. Millward, the manager, wrote to Ernest Douglas in 1919 deploring the new proposals of the joint committee of owners and men at Manchester regarding conditions of work, and said they were constantly giving away hard won principles "thereby bringing the colliery which had been well managed from birth down to the level of the less fortunate ones." A report in the *Colliery Guardian* in 1912 described it as "magnificently managed and run", and as far back as 1877 it had been hailed as "a model of engineering and management". In its prime, from 1900-25, Pemberton Colliery possessed nearly 2,000 wagons, 6 locomotives, one of which was built in the colliery workshops, 15 miles of track forming the sidings, workshops employing over 200 men and an enormous steam-raising plant. Electricity, which was generated by gas engines driven by waste gases from the by-product plant, was used only for lighting and for driving the main pumps. All the power required to work the colliery was generated on the premises.

In view of the "deplorable state" of the coal trade in 1924, concern was felt for the future of the colliery, and Mr. A. H. Leech, a Wigan mining engineer, was engaged to report on future prospects. Leech recommended the driving of two long tunnels from the Wigan five feet seam in the King Pit at an estimated cost of £13,000 to win 900,000 tons of Orrell yard seam in the abandoned Venture Pit area. This was accordingly carried out. However, in 1929 Major Blundell and his co-directors sold the colliery to a new company of which Mr. C. D. Gullick, M.C., was the managing director and later chairman. Major Blundell still held the mineral rights, and royalties were paid to him by the new company until the Coal Act of 1938 nationalised coal royalties. The terms upon which the undertaking was handed over to the new company by Major Blundell were extremely generous, and it was made as easy as possible for them to keep the pits going, with all that it meant to the people in the locality.

Like his uncle, Cuthbert Blundell gave many benefactions in the district. In 1910 he enlarged Highfield Church so that it could become a parish church, and he endowed it with sufficient money to pay half the vicar's stipend. The ecclesiastical commissioners undertook to pay the other half, but from 1867 to 1910 the whole of the stipend had been paid by the Blundells. Cuthbert built a fine new vicarage in 1913; he also provided a graveyard and a large recreation ground with a commodious brick-built pavilion in 1923, and in 1932, after he had given up the colliery, he paid for the building of Highfield Senior School,

now the Secondary Modern School. On winding up the Blundell Colliery Company, he gave a sum of money, said to be £70,000 to be shared by his employees. Unfortunately, he left the distribution to others, and the arbitrary, and in the opinion of some, the unfair, way in which it was allocated caused bitterness, which clouded this most generous act.

Continuity between the old and new régimes was assured in that Mr. Gullick, who had been at the colliery since 1911 except for the war period, was a nephew of Ernest Douglas, and his mother was a niece of William Watkin. Also Douglas remained as land and mineral agent to Major Blundell. The new company immediately set to work to put the colliery on a sound business footing. It initiated a policy of advertising: a talking film was made, descriptive booklets and leaflets were published, and various prize winning exhibits were shown at Wigan Carnivals. The sales department was completely reorganised: the Liverpool office was closed and all the depots except the one at Miry Lane, Wigan were sold to Daniel K. Rea, the Liverpool coal factor. A large proportion of the output of coal and coke was sold through Rea and Richard Williams, another Liverpool coal factor. Other coal was sold direct by the company to customers and delivered in the company's own lorries or by rail. The gas and electricity companies were still large customers as were Tate and Lyle's and Fleetwood Trawlers' Association. The latter sent boxes of fish to the colliery for sale to the workmen.

By 1934, although average proceeds had dropped by about 8d. per ton, total costs were down by more than 2s. 0d. a ton and as a result losses were converted into profits. Costs were brought down partly through wage reductions and partly through stringent economic measures. The underground costs for the various seams in 1924 and 1931 were as follows:

| | 1924 | 1931 |
|-----------------|--------------------|------------------------------|
| Wigan five feet | 10s. 7·60d. | 8s. 10·40d. |
| Wigan nine feet | 9s. 8·07d. | 8s. 2·46d. |
| Ravine | 14s. 5·67d. (1929) | working ceased in that year. |
| | | 7s. 7·30d. |
| Orrell yard | 10s. 4·70d. | 8s. 7·23d. |

These figures represent the cost of working each seam and raising the coal to the surface, but to this must be added the cost of all the surface establishment, selling costs, taxes, rates, insurances, *etc.*, which amounted to about 4s. 6d. per ton. On 1 July 1935 a central selling organisation known as Lancashire Associated Collieries was brought into operation by the coal owners of Lancashire and Cheshire, under the provisions of

the Coal Act of 1930. The executive board had wide powers. It fixed quotas for each colliery to limit output. Receipts by each undertaking in 1934 were taken as the basis for determining the prices paid by the board to the owners, and the profits on the sale of coal were pooled and divided between the participating undertakings on a tonnage basis. The board could enter into agreement with merchants, dealers and other colliery selling districts. The scheme covered 51 collieries which employed in all over 50,000 men and had an annual output of 13,000,000 tons.

Apart from coal and coke, the colliery produced bricks and drain tiles, tar, ammonia, benzol, toluol, sulphates and naphthalenes. Thin seams of good quality were opened out and an attempt was made to work the poor quality Ravine seam. A Chance washery, then the most up-to-date, was installed in 1934 to improve the product, and in 1936 work commenced on the opening up of the Wigan seams at Summersales in the Venture Pit area. Quite large outputs were still raised, generally between 300,000 and 400,000 tons a year, and in 1939 the colliery was still one of the largest in Lancashire with 1,571 workpeople. But the seams were becoming exhausted, and the decline when it came, was swift. In 1942 the number of employees had dropped to 581. The Wigan seams in the Venture Pit area were being worked from a tunnel driven from the King Pit, and it was now decided to sink a new shaft at Summersales to work these seams and to abandon the old colliery. King Pit finished in November 1946, less than two months before nationalisation of the mines. In a letter to the members of the company, Mr. Gullick wrote:

"On the 3rd November 1946 the last tub of coal was raised at Pemberton, the seams having been exhausted of all coal economically workable, so appropriately enough with the extinction of the old régime, Pemberton Colliery once so famous but for many years declining passed finally into the history of the great days of coal mining."

Previous to that, the brickworks and coke plant had been closed. During the war a government inspector when refusing to recommend the coke works for a grant of £4,000 towards blacking out, described it as "a museum piece". The last Pemberton pit, Summersales, however, is still working. The surface plant there is very well laid out. An article of 19 July 1946 in the *Iron and Coal Trades Review* said:

"Mr. C. D. Gullick, Managing Director of Pemberton Colliery Ltd., and his staff deserve congratulation on the originality and foresight shown in the surface layout at this colliery, which demonstrates that improvement in appearance need not conflict with economy and efficiency in working."

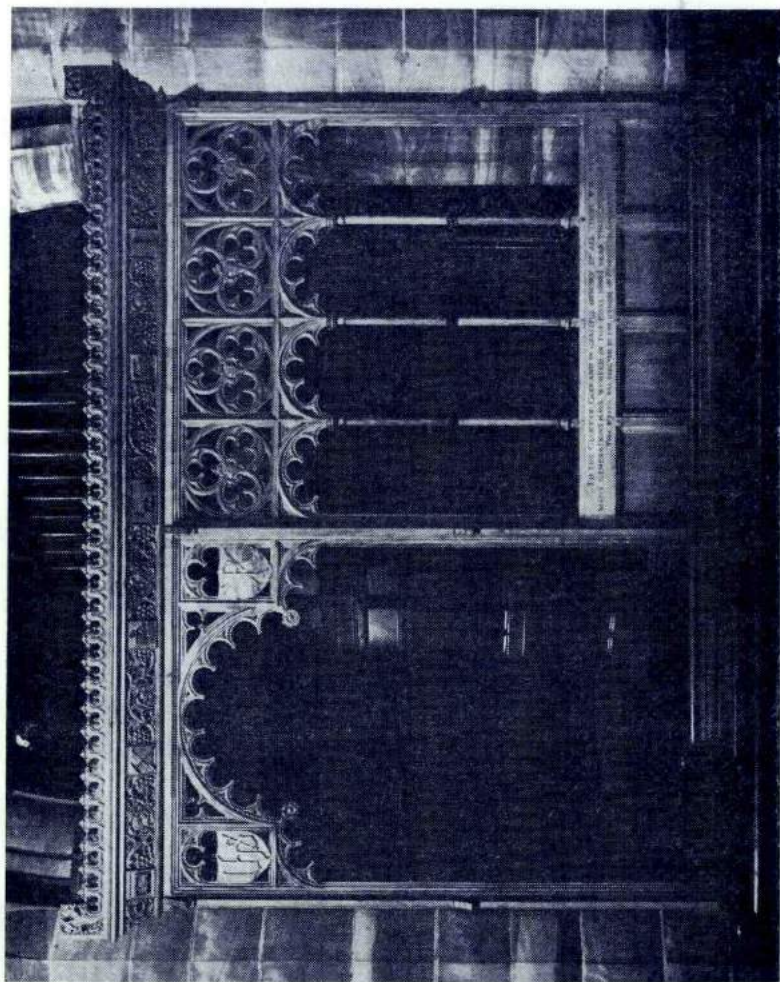


Plate 13. MEMORIAL SCREEN IN HIGHFIELD CHURCH
Erected by Pemberton Colliery Company, 1946

It was taken over by the National Coal Board on 1 January 1947. It is interesting to compare some of the present-day statistics of this colliery with those of Blundell's Collieries of the past: 63,847 tons of coal were raised in 1963 by 213 workpeople; the output per man shift overall was 26.3 cwt., and the coal was sold mainly for domestic use and for steam-raising at industrial concerns.

As a tribute to the workpeople of Pemberton Collieries, the colliery company erected a beautiful screen in Highfield Church. Emblems carved on the screen represent a miner's lamp, pick and shovel, a canary in a cage, a pit head and a pit pony pulling a tub of coal. The inscription on the screen reads, "To the glory of God and in grateful memory of all those who for many generations have worked in the coal mines near this church. This screen was erected by the owners of Pemberton Colliery". A similar screen to the memory of Major Cuthbert L. B. H. Blundell was erected by his sister, Lady Lethbridge.

By the time Summersales Colliery finishes, Blundells and their successors will have been mining coal in Orrell and Pemberton for approximately two centuries. During those many years they will have produced more than 45,000,000 tons of coal out of the estimated total of 725,000,000 tons worked in the whole of the Wigan coalfield.

APPENDIX A
 MAIN PURCHASES AND ACQUISITIONS OF LAND AND MINERAL RIGHTS BY BLUNDELL'S
 IN THE WIGAN COALFIELD

| DATE | SITUATION AND OTHER PARTICULARS | SEAMS OF COAL | NAME OF COLLIERY | FROM WHOM PURCHASED | PURCHASER |
|-------------|--|---|------------------|---|--|
| 1774 | Two closes of land in Old Hall St., Liverpool, at end of Leeds and Liverpool Canal for coalyard and offices. | | Orrell | | Jonathan Blundell & partners |
| 1780 | Orrell House Estate with colliery | Orrell 4 ft. Orrell 5 ft. | Orrell | Michael Jackson | Jonathan Blundell |
| 1802 | Blackrod, Hollinshead Farm Estate adjoining canal north of Arley. Also Denton's Farm Estate | Haigh Yard, Arley | Blackrod | Inherited from John Hollinshead on condition he took the name and arms of Hollinshead | Hy. Blundell |
| 1800-35 | Highfield, Pemberton, Highfield House and remaining 8 Cheshire acres purchased for £2,500 in 1835. | Ince 7 ft., Pemberton 5 ft., Pemberton 4 ft. and all seams below | Pemberton | Bedford Kenyon of Highfield House, grandson of Robt. Kenyon who died in 1801, sold estate to pay back mortgages | Hy. Blundell Hollinshead and Rich. Benson Blundell Hollinshead |
| before 1825 | Marklands Estate in Pemberton | Pemberton 5 ft. Pemberton 4 ft. | do. | John Markland | Hy. Blundell Hollinshead |
| 1827 | Barrow's Thwaites Delf Estate, Pemberton | Surface and Minerals | do. | Mr. Barrow | do. |

| | | | | | |
|--------------------|---|---|-----------|--|-------------------------------|
| before 1863 | Glass House Estate in Pemberton | All seams (Top partly worked from Hawkley Colliery) | do. | H. Maxwell | Hy. B. H. Blundell |
| 1863 | Moss House Estate, Pemberton | Surface and minerals. Pemberton seams worked by T. Whaley | do. | Thos. Whaley | do. |
| 1863 | Land at Smithy Brook, Pemberton | Surface and Minerals | do. | — | do. |
| between 1865-69 | Ellison's Estate, Little Lane, Pemberton | do. | do. | Mr. Ellison | do. |
| 1861 | Hare and Hounds and Skew Bridge, Pemberton. Surface purchased by John Stephen | Minerals only all seams. Pemberton mines worked by German & Stephen | Pemberton | Bridgewater Trustees | Hy. B. H. Blundell for £5,000 |
| 1868 | Oldham's Estate, Little Lane, Pemberton | Minerals | do. | Mr. Oldham | do. |
| 1868 | Harrison's Estate, Little Lane, Pemberton | Mineral rights in all seams | do. | H. Harrison | do. |
| 1868 | Taylor, Farrimond & Others | Mineral rights in all seams | do. | Messrs. Taylor, Farrimond, Knowles, etc. | do. |
| 1867 | Baker's Estate | All mineral rights | do. | Hy. Baker | do. |
| 1867 | R. G. B. Clayton's Rawlinsons Estate | Surface & Minerals | do. | R. G. B. Clayton | do. |

Appendix A—*continued*

| DATE | SITUATION AND OTHER PARTICULARS | SEAMS OF COAL | NAME OF COLLIERY | FROM WHOM PURCHASED | PURCHASER |
|------|--|---------------|------------------|----------------------|--|
| 1868 | Exchange agreement with Meyrick Banks, who exchanged all seams under Worthington Fold, Holmes House Farms East of Pemberton fault and under Hawkley Hall, Hindley Hall, Stone House Farms west of Hawkley fault for surface of Rawlinsons plus £3,041 9s. 10d. | All seams | Pemberton | Meyrick Banks | Hy. B. H. Blundell for £5,000 |
| 1870 | Exchange agreement in order to straighten boundary west of Park Lane, Ashton | do. | do. | Sir R. T. Gerard | do. |
| 1887 | Surface and all minerals under Alexandra Park and Billinge Road, Mitchell St. bowling green areas in Newtown, Pemberton | do. | do. | Bridgewater Trustees | do. Surface £9,000 Minerals £8,000 |
| | Orrell 4 ft. and 5 ft. under parts of Newtown, Pemberton. Minerals under area at Lane ends | | do. | do. | do. Lane ends coal £1,450 |

APPENDIX B

SCHEDULE OF LEASES TAKEN OUT BY BLUNDELLS FOR THEIR ORRELL, PEMBERTON, INCE, MESNES AND CHORLEY COLLIERIES (BLACKROD COLLIERY ALL FREEHOLD)

| DATE | LESSOR | SEAMS LET | FOOTAGE RENT | CERTAIN RENT | SITUATION | SHAFTS FROM WHICH COAL WAS WORKED | NAME OF COLLIERY | TERM OF LEASE | LESSEE | NUMBER ON PLAN |
|--------------|--------------------------------|---------------------------|---------------------------------------|--|--|--|------------------------|---------------|--------------------------|----------------|
| Mar. 1791 | Sir Robt. Holt Leigh | Orrell 4 ft. | — | 1st year £750 2nd year £500 3rd year £750 4th year £1,000 5th year £1,000 and so on | Higher and Lower Carr, Gin Riding and Catterall's Kitt Green, Orrell | | Higher Carr, Orrell | 21 years | Hy. & Jonathan Blundell | 1 |
| Do. | Do. | Do. | — | Do. | Edge Hall Estate, Nr. Orrell Stn. | Up to No. 58 Pit Far Moor | Slycroft Orrell | 21 years | Do. | 2 |
| Summer, 1791 | Wm. Gerard and Mrs. Walmsley | Cannel | — | — | Kirkless | — | Ince Cannel Works | — | Do. | 2a |
| Jan. 1799 | Rev. Thos. Holme | Do. | — | £560 per annum | East Side of Dean Wood Orrell, from Abbey Lakes to Orrell House Farm | 14 shafts including Engine Pit 120 yds. deep | Chain Colliery, Orrell | 21 years | Hy. Blundell & Co. | 3 |
| Jan. 1807 | Sir Robt. Holt Leigh | Orrell 5 ft. | £500 per Cheshire acre of seam | £750 per annum | Edge Hall Estate | | Slycroft, Orrell | 21 years | Hy. Blundell Hollinshead | 2 |
| Do. | Do. | Orrell 4 ft. | Do. | Do. | Far Moor, Orrell | | Do. | | Do. | 2 |
| Jan. 1826 | Duke of Bridgewater's Trustees | Pemberton 4 ft. and 5 ft. | £105 per Cheshire acre per foot thick | £300 | Appleton Farm, Little Lane, Pemberton | No. 7 or Chain Pit | Pemberton | 14 years | Do. | 4 |

Appendix B—continued

| DATE | LESSOR | SEAMS LET | FOOTAGE RENT | CERTAIN RENT | SITUATION | SHAFTS FROM WHICH COAL WAS WORKED | NAME OF COLLIERY | TERM OF LEASE | LESSEE | NUMBER ON PLAN |
|------------|------------------------------------|--|-------------------------------------|-------------------|---|--|------------------|----------------------|-----------------------------------|----------------|
| Jan., 1827 | Duke of Bridgewater's Trustees | Orrell 5 ft. | | 1/6th of proceeds | Dukes Barn Farm, Winstanley | Not known. Engine Pit, Near Duke's Barn | Dukes | 21 years | Hy. Blundell Hollinshead | 5 |
| Jan. 1827 | Do. | Pemberton 4 ft. and 5 ft. | £90 per ft. thick per Cheshire acre | £350 per annum | Hare and Hounds Land, Billing's Pemberton | No. 11 Pit | Pemberton | 21 years | Do. | 6 |
| Dec. 1827 | Do. | Orrell 4 ft. and 5 ft. | £80 per ft. thick per Cheshire acre | | Rainford House Estate, Pemberton | Farryman's Pit | Pemberton | 21 years | Do. | 7 |
| Dec. 1827 | Do. | Railway to Leeds and Liverpool Canal at Seven Stars, Wigan | | | Long inclined plane on site of Victoria St., Newtown, Pemberton | 15 Pits (from No. 1 to No. 15) served by this Railway | Pemberton | Surrendered 1/4/1868 | Do. | 7 |
| 1836 | Do. | Orrell 4 ft. and 5 ft. | £90 | £350 | Summersales east of Croppers House fault, near Pony Dick | No. 6 and No. 9 Wood and Cat Bank Pits | Pemberton | 20 years | Rich. Benson Blundell Hollinshead | 7 |
| Aug. 1837 | Knowles, Taylor and others | Pemberton 5 ft. Pemberton 4 ft. | | | Between Smithy Brook and Goose Green (Lady Lane), Pemberton | Lady Lane Pit | Pemberton | 20 years | Rich. Benson B.H. Blundell | 9 |
| Jan. 1839 | Sir H. J. Gunning, Rector of Wigan | Cannel and King | | £200 | Mesnes Park, Market Sq., and Frog Lane Wigan | Nos. 1, 2 and 3 Pits, No. 2 under Bridgeman Terr. being Engine Pit | Mesnes | 30 years | Do. | 10 |

| | | | | | | | | | | |
|---------------|--|--|--------------|--|--|--|-----------------------|------------------------|-----------------------|---|
| Sept. 1839 | Wm. Gerard Walmesley | Ince 4 ft. Ince 7 ft. Pemb. 5 ft. Pemb. 4 ft. | £70 | £500 | Amberswood Common, Ince, Wigan | Nos. 1-10 Pits | Ince or Amberswood | 30 years | Do. | 11 |
| Jan. 1841 | Bridgewater Trustees | Orrell 5 ft. Orrell 4 ft. | £120 | £400 | Summersales and Near Enfield St., Pemberton | Higher Venture, Low Venture and Mill Pit | Pemberton | 21 years | Do. | 12 |
| 1840s | Lady Houghton Fazackerley Cunliffe and Grundy | Mountain Mine | | | Chorley Town Centre | Millstone, Church, Stn. and Chorley Moor Pits | Chorley | Surrendered in 1855 | Do. | 9a |
| Dec. 1841 | Bridgewater Trustees | Orrell 5 ft. Orrell 4 ft. | £120 | £120 for 2 yrs. £800 3rd and 4th year. £1,000 after | Tan House and Hatton Estates, Pemberton | Tan House, Engine and Bye Pits | Pemberton | 30 years | Do. | 13 |
| 1845 | Meyrick Banks | Orrell 5 ft. Orrell 4 ft. | | | EXCHANGE AGREEMENT 13 .025 acres of both seams at Tan House for a similar area under Winstanley Park | | | | | |
| June 1848 | Bridgewater Trustees | Pemberton 5 ft. Pemberton 4 ft. | £100 £120 | £400 | Goose Green, Pemberton | Worked from Lady Lane and Bye Pits | Pemberton | 40 years | Do. | 14 |
| 1840s | Wm. Baker | Pemberton 5 ft. Pemberton 4 ft. | | | Between Goose Green & Ben Jonson, Pemberton | Do. | Pemberton | | Do. | 15 |
| June 1856 | Bridgewater Trustees | Orrell 5 ft. Orrell 4 ft. | £120 | £400 | Summersales and Enfield St. Area, Pemberton | Higher Venture Low Venture and Mill Pits | Pemberton | 21 years | Hv. B. H. Blundell | A wayleave for the getting of Bankes's coal leased to Blundell is granted at a rent of 2/6d. per perch |
| 1857 | Ellison | Pemberton 5 ft. Pemberton 4 ft. | | | Little Lane, Pemberton | Worked from Bye Pit | Pemberton | | Do. | 16 |

Appendix B—continued

| DATE | LESSOR | SEAMS LET | FOOTAGE RENT | CERTAIN RENT | SITUATION | SHAFTS FROM WHICH COAL WAS WORKED | NAME OF COLLIERY | TERM OF LEASE | LESSEE | NUMBER ON PLAN |
|------------|---|--|--|--------------|------------------------|-----------------------------------|--|---------------|-------------------------------------|--|
| Apr. 1858 | Bridgewater Trustees | Cannel King and Little Coal | £180 £75 £70 | | Summersales, Pemberton | King Coal Pit | Pemberton | 30 yrs. | Hy. B. H. Blundell | A wayleave for other coal is granted @ 2/6d. per perch |
| June 1858 | Meyrick Banks | Orrell 5 ft. Orrell 4 ft. | £120 | £1,000 | Winstanley Park | Worked from Low Venture Pit | Do. | 21 years | Do. | 17 |
| June 1855 | Alex. Fowden, Haliburton and others | Orrell 5 ft. Orrell 4 ft. | | £40 | Tan Pits | Tan House Colliery | Do. | | Do. | 13 |
| 1868 | IMPORTANT EXCHANGE AGREEMENT WITH MEYRICK BANKS. SEE SCHEDULE OF PURCHASES OF LAND. | | | | | | | | | |
| 1870 | Sir R. T. Gerard | EXCHANGE AGREEMENT FOR COAL IN ALL SEAMS ON ASHTON BOUNDARY. | | | | | | | | |
| 1870-1940- | Bridgewater Trustees | All seams | Several Leases in Newtown and Tunstall Lane area | | | King Queen, and Prince Pits | Pemberton | Various | Do. and Pemberton Colliery Co. Ltd. | 18 |
| 1925-1934 | Do. | Orrell yard Wigan 9 ft. | | | Summersales Do. | Do. Do. | Do. Do. | Do. Do. | Do. and 1929 Ltd. | 12 |
| 1870-1940 | Lord Gerard | Various Seams, Orrell Yard Mine | Areas near Park House Bryn and Park Lane. In Barrier and Shaft Pillar, Park Lane | | | King, Queen, and Prince Pits | Pemberton | Various | Pemberton Colliery Co. Ltd. | 19 |
| 1870-1940 | G. H. Banks | Various | Areas formerly in Lease to Worstley Messes Colliery Co., Nr. Hawkley. | | | Do. | Pemberton | Do. | Do. | 20 |
| 1925-1934 | G. H. Banks Do. | Orrell Yard Wigan 9 ft. Wigan 4 ft. Wigan 5 ft. | £60 NIL | | Winstanley Park | Do. Summersales Pit | Pemberton Do. Summersales Colliery | Do. Do. | Do. | 17 |

APPENDIX C

OUTPUTS AT BLUNDELL'S COLLIERIES OUTSIDE PEMBERTON
(IN TONS PER ANNUM)

| DATE | ORRELL COLLIERIES <i>i.e.</i> Slycroft Chain, etc. | ORRELL SLYCROFT 1791- 1830 | ORRELL CHAIN 1799- 1820 | INCE CANNEL WORKS | AMBERS- WOOD 1839- 1871 | MESNES WIGAN 1839- 1854 | CHORLEY 1836- 1854 |
|------|---|-------------------------------------|----------------------------------|-------------------------|----------------------------------|----------------------------------|--------------------------|
| 1788 | 18,250 | | | | | | |
| 1789 | 22,320 | | | | | | |
| 1790 | 27,175 | | | | | | |
| 1791 | 38,840 | | | 5,178 | | | |
| 1792 | 55,060 | | | 7,867 | | | |
| 1793 | 46,490 | | | 9,357 | | | |
| 1794 | 34,120 | | | 6,180 | | | |
| 1795 | 37,770 | 15,387 | | 7,602 | | | |
| 1796 | 38,300 | | | 8,016 | | | |
| 1797 | 35,205 | | | 10,531 | | | |
| 1798 | 37,845 | | | 10,133 | | | |
| 1799 | 42,480 | | | 10,926 | | | |
| 1800 | 48,120 | | | 10,312 | | | |
| 1810 | | | 16,370 | | | | |
| 1845 | | | | | 49,764 | 31,466 | 28,600 |
| 1853 | | | | | 60,000 | 30,000 | 14,852 |

OUTPUTS AT BLUNDELL'S PEMBERTON COLLIERIES
(IN TONS PER ANNUM)

| DATE | BYE PIT GP. 1815-1946 | WOOD PIT GP. 1820-1858 | VENTURE (now Summersales) 1840-present | TAN PITTS 1840-1871 | KING, QUEEN AND PRINCE 1870-1946 |
|------|--------------------------|---------------------------|---|------------------------|--|
| 1835 | 34,510 | 16,900 | | | |
| 1845 | 27,000 | 17,000 | 27,000 | 25,000 | |
| 1853 | 5,324 | 8,580 | 3,161 | 24,707 | |
| 1860 | 50,000 | | | | |
| 1870 | 59,150* | | | 37,200 | 39,000* |
| 1875 | 63,700 | | 115,250 | | 206,000 |
| 1880 | 68,250 | | 57,300 | | 301,000 |
| 1885 | 59,150 | | | | 377,000 |
| 1892 | 70,000 | | | | 387,200 |
| 1898 | 77,807 | | | | 438,925 |
| 1913 | 34,991 | | | | 703,009 |
| 1915 | (Closed until | | | | 682,000 |
| 1920 | 1930) | | | | 558,000 |
| 1925 | | | | | 431,000 |
| 1930 | | | | | 334,000 |
| 1935 | | | | | 341,000 |
| 1940 | | | | | 355,000 |
| 1963 | | | 63,847 | | |

(Summersales now
working Venture
area coal)

In 1852 the average output from Lancashire collieries was 23,490 tons per annum. In 1854 Thomas Young Hall stated that the average from collieries in the northern coalfield was 59,940 tons, although some of the new collieries could raise 108,000-135,000 tons a year. Monkwearmouth Colliery, Sunderland, one of the largest Durham collieries in the mid-nineteenth century, was raising 270,000 tons per annum at that time.

* From 1870 onwards the Bye Pit and King Pit, etc. were one colliery.

APPENDIX D

SEE FIGURES 3 AND 4

| NAME OF COLLIERY | LEASEHOLD NO. OR FREEHOLD LETTER ON PLAN | SEAMS WORKED | DEPTH OF DEEPEST SHAFT IN YARDS | COLLIERY ABANDONED | |
|--|--|--|--|--------------------|-----------------------|
| | | | | COLLIERY OPENED | COLLIERY ABANDONED |
| Orrell House | | Orrell 4 ft. and Orrell 5 ft. | 76 | Before 1780 | c. 1800 |
| Ince Cannel Works | | Cannel | 80 | Before 1791 | Not known |
| Orrell Higher Carr | | Orrell 4 ft. and Orrell 5 ft. | 120 | 1791 | c. 1817 |
| Orrell Slycroft & Edgehall | | Orrell 4 ft. and Orrell 5 ft. | 98 | 1791 | 1830 |
| Orrell Chain | | Orrell 4 ft. | 120 | 1799 | 1819 |
| Blackrod | | Arley, Haigh Yard | 216 | Before 1802 | 1849 |
| Pemberton Bye, Engine & Brickcroft | 14 & 16/B | Pemberton 4 ft., Pemberton 5 ft. and Ince 7 ft. | 142 | 1815 & 1816 | 1946 |
| Pemberton Wood | | Orrell 4 ft., and Orrell 5 ft. | 185 | 1820 | 1858 |
| Pemberton Chain | | Pemberton 4 ft., and Pemberton 5 ft. | 98 | 1826 | 1846 |
| Winstanley "Dukes" | | Orrell 4 ft., and Orrell 5 ft. | 80 | 1827 | 1846 |
| Pemberton No. 11 | | Pemberton 4 ft., and Pemberton 5 ft. | 113 | 1827 | 1846 |
| Pemberton Farrymans | | Orrell 4 ft., and Orrell 5 ft. | 180 | 1827 | 1847 |
| Pemberton Lady Lane | | Pemberton 4 ft., and Pemberton 5 ft. | 102 | 1837 | c. 1870 |
| Chorley | | Mountain Mine | 216 | Before 1835 | Sold |
| Mesnes (Wigan) | | Cannel Mine | 117 | 1835 | 1854 |
| Amberswood (Ince) | | Pemberton 4 ft. & 5 ft., Ince 7 ft. & 4 ft. | 296 | 1839 | 1854 |
| Pemberton Venture, Mill & Cannel Pits | | Orrell 4 ft. & 5 ft., King Coal & Cannel Orrell 4 ft. & 5 ft. | 320 | 1839 | 1873 |
| Pemberton Tanhouse | | | 250 | 1840 | 1884 |
| | | | | 1841 | 1871 |

| | | | | | |
|------------------------------------|---------------------------------|--|------------------------|----------------|---------------------------------|
| Pemberton King, Queen and Prince | 14, 15, 16, 18, 19 & 20/B | Orrell 4 ft., 5 ft., & Yard, Ravine, King & Cannel, Wigan 9 ft., 2 ft., 4 ft., & 5 ft., Pemberton 4 ft., 2 ft., 5 ft., & Yard, Ince 7 ft. | 636 | 1869 & 1900 | 1946 (pumping until 1960) |
| Pemberton New Venture | C | Sunk for Orrell Yard & Mountain Seams. Sudden in-rush of water 1913 | 511 | 1912-3 | 1916 |
| Pemberton Summersales (now N.C.B.) | 12 & 17/C | Wigan 9 ft., 4 ft., & 5 ft. Small area of Orrell 4 ft. | 20 (workings 80) | 1944 | Still working |

APPENDIX E

THE CONCERN OF MESSRS. JONATHAN BLUNDELL & SON

Figures from cash accounts illustrating the rapid growth of the business.

| Expenses | INCE CANNEL WORKS | | | 1800 | | |
|--|-------------------|-----------|-----------|--------------|-----------|-----------|
| | 1791 | £ | s. d. | £ | s. d. | |
| Wages, etc. | 1,229 | 1 | 6 | 2,197 | 13 | 0½ |
| Cartage from Ince to Wigan | 194 | 7 | 8 | — | | |
| Stores and other disbursements and rent of mines | 662 | 4 | 0½ | 756 | 4 | 8½ |
| | <u>2,085</u> | <u>13</u> | <u>2½</u> | <u>2,953</u> | <u>17</u> | <u>9</u> |
| Sales | | | | | | |
| Cannel sold at the works | 1,318 | 7 | 11½ | 1,343 | 5 | 9½ |
| Cannel sold at Wigan | 523 | 17 | 4½ | 1,916 | 8 | 8 |
| Cannel forwarded to Liverpool | 214 | 3 | 4 | 618 | 5 | 0 |
| | <u>2,056</u> | <u>8</u> | <u>8</u> | <u>3,877</u> | <u>19</u> | <u>5½</u> |
| Loss | 29 | 4 | 6½ | 924 | 1 | 8½ |
| | | | | | | Profit |

ORRELL COLLIERIES AND THE BUSINESS AT LIVERPOOL

| Expenses | 1788 | | | 1798 | | |
|---|--------------|----------|-----------|---------------|-----------|-----------|
| | £ | s. | d. | £ | s. | d. |
| Cartage | 393 | 13 | 3½ | 1,133 | 3 | 1½ |
| Canal tonnage, clerks' salaries, porters' wages, etc. | 2,789 | 16 | 3½ | 5,316 | 4 | 3 |
| Wage bills at Orrell Collieries | 1,999 | 7 | 8½ | 6,835 | 0 | 11½ |
| Other expenses at Orrell Collieries | 1,882 | 0 | 6½ | — | | |
| Flat hire and other expenses conveying coal from the collieries | 781 | 10 | 6 | 1,133 | 3 | 1½ |
| Rent of coal mines | — | | | 634 | 0 | 0 |
| Agent John Harvey's salary | — | | | 100 | 0 | 0 |
| | <u>7,846</u> | <u>8</u> | <u>4½</u> | <u>15,151</u> | <u>11</u> | <u>5½</u> |
| Sales | | | | | | |
| House coals sold | 9,737 | 9 | 11 | 16,778 | 1 | 2 |
| Coal Slack sold | 7 | 17 | 10 | 534 | 9 | 2 |
| Coal charcoal sold | 75 | 1 | 11 | — | | |
| Cannel sold in Liverpool | — | | | 1,319 | 1 | 9 |
| | <u>9,820</u> | <u>9</u> | <u>8</u> | <u>18,631</u> | <u>12</u> | <u>1</u> |
| Profit | 1,974 | 1 | 3½ | 3,480 | 0 | 7½ |

Other odd items from early accounts

- 1790 *To Rev. Thos. Holme for Smiths coals* £798 13s. 9d.
 There are several entries which show that Blundells bought coal from other colliery proprietors for sale in Liverpool.
- 1788 *To the Proprietors of the Canal for tonnage down the River Douglas* £5 11s. 0d.
- 1789 *By Luke Babe for Custom House Expenses of coals shipped for his account* £2 19s. 11½d.
- 1800 *Amount of Provinder purchased this year* £3,403 3s. 2½d.
 This gives some idea of the great number of horses used.
- 1788 *By William Whalley for an old flat sold* £120 0s. 0d.