

From the *Transactions* of the
Bristol and Gloucestershire Archaeological Society

Paper and Board Mills

by F. J. T. Harris
1976, Vol. 94, 124-135

© The Society and the Author(s)

Paper and Board Mills in or near Gloucestershire

By F. J. T. HARRIS

SOME TWENTY years after the late Dr Shorter's article¹ on paper mills in Gloucestershire, it seems desirable to make a fresh survey of the local paper industry.

The first paper mill for which there is any evidence in the British Isles was located near Hertford, and supplied paper for a book printed in 1495.² It was estimated that 100 mills existed in 1690,³ rising to 200 by 1712. Although many of these were in the home counties, the industry had already spread to Devon, Gloucestershire and also to Scotland. All the paper was, of course, hand-made. From 1712 home-produced paper was subject to an excise, but despite this, during the 18th century, the paper industry continued to consist of many widely scattered units. Many of the early mills were of very small size and were at one time or another also grist mills or fulling mills—even operating as paper and grist mills, for example, at the same time and under the same roof. In 1738 the number of mills was estimated at 278.⁴ In 1799, 422 paper-makers were recorded in England and Wales and 33 in Scotland,⁵ the average production then being about 35 ton per mill per year.

Nevertheless change was at hand. In April 1801 a patent for a paper-making machine was taken out by John Gamble.⁶ This patent and his 1803 patent⁷ were later assigned to Henry and Sealy Fourdrinier, who financed the development of the paper-making machine by Bryan Donkin. In 1806 the machine was offered to the trade. Evidence as to the number of licences granted by the Fourdriniers under these patents between 1807 and 1822 is available.⁸ In 1820 licences were granted to Flint and Tregent of Littleton, Evesham and to J. C. Radway of Quenington, Fairford. By the end of 1822, 42 licences for paper-making machines had been granted, and the quantity of machine-made paper being produced in Britain was about the same as that of hand-made paper. As the number of paper-making machines increased, so the total number of mills decreased. In 1835 there were 82 machines in the U.K. with an annual production of 24,475 tons of machine-made paper, an average of 300 tons per machine.⁹ By 1840 the number of machines in Britain appears to have been of the order of 200, and a number of family names still well known in the industry appeared in the patents.¹⁰ In 1861, in the interest of Free Trade, the excise and import duties ceased, and the U.K. production was about 100,000 tons a year. An excellent account of paper-making in the 19th century is contained in the history of John Dickinson & Co. Ltd.¹¹

No excise list of paper-makers earlier than 1816¹² still exists. Each mill received an excise identification number which it tended to retain, though there were a number of alterations. A study of the excise lists enables changes in ownership, or the starting or closure of mills during the period 1816 to 1851 to be noted. By 1912 the annual U.K. production exceeded 1,000,000 tons a year. By 1938 the production exceeded 2,700,000 tons, of which 859,000 tons was newsprint, 540,000 tons board, and 433,000 tons packaging and wrapping papers.¹³ The Paper Makers' Association reported

1. A. H. Shorter, *Trans. B.G.A.S.*, LXXI (1952), 145-61.

2. D. C. Coleman, *The British paper industry, 1495-1860* (Oxford, 1958).

3. P.R.O., CO. 391/90.

5. *1st Inland Revenue report* (1857), app. 30.

7. British patent 2708, 7 June 1803.

4. Customs & Excise—Treasury Letters, 1733-45, f. 247.

6. British patent 2487, 20 April 1801.

8. Papers of the 1837 Fourdrinier committee.

9. Hunter, *Papermaking, the history and technique of an ancient craft* (London, 2nd edn 1947), 526.

10. British patents 3056 (1807), 3191 (1801) Dickinson and 4509 (1820) Crompton for example.

11. Evans, *The endless web* (London, 1955).

12. Excise general letter, 8 October 1816.

13. Paper makers' association representations to H.M. government, PMA 59/17/1/1944.

in 1944 that there were 211 mills making paper or board in the U.K. of which 5 were in Gloucestershire. In 1972 the production of paper and board exceeded 4,300,000 tons, yet there were only 135 mills; of these, nine mills were in or near Gloucestershire:

<i>Board Makers:</i>	Smith, Stone & Knight, Avonside Mill, Bristol	(No. 31 below)
	St Anne's Board Mill Co. Ltd, Brislington, Bristol 4	(No. 32)
	E. A. Chamberlain Ltd, Nailsworth Mills, Nailsworth	(No. 44)
	Daniels (Cam) Ltd, Middle Mill, Cam	(No. 45)
<i>Paper Makers:</i>	Keynsham Paper Mill, Avon Mill, Keynsham, Bristol	(No. 33)
	Bathford Paper Mill Co. Ltd, Bathford	(No. 2)
	W. J. Dowding & Sons Ltd, Chap Mill, Slaughterford	(No. 7)
	Evans, Adlard & Co. Ltd, Postlip Mills, Winchcombe	(No. 65)
	James R. Crompton & Bros Ltd, Lydney Paper Mill, Lydney	(No. 70)

An article in the 1970 *Journal* of the Bristol Industrial Archaeology Society¹⁴ reports a survey of paper mills near Bristol.

Beginning with a selection of those mills which were just outside the Gloucestershire county boundaries, we can list:

<i>Mill</i>	<i>Excise No.</i>	<i>Dates</i>	<i>O.S. Nat. Grid</i>
SOMERSET			
1 NORTHWICK	Bath 12, Bristol 12, Bristol 463	1791-1851+	ST 585655
2 BATHFORD	Bath 18	1809-to date	ST 790672
3 CATHERINE	Bath 21	1803-1871+	ST 782697
4 SALTFOED		1742-1800	ST 692679
5 CHEWTON KEYNSHAM		1678-1749	ST 655670
6 PORTISHEAD		1925-1937	ST 474770

The dates shown may not represent the whole history of the mill.

Northwick Mill, near Dundry is known to have been in operation in 1791. It is shown as No. 12 in the excise list of 1816 in the Bath collection of excise. It was later in the Bristol collection area, still with the number 12. It closed in 1832 but re-opened again in 1838 with the new excise no. 463. 'Bathford Mill' is shown on Andrews and Dury's map of Wiltshire 1773.¹⁵

WILTSHIRE

7 CHAPS MILL	Bath 14	(early 19th century to 1972)	ST 843738
--------------	---------	------------------------------	-----------

Andrews and Dury show Caps Mill.

OXFORDSHIRE

8 UPTON	Marlborough 226 (?) Marlborough 663 (later Oxford 663)	1803-1827 1829-1832+	SP 244127
9 WIDFORD (Barrington)	Marlborough 227	1803-1851+	SP 273118

There had been a corn mill at Upton, and a fulling mill in Burford in 1550¹⁶ and in 1801 four or five paper-makers lived in Burford. Balston records the paper-maker 'Hatton' in 1803¹⁷ and in

14. Attwood, *Bristol IAS Journal* (1970), 11-21.

15. Andrew and Dury, *Map of Wiltshire 1733*; facsimile published by the Wilts. Arch. & Nat. Hist. Soc. (1952).

16. M. S. Gretton, *Burford, past and present* (London, 1945).

17. Balston's private records at Springfield Mill, Maidstone, now being deposited in the Kent R.O.

1816-27 Widford was operated by a Sarah Hatton at the same time as Upton (No. 8) was operated by William Hatton. In 1896 it was a flour mill, but it was then said that a few years earlier it had been engaged in the manufacture of paper.¹⁸ The buildings are now part of Widford Mill Farm.

WARWICKSHIRE

10 BIDFORD GRANGE Worcester 470 1816-1832+ SP 117515

This probably had a 40-inch wide machine. A reference¹⁹ suggests that the paper mill ceased not long before 1880.

WORCESTERSHIRE

11 LITTLETON PAPER MILL Worcester 471 SP 067479
12 HARVINGTON PAPER MILL SP 066480

A series of articles²⁰ based on local recollection and documents in the Northwick collection (Worcs. R.O.) give details of these two interesting mills. The first paper mill at Littleton was built for John Washbourne just before his death in 1717. It was used by John Gould who was buried in 1788. In 1801, Rebecca, Lady Northwick leased the mill to a 21-year-old John Gould, son of the above, and he was already using the mill. A lease in 1803 between John Gould and Edmund Smith deals with a paper mill which Gould had recently built on the east side of the Harvington corn mill. Gould went bankrupt, but recovered, and was using both mills in 1810. John Philips used the Littleton Mill in 1816 and in September 1820, John Gould, Arthur Richardson and N. L. Phelps leased the mills for twelve years to Patrick Tregent and Edwin James Flint, both of Birmingham, paper-makers. These two had received a licence from the Fourdriniers in June 1820 for a paper-making machine (compare with Quenington No. 69 below) and the lease refers to the 'Patent Paper Machine now standing complete in the Machine Room, together with all other machinery and apparatus belonging thereto'. There are a number of references to the firm of Flint and Tregent and Co. in Birmingham between 1808 and 1825.

In 1825 the lease of the Littleton and Harvington Mills was assigned to Flint, but the excise lists show a change in Tregent's name. An 1828 mortgage mentions Arthur Richardson, Jonah Thompson and Josiah Tredwell of Evesham, Edwin Flint now of London, Patrick Tregent now of Postlip, Gloucestershire and Francis Wagstaff, late of Wyre Piddle now of Pershore. According to the excise list, later occupiers included John Ibbotson 1832-8, who may have been the same John Ibbotson who had been at Primrose Valley Mill (excise no. Manchester 224) with a patent paper machine in 1818, and related to the Ibbotson and East of Colnbrook who had one of the first licences in the U.K. in 1807.

A lease between the Hon. Revd. George Rushout Bowles and James Wade of Littleton Mills, paper-maker, dated 1 July 1839, again referred to the patent paper-making machine. The mill was clearly in need of alteration and repair, for the Revd. Bowles accepted a quotation by J. Gregory, Warley, Bristol in 1841, for the installation of a 20 h.p. engine and pumps, a 6 h.p. engine to drive the machine as well as pipes, etc., to convey steam to rag boilers and steam cylinders. The cost was over £1,000. Despite the new equipment, the mill was in difficulties in 1843. What happened to the new equipment and the patent paper machine? The late E.A.B. Barnard suggested in 1939 that it was all moved to Postlip (No. 65 below), but this is incorrect.

Neither Harvington nor Littleton Paper Mills was working in 1851 and the latter was pulled down, possibly about 1860.

13 WYRE MILL SO 956468

In 1934 it was said²¹ that William Lloyd, bishop of Worcester, re-erected this mill in 1705

18. W. J. Monk, *Walks and drives around Burford* (Burford, 1896).

19. *Evesham Journal*, 2 September 1939.

20. E. A. Barnard, 'Old days in and around Evesham', *Evesham Journal*, 11 February to 1 April 1939.

21. Mrs Berkeley, *Trans. Worcs. Arch. Soc.*, XI (1934), 22.

intending to emulate the Sudeley paper mill. This seems unlikely since Sudeley appears to have been a corn mill until about 1769 and there may be some confusion between the two Lloyd families.

In January 1814 Bryan Donkin recorded in his diary²² 'Went to see a new mill now erected by Messrs. Lloyds. One of the Mr. Lloyds shewed us the mill upon the River Avon. He told me they intended to put up a paper machine.' Little is known of the mill's history, but it was owned by a Lloyd family as late as 1829, according to a plan of that date which still showed a spring intended for the use of the 'Paper Manufactory'. It was then occupied by Thomas Lloyd (see No. 65 below).

14 OVERBURY MILL Worcester 472 and 256 SO 962380
(Robinson's)

15 OVERBURY MILL (Nind's) about SO 958378

Ben Davies was a paper-maker in Overbury in 1724, and Taylor's map of Worcestershire shows more than one mill. Mr Nind, paper-maker of Overbury was named in 1795 and 1803.²³ Edward Robinson occupied an Overbury Mill with the excise no. 472 in 1816. He discontinued the mill in September 1821 and restarted the following December, with the number 256.

Mrs Berkeley's article²⁴ calls the Robinson's Mill—Silver Rill. Elisha Robinson left his father's mill in the 1840s for Bristol and started a paper bag business which grew into today's E. S. & A. Robinson Ltd of Bristol. The mill occupied by the Nind's was 'The Red House' but does not appear in the excise lists. The Silver Rill mill appears to have finally ceased about 1841, being then occupied by Edward Lloyd James.²⁵

HEREFORDSHIRE

16 BILL MILL Hereford 146 SO 625216

This mill was occupied by a Mr Parker in 1803 and by Joseph Lloyd in 1816. It was at other times a woollen mill and a corn mill. The mill is shown in Atkinson's map of 1847. See also Guns Mill No. 57 below.

MONMOUTHSHIRE

17 PANDY MILL Hereford 127 ST 492943

18 ITTON COURT Hereford 128 ST 489946

19 DYERS COURT Hereford 129 ST 485945

This group of mills were all close together on the Mounnton Brook. The interesting point is that John Reece is referred to in 1811 in connection with Pandy Mill²⁶ and in 1816 he occupied Pandy Mill, Itton Court, and Dyer's Court. He appears at Cone Mill (No. 51 below) in 1820. He also occupied, at one time, Lark Mill (No. 21) and after 1839 he was a partner with John Sandford at Cone Mill (No. 51), Linnet Mill (No. 22) and Itton Court (No. 18). Of the three mills only Itton Court was still working in 1851.²⁷

20 LADY MILL Hereford 133 ST 506937

21 LARK MILL Hereford 134 ST 508935

22 LINNET MILL Hereford 135 ST 512933

Linnet Mill was probably in use by 1750. Lark and Lady Mills date from before 1816. In 1821 James Birt occupied Lady and continued to 1848, whilst John Reece occupied Lark. He handed over Lark to James Birt in 1830. A James Birt lived near Cone Mill (No. 51) in 1858.²⁸ Castle and Co. occupied both Lark and Lady Mills from 1848 till after 1851. One of the partners was John Birt,

22. Donkin's private diary in the possession of The Bryan Donkin Co. Ltd.

23. Balston records.

24. Berkeley, 24-5.

25. Excise general letter, 30 November 1841.

26. Mon. R.O., E & E 1057.

27. House of Commons paper, *Return of the number of paper mills*, 27 Feb. 1852.

28. *Slater's directory* (1858).

who also appears at Guns Mill (No. 57). In 1865 and 1871 he owned Lark Mill.²⁹ In 1884 Alexander Campbell made carpets at Lark. Both mills were disused in 1887.³⁰

Linnet Mill was at one time occupied by John Reece, and from 1839 by Reece and Sandford, as mentioned above. This firm continued until 1865 when John Birt apparently occupied Linnet Mill as well as Lark, until after 1871. This mill was also disused in 1887.³¹

23-26 WHITEBROOK MILLS Hereford 136, 7, 8 and 9 SO 516072-
SO 534066

One or more was owned by Kingsmill Grove in the 1780s, who also appeared in Bristol^{32, 33}. George Lloyd was the occupier of Hereford 137 between 1841 and 1844, as well as Hereford 139 from 1839 to 1844. He was also at another Hereford mill (No. 642) from 1839 to 1844. In 1844 he left these three mills and moved to Guns Mill (No. 57) to take over from Joseph Lloyd. Hereford 138 was occupied from 1830 to 1832 by James Wade, and he also had been an occupant of Hereford 642. It is presumably this James Wade who leased Littleton Paper Mill (No. 11) in 1839. Although only one Whitebrook mill was recorded as working in 1851, the others appear to have worked intermittently up to about 1880. Remains of the buildings are still visible.

In or near Bristol, the following mills appear in the excise lists:

<i>Mill</i>	<i>Excise no./ and ride or division</i>	<i>Dates</i>	<i>Proprietors</i>
27 ASHTON GATE	10; 4R	1845-48	Daniel Cotterell Saml. Turner
28 CASTLE GREEN	26; 20 Dn	1832+-44	Elizabeth Hanley
29 TOWER HILL	50; 20 Dn	1844-50	Thos. Weston Robt. Mullet Saml. Rogers
30 ST PHILLIPS MARSH	56; 3 Dn	1839-49	Thos. Westcott

There were also several pasteboard or scaleboard makers. A list of paper mills for 1851³⁴ shows no Bristol mills. There are now additionally:

<i>Mill</i>	<i>Excise no./ and ride or division</i>	<i>Dates</i>	<i>O.S. Nat. Grid</i>
31 AVONSIDE MILL, Little Avon Street Boardmakers, who have been operating from 1876 to date.			
32 ST ANNE'S BOARD MILL CO. LTD		1914 to date	
33 KEYNSHAM PAPER MILL		1933 to date	

The BIAS article previously mentioned³⁵ gives more information regarding the Bristol mills before 1816, as well as about Nos. 31, 32 and 33.

GLOUCESTERSHIRE

³⁴ BITTON MILL ³⁶	Bath 6, Keynsham 1R	ST 689710
³⁵ BITTON (Golden Valley) ³⁷	Bath 563, Keynsham 1R	ST 681698

A very complete paper mill was for sale in 1787;³⁸ this appears to be Bath 6 mill. Bath 563 is first shown in the excise lists in 1824 when both mills were occupied by Thomas Bevan and George

29. Sir J. Bradney, *History of Monmouthshire* (1929).
 30. Ordnance Survey 6-inch map, sheet Glos. LIV SW, surveyed 1881, published 1887. 31. *Ibid.*
 32. A. H. Shorter, *Paper mills and paper-makers in England 1495-1800* (Hilversum, 1957), 167.
 33. D. G. Tucker, 'Paper mills of Whitebrook, Monmouthshire', *Archaeologia Cambrensis*, CXXI (1972),
 80-96. 34. House of Commons paper, 1852. 35. Attwood.
 36. Shorter, *Trans. B.G.A.S.*, LXXI, 150. 37. *Ibid.*
 38. *Gloucester Journal*, 28 June 1873.

Mill.⁵⁸ Stone Mill appears in 1880 as a flour mill⁵⁹ but the farm close to it is 'Paper Mill Farm', ST 689956.

'Wick Mill' is shown by Taylor and there was a John Gazard of Wicks Mill, flockmaker in 1774.⁶⁰ In 1816 the excise listed a paper mill here in the hands of Eli Gazard. It seems it later may have become a corn mill by the 1830s and later a saw mill.⁶¹ Perhaps, therefore, both Stone Mill and Wick Mill were paper mills.

- 42 DUNKIRK MILLS, Gloster 100⁶² SO 846005
 Nailsworth
- 43 HORSLEY MILL ST 844987

Charles Wood was making paper at Dunkirk Mills in 1767⁶³ and from 1777, Thomas Kench was probably here until after 1830.⁶⁴ It was being used for textiles at the same time. Paper ceased no later than 1839 and the mill continued as a cloth mill until recently.

In 1761 Thomas Evans insured the stock of Horsley Mill and he may be the Thomas Evans who appears at Whitminster Mill (No. 47 below) in 1764. In 1777 Thomas Kench insured Horsley and his wife died there in 1814. Horsley had ceased to make paper before 1851 and it was later a cloth mill.⁶⁵

- 44 BIRTS MILL ST 852997

There is also Nailsworth Mills or Birts Mill which was a cloth mill till 1876. Conversion to a board mill began in 1877 and the board manufacturing company who still occupy the premises was established in 1879.

- 45 MIDDLE MILL Cam SP 749007

This board mill was opened a few years after the Nailsworth Mills (No. 44 above) about 1880. It is still operating and has some of the most modern equipment in the country.

- 46 ST MARY'S MILL, Gloster 96, Hampton Ride SO 887022
 Chalford⁶⁶

A cloth mill of this name was for sale in 1813.⁶⁷ It was used for paper from 1846 until 1851.⁶⁸ It was later a wool mill.⁶⁹

- 47 WHITMINSTER MILL Gloster 101, Stroud 3R SO 760089
 (Wheatenhurst)⁷⁰

This is recorded as a fulling mill in the 14th and 15th centuries. In 1764 it was a paper mill under Thomas Evans and continued to about 1834. In that year the Gloucester-Berkeley Canal Co. obtained an Act of Parliament allowing them to compulsorily acquire the mill and nearby corn mills. In 1968 the Gloucestershire Society for Industrial Archaeology recorded the history of these mills.⁷¹

- 48 HERMITAGE MILL, Gloster 102 SO 872066
 Stroud⁷²

This was part of the Vatch Mill complex which was probably a fulling mill by the early 17th

58. Tann, 84.

59. Ordnance Survey 6-inch map, sheet LVI NW, surveyed 1879/82.

60. Tann, 109.

61. Ordnance Survey 6-inch map, sheet LVI NW, surveyed 1879/82.

62. Shorter, *Trans. B.G.A.S.*, LXXI, 154.

63. Shorter, *Paper mills*, 165.

64. Excise general letters, 8 October 1816, 10 September 1839.

65. Ordnance Survey 6-inch map, sheet LVII NE, surveyed 1881/2.

66. Shorter, *Trans. B.G.A.S.*, LXXI, 154.

67. *Ibid.*

68. Excise general letters, 23 February 1846 and 20 May 1851.

69. Ordnance Survey 6-inch map, sheet L NW, surveyed 1881/2.

70. Shorter, *Trans. B.G.A.S.*, LXXI, 153.

71. Gloucestershire Society for Industrial Archaeology, *Newsletter 12* (1968).

72. Shorter, *Trans. B.G.A.S.*, LXXI, 155.

century. In 1776 Francis Chapman, a paper-maker of Berkhamsted, Herts., was permitted to trench and lay pipes for water. Two years later he insured a paper mill then occupied by William Ward.⁷³ John Ward was the paper-maker from 1794 until after 1816. The 1828 1-inch OS map shows Hermitage and also the rest of the Vatch complex of mills. By 1880 the Upper Vatch Mills were disused. Although the textile mills continued, the paper mill ceased before 1851.

49 RODMORE MILL⁷⁴ Hereford 140, Lydney Ride SO 581027

There was a furnace at Rodmore in 1629. It was later a forge and then a corn mill.⁷⁵ It was to let in 1774 and again in 1789 when it was described as 'Modern . . . adapted for . . . white and brown paper'. It was leased to J. H. Stephens, and William Stevens was paper-maker here from 1795. In 1832 Samuel Stevens is listed until he in turn is replaced by James Stevens in 1838. James discontinued the mill in 1842⁷⁶ and the site became a corn mill.⁷⁷ Some of the buildings still exist.

50 ROWLEY MILL Hereford 141, Lydney Ride SO 594011

This was a forge, at one time used by the Foleys, and converted between 1797 and 1809 into a paper mill. It remained in the hands of Thomas, Joseph or Richard Morris until 1841, then of John Lavender until 1844, when a William Stevens became the paper-maker. This William may have been the son of William Stevens of Rodmore (No. 49 above) who had been baptized at St Briavels in 1815. In 1851 it had one beater working. By 1875 it had become a board mill with a machine variously described as 72 or 74 inches wide, supplementing the hand-made side.⁷⁸ It was later working in conjunction with Clanna Weir Mill (No. 52 below). Although steam was available, the machinery was water-driven as late as 1918. It made boards for shoe stiffeners, which were cut out to shape at the mill. It closed about 1930, but the pond, manager's house, offices (converted to a cottage) and traces of the buildings still remain.

51 CONE MILL⁷⁹ Hereford 519, Lydney Ride SO 597005

This 'commodious paper mill with convenient drying houses' was to let in 1777 after the death of Richard Barrow, and is shown on Taylor's map.⁸⁰ Samuel Jenkins, maltster, paper-maker and farmer, insured the mill in 1795 and again in 1801.⁸¹ Rudge⁸² described Mr Jenkins in 1803, as a paper-mill owner. It first appeared in the excise list in 1820 and may therefore have been out of use for some years and rebuilt. It was occupied by John Reece, who had for some years held Linnett Mill (No. 22 above), Pandy Mill (No. 17) and Itton Court (No. 18), all in Monmouthshire. In 1839 he went into partnership with John Sandford; the firm of Reece and Sandford ran the mill until the 1860s. The Gloucester Paper Co. took over in 1869 and in 1871 they had a 44-inch wide machine. They had installed the plant and machinery necessary to chip and pulp wood and make paper from the resulting fibres. The wood chips were cooked under pressure with sodium hydroxide and a chemical recovery system was operating.⁸³ This was probably the first pulp mill in Britain. It is said that the paper was very strong and used for emery or glass paper as well as envelopes. The *Gloucester Journal*⁸⁴ describes in detail an explosion of one of the pulp boilers. Fortunately there was no loss of life and the mill re-opened in 1874 in the hands of J. E. Randle, although there were several changes later.⁸⁵

The paper-making machine which had been described as 44-inches wide in 1871 was said to be 48-inches in 1874 and 54-inches in 1883. In 1882-3, John Macpherson improved the water supply to the mill and installed larger machinery.⁸⁶ The machine is described as 80-inches wide after

73. Shorter, *Paper mills*, 165.

75. Hart, *The industrial history of Dean* (Newton Abbot, 1971), 44.

76. Excise general letter, 1 December 1842.

77. Ordnance Survey 6-inch map, sheet XLVI NE, surveyed 1879/80.

78. Hart, 381.

80. Taylor's map.

82. Rudge, II, 121.

84. *Glouc. Jnl.*, 28 June 1875.

86. *V.C.H. Glos.*, x, 112.

74. Shorter, *Trans. B.G.A.S.*, LXXI, 158.

79. Shorter, *Trans. B.G.A.S.*, LXXI, 159.

81. Shorter, *Paper mills*, 165.

83. Hart, 382-3.

85. Hart, 385.

1885, making blottings, printing, writing papers. In 1895 the manager was Mr Johnstone, according to Harris's *Directory*, and the mill was finally closed that year. Most of the buildings have now been demolished, yet this must have been one of the most interesting and forward-looking mills in the country.

52 CLANNA WEIR MILL

SO 589021

53 CAMP MILL

SO 664106

Clanna Weir Mill had been a forge about 1775-1790. It was owned by J. F. Noble & Co. in 1879, who used the mark 'No. 144' for this mill and ran it together with Rowley Mill (No. 50 above) which they also owned.⁸⁷ Although shown on the 6-inch OS map about 1880 as a paper mill, it always appears to have been a board mill. It was being run by M. J. Mason in 1887 and the following year he leased Camp Mill, Soudley.

Camp Mill had a very varied history, as a foundry, flour mill and saw mill⁸⁸ before being used for board. After passing through several hands, it finally closed as a board mill in May 1908. It was later used again as a saw mill and is today a car dump.

54 HALL MILL, Awre⁸⁹ Hereford 142, Newnham Ride

SO 697076

A mill is shown on this site on Taylor's map.⁹⁰ The poll for a knight of the shire in 1811 shows that it was then occupied by a Mr Lloyd. The 1816 Excise letter⁹¹ records Mr Joseph Lloyd. The last Excise reference is in 1834 and the paper mill had ceased before 1851. It was later Awre corn mill⁹² and the mill dam, the site of the water-wheel and traces of some buildings can still be seen.

55 UPPER REDBROOK COPPER WORKS

SO 536101

56 LOWER REDBROOK COPPER WORKS

SO 538097

Documents in the Gloucestershire R.O. refer to these sites. One relates to the Upper Redbrook works, 'formerly used as a paper mill and now converted into a copper works', March 1710.⁹³ Another is a lease in December 1680 of a corn mill or paper mill in Redbrook, Newland called Redbrook Lower Mill and a fulling mill.⁹⁴ It appears to have been converted into a copper works by 1691.

57 GUNS MILL⁹⁵ Hereford 143, Dean Ride

SO 675159

58 MIDDLE MILL⁹⁶ Hereford 144, Dean Ride

SO 673159

59 UPPER MILL⁹⁷ Hereford 145, Dean Ride

SO 672158

In 1701 there were two grist mills and a fulling mill mortgaged to Thomas Foley. There was also a furnace which had been rebuilt in 1683 and which was used by the Foley partnership at least until 1732.⁹⁸ The water for power came from St Anthony's Well, which had been famous as a source of medicinal water.⁹⁹ In July 1743 Joseph Lloyd was advertising in the *Gloucester Journal* for labour for his paper mill, and for the next 100 years members of the Lloyd family continued to occupy these mills. The 1816 excise list¹⁰⁰ shows a later Joseph Lloyd at these three mills as well as Hall Mill (No. 54 above) and Bill Mill (No. 16). He had also leased Sudeley Mill (No. 62 below) in 1803 and his brothers were then tenants at the Postlip Mills (Nos. 63, 64, 65). The Abenhall tithe map of 1840 refers to the paper mill as the lowest of a group of mills, some of the others upstream being washing mills. The mills were discontinued in 1848, but in May 1855 they were being advertised in the *Gloucester Journal* for sale. The large mill then contained a paper-making machine and

87. Hart, 381.

89. Shorter, *Trans. B.G.A.S.*, LXXI, 157.

90. Taylor's map.

92. Ordnance Survey 6-inch map, sheet XL SW, surveyed 1879.

93. Glos. R.O., D1677/GG1092.

95. Shorter, *Trans. B.G.A.S.*, LXXI, 157.

97. *Ibid.*

99. Rudge, II, 21.

88. Hart, 386.

91. Excise general letter, 8 October 1816.

92. Glos. R.O., D1677/GG1010.

94. Glos. R.O., D1677/GG1010.

96. *Ibid.*

98. Hart, 70.

100. Excise general letter, 8 October 1816.

drying machine by Donkin & Co., two steam engines, three large steam boilers and other machinery, the whole erected new since 1851. There was a washing mill (Middle Mill?) and also a vat mill (Upper Mill?) nearby. The advertisement stated that the finest writing paper had been made for many years, the mills being formerly occupied by Mr Lloyd and since by Mr Birt, whose bankruptcy was the cause of the sale. Ultimately the mills were in the hands of Joseph Skipp Lloyd, a barrister and a direct descendant of the original Joseph Lloyd. They finally closed in 1879.¹⁰¹ A detailed description of these sites and a survey of the old furnace and its buildings has recently been published.¹⁰²

60 LONGHOPE MILL¹⁰³ Gloster 244 SO 691184

A furnace existed in this parish as early as 1656 and was for some years leased to Thomas Foley. The paper mill appears for the first and only time in the excise list in 1821. It appears to have closed before 1832. It has been suggested that the mill was south of Longhope railway bridge.¹⁰⁴ At this spot a mill is shown on the 1831 1-inch OS map and on the 1878 6-inch OS map is Furnace Flour Mill.

61 BROMSBERROW MILL¹⁰⁵ SO 736343

It would seem from an article on Bromsberrow¹⁰⁶ that this was called Pepper Mill prior to 1700. The one and only reference to a paper mill is Taylor's 1777 map of Gloucestershire. His 1786 map of Herefordshire shows 'Pepper Mill' and it may therefore have been merely a mistake by Taylor in the Gloucestershire map.

62 SUDELEY MILL¹⁰⁷ Gloster 103, Winchcombe Ride SP 027281

63 COATES (also called Postlip)
LOWER MILL¹⁰⁸ SP 018277

64 COATES (also called Postlip)
MIDDLE MILL¹⁰⁹ SP 013272

65 POSTLIP UPPER MILL¹¹⁰ Gloster 633, Winchcombe Ride SP 008271

There is a fairly continuous history of mills in this area since the Domesday Survey recorded six mills in Sudeley manor and two in Postlip. Richard Horton leased Noble's Mill, Walk Mill and a mill at Coates in 1585.¹¹¹ In 1687 the churchwarden's rate assessment¹¹² includes a Mr Williams for the mills at Coates, but by 1728 John Durham was paying rates for places at Coates and for Postlip Upper Mill.¹¹³ This Mr Durham is the first known paper-maker at any of these mills and as early as 1733 John Durham & Co. were taking their workers on an annual feast.¹¹⁴ John Durham was paying rates for Coates (or Postlip) Lower Mill from 1734, Coates (or Postlip) Middle Mill from 1745 and his son William was also tenant of Sudeley Mill from 1769. After the death of William Durham in 1803 the four mills were occupied by members of the same Lloyd family who were associated with Guns Mill (No. 57 above).

The Sudeley Mill was bought by the Lloyds in 1812.¹¹⁵ In the 1816 excise letter¹¹⁶ the four mills are given the one number '103' but this number was later associated exclusively with the Sudeley Mill. It closed in 1842, reopened in 1844 and continued spasmodically until 1860, though the buildings, even today, are clearly recognizable as a paper mill with drying loft.

In 1820 the Lloyds were making writing paper at Postlip Upper Mill, brown or wrapping paper at

101. A. W. Crawley-Boevey, *Cartulary of abbey of Flaxley* (Exeter, 1887).

102. G.S.I.A. *Journal* (1974), 9-40.

104. Hart, 386.

106. *Trans. B.G.A.S.*, XLV (1923), 95-155.

108. *Ibid.*

110. *Ibid.*

112. *Glos. R.O.*, P368/CW1 etc.

114. *Gloc. Jnl*, 25 September 1735.

116. Excise general letter, 8 October 1816.

103. Shorter, *Trans. B.G.A.S.*, LXXI, 160.

105. Shorter, *Trans. B.G.A.S.*, LXXI, 157.

107. Shorter, *Trans. B.G.A.S.*, LXXI, 155-6.

109. *Ibid.*

111. *P.R.O.*, E164/39/174.

113. *Glos. R.O.*, P368/OV1 etc.

115. *Glos. R.O.*, D2579, Box 8.

Coates (or Postlip) Middle Mill and blue or sugar papers at Lower Mill. They were however only tenants and the mills were sold by Lord Coventry to W. S. Evans. He installed a paper-making machine with four drying cylinders, probably by Bryan Donkin and Co., and it came into use in 1827. The 1828 excise list¹¹⁷ shows Postlip under a new number (No. 633) and Patrick Tregent, previously of Littleton and Harvington Mills (Nos. 11 and 12 above) was W. S. Evans's tenant.

In 1850 J. R. Evans (apparently not related) became the tenant together with his partner W. G. Adlard, using the name Evans & Co. A programme of improvements and alterations was carried out. After the death of J. R. Evans in 1870 the mills continued under W. G. Adlard and his son, until 1876 when Evans, Adlard & Co. were able to buy the mills. Having become the owners, the Adlards largely rebuilt the mills, a new paper-making machine with seven drying cylinders made by Bertrams of Edinburgh was installed in 1877 and many other alterations carried out. The company was already making filter and blotting papers and eventually became Evans Adlard & Co. Ltd who still manufacture paper at Postlip Upper Mill.

A very detailed history of these four mills has recently been published,¹¹⁸ with many illustrations of their watermarks. Records relating to the Sudeley Mills¹¹⁹ and Postlip Mills¹²⁰ have been deposited with the Gloucestershire R.O.

66 STANWAY PAPER MILL

SP 071322

This was a paper mill as early as 1635 according to a rent roll of that year.¹²¹ Later references suggest that it worked as such for most of the 17th and 18th centuries. An 1816 rent roll refers to Paper Mill Farm which is still on the same site. The 1828 1-inch OS map marks a paper mill. The paper-makers are unknown but this may well have been one of the earliest, if not the earliest paper mill in the country.

67 BLOCKLEY

SP 17135

In 1840 a new silk mill 'The Good Intent' was built on the site of an earlier flour mill. It was put for sale in 1864 'partly fitted up with machinery for throwing silk . . . abundant spring water fit for the manufacture of fine writing paper'. It was rented for that purpose. It was partly burnt down in 1866 and the tenant Alfred Compare was convicted for arson. It is now a dwelling house.¹²²

68 LITTLE BARRINGTON
MILL¹²³

Marlborough 228, Burford Ride

SP 216130

There had been a fulling mill at Little Barrington for many years. It is not known when it became a paper mill. The excise records only show that George Ward worked it from 1816 until Henry Ward took over in 1842. He closed it down in 1846 at which date he moved to the nearby Widford Mills (No. 9). It later became part of Barrington Grove estate and was converted into three cottages—Paper Mill Cottages. The drying house can still be clearly recognized and part of the water-wheel remains. This mill was transferred to the Oxford collection of excise in 1832.

69 QUENINGTON MILL¹²⁴

Marlborough 229, Fairford 2 Ride

SP 148038

In 1726 Tuck Mills in Quenington were leased to Robert Jenner of Fairford¹²⁵ but by 1743 it seems likely that one had already been converted to a paper mill.¹²⁶ Certainly in 1748 it was insured by Charles Morgan of Fairford and the tenant was Jonathan Carby, paper-maker, Carby died in 1791. The next known paper-maker is Joshua Carby Radway in 1803.¹²⁷ He remained until 1835, being succeeded by Thomas Pinnell, then a partnership of Thomas & Richard Pinnell until 1841 when Joseph Bence Palser is recorded (he had been at Bradley Mill (No. 39) in 1838).

117. Excise general letter, 20 March 1828.

119. Glos. R.O., D2579, Box 8.

121. *V.C.H. Glos.*, vi, 229.123. Shorter, *Trans. B.G.A.S.*, LXXI, 161.

125. Tann, 242.

127. Rudge, II, 267.

118. *G.S.I.A. Journal* (1975), 9-65.

120. Glos. R.O., D1005.

122. N. M. Marshall, *Blockley and the silk trade* (1972), 15.124. *Ibid.*, 160.126. Shorter, *Paper mills*, 164.

According to evidence given to the Fourdrinier Committee¹²⁸ J. C. Radway was given a licence for a paper-making machine at Quenington on 5 July 1820. This was the first in Gloucestershire, though a month after the licence for Flint & Tregent at Littleton (No. 11) and the 36th in the U.K.

The mill was transferred to the Oxford collection of excise in 1832. It had four beaters working in 1851 and was later making printing paper from straw. It was owned by J. Cowley (C. Brewer, manager) in 1856. Between 1859 and 1863 it had been transferred to W. A. Knight who occupied it in 1876, but it does not appear in the 1879 Kelly's *Directory*.

70 LYDNEY PAPER MILL

Lydney

SO 631022

This is a new mill, having been built in 1965 and is owned by James R. Crompton and Brothers Ltd.

Thus ends our survey—a story of many small manufacturing units being overtaken by mechanization and concentration, till only a few large units remain.

Permission to examine the records in the Customs & Excise library is gratefully acknowledged.

January 1976

128. 1837 Fourdrinier committee papers.