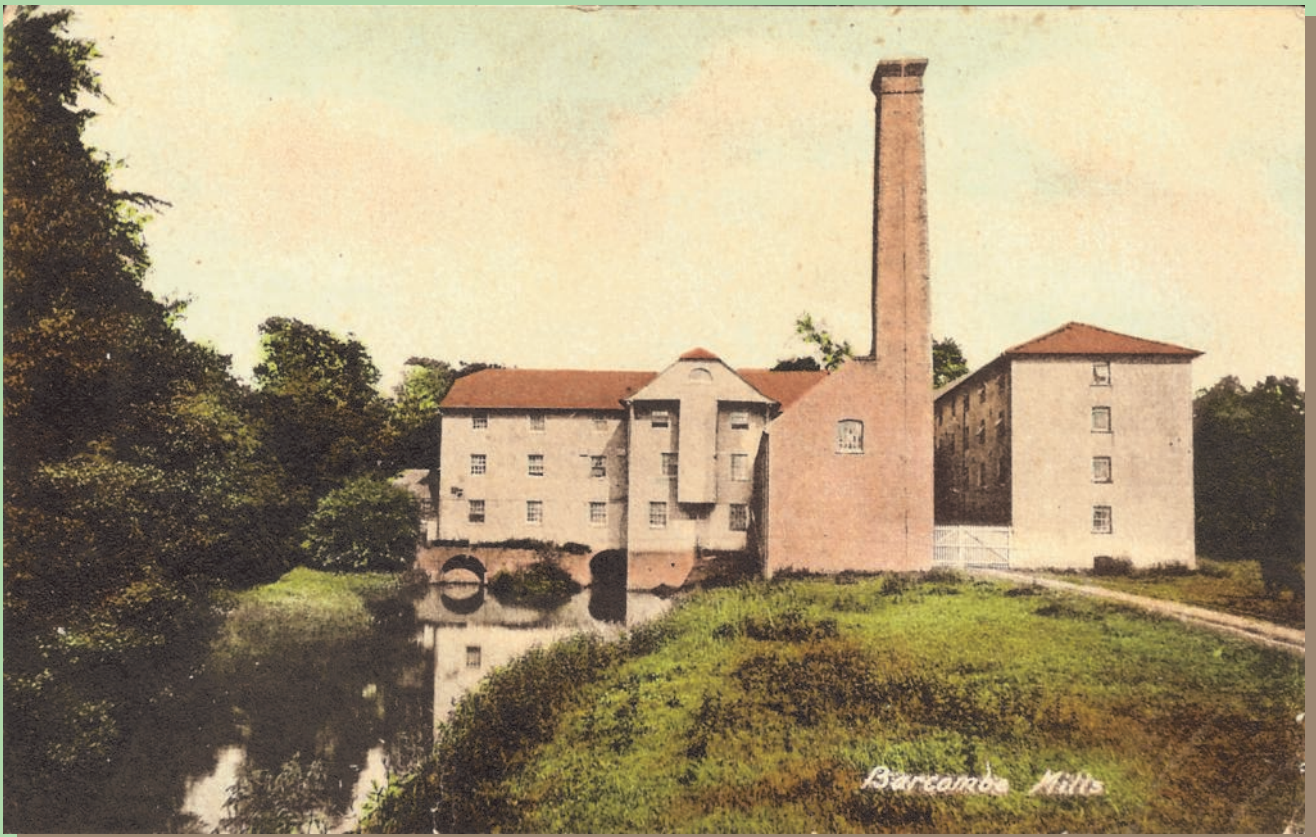


BARCOMBE MILLS



Its Industrial and Transport History

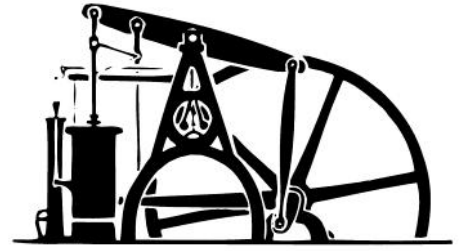


**The Mills of Barcombe Parish
The Button Factory at Barcombe Mills
Barcombe Mills Toll Road
The Upper Ouse Navigation
The Railway at Barcombe Mills**

£5.00

2014

SUSSEX INDUSTRIAL HISTORY



Journal of the Sussex Industrial Archaeology Society

FORTY-FOUR

2014

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Cover illustration—the rear of Barcombe Mill (postcard dated 1910)

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The annual subscription to the Sussex Industrial Archaeology Society is £15 payable on 1 April. Life membership is available at fifteen times the annual subscription. Members are entitled to copies of the *Sussex Industrial History* and the *Newsletters* without further charge.

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ISSN 0263 5151

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THE MILLS OF BARCOMBE PARISH

Bob Bonnett

In the Domesday Survey of 1086, Barcombe - '*Bercham*' - is mentioned as having 'three and one half' mills with an annual rent of 20 shillings (£1) and in the ownership of William de Waterville. The rent of 20 shillings was the total for all the mills. The half mill is the proportion (50%) taken as rent. Mills with two pairs of stones were classed as two mills in the survey. I have seen a report that a mill was half in Barcombe and half in the neighbouring parish of Isfield. No mill is reported in Isfield in the Domesday books. Watermills were used for other purposes than grinding corn, such as fulling, and even ore-crushing was listed in the Survey. Animal mills were also included, therefore it is possible that one of the mills surveyed at Barcombe may have been a fulling mill or animal-powered.

With Barcombe having more than three mills, it raises the question: why so many? Was it because this area was the Saxon Hundred meeting place? Perhaps the Barcombe area was a central settlement where courts were attended by freemen from the district, thus attracting large gatherings. The only Saxon feature so far discovered in Barcombe was located in the courtyard of the Roman Villa. Maybe there is more to be discovered.

In 1572 two watermills are recorded in Barcombe. In Edna and 'Mac' McCarthy's third book in their trilogy *Sussex River* they record that they found '16th century references to Thomas Erith and his wife Denise who held a fulling mill at Barcombe now called a corn mill, and a 17th century reference to the little mill of Barcombe'.

A watermill at Barcombe is mentioned on Budgen's 1723 large-scale map of Sussex. The mill appears again on the next large-scale map of Gardner, Yeakell and Gream in 1795. It is probable, therefore, that a watermill worked on this site, or close by, from before the Domesday Survey until the start of the Second World War.

No windmills are shown on either map. With two sites where windmills might have stood shown on the tithe map of 1839, it is probable that windmills did work in the period between the two maps.

Barcombe Watermill was in operation from the 1780s and the oil mill, which also ground corn, from the 1800s. Why, with this local milling capacity, was a new windmill built in 1818? The Parish of Barcombe's population in 1818 was about 730 — not enough to ensure that the windmill would be profitable. Flour and animal feed produced in the mills

was possibly transported to Lewes by river. We know that the river was navigable as Budgen's map of 1723 shows the Ouse navigable to Isfield. This was long before the navigation was constructed in the 1790s.

In 1858 the Lewes to Uckfield railway line was opened and later sidings accessed the two watermills, increasing their opportunity to sell their produce further afield.

Barcombe Windmills

The tithe map of 1839 names two possible sites where windmills might have stood in addition to the mills detailed below. The name 'Mill Mead' is shown west of the road from Barcombe to Barcombe Cross. 'Mill Field' is shown ¼ mile east of Barcombe Cross.

Hawcock's Mill

Under Barcombe in Schedule 2 of the 1801 Defence Schedule, a windmill and one watermill are entered capable of supplying 30 sacks of flour every 24 hours between them. The windmill was most probably Hawcock's Mill. The Ordnance Survey map of 1813 shows the mill south of the road to Hamsey Common. As the mill does not appear on the Gardner, Yeakell and Gream map of 1795 it was probably built around 1800.

The *Sussex Weekly Advertiser* dated 9 March 1818 reports:

'On Saturday morning we had again a heavy gale of wind, which blew down a windmill at Barcombe, belonging to Mr. Hawcock, and did other damage in the neighbourhood.'

The same gale damaged fishing craft at Selsey and Bognor. In a sales notice dated 27 April in the same paper the damage was reported as 'trifling', but one wonders why the mill was so soon advertised for sale:

'To be sold at auction by Verrall & Son, at the Star Inn, Lewes, on 2 May. A Post Windmill, the property of Mr. John Awcock, built a few years since, which was blown down in the gale of March 7, situated near Barcombe Church, and late in the occupation of Messrs Morley & Guy. The damaged sustained is but trifling: the principle parts will come to hand without new framing, and the breast, round-beam, stones, wheels, sweeps and one stock etc. etc. are not damaged by the fall. May be viewed and particulars known by applying to Mr. Awcock, Barcombe, or Mr. John Streeter, Miller, Preston.'

It is probable that the mill was not rebuilt, although it continued to be shown on the revised Ordnance

Survey map of 1843. Greenwood's map of 1825, surveyed in 1823 and 1824, only shows Barcombe Windmill to the north.

Barcombe Windmill

Barcombe Windmill was built around 1818 soon after Hawcock's Mill was blown down, possibly to replace it. The mill was built by millwright Jesse Pumphery who then worked it until 1825 when he sold it to John Holroyd. Richard Jenner became the first tenant. The *Sussex Advertiser* of 1 June 1835 advertised Barcombe Place, the house, together with Burtenshaw Farm, land and Barcombe Windmill for sale. The estate, including the mill, was again offered for sale in 1836 in January and October and again in October 1837. During this period the mill was let to Mr. Richard Jenner. In 1839 Jenner was succeeded by Henry Guy.

Action in the High Court brought about the next sale offer, first advertised in the *London Gazette* dated 30 May 1845:

'Sussex, part of the Estates of the late John Holroyd Esq.

To be sold by auction under an order of the High Court of Chancery in a case of Holroyd v Wyatt, at the Star Inn, Lewes, during July 1845.'

'A freehold estate at Barcombe consisting of a capital Windmill driving two pairs of stones, and buildings, let to Mr. Guy and Mr. Good at £54 10s 0d per annum.'

The mill was again advertised for sale by auction in the *Sussex Advertiser* in their 26 April and 2 May 1848 editions.

Mr. Guy and Mr. Good were still in residence; the only difference was the rent was reduced to £49 12s 0d per annum. Good may have left soon after and then, in 1851, Miss M. Guy is listed as miller, followed in 1855 by Henry Guy. Simmons lists Mrs. Mary Martin at the mill between 1855 and 1870, but this is uncertain. In 1882 John Locke was in occupation; Mrs. Mary Martin, miller, is in the Manor House, presumably the owner of the mill.

Simmons interviewed Mr. Bunney in 1937, a relation (son?) of Mr. E. Bunney who, in 1891, had purchased the mill house and mill site. The mill was not working when Bunney purchased it. The following are his notes from the interview:

'Very high white post mill with tail-pole and exceptionally large sweeps. Three floors, on brick roundhouse. The only mill on this site. Horse pulled it round when it required to be turned. Owned by Henry

Guy, then Henry Gaston, then bought by Mrs. Hensley and rented from her by Mr. John Locke, who was the last to work it. Sold to Mr. E. W. Bunney in 1891 by Mrs. Hemsley for the ground and mill house. He wanted it taken down, but the millwrights wanted £30 and all the materials for the job, which he would not pay, so it was left alone and the roundhouse was used as a hen house, selling eggs etc. It was eventually burnt down about 29 or 30 years ago (1900/01) one day at four o'clock in the afternoon. The cause was never known: it was thought to have started in the top of the mill; there was a gale blowing at the time and the burning wood was blown a tremendous way – some parts a quarter of a mile away. The wood was very thick and strong and the centre post was 2ft. square. Mr. Bunney got £100 insurance and also sold the interior as quite a lot was saved. No hens were burnt; the only thing of value lost was a gun belonging to the present Mr. Bunney. The mill house is still known by that name and the bakehouse is now turned into the garage.'

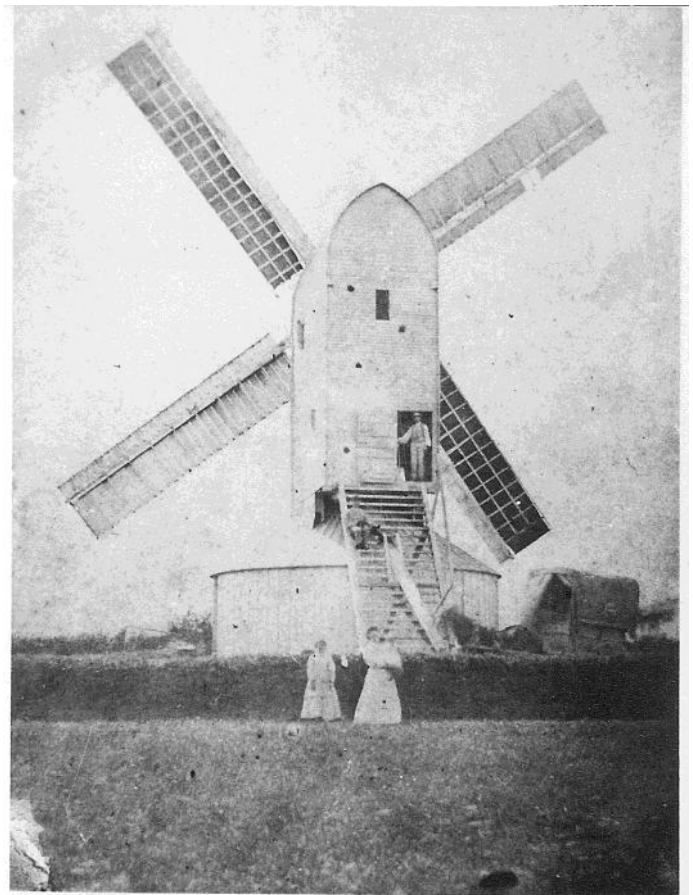


Fig. 1 Barcombe Mill as seen in the photograph taken in 1874. The mill was large and tall with two common and two shuttered sweeps. (Peter Hill collection.)

Barcombe Oil Mills

The Royal Exchange Fire Insurance Policy No. 138560, dated 26 February 1794, appears to be the first record of Barcombe Oil Mills:



Fig. 2 The Oil Mills, Barcombe

'Thomas Rickman jnr. Of Lewes in the Co. of Sussex. On his Oil Mills brick built and slated situated in the parish of Barcombe in the Co. aforesaid £200. On the going gears running tackle and machinery therein £200.'

These values increased to £300 and £500 respectively in 1800.

No mention is made on the policy of Samuel Durrant, who is recorded as being in partnership with Thomas Rickman from 1793. It was the two of them who built the mill. In the Defence Schedule of 1801, Rickman's watermill and the Barcombe Windmill are recorded, the watermill being able to provide a 21-day supply of flour. Rickman, at the time, owned the oil mill (which also milled), Barcombe Watermill down river and Barcombe Windmill. All three milled grain, which was not noted in the schedule.

In 1809 the mill building, corn-milling machinery and oil machinery were insured, again to Thomas Rickman. This time they were separated at £250, £50 and £200 respectively.

The *Sussex Weekly Advertiser* dated September 19 1808 only records Samuel Durrant:

'On Thursday last, a man employed by Messrs. Durrant & Co. in their Oil Mill at Barcombe, was much

hurt by the water wheel, whilst in motion; but we are glad to hear good hopes are entertained of his recovery.'

Durrant is again recorded in 1810 in the Royal Exchange Fire Insurance Policy, No. 251532. He had a warehouse in Lewes:

'3 February 1810: S. W. Durrant & Co. of Lewes, Co of Sussex, Corn, Flour and Oil Merchants.' On utensils and trade in their Warehouse, timber and slated, situated near the river in the parish of All Saints in Lewes, in which it is warranted no hazardous goods are deposited £3000.'

'On stock in trade including Bolting Cloths etc. in their new built Water Corn Millhouse only adjoining and communicating with their Oil Mill, timber and slated, situated in the Parish of Barcombe, Co. aforesaid, £1000. On moveable utensils etc. in the said Oil Mill only £500.'

The partnership of Thomas Rickman Jnr. and Samuel Durrant ended in 1812.

By 1834 the mill was owned by Russell Gray who is recorded in *Kelly's Directory* as 'Miller and Seed Crusher.' The mill was advertised in the *Sussex Weekly Advertiser*, 25 April 1848, together with the watermill downstream for sale by auction on May 16 1848 at the Star Inn, Lewes. The advertisement gave the following details of the Oil Mill:

'Also, near to the above, on the River Ouse, the celebrated Freehold Oil Mills, fitted with two breast wheels, two pair of large vertical grinding stones, 15 presses, stoves, and two pair of rollers; also four pair of corn mill French stones, double action high pressure steam engine, extensive warehouse, and oil cisterns to hold 70 tons of oil, together with a substantial warehouse with three floors situated in the town of Lewes and on the River Ouse. The purchaser of the corn mill will have the option of taking by valuation the well established bakers' shops at Brighton and elsewhere.'

(The corn mill referred to above is Barcombe Mill which was included in the advertisement and also owned by Russell Gray. See below.)

The method used to extract the oil when the mill was built is not known. It is possible that a steam engine was installed when the mill was built; a Boulton and Watt double-acting steam engine was purchased by Cotes and Jarratt for their oil mill in Hull in 1783. It is more likely that 'stampers' were first used, driven from the water wheel, and then later these were replaced by presses powered from the steam engine.

The main oils processed were linseed, hemp, rapeseed and mustard. The first part of the process is to crush the seeds (bruising the seeds) under large heavy edge runners. These are a pair of vertical

circular stones freely mounted at the ends of a short horizontal axle. A vertical shaft is joined to the middle of the axle and rotating this shaft causes the stones to revolve on a circular base crushing the seeds laid in their path.

The Romans used hand- and animal-turned runners to crush olives. Also in the second century AD the Chinese used runner stones for hulling rice. It was the Chinese who, as early as the fifth century, adapted water power to drive edge stones. Although suited to many industrial processes, it was not until the seventeenth century that the edge runner mill was used widely in Europe.

The bruised linseeds would then be warmed in a large cast iron stove to help extract the oil. Rapeseed needs little or no heat and can cause health problems to workers if heated. The seeds are then removed and emptied into porous woollen bags; the bags are wrapped in a horsehair and leather blanket and placed in one of a number of partitions in a long wooden trough. Wooden wedges are placed either side of the bags, one with the thick end up, the other thick end down. 'Stampers' stamp down on the top of the wedge with the thick end up squeezing the oil from the seeds. Fifty or more strokes may be needed until the stamps bounce indicating that the wedge has reached the bottom. The bag is removed by

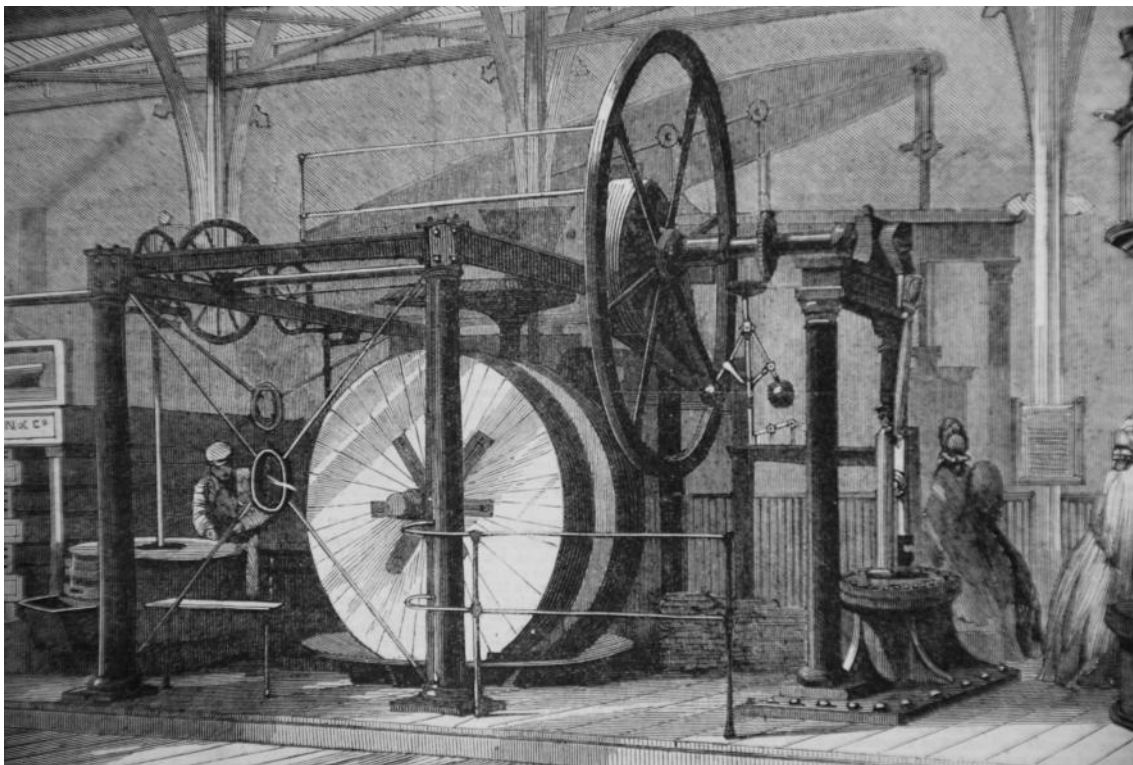


Fig. 3 from *The Illustrated London News* of 31 May 1862, showing 'Martin Samuelson & Co. Machine for Crushing and Grinding Linseed, Extracting the Oil and Making Oil Cake' at the 1862 London Exhibition.

stamping on the other wedge to release the pressure. Often not all the oil is extracted and, therefore, the contents are returned to the stove and the process repeated. The bags can be used many times and repaired when necessary.

The waterwheel would, before the installation of the steam engine, drive the stampers. The stampers were set in large strong wooden frames and lifted up by cams or pegs. The edge stones were driven by gear wheels from the waterwheel.

The remains after the second pressing, the 'cake', would be used as fertiliser or cattle feed. Small mills or cake crushers were made to turn cake into stock feed. Seed oil was used for lighting, cooking and many industrial uses including paint manufacture. Probably the first oil mill in England was built in Hull in the fourteenth century. The Oil Mill, Barcombe, in 1835 was advertising linseed oil cake at £11 per thousand, for, of course, cash.

In August 1848 R. H. Billiter in the *Sussex Weekly Advertiser*:

'Begg to inform the consumers of Oil Cake the Oil Mill has commenced working for the season, and that they can now be supplied with Genuine Linseed Cake at £10 – 10s. – 0d. per ton. Terms as in London, namely ready money.'

Two years later Mr. Billiter appealed, unsuccessfully, against the rating of the mill occupied by him. A 'Gray' still appears in the records until 1855, but Billiter is shown as the occupier when the mill caught fire in 1854 and it is his executors who advertised the mill for sale in 1880. But before the sale is recorded, the details of the fire, written up in the *Sussex Weekly Advertiser*, June 13 1854, are of interest:

'Destruction by Fire of Barcombe Oil Mill, on Tuesday morning last for some time in the occupation of and under the management of Mr. R. H. Billeter and insured'

'The mill was about 100 feet long by about 60 feet deep. It was mainly for the purpose of manufacturing oil and cake, but the power during the summer season was applied to grind flour, hence the stock of about 250 quarters of corn which were destroyed during the blaze.'

'With larges patches of burning oil floating down the river, fears were raised of setting the corn mill alight further downstream. Mill was still burning in places the following Sunday evening. Damage estimated at between seven and eight thousand pounds.'

Surprisingly, after only four months, Billiter was advertising that he was in a position to supply cake for present use, and that he had every reason to believe the mill destroyed by fire in June last would be at work again within the next month.

In June 1856 Billiter leased the lower corn mill for a period of 21 years.

He died on the 27 August 1879 and in October both mills were advertised for sale by his executors on behalf of his widow.

The 1880 sales notice in the *Sussex Weekly Advertiser* gives us further details of the mill:

'To be sold by auction by instructions from the executors of the late R. H. Billiter Esq.'

'Lot 1. The Oil and Upper Flour Mill, on the River Ouse, at Barcombe, a large and substantial building 120 feet (36.6m.) by 64 feet (19.5m.): engine house 36 feet (11m.) by 27 feet (8.2m.), a detached oil store 45 feet (13.7m.) square, gas house, cottage, stabling and other buildings.'

'The mills are driven by two undershot water wheels (one iron and one wood) and a 28 horse power beam steam engine, capable of working 80 tons of oil cake and about 200 quarters of wheat per week. They are arranged throughout with spacious stores and fitted with best stiff gear machinery. In the oil mill there are two sets of double pumps, 16 hydraulic presses with 10 in. (254mm.) rams, one pair of granite and one pair of York stones: and in the flour mill four pairs of French wheat stones. The mills are in the occupation of Messrs. William Tickner & Co.'

Tickner, with the previous foreman, Sayer, then worked the oil mill. Their partnership was dissolved at the end of December 1887. It is unknown if the mill continued working. It is most probable that oil production ceased in 1887. The mill was again advertised for sale on the 1 June 1891, but as there were no bids the property was withdrawn by the owners, Messrs. H. Drewitt & Son. Simmons records that in 1899 Charles Albert Colbran was at the mill and two years later William Hemsley. By March 1901 Hemsley was advertising ground oats and poultry meal for sale. In 1905 E. Kenward owned the mill and corn was ground, possibly until the mill was demolished in 1925.

This large oil mill in the south of England was helped by being connected first to the Ouse Navigation and later, via a siding, to the Uckfield to Lewes railway line. Part of the outer walls and floor of the mill can still be determined and six runner stones remain on the site.

Barcombe Mill

This may be an early site of a fulling mill; later a single reference in Shorter's *'Paper Mills and Makers'* refers to Barcombe Mill as being a paper mill. Shorter also writes in 1951 in *'Notes and Queries'* that an advertisement in the *Post Man*, 12 December 1706, states that a paper mill, corn mill and lands in the parish of Barcombe were to be sold. Often a watermill carried out more than one process.

The first single reference to a corn mill found was the Royal Exchange Fire Insurance Policy, No. 91449: 29 December 1784:

'Thomas Rickman & Son of Barkham in the Co. of Sussex, Millers.'

'On their dwelling house timber built and tiled situated at Barkham aforesaid £200. On their Water Corn Millhouse timber built and tiled situated near the mills therein together with the running tackle £500. On utensils and stock in trade £1000.'

A second Royal Exchange Fire Insurance Policy, No. 132132 dated 14 January 1793, records:

'Thomas Rickman & Son of the parish of Barcombe in the Co. of Sussex.'

'On a house timber built and tiled situated in the parish aforesaid £300. On a Water Corn Mill near £700.'

It is uncertain if the Rickmans built the mill around 1780 or if they owned another mill at this time, then, around 1793, built the mill at Barcombe to take advantage of the newly opened Ouse Navigation. Rickman also owned Barcombe Oil Mill.

The Royal Exchange Fire Insurance Policy, No. 173289 dated 13 March 1800, to Thos. Rickman & Son increased the value of the mill to £1000 and: 'Warranted no steam engine.'

It is not usual to know the name of the millwright looking after a mill, but by virtue of a change in ownership in a millwrighting business advertised in the *Sussex Weekly Advertiser*, 29 October 1804 we are told:

'To Millers. William Sudds, Millwright, takes the liberty of informing his friends that he intends carrying on the business on his own account. Orders directed to him, at Mr. Packham's opposite Cliff Church, Lewes, will be punctually attended to. William Sudds flatters himself, that having been for the last five years, constantly employed, and having care and Management of Barcombe Mill will be a sufficient recommendation.'

By 1834 the mill was owned by Russell Gray who is recorded in *Kelly's Directory* as 'Miller and Seed

Crusher.' Simmons records that in 1838 Richard Jenner was associated with the mill. (Owner/miller?)

The mill was advertised for sale in the *Sussex Weekly Advertiser*, 25 April 1848:

'To be sold by auction on May 16, 1848, at the Star Inn, Lewes. The copyhold Corn Mill known as Barcombe Mill, situated on the River Ouse. The mill is in complete repair, fitted with two powerful breast wheels and the most approved machinery, with 12 pairs of stones, flour dressing machines, and capable of manufacturing from 500 to 600 sacks per week.'

The advertisement also gave details of the Oil Mill.

The mill was purchased by Whitfield, Molyneux and Whitfield, and in June 1856 leased to Richard Billiter who, like Rickman before him, also owned Barcombe Oil Mill.

The *Sussex Weekly Advertiser* on 27 October 1858 reported:

'An unusual accident occurred during the week at Barcombe Mills, the injured person being Mr. Gaston who has been employed there these 25 years. Whilst sacks of corn were being raised to the upper floor, one fell a distance of 18 feet (5.49m.) and fell with frightful force on to the head, causing a dislocation of the neck. After he had recovered from the shock Mr. Gaston put his hands at the back of his neck and forced the bone back into position. Mr. Gaston is a strong muscular man, otherwise it seems he must certainly have been killed. He was seen afterwards by a surgeon and is progressing favourably.'

Billiter bought land and both mills from Whitfield Molyneux and Whitfield for £24,000 in 1865.

Stidder and Smith in Volume 1 of *Watermills of Sussex* write that in 1870 a new, very much larger mill was built and, like Barcombe Oil Mill, a railway siding to the Uckfield to Lewes line constructed to it. It was built mainly of pitch pine with a semi-classic façade. The mill had four floors and is said to have had 8 or 10 pairs of French burrs and one peak pair of millstones powered by two enclosed waterwheels. Simmons records that one was a breast wheel about 12 feet (3.66m.) wide, the other being an undershot wheel. (The sale notice above mentions the mill had 12 pairs of stones.)

The appearance of the mill and its size in 1848 would indicate a building of an earlier date than 1870, perhaps built by Russell Gray as early as the 1800s.

Billiter died on the 27 June 1879. Billiter's executors on behalf of his widow advertised both the oil/corn



Fig. 4

The Flour Mill in c.1870 showing a barge in front of the mill, and railway wagons on the siding to the left. (Reeves Studio, Lewes.)

mill and the corn mill for sale or rent. Only the oil mill sold; Barcombe Mill was re-advertised and subsequently purchased by William Catt, the son of William Catt who owned the large tide mill at Bishopstone, Newhaven.

In 1894, *The Miller*, dated 5 February 1894, reported:

'Barcombe Mills, Sussex. Messrs. John Catt & Co. New 5-sack roller flour mill plant by Turner has just been installed. Previously the mills had 12 pairs of stones. The mill was taken by Messrs. John Catt & Co. in 1876. Motive power for the roller plant is by 50 h.p. compound engine, (presumably a steam engine) and a "Little Giant" turbine drives the remaining three pairs of stones for wheat meal.'

Mr. Harry Dobson was in charge from 1900. By 1903 William Wilmshurst occupied the mill and worked it until it closed in 1918.

By 1922 it was owned by Messrs. Griffiths Hughes of Manchester, manufacturers of Karwood poultry food. They commissioned a survey of the building with the aim of using it for storage. By this time the rolling milling equipment had already been removed. Interestingly, the survey drawings still show that five pairs of millstones remained on the first floor. Perhaps these were used together with the rollers. It appears that the ground floor layshafts drove these stones and the layshafts on the first floor drove the rollers. The plans also show a 60hp turbine and a 30hp turbine on the first floor. No milling is thought to have been carried out.

In 1932 the buildings were owned by Obediah Corke who sold them to Edmund Schwerdt for £1350 for the manufacture of buttons. Machinery was installed to

slice nuts, imported from South America, to make coat buttons. Water power was not used. In March 1939 the building caught fire and burnt to the ground. All that remains today as a reminder of what was once one of the largest mills in Sussex are two peak stones by the river bank. However, these are not two original stones from the mill, but came from Rockhill Windmill in 1922.

Barcombe Horse-Gin or Threshing Floor

A Grade II octagonal horse-gin or threshing floor with a central wooden post and surrounding wooden posts surmounted by a thatched roof stands in front of Barcombe Church. If it housed a gin it is not known for what purpose. Possibly it was to mill flour or animal feed.

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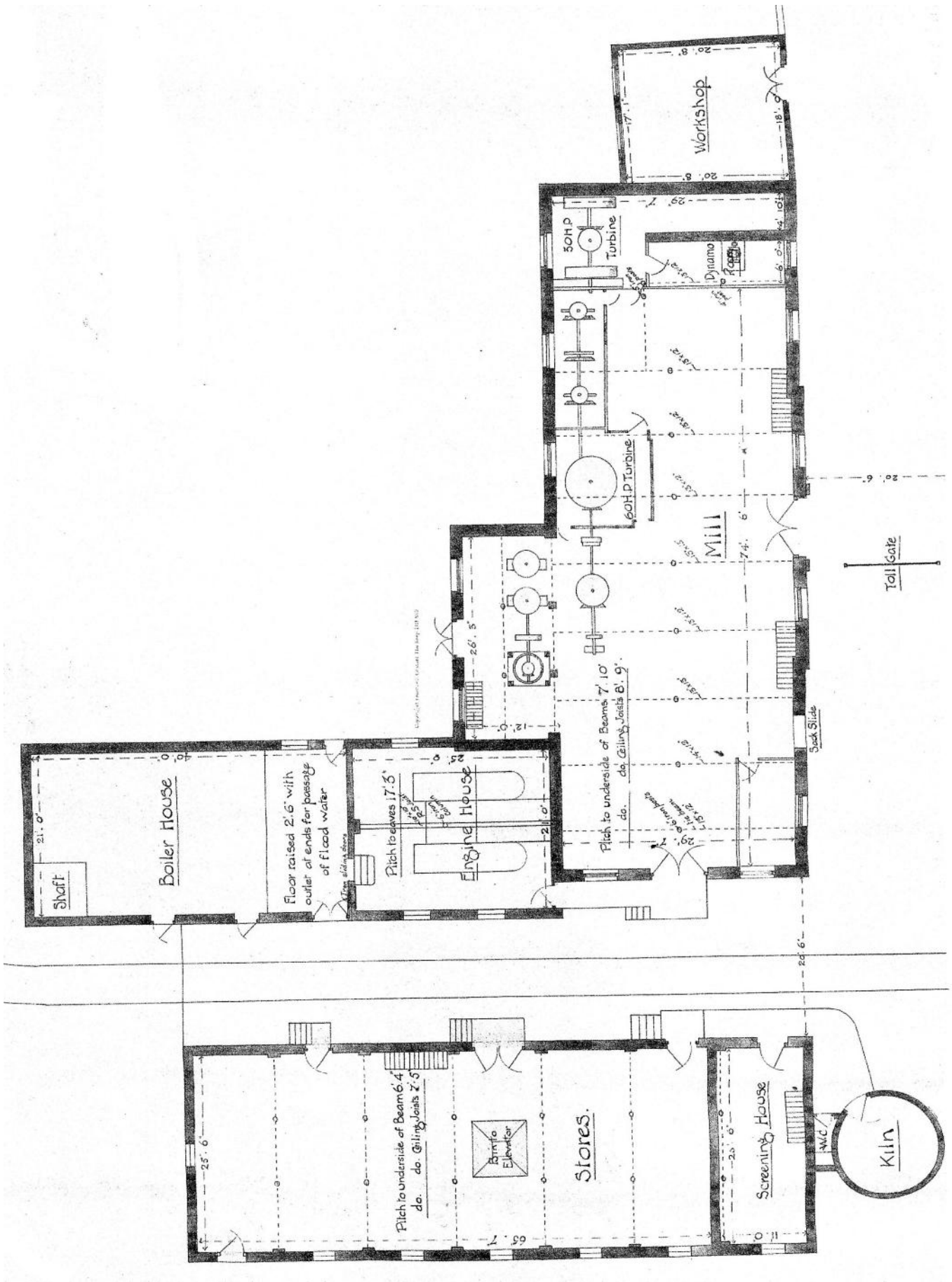


Fig. 4 Griffiths Hughes 1922 Survey Drawings — Ground Floors (East Sussex Record Office)

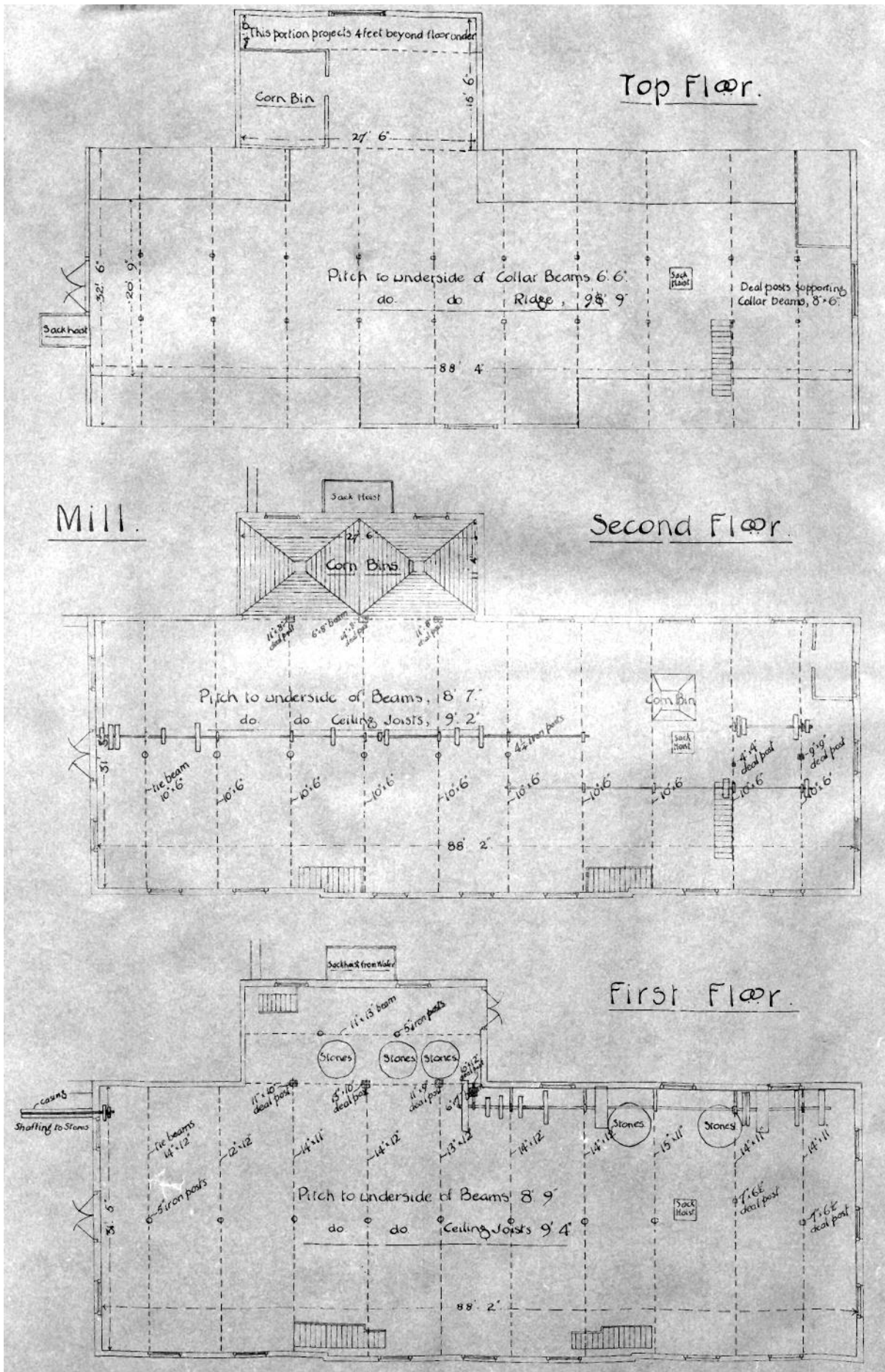


Fig. 5 Griffiths Hughes 1922 Survey Drawings — First, Second and Third Floors (East Sussex Record Office)

THE BUTTON FACTORY AT BARCOMBE MILLS

*Mike Green, Stephen Green &
Peter Cox*

Introduction

Barcombe Mills is situated at the tidal limit of the River Ouse at GR TQ433148 in the parish of Barcombe, Sussex, some 15km from the sea.

From 1932 to 1939 a button factory was based in the corn mill and the adjacent buildings. The whole must have made an impressive sight in an essentially rural part of Sussex.

The Company

The history of the button factory at Barcombe Mills begins with the purchase by Edmund Schwerdt of the 'mill, engine house, warehouse, office and site' from a local farmer Obed Corke on 2 June 1932 and ends with the destruction of the premises by fire on the night of 9 March 1939.

Edmund Schwerdt was the youngest son of Richard Schwerdt (1862-1939). Richard Schwerdt had moved from his native Germany to join the London company of CA & E Speyer Co Ltd, general dry good merchants and importers of notions (see glossary), principally buttons and braid. Richard Schwerdt's rise in the company was rapid as he became partner at the age of 22, and 5 years later the firm was renamed Speyer, Schwerdt & Co Ltd. Marriage in 1888 to Mathilde von Guaita brought great inherited wealth, enabling him to relinquish active management of the company whilst retaining the chairmanship. Richard Schwerdt set out to enjoy the life that pleased him most - that of the English country gentleman. (Schwerdt family history).

Speyer, Schwerdt & Co Ltd of 5 & 7 Golden Lane, London EC1 traded successfully up to the outbreak of the Great War but during the war and throughout the 1920s trading was difficult. In 1928 the British government introduced a safeguard import duty of 33⅓% and, although the company was solvent, the decision was made to go into voluntary liquidation which was finalised on the 24 December 1930.

Edmund, by now a 26-year-old employee of the

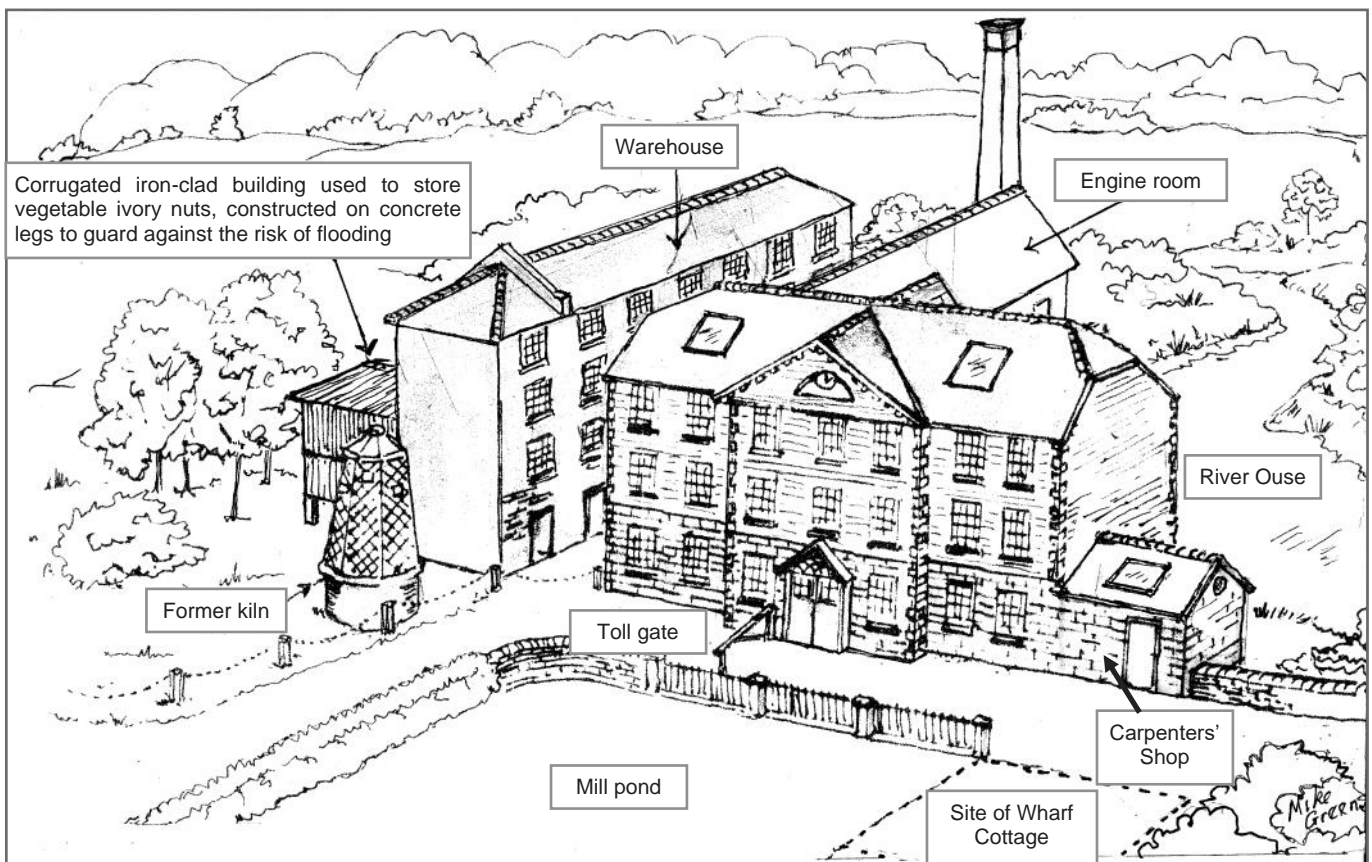


Fig. 1. A conjectural bird's eye view of Barcombe Mills Button Factory (1932-1939) from the north-east, showing the corn mill and the adjacent buildings. The wharf cottage (office) has been excluded to illustrate the position of the main buildings in relation to the Carpenters' Shop, far right, which survived the fire. (Not to scale.)



Fig. 2 East side and front of the former corn mill, showing the Carpenters' Shop, Wharf Cottage and the mill pond

company, was unhappy with the decision and believed that importing partly finished buttons would avoid the 33⅓% safeguard import duty. He decided to set up his own company and during the winding-up of Speyer, Schwerdt & Co Ltd Edmund bought the assets and goodwill of the company for £4000, financed by a loan from his bank, and on completion the company was renamed 'Speyer, Schwerdt & Co (1929) Ltd'.

Seeking suitable factory premises brought him to Barcombe Mills which he purchased with a £3,800 loan from his father, Richard Schwerdt - £1,350 for the land and buildings, £2,000 to set up a new company, 'Barcombe Mills Limited', and the remainder for ancillary purchases. The company was incorporated as a private company on 31 August 1932 and commenced trading on 1 September 1932.

Continental button manufacturers agreed to supply semi-finished buttons and an experienced button worker Giovanni Donati from Italy was appointed manager of the colouring and finishing department. This arrangement lasted only three years when "the suppliers of semi-finished buttons realised they were giving an unfair advantage to a competitor and withdrew supplies" (Edmund Schwerdt).

The decision was made to purchase additional machinery and convert the buildings at Barcombe

Mills for the purpose of manufacturing buttons from raw materials, i.e., vegetable ivory, and Leone Belotti from Italy was appointed as Works Manager. To raise funds Edmund Schwerdt approached Felix Sartori of 'The British Button Industries Co. Ltd.' at 48 Maple Road, Penge, London SE20. Sartori was in partnership with fellow Italian Ermete Speroni, having taken the place of the original co-partner A L Bellomotti who had died in 1935. Felix Sartori advanced £3,000 but negotiations broke down as the deeds for the Barcombe Mills property were held by Edmund Schwerdt's father, Richard.

Edmund Schwerdt approached his family for £10,000 but they were advised by accountants that this would not be sufficient to settle existing debts and put the company on a sound financial footing.

It is believed that subsequently Richard Schwerdt made the deeds available and Felix Sartori increased his loan to £8,000 on security of first debenture of the company's assets and the freehold of the property. On 10 February 1936 the directors affixed the Company's seal to a debenture of £8000 payable on 27 June 1937 at an interest rate of 6%. Felix Sartori appointed Leone Belotti to the board to protect his interest.

In April 1936 the offices of Speyer, Schwerdt and Co (1929) Ltd at Golden Lane were closed and business was conducted from Barcombe Mills. Prior to the

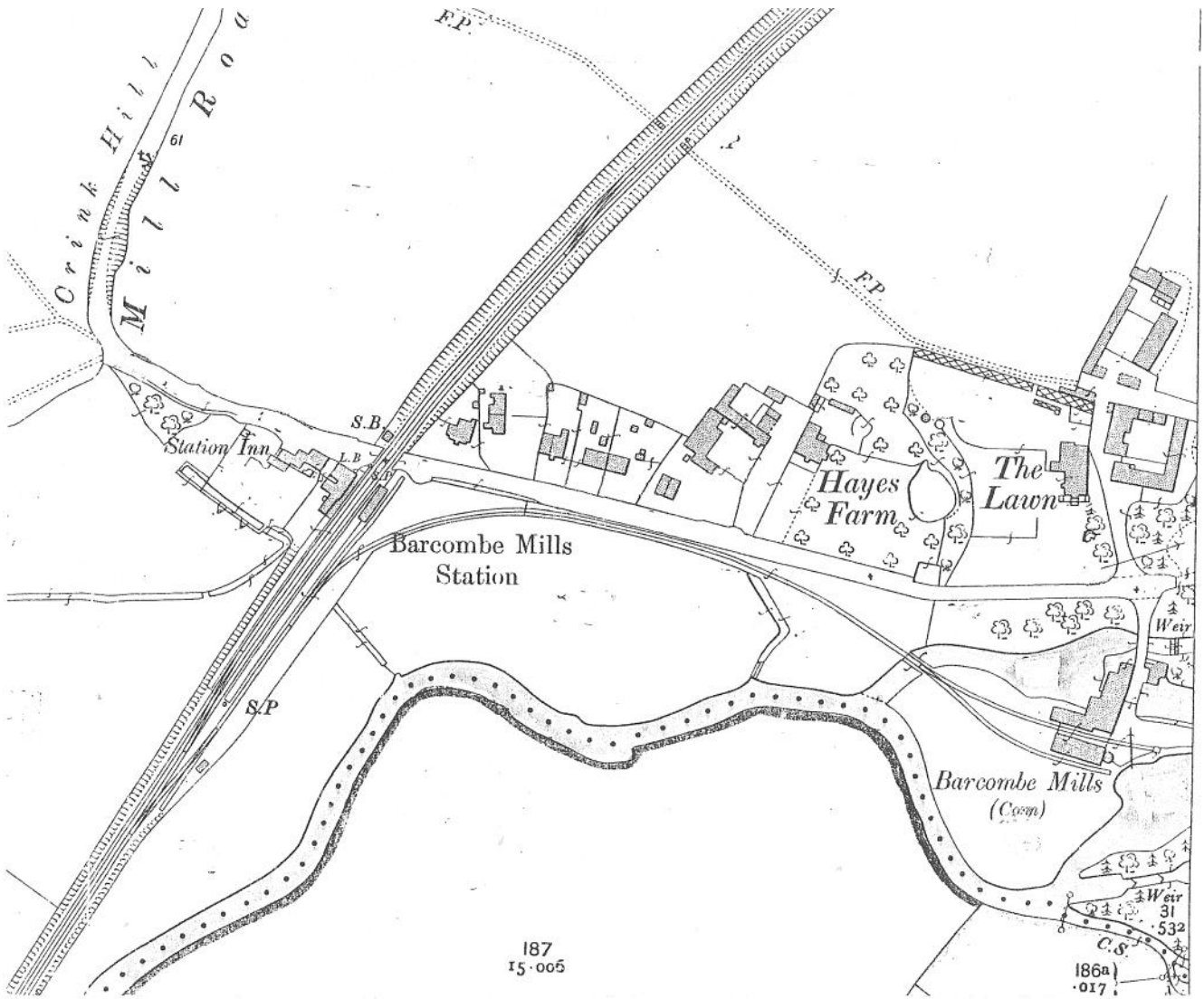


Fig. 3 Extract from a 6" Ordnance Survey map of 1899 showing the engine house built to the rear c1880-90

closure of the offices in Golden Lane the two businesses had run independently with material and machinery ordered using credit facilities from established contacts of Speyer, Schwerdt & Co Ltd invoiced to Barcombe Mills Ltd. Buttons manufactured at Barcombe Mills were invoiced to Speyer, Schwerdt & Co (1929) Ltd at a specific charge for colouring, boxing etc.

By July 1936 further funds were urgently needed and Schwerdt entered into negotiations with the Spanish group SA Grober and its secretary Ippolito Strazza for a loan of £4000 and the purchase of 51% of the Company's issued share capital. The loan was made on 11 September 1936 and Ippolito Strazza returned to Spain. He was appointed to the board on 9 November 1936 to protect the interests of the Spanish group. Reputedly, Schwerdt flew to Spain to secure the purchase by SA Grober of 51% of the company but was unsuccessful.

Felix Sartori became increasingly concerned about the financial situation of the company and on 27 April 1937 appointed the Official Receiver. The Receiver carried on with the business with a view to 'sale as going concern' and on 27 April 1937 agreed with Felix Sartori for the sale of the assets and property of the company.

Accounts provided by the company showed trading as follows:

Period	Turn-over £	Gross profit £	Net profit £	Net Loss £
1st Sept 1932 to 4th Aug 1933	4,487	872	11	-
5th Aug 1933 to 31st Aug 1934	8,647	1,368	-	127
1st Sept 1934 to 7th Aug 1935	16,781	1,121	-	1,120
8th Aug 1935 to 11th Feb 1937	47,773	7214	-	2725

Edmund Schwerdt attributed the company's failure to shortage of working capital, the heavy cost of borrowed money, to his private drawings on the Company's resources and the failure of the Spanish group to take a controlling interest in the company.

On 15 July 1937 the Receiver issued a deed releasing Schwerdt from actions, claims and demands the Company might have against him. Creditors received 5/6d in the pound ¹.

From July 1937 trade was conducted from 48 Maple Road, Penge under the abbreviated title of 'BM Ltd' with Leone Belotti retaining the post of Works Manager at Barcombe Mills ².

On completion of the winding-up proceedings Edmund Schwerdt left the UK to live in Italy, buying a ruined castle in the village of San Mamete on Lake Lugano where his family confirm he remained throughout the Second World War.

Edmund Schwerdt died at Moshi, Tanganyika (now Tanzania) in June 1953, aged 50.

The company founded by A L Bellomotti and Ermete Speroni in the early 1930s, British Button Industries Company Ltd at Penge, continued trading until closure in November 1966, blaming competition from Hong Kong and Japan and the current economic freeze ³.

The Factory

On 2 June 1932 Edmund Schwerdt purchased from Obed Corke the corn mill at Barcombe Mills, together with the engine house, warehouse, office, good rail and road links, altogether some seven acres, for £1350. On the plan included with the conveyance, Schwerdt's purchase is shown in purple and included a 12-foot access running some 1700 feet eastwards to the weir.

The engine house and warehouse were both built of brick with wooden floors and joists. Both were to the height of 4 storeys with the chimney from the engine house reaching to about 65 feet. In the engine house anthracite was used to make producer gas, a low calorific fuel consisting of 35% carbon monoxide and 65% nitrogen. This fuelled a Gardner 50hp gas engine and used to drive machinery by line shafting. (This probably replaced the compound engine installed by 1894 ⁴.) The engineer in charge was called 'Mac'. A 'Little Giant' water turbine (also producing 50hp) provided electrical power for the polishing shop and was used as a back-up during

the servicing of the gas plant. The only electricity (mains) used was for lighting ⁵.

On the 1932 conveyance plan the former railway siding is shown dividing, in order to deliver raw materials to the warehouse and, separately, fuel to the engine house.

The ground floor of the former watermill was of brick construction clad with plaster blocks to imitate stone. The surviving carpenters' store shows this cladding today. The higher walls were made of wood as were the floors and joists but with metal supports.

There was a walkway at first-floor level from the warehouse to the mill, probably for moving sorted buttons to the colouring and polishing section of the watermill.

The former railway siding ran some 350m from the mills to Barcombe Mills station on the Lewes to Tunbridge Wells line.



Fig. 4. Rear view of the mill with the railway siding crossing the bridge over the mill race, the former corn mill to the left, and the engine house and warehouse to the right.

The Process of button making

The buttons were made from Corozo nuts (seeds of the palm tree, *phytelephas macrocarpa*), a vegetable ivory. Vegetable ivory was first used in England in the 1820s and 1830s to make a variety of objects including umbrella handles and toys. However by 1887 it was recorded that 2 - 3 million nuts each year were being used by factories in London & Birmingham to make buttons ⁶. The popularity of vegetable ivory for buttons lasted into the 1950s.

The buttons made at Barcombe Mills "catered for the lower end of the market, i.e., working garments, overalls, uniforms etc."⁷ From 1932 to 1935 semi-finished buttons were processed at Barcombe Mills.

After 1935, when semi-finished buttons could no longer be obtained from the Continent, the decision was made to manufacture buttons from imported Corozo nuts. The pre-shelled nuts were imported from Ecuador ⁸ and Bahia, Brazil.

The *SS American Farmer* was used to transport the pre-shelled nuts along with other ships from the same company, the *SS American Trader* and *SS American Shipper* ⁸.

"The Corozo nuts were delivered by rail to Barcombe Mills station in two-hundredweight bags, unloaded, put on a flanged trolley and pushed by hand along an existing rail siding to the mill"⁵. Figure 6 indicates that there were 200 bags in each delivery.

"If the nuts needed the husks removing they would be put in a cage approximately 3 feet in diameter by 4 feet long with bars running lengthwise. Batches of about five hundredweight were loaded and the cages spun thus removing the husks and leaving a nut about the size of a walnut. The nuts were cut into slices of about 1/8" thickness using small circular saws of about 8" to 9" in diameter mounted on saw tables rotating at about 1000 rpm and powered from the line shafting"⁵.

"The slices were referred to as 'button blanks'⁹.

"There were 12 operatives who wore steel finger stalls on three fingers and one thumb and goggles for eye protection. The nuts were fed towards the spinning blade using a wooden guide with a bird's mouth cut"⁵.

"The button blanks were sorted for size by passing through three hanging sieves suspended from the ceiling. Each sieve was about 3ft in diameter with meshes so that the largest blanks were collected at the top, allowing the smaller diameters to pass

through and be collected in the lower sieves. They were then shaped on machines located in the machine shop 'in secret' by two of the Italians. Four button holes were then made in each button by a machine with four drill bits"⁵. The buttons were quality checked by about 12 girls who came from as far afield as Hadlow Down, Brighton and Buxted.

"The buttons were next dyed in vats shaped like those old-fashioned domestic washing coppers. There were two iron and three wooden vats, each between 10 and 12 feet in diameter and 4 feet high. A typical load was up to three hundredweight of buttons in wire mesh cages which were placed into the boiling dye, the steam used for heating being provided by a vertical Cochrane boiler fuelled by oil"⁵.



Fig. 5. Giovanni Donati on the right, manager of the colouring and polishing department on the top floor of the warehouse adjacent to the corn mill, assisting his staff to sieve and sort a consignment of semi-finished buttons imported from the Continent.

ESTABLISHED 1930 CABLE ADDRESS: CALVETAL

PABLO CALVET & Co. #5822

— IMPORTERS - EXPORTERS —

112 WALL STREET NEW YORK March 10th, 1937

Sold to BARCOMBE MILLS Ltd.
Speyer Schwerdt & Co. Ltd.
Barcombe Mills,
Sussex, England

TERMS: 60 days sight draft
PAYABLE IN NEW YORK EXCHANGE

CALCO T V B	200	SHELLSOFF IVORYNUTS MANTA/BAHIA darkskin bags - 42900 lbs. -19465 kilos @ £18.0.0 ton 1000 kilos CIF London	£253.0.5
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INVOICE NO. 7557
EXISE. Angol
SHIPPED VIA SS American Farmer 3/12 to London
CONTRACT #2271

THE ACCEPTABLE RETENTION OR DEPOSIT OF US BY ANY CHECK, NOTE, DRAFT OR TRADE ACCEPTANCE WITH REFERENCE TO THIS INVOICE SHALL NOT BE DEEMED A PAYMENT TO US UNLESS THESE DOCUMENTS HAVE BEEN ACTUALLY RECEIVED BY US OR BY OUR BANK OF PROVISIONAL DEPOSIT AND CREDITED BY SAID BANK TO OUR ACCOUNT.

Fig. 6. This invoice of 10 March 1937 shows that Speyer Schwerdt & Co Ltd were still being used to process orders.

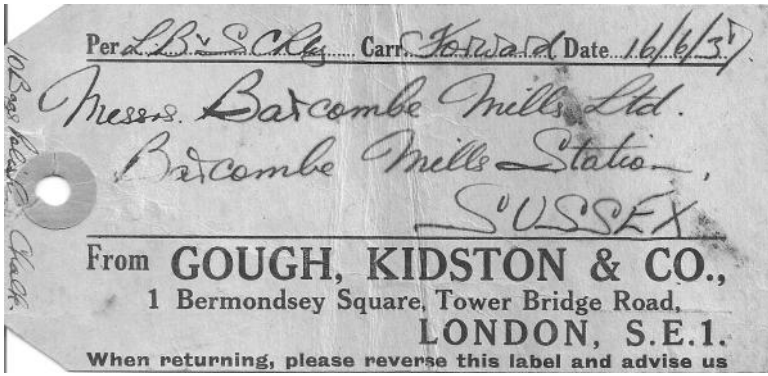


Fig. 7. Delivery label for chalk used in the manufacturing process to 'Messrs Barcombe Mills Ltd' at Barcombe Mills Station

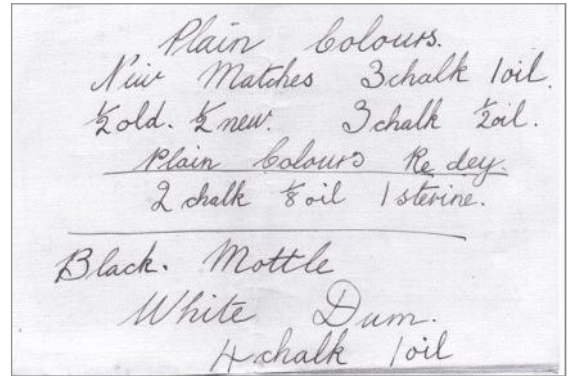


Fig. 8. A reminder to polishers of the quantities of matches, chalk and oil to be added to the barrels

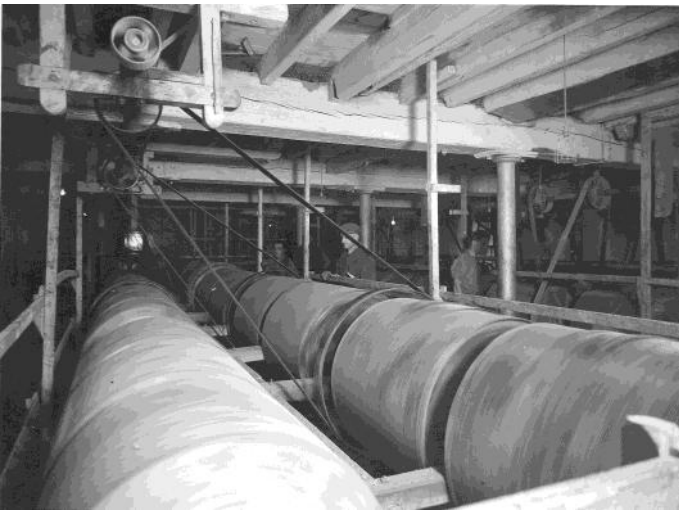


Fig. 9 The polishing barrels



Fig. 10 Female staff in the former corn mill sorting buttons, sewing buttons on to cards and boxing cards for dispatch

The final process for the buttons was polishing. At Barcombe Mills the buttons were polished using 'dry barrelling'. The buttons were placed into a hexagonal wooden barrel (tumblers) together with dry powdered chalk, short lengths of untipped matchstick, referred to as 'chips', and an oil, and then rotated at a pre-set speed. The short lengths of match stick were supplied by Bryant & May; sometimes wood chippings were used as an alternative ⁷.

There were 30 hexagonal wooden drums (sic) each about 5 feet long and 2 feet in diameter ⁵.

The polishing barrels were situated on the ground floor of the former watermill, appropriately known as the 'Barrel Room' ⁷. Power for the barrels came from the 'Little Giant' water turbine mounted on a vertical shaft powering an electrical generator ^{5 & 9}.



Fig. 11. Label on a button box

Finally the buttons were 'carded', i.e., sewn onto cards. This was done by "outside labour (wives of the Italian employees)" ⁸.

"The girls who undertook this task often took the buttons and cards home to earn some extra cash" ⁵.



Fig. 12. An early picture of staff, maybe a sports day, possibly about 1935. A bay window was inserted in the first floor of the cottage about 1936

On the left: Giovanni Donati?, Speyer?, Herbert Wright? (salesman), Edmund Schwerdt (in shirt sleeves), unknown, Mrs Schwerdt, Leoni Belotti, unknown

The People - reminiscences

Irene Mary Fitt (later Cox), a shorthand typist, joined the company in Spring 1936. "I caught a steam train from London Road Station near where I then lived in Springfield Road; took about half an hour I think. Several girls came from Moulsecombe (must have got on at Falmer station). Mr Schwerdt managed a reduced fare for them".

"The Mill was only five minutes walk from the Station; there were floods Oct-Nov and February and we had to go down in a farm (factory?) trolley. There were lines for the trolley to run on, I think the men must have pulled it".

"Mr Edmund Schwerdt brought the Italian employees from Brescia, N.Italy.

Giovanni Donati, Carlo Finazzi, Raffaele (no relation to Carlo) Finazzi, and his son, Vavassori, Speroni (Penge), Leonardo Belotti, Consoli, Pagani".

"Office staff:- Leone Belotti (Managing Director), Speroni from Penge also.* Myself, shorthand typist

wages clerk. etc."

"Two bookkeepers were employed briefly, but I don't think they lasted long. Miss Maynard and Miss Hollingsworth."

"Edward? Wilkie, (company) secretary, a dour Scotsman, lived in Selby gardens, Uckfield.

I worked upstairs in the wharf cottage and they were downstairs."

"Wilfred Neil, always wore a button hole. He worked mainly in the factory stores. Robert Squires worked with Neil (I think) they both had been allocated from Penge, Neil lodged at the Pub. Squires was older and used snuff."

"It was a mixed workforce; the men would be on the machines and the dye room."

"A spray room was all female but had a male supervisor (Bill Lee-Amies).

Shift work was worked for a time including night shift but wasn't being worked on the night of the

* Both Leone Belotti and Ermete Speroni lost their lives when the *Arandora Star* carrying them as internees to Canada, was torpedoed by U-47 on 2 July 1940.

fire. Work force I should think between 70 - 80."⁸

Alfred John Cox (1885 -1954) worked at the Mills as a maintenance engineer. He had previously worked for the Lewes & District Electric Company (1904 - 1932) as a mechanical and electrical engineer, gas fitter and blacksmith before starting on his own. This latter move was not successful so he found maintenance work at Barcombe Mills. The 'Maintenance Area' was known as the Carpenters' Shop and is the only surviving building of the Mills at the present day. His son and my father, Alfred John William Cox, married Irene Mary Fitt in 1941.

Percy 'Dick' Blackford worked in the Barrel Room at the Mills from 1933 to 1 April 1939, the last year as foreman (reference from Leone Belotti, 1 April 1939). He carried the reference letter, a Corozo nut, a selection of buttons and a photograph of the former mill throughout his service with the Royal Hampshire Regiment during the Second World War.

Ted Smith. Worked at the Mills at age 16 having had several jobs before and left to be a painter on the railway.

"I think I had about 28 shillings a week up there. By doing a bit of overtime you know, on Sunday"⁹.

Sid Moore interviewed on 6 February 1998 by John Blackwell (Sussex Industrial Archaeological Society).

Destruction by fire

The mill was destroyed by fire on the night of 9/10 March 1939. I M Fitt recalled that "Teak replaced wooden staircases in the Mill as a fire precaution, but a night watchman was dispensed with. I understand an insurance claim was met".

The *Sussex Express and County Herald* of 17 March 1939 thought "the fire may have been caused by one of the machines becoming overheated and igniting a joist which smouldered throughout Thursday evening before eventually bursting into flames during the night". The newspaper also notes that the fire started in the "oldest portion of the building, the structure of which included a large quantity of pitch pine".

The destruction of the mill was almost complete as the following photographs show.



Fig. 13 View from the north-east showing the former corn-drying kiln, remains of the warehouse and engine house.



Fig. 14 Aftermath of the devastating fire of March 1939. This photograph shows the Barcombe Parish fire engine.

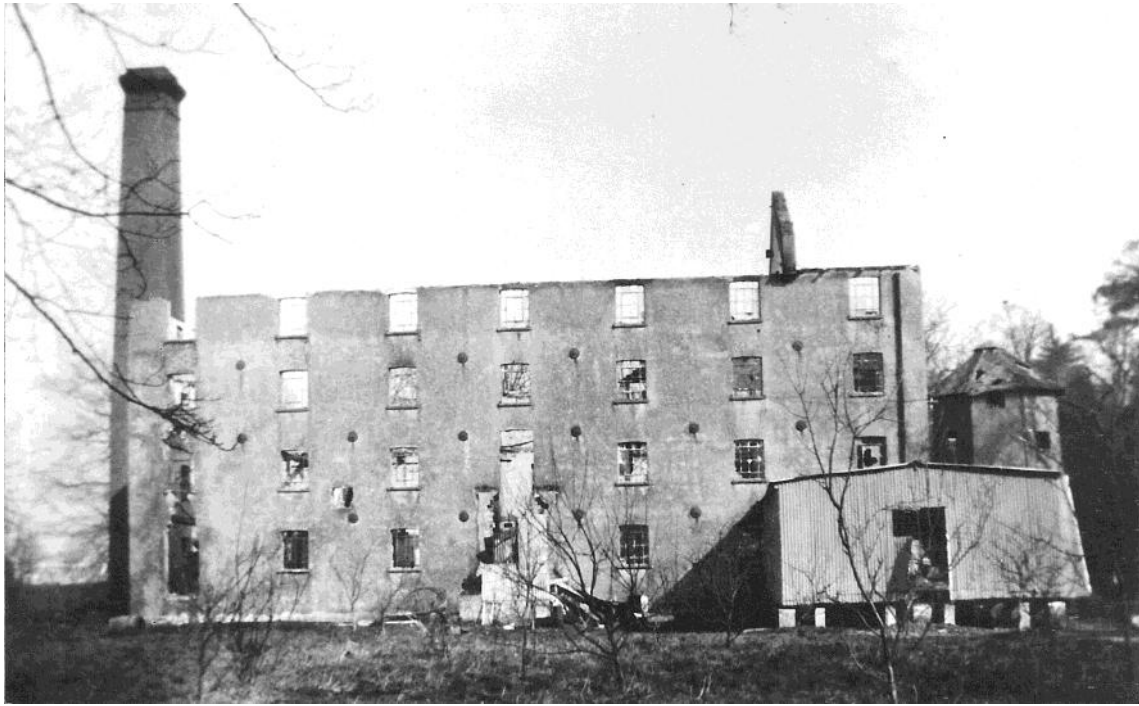


Fig. 15 This photograph shows the fire-damaged warehouse with the corrugated engine shed, which survived the blaze and contained £2000 worth of Corozo nuts. The building is on concrete legs to keep the contents above any flood waters. The former kiln can be seen behind the corrugated shed.

The extant remains

Mr Brook, the Fire Brigade's Chief Officer, told the paper "All we could do was save the Office, from which we removed the contents of a safe and a store shed containing £2,000 worth of Corozo vegetable ivory nuts, from which buttons are made".

Glossary

Braid: formed by intertwining three or more (usually an odd number) strands into a narrow band.

Button: knob or disc used for fastening or ornamenting garments.

Notions: the collective term for items that are sewn or otherwise attached to a finished article.

Sterine (German), *Sterol* (English): added to the barrels as a polishing and lubricating agent.

Trimmings: material sewn onto a garment for ornament.

(The *Cassell Concise English Dictionary* and Wikipedia)

Photo credits

All photographs are from the author's collections unless identified otherwise.

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7. Percy 'Dick' Blackford, former employee and foreman of the polishing department.
8. Irene M Fitt, former employee. Excerpts from her memoirs.
9. Ted Smith, former employee. ESRO AMS 6416/1/7

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Kelly's directories

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BARCOME MILLS TOLL ROAD

Brian Austen & John Blackwell

Of the elegant late Georgian mill at Barcombe Mills, much illustrated in the *Sussex County Magazine* in the 1930s, little now remains. It was destroyed by fire in March 1939. The *Sussex County Magazine* photographs clearly show that a toll was taken at the front of the Mill on most wheeled vehicles using this road which was privately owned.

The visitor today will notice two relatively recently erected signs, one declaring that the road toll collected here was the oldest known in the County, dating back to the Norman Conquest¹, while the other board shows rates of toll payable. However no evidence has been found of toll collection here earlier than the first decades of the nineteenth century. Traffic would have been local and no long distance travellers would have wanted to use a minor road connecting the village of Barcombe to the Lewes to Uckfield Road (the A26), which between 1752 and 1871 was a turnpike and road tolls collected under powers granted by Act of Parliament².

Stylistically the mill which stood prior to the fire would appear to date from the last decades of the eighteenth century or the first ones of the century that followed. Earlier mills are known to have existed beside the Ouse, possibly on this site. The Domesday Survey of 1086 lists three and a half mills in the parish of Barcombe, which at this date would have been water-powered. Their exact locations cannot be ascertained but they would have been close to the River Ouse which provided their power source. A map of 1620 and a later one c1790 show mills beside the river, but the absence of roads and other features on them make it uncertain if the location is the same as that of the mill in which we are interested³. Stidder and Smith give a date of 1870 for the building of the new and much larger mill, but the architectural style of the building argues against such a date. It may have been enlarged to the rear, however, and an engine house and warehouse built about this date, though no documentary evidence has been discovered and significantly Simmons' reports fail to mention such rebuilding.

A late eighteenth century date would seem likely and Bob Bonnett, researching the records of the

Royal Exchange Fire Office, has found that in 1784 a value of £500 was placed on this 'timber built' mill, with a further £1,000 for utensils and stock-in-trade⁴. The need for such a large mill was justified by its transport links. The River Ouse above Lewes was improved under the powers granted by a Navigation Act of 1791 establishing the Company of Proprietors of the River Ouse. The closeness of the mill to established markets in the County Town of Lewes and the rapidly expanding resort of Brighton would have been advantageous. The mill pond was expanded into an extensive basin immediately in front of the Mill for the barges bringing in grain and taking away flour⁵. This dating fits the evidence from printed maps of the period. Gardiner & Gream's 1" map of 1795 shows road access to the Mill from both Barcombe Cross and the Lewes and Uckfield Turnpike but no through road connecting the two. The picture changes with the 1825 Greenwood 1" map where a road across the weir is clearly in place. Was it at some date between the publications of these two maps that the toll outside the Mill was established? The earliest record of the collection of tolls here comes from 1842 when tolls, probably 2d, were recorded in the account books of W.W. Grantham's grandfather who lived at Barcombe Place⁶.

With private road tolls it would be expected that the land on either side of the road would be in the hands of the landowner, who benefitted from their collection. The extent of the road passing Barcombe Mills appears to have been differently defined in documentary sources. In 1932 it was stated to be from the "north-east corner of Ossinge Field over the Barcombe Mills railway line through the mill itself & Mill Lane discharging into the Uckfield and Tunbridge Wells road". Most of the road was in the adjoining parish of Malling, and the section from Pike's Bridge to Wellingham Turn may have been the only section in private hands, the remaining short distance to the turnpike being a parish road⁷.

At times the obligation of maintaining the road was in dispute, such as in September 1922 when E Griffiths Hughes Ltd and the LB&SC Railway were trying, and failing, to resolve the question. The Railway had in 1861 drawn up an agreement with Richard Billiter, the lessee of Barcombe Mill, which gave the right to intending railway passengers to pass and return to Barcombe Mills railway station free of toll in return for the sum of £400, and an agreement for a private railway siding connecting the mill to be built at Billiter's expense⁸.

Traffic was probably never heavy, but increased after World War I including motors, commercial lorries and vans, for which the road was never originally intended. As a consequence there were constant complaints by users, especially in the winter, when the road was subject to flooding. The East Sussex County Council was approached in March 1931 by W.A. Wilmshurst through the firm of Isaac Vinnell & Sons of 200 High Street, Lewes regarding the liability for maintenance. Another communication to the Council came in January 1932 from W.W. Grantham of Balneath Manor, Chailey, and Chairman of Barcombe Parish Council. The road was described as “deplorably dilapidated and unsafe from the north-east corner of Ossingie Field over the Barcombe Mills railway line, through the mills itself and Mill Lane discharging into the main Uckfield & Tunbridge Wells road”. The Parish Council indicated that if no solution came from the County Council, they were prepared to ask the Minister of Transport to receive a delegation⁹.

In the early 1930s the toll was collected by Mr. Obed Corke, the owner of the road and actual toll collector. When interviewed, he stated that the County Council should either take over the road entirely or assist in the costs of maintenance. He blamed its poor state of repair on “a number of milk lorries belonging to tenants of small holdings of the County Council”. The cost of filling up the holes caused by these was about £50 per annum, which was as much as he received in toll income. He further alleged that some of the lorries stopped short

of the toll bar and that the drivers would carry the load to another lorry waiting beyond the barrier to avoid paying the toll.¹⁰ The right to collect tolls for the section Hayes Farm to Pike’s Bridge passed to Arthur Lionel Schwerdt of the button factory by a document dated 2 June 1932¹¹. No satisfactory resolution to the problem appears to have been effected, for as late as 9 May 1939 the Barcombe Parish Council were still petitioning the East Sussex County Council to take responsibility for the road¹².

The tolls were relatively high for the short section of road involved, and a replica toll board now displayed records them as:

Carriage & horses	1s-0d (5p)
Four wheels and one horse	9d (3.75p)
Two wheels & one horse	6d (2.5p)
Waggon & horses	1s-6d (7.5p)
Motor cars	1s-0d (5p)
Steam engines	2s-0d (10p)
Motor & side cars	3d (1.25p)

A photograph published in the August 1936 issue of the *Sussex County Magazine* shows two young cyclists examining a notice applied to the left side of the door of the mill beside the barrier which appear to list the tolls (fig 1). The barrier swung out from the wall to close the road, except for a sufficient space to allow the passage of pedestrians and cyclists who would be free of toll.

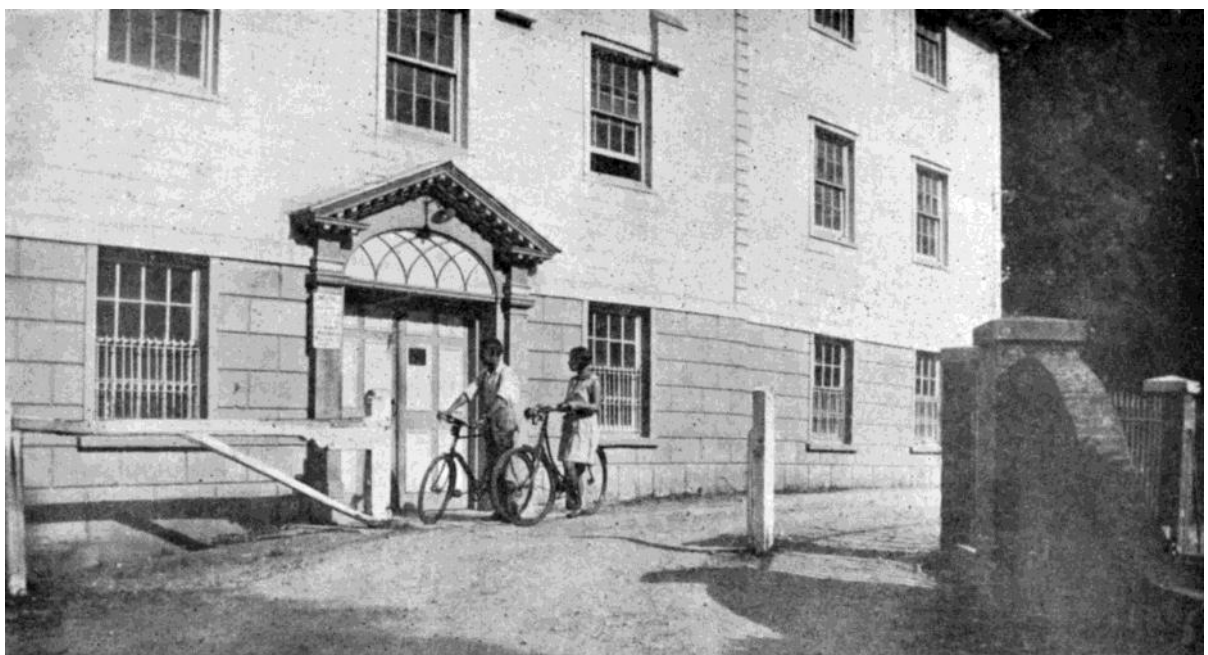


Fig. 1 The Barcombe Mills toll barrier 1936 (*Sussex County Magazine*, Vol. 10, No. 8)

The burning down of the mill in March 1939 does not appear to have initially ended the collection of toll but the Second World War did. Military forces stationed in the area soon realised the inadequacy of the existing bridge for military traffic and as a result a new bridge was constructed by the Royal Engineers a short distance away which was used by non-military traffic as well. The last tolls were probably collected in 1940. The new bridge was of box girder construction, a forerunner of the famous Bailey Bridge. The military bridge was in turn replaced in January 1976 by the East Sussex Highways Department, but the wartime bridge was considered to be of sufficient interest to be taken down and placed in store at the Regimental Museum at Chatham. Recent enquiries to the Museum failed to locate the bridge. In June 1947 Corke conveyed "land forming a private road running from Camois Court" to the County Council¹³.

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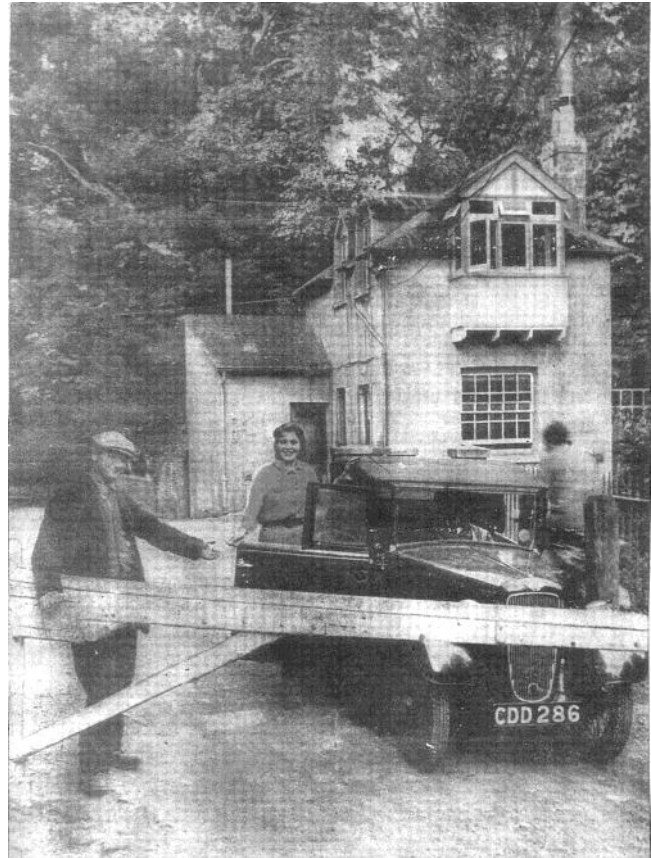


Fig. 2 Illustration from *Southern Weekly News*, 23 October 1937, with following caption:

"TOLL HAS STILL TO BE PAID on all vehicles passing through Barcombe Mills, well-known beauty spot favoured by all lovers of the Sussex countryside. Here a fair motorist is seen handing over the shilling fee before passing the barrier on the well-worn private road."

THE UPPER OUSE NAVIGATION

Nick Kelly

The Sussex Ouse rises near Slaugham Place in St Leonard's Forest running eastwards until the vicinity of Ardingly where the river then takes a southerly course to flow into the English Channel at Newhaven. Over the length of the river's course, some 45 miles, it passes through Lindfield and Lewes. The river had been navigable after a fashion up to Lewes from time immemorial. During the early eighteenth century small barges, probably of one or two tons, worked up to Maresfield Forge on the Maresfield stream. It is believed that a number of simple navigable weirs or half-locks existed on the river. Such structures also existed on contemporary Wealden navigations. These half-locks would have been only suitable for light traffic on a seasonal basis. (It is worth noting that similar half-locks or staunches survived at several locations in England well into the twentieth century).

From the sixteenth until the eighteenth centuries timber and iron products from the Wealden iron

industry were exported via the river. Ernest Straker in *'Wealden Iron'* (1931) stated that the Ouse was second only to the Medway in importance as an export route for Wealden iron products. However, by 1790 the river appears to have been navigable only up to Barcombe Mills. At this time most of the traffic from the Weald went by road. The rapidly developing economy in the late eighteenth century put an intolerable burden on the local roads. Whilst East - West routes followed the chalk Downs or the sandstone ridges, North - South had to cross the clay vales. Wealden timber could take up to three years to reach Chatham Dockyard and the roads were often bottomless pits of sticky clay. Daniel Defoe in his *'Tours'* (1724) had the following to say about Offham:

"At a country village not far from Lewes, an ancient lady was drawn to church in her coach with six oxen, nor was it done in frolic or humour, but mere necessity, the way being so sticky and deep that no horses could go in it".

Clearly, such roads were of little use for a considerable part of the year.

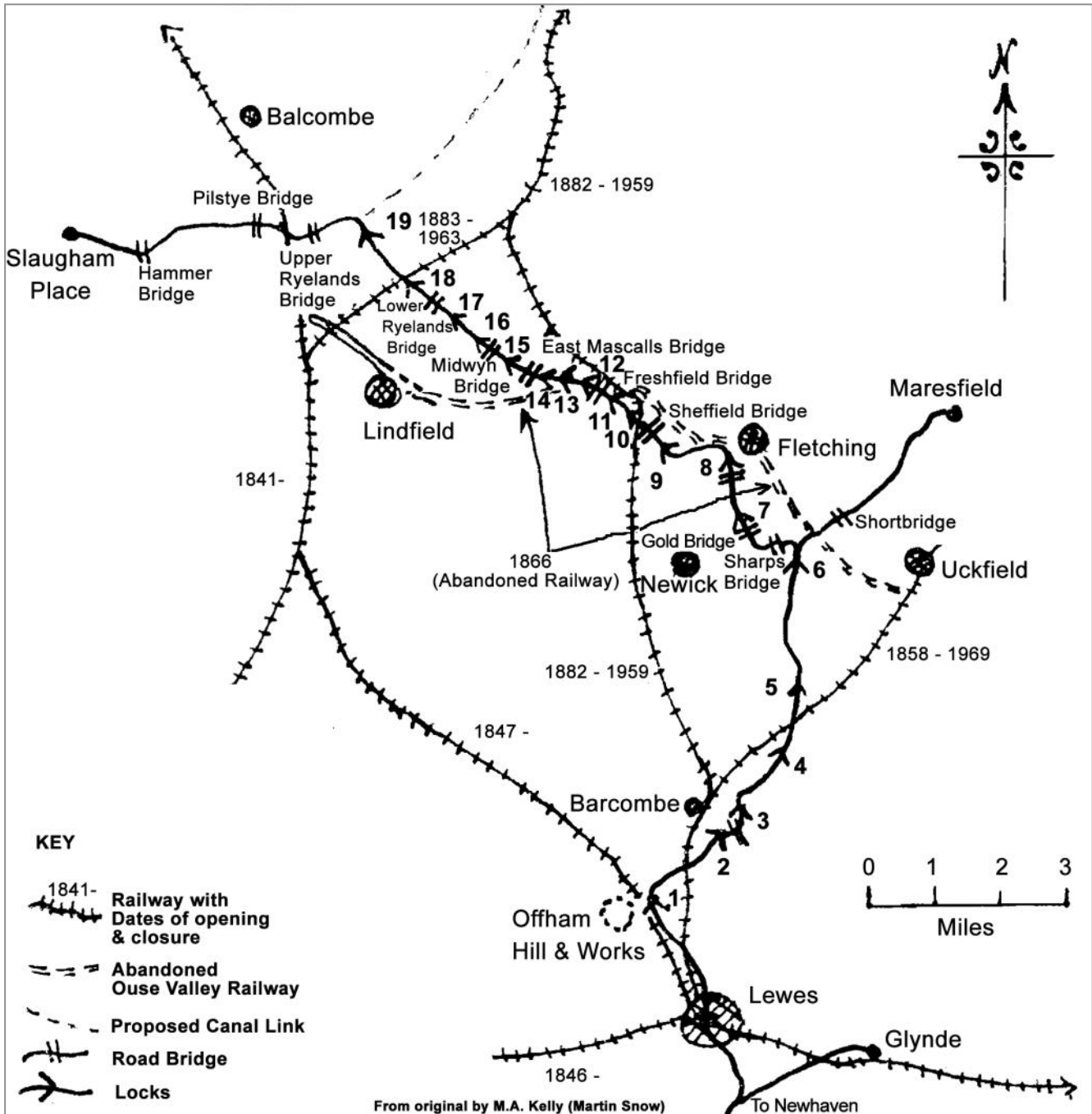
With the success of canals in the Midlands, and river navigations nearer home like the Wey up to Guildford (Act 1651) and its extension the Godalming Navigation (Act 1760), the highly profitable upper Medway (Act 1740) up to Tonbridge, along with the Arun (Act 1785), it was only natural that attention would be focused on the Ouse, which in 1790 was a very imperfect tidal navigation. It was only useable two weeks out of every month, due to spring and neap tide fluctuations. However, the Ouse ran right into the heart of the Weald where coal was expensive and lime was in urgent demand as a fertilizer. Moreover, Newhaven was one of the best ports for shipping between Sandwich and Portsmouth.

The first Act of Parliament relating to the Ouse received the Royal Assent on 28 April 1790. It was then followed by a series of Acts relating to both the Upper Ouse (above Lewes) and the Lower Ouse (Lewes down to the tideway). The 1790 Act was entitled

'An Act for improving, continuing and extending the navigation of the River Ouse from Lewes Bridge in the town of Lewes to Hammer Bridge in the parish of Cuckfield and to the extent of the said parish of Cuckfield and also of a branch of the said river to Shortbridge in the parish of Fletching in the county of Sussex'.



Fig. 1 The lock at Barcombe



Key to Locks

- | | |
|---|---------------------------------------|
| 1) Hamsey TQ407119 | 10) Bacon Wish TQ398241 |
| 2) Pikes Bridge Lower TQ433148 (Barcombe Mills) | 11) Polebay TQ393243 |
| 3) Pikes Bridge Upper TQ434148 (Barcombe Mills) | 12) Freshfield TQ385244 |
| 4) Oil Mills/Primmer Wood TQ440168 | 13) Henfield Wood TQ376245 |
| 5) Isfield/Sutton Manor TQ441187 | 14) East Mascalls TQ366254 |
| 6) Sharps Bridge/Buckham TQ443206 | 15) Pim's/Plummerden TQ355262 |
| 7) Goldbridge TQ427216 | 16) Fulling Mill/Buckshall's TQ350268 |
| 8) Fletching Mill/Carver's TQ424231 | 17) Tester's/Avin's TQ346271 |
| 9) Iron Gate TQ409228 | 18) Ryelands TQ336275 |
| | 19) Riverswood TQ332283 |

Fig. 2 Map of the Upper Ouse Navigation



Fig. 3 Barge, loaded with oil cakes, moored at Bear Brewery (on right) below Cliff Bridge, Lewes, c1860 (Author's collection)

The first serious suggestions for improving the river came in 1787, in that year a correspondent of the *Sussex Weekly Advertiser* wrote about the advantages that Sussex would gain for the wool and iron industries by improving her inland waterways. A meeting was therefore proposed to discuss the possibility of improving the river in a similar way to the Arun. Then on 22 October 1787 the same correspondent wrote that

“The late meeting at Sheffield Green was attended by local gentlemen and levels were taken as high as Lindfield Mill. Those who examined the river are of the opinion that it may be made navigable, at as moderate an expense as any river that they have ever seen”.

Thomas Pelham M.P. of Stanmer Park, the chairman of the meeting, organised a subscription fund to pay for a full survey and an estimate under the direction of William Jessop, the renowned canal engineer. William Jessop reported to Lord Sheffield, by far the largest landowner on the course of the navigation and the leading promoter. The proposed navigation was to run from Lewes Bridge to Pilstye Bridge near the present Balcombe - Cuckfield road with 27 locks, a surface width of 24 feet and a minimum depth of

four feet, with barges being able to carry up to 30 tons.

Jessop estimated that these works would cost £13,595, exclusive of parliamentary expenses. He also suggested the use of timber locks to keep the expenditure down, whilst casting his doubts on the validity of extending the navigation above Lindfield at all. He also pointed out that improvements to the Lower Ouse were essential if the Upper Ouse were to be a viable concern. He estimated that the cost of improving the Lower Ouse would be £1,980. Lord Sheffield had hoped to gain powers for the Lower Ouse as well, but this was thwarted as any such works would be concerned with drainage as well as navigation. Moreover, as this section was already navigable albeit after a fashion, there was opposition to a company with powers to levy tolls.

Eventually two Bills, both covering the section between Lewes Bridge and Barcombe Mills, were presented to the House of Commons early in 1790. The Lower Ouse Bill was thrown out after its second reading, due to the apparent need for a second survey by Jessop, which increased the estimate to £6,472. Whilst the Upper Ouse Bill experienced some difficulties in the committee stages, it was eventually

passed, as indeed was an amended Act concerning the Lower Ouse. The Act pertaining to the Upper Ouse incorporated Jessop's plan but continued the navigation up to Slaugham Place with a branch to Shortbridge to serve Uckfield and a cut to Offham to serve the lime works. The company was established with 45 shareholders authorised to raise £25,000 in £100 shares. £10,000 was to be subscribed initially before any construction was to be undertaken. Tolls were laid down and the main traffic anticipated was coal and chalk/lime upwards, with agricultural products downwards.

The Company of Proprietors of the River Ouse Navigation Company met for the first time at the Sheffield Arms, Fletching on 7 June 1790. A management committee was elected with Lord Sheffield as chairman, Josiah Smith as treasurer, Samuel Waller as clerk, with William Board, Sir William Burrell and Richard Streatfield as committee members. The contract was given to the Pinkerton brothers who estimated the cost to Hammer Bridge to be £15,119.11s 1d, (£15,119.55p) with a further £832.16s 8d (£832.83p) to extend the navigation to Slaugham Place.

The Pinkerton brothers often worked with William Jessop. Their figures are suspiciously close to Jessop's original estimate and were rather low. They agreed to complete specific sections at agreed dates but trouble started almost immediately. The Lewes to Barcombe Mills section was due to open by Christmas 1790 but it was not until 13 July 1791 that the first tolls were taken at Hamsey lock. The company had appointed Robert Chatfield as lock keeper with a salary of £30 p.a. paid quarterly. He was also empowered to oversee barges and to check that metal plates gauging the weight of vessels were accurate and in place.

There were also some problems with barges working on the unimproved river up to Barcombe Mills, as they were too long for the lock at Hamsey. Francis Sergison stated that the company should not close up Hamsey Weir until new barges had been built and that Mr Rickman, the miller, would not lose trade because of his oversize barges.

Other problems included difficulties with the contractors, Messrs Pinkerton, as in April 1792 the committee revealed that

"Messrs Pinkerton have neglected their undertaking on the river Ouse that a considerable part of the work has failed and other parts have been injudiciously done

and that the mortar and some other materials they have used are bad and not according to their contract".

Later in August they ceased work altogether.

Lord Sheffield wrote to Jessop for information and on 3 September 1792 His Lordship received Jessop's reply to the effect that costs had been higher than expected. Apparently this was mainly due to the lack of a dredger. He went on to state that the Pinkertons had under estimated their tender and that the weather had been poor leading to building difficulties. Nonetheless, whatever the cause, the consequence was the neglect of the work and the flight of the Pinkerton brothers from their creditors.

Some £14,000 had been paid out and Richard Streatfield estimated that a further £4,000 would be needed to complete the works to Hammer Bridge. As has already been noted, the estimate was quite low and specified wooden locks. However, brick and stone locks were built. Moreover, the surface width of the navigation was increased from 24 feet to 27 feet, but no extra funds were made available. This put the company in a poor financial position. Because of the lack of skilled labour, several of the navigation cuts and embankments up to Hammer Bridge had been completed whilst the locks and navigation bridges had only been partially built. The company therefore could get no return from a large part of its investment until more money had been spent.

Landowners had also been aggravated by the works without getting any benefit from the navigation passing through their land. The Pinkertons had probably stopped work above Fletching lock and Richard Streatfield and the other proprietors continued to supervise work up to Sheffield Bridge where they stopped. This section opened during April 1793. On the fourth of that month the committee stated that £200 would be needed to complete the work up to Hammer Bridge. However, on 3 June 1793 Samuel Waller, the clerk, was ordered to try to sell the by now rotting building materials for the upper river. Also the creditors were becoming restive so the committee mortgaged the tolls to raise around £100 to complete the navigation up to Freshfield Bridge.

By 1796 things were looking bleak; on 16 August the committee was moved to record

"This well nigh useless and declining navigation on which upwards of £20,000 has been spent has only raised £964 11s 6d (£964.8p)".

1792	£20 19s 3d	(£20.96)
1793	£101 0s 3d	(£101.01)
1794	£368 14s 6d	(£368.73)
1795	£281 18s 9d	(£281.94)
1796 (8 months only)	£191 18s 9d	(£198.94)

This state of affairs was blamed on the Pinkerton brothers original poor construction, particularly the imperfect locks. A hope was expressed that the extension to Freshfield Bridge would double the tolls received. This was rather optimistic, as the extra two miles of cut ending at a small isolated country wharf would bring minimal financial return. Also at this point a local man, Dymoke Wells, who had been at the meeting in 1787 and who had been connected with the navigation under the Pinkertons, was invited to become the site engineer and contractor. It would not be until August 1802 that the first barge would reach Freshfield Wharf, by which time Lord Sheffield had broken away from the committee because of disagreements over land that the company had allegedly not paid for.

Around the time that James Creasy was appointed to complete the Freshfield - Lindfield section, Dymoke Wells tendered to complete this at a cost of £3,000. To raise further funds a new Act was proposed for 1806. The 1806 Act received Royal Assent on the 12 June 1806. It allowed the proprietors to borrow up to £30,000 on the security of the tolls, clarified the company's financial position and allowed them to drop the powers of extension on the Slaugham Place - Hammer Bridge section.

The first barge reached Lindfield in December 1809 whilst work continued above the town by which time William Smith, the first great geologist and 'The Father of Geology' was appointed engineer to replace James Creasy who had died. He estimated that to complete the navigation above Lindfield would cost £4,224. Dymoke Wells also tendered to complete this section and he was to be paid one third in cash, one third in toll securities and the remaining third in 1790 original-issue £100 shares, then valued at £50, which could be converted into cash. The navigation was effectively completed on 27 April 1812, when Upper Rye wharf by Upper Ryelands Bridge was opened. This was as far as the Upper Ouse navigation would ever get. Whilst William Smith estimated the cost for completion to Hammer Bridge and some work including rebuilding Upper Ryelands Bridge to navigation standards was undertaken, but most of this work was never completed.

At last the navigation was finished, having taken over two years to build 19 locks and 22½ miles of navigation. A committee which had been appointed to report on the state of affairs of the company published its report on 6 August 1812. It found that debts of £23,716.16s.10d (£23,716.84p) had been incurred, which added to the £16,000 raised on the original share issue of 1790 amounted to approximately £40,000. The committee estimated that the maximum return on tolls likely to be collected could only be approximately £2,000 and that at least £1,295 would be needed for current running expenses, so there would be little left for payment of the debt. The committee therefore proposed an increase in tolls.

As noted earlier, the break with Lord Sheffield had caused relations between His Lordship and the other proprietors to become very strained. In 1810 he claimed that the tolls collected from 1800 onwards had been misappropriated by Samuel Waller, the clerk. The committee countered this by stating that the navigation did not prosper under His Lordship's management and that it did not advance beyond his wharf at Sheffield Bridge. Lord Sheffield, for his part, commented that he was trying to protect the rights of the 1790 shareholders, as by 1812 the possibility of a third Act to put the navigation on an even financial keel was being discussed. In March 1813, Wells told Lord Sheffield that "since I have become one of the committee, I have had the sole management of their concern". Wells was, no doubt, behind the abortive 1813 Act which was to allow the company to increase its share capital to £32,000 to extend and maintain the navigation.

The company would also be allowed to devalue the 1790 shareholding and increase tolls as the 1812 committee had recommended. This Bill, however, was thrown out due to the strenuous opposition of Lord Sheffield, concerned with its failure to provide cover for the original creditors and shareholders. During the following year an amended Act was passed receiving the Royal Assent on 28 June 1814. This Act only allowed an increase in tolls and it laid down that they were to be used firstly for the upkeep of the navigation and then for the discharge of the loan debt. The tolls for lime and chalk were radically adjusted to help raise funds.

George Shiffner, owner of Offham chalk and lime works and holder of one £100 share in the navigation, produced a table showing just how much tolls had risen. (See Table 1 on the next page.)

Table 1. Comparison of Chalk & Lime Toll Rates (per ton/mile) 1790 Act - 1814 Act

Lock or Wharf	Distance above Lewes	Chalk/Lime 1790 Act	Chalk 1814 Act	Lime 1814 Act
Barcombe Mills	4 miles	2d	8d	1s.8d
Oil Mills	6 miles	4d	1s.4d	2s.6d
Shortbridge	9 miles	7d	1s.6d	3s.9d
Goldbridge	10 miles	8d	1s.7½d	4s.1d
Fletching Mill	11½ miles	9½d	1s.9d	4s.4d
Sheffield Bridge	13¼ miles	11¼d	1s.10¾d	4s.7½d
Freshfield Bridge	14½ miles	1s.0½d	2s.0d	4s.10d
East Mascalls	16½ miles	1s.2½d	2s.2d	5s.2d
Lindfield Mill	17½ miles	1s.3½d	2s.3d	5s.4d
Lower Rye Bridge	19 miles	1s.5d	2s.4½d	5s.7d
Upper Rye Bridge	20 miles	1s.6d	2s.5½d	5s.9d

As can be seen under the 1814 Act, chalk and lime were separated and the per ton/mile rate had more than trebled. This meant that it was as cheap to supply the area around the upper reaches of the navigation with chalk and lime as from the various chalk quarries and limeworks on the North Downs around Coulsdon and Merstham. Even though George Shiffner was on the committee, he was unable to get any reduction on deliveries of chalk and lime from Offham. Nevertheless, a fair trade in chalk and lime appears to have been generated.

They were not the only important commodities transported, for the navigation stimulated the use of coal as a domestic fuel. Annual imports of coal and culm at Newhaven increased from an average of 19,912 tons per annum between 1814 and 1818 to an average of 26,578 tons per annum between 1819 and 1824, a rise of 33%. Although the price of coal often remained beyond the means of the poorer people, the building of the navigation did greatly reduce the coal prices in Lindfield, Fletching and Shortbridge where it was collected from the company's wharves or from those of adjoining landowners.

Complementary to the navigation were the feeder roads; even though Wealden roads had a particularly notorious reputation, they were essential for the distribution of goods to and from the wharves and the outlying farms and villages. Also the local roads could now be built properly as the navigation supplied road-building materials easily and cheaply. Therefore the navigation had a vested interest in the local roads and their condition. The Balcombe parish roads were probably the worst in the catchment area of the navigation as the wharf at Upper Ryelands Bridge was in open country, miles from the nearest settlement. Much of the traffic that used the roads

out of the valley, moreover, left the parish of Balcombe.

It was hardly surprising, therefore, to learn that the parishioners were reluctant to rebuild roads for traffic that by and large was not benefiting their community. Matters came to a head on 4 February 1822 when the Committee threatened to take legal action against the Balcombe parish surveyors concerning the abominable condition of the highway from Upper Rye and throughout the parish. However, such action does not appear to have been implemented as there was a further complaint made on 3 February 1823. It must be said, however, that generally the condition of the local roads were adequate for the available traffic of the day.

Throughout the 1820s and 1830s the Ouse maintained a local level of trade with all the usual minor details and repairs that would keep such a concern running. In 1822 there was concern about the wastage of water at the locks and a handbill was printed threatening fines of up to £5 or committal to the House of Correction for one calendar month for any offender causing waste of water for the purpose of fishing or otherwise! But the pace of life in rural Sussex in the nineteenth century was rather slow and apparently no one was ever prosecuted under this byelaw.

On 2 August 1827 a new committee was formed with the second Lord Sheffield in the chair, the personal rivalries and friction between his father and the original committee, some 25 years earlier, having been forgotten. Also on the new committee was Sir George Shiffner Bt who had been created a baronet in 1818. However, it has to be said that this new committee does not appear to have been any more efficient than its predecessors, as repairs were

ignored until equipment finally broke down. For example, during 1831 one of the Pikes Bridge locks at Barcombe Mill collapsed holding up trade for two months! It cost £68 to rebuild. Bridge repairs could also be expensive with Primmer Wood Bridge and Pikes Bridge costing £63 13s 0d (£63.65p) and £75 10s 0d (£75.50p) respectively to rebuild. As the company had no money, Sir George Shiffner paid the bills himself and then had difficulty extracting £50 from the company clerk, John Cave.

One major problem was non-payment of tolls. Two of the major offenders owed some £1,267 (£455 and £812 each) between them! The Company Minute Books for the period (1820s - 1830s) are full of entries having their accounts, which seems to indicate that non-payment of tolls was very widespread. Thus the Upper Ouse Navigation was in no real condition to fight the threat that faced it in the shape of the growth of the railway.

After the closure of the Croydon Canal in 1836 and its conversion into a railway, it was only a matter of time before the iron road spread to Brighton and the south coast. The first real indication of the threat came on 3 February 1840 when the committee received the notification from Edward Verrall, the then clerk, that notice had been served on him that

the intended railway from Keymer to Hastings via Lewes would cross the navigation in the parishes of Hamsey and South Malling. Although in fact this project never came to fruition and would not actually have interfered with the navigation, the committee recognised the presumed competition and decided to oppose the plan.

The failure of this proposal was just a minor breathing space. In 1837 the Act for the London and Brighton Railway had been passed, and throughout 1839 and 1840 the construction of the new railway progressed. One of the major engineering works on the route was John Urpeth Rastrick's 37-arch viaduct over the river Ouse just above Upper Ryelands Bridge, built in an Italianate style. Its 12 million bricks, which were made beside the Lower Ouse Navigation in the brick kilns at Piddinghoe above Newhaven, were moved by barge up to the construction site. The viaduct itself was completed in March 1841. The line was opened to Haywards Heath on 12 July 1841 and on to Brighton on 21 September 1841. It appears that goods from London were transhipped at Upper Ryelands Bridge for Lewes and this, along with the construction materials carried, was beneficial to the navigation in the short term.



Fig. 4 Pikes Bridge photographed in April 2014 (Nick Kelly)

However, it was not long before the London Brighton & South Coast Railway (LB&SCR) opened the line from Brighton to Lewes, thus bypassing the navigation. This line was opened on 8 June 1846. During 1842 the committee concluded that the demise of the navigation as a going concern was imminent. There was some discussion concerning the sale of the company to the LB&SCR, but this proved unfruitful as it did not directly compete, and no other purchaser could be found. One major problem was the decline of the small water-powered industrial concerns which the navigation served. The first to go was Isfield Paper Mill. The problem was that such undertakings in isolated locations soon fell victim to competition. Industry aided by the railway was becoming increasingly concentrated on the coalfields and the small water-based industries were no longer competitive.

During 1847 there was further railway expansion with the Keymer - Lewes line opening on 1 October, and on 8 December the Lewes - Newhaven line opened, this line taking traffic from the Lower Ouse Navigation. The committee tried to reduce costs by cutting wages and cutting tolls. By the late 1840s they amounted to around £800 p.a., two thirds of what they had been in the 1820s. In 1851-52 the tolls were £784 9s 2d (£784.46p) all of which was used up in the upkeep of the navigation.

Then in 1852 the last of the original promoters, Richard Streatfield, died. He had five £100 shares. Throughout the 1840s he had been the only really active committee member, other than Edward Verrall who as well as being a committee member was also the company solicitor. During the remainder of the 1850s he tried to maintain some semblance of order. The last major repairs to the navigation took place in the spring of 1858 when Isfield lock, which had collapsed, was rebuilt, Edward Verrall paying for the repairs out of his own pocket.

The last committee meeting of The Company of Proprietors of The Upper Ouse Navigation Company took place on 7 February 1859 when Edward Verrall made the final tolls cut on coal down to ½d per ton. At the end of the meeting he thanked those assembled for their support, toasting the original 1790 committee for its efforts. After 1859 the navigation was kept going by the company clerk, John Cave, the sections between Lindfield and Upper Ryelands Bridge becoming disused commercially about 1861, according to local report. It is believed that the last barge was received at

Lindfield wharf in 1868, the river above Barcombe Mills becoming unnavigable after around 1875. The *'New Oarsman's Guide'* of 1896 described the Ouse thus:

"Barges used to travel 27 miles up to Freshfield wharf near Lindfield, the locks however are in a state of ruin. The channel in the upper reaches much obstructed by bushes and the navigation above Lewes wholly abandoned."

Some isolated sections were maintained for sporting and leisure purposes. Above Lindfield the section above Pims Lock (Deans Mill), at Lindfield up to Tester's Lock, with Fulling Mill Lock was kept in working order by Ardingly College Rowing Club as late as 1914. Pleasure boats also could be hired at the Anchor Inn at Barcombe on the section below Isfield Lock.

It is worth noting that no railway was built down the Upper Ouse valley during the commercial life of the navigation. A line was planned to compete directly with the river; this was the LB&SCR-sponsored Ouse Valley Railway from Balcombe viaduct to Uckfield via Lindfield with an extension from Uckfield to St Leonards, some work being carried out on the Balcombe viaduct - Uckfield section. The line had received its Act during 1864, construction beginning in 1865. However, due to the failure of the London bank Overend Gurney & Co, which collapsed on 11 May 1866, precipitating the greatest financial crisis of the nineteenth century, work ceased with approximately four miles of embankment and other work having been constructed. By the time the Lewes & East Grinstead Railway opened in 1882, trade on the river had long ceased.

The Upper Ouse Navigation Company lasted as a trading concern from 1790 until 1868, a fair span of time for an agricultural navigation which was unconnected to the English inland waterway system. Whilst it never paid dividends, it did eventually pay off the loan debt, the real problem being that there was simply not enough trade on offer in what is even now a very rural area. Also the very significant development to road transport during the same period led to a situation where, aided by the rail system, the local roads were able to compete with the navigation successfully. However, like the proverbial 'old soldier' the Ouse navigations, both Upper and Lower, have never died. They simply faded away! Similarly, the five Acts of Parliament, three concerning the Upper Ouse (1790, 1806 and 1814) and two concerning the Lower Ouse (1791 and 1800) have not been repealed.

Following successful canal and waterway restoration work elsewhere, attention was focused on the Upper Ouse in 2000 when Mick Waller called a meeting in Lewes to propose the restoration of the Upper Ouse navigation. To that end S.O.R.T (Sussex Ouse Restoration Trust) was formed. Since then work on restoring Isfield lock has commenced and a considerable amount of work has been done on the structure. In the longer term it is planned to return the lock to full working order, which would allow a fully navigable section from the Anchor Inn, a very popular riverside location (The Anchor, along with The Sloop at Freshfield, is a surviving navigation public house), through Isfield lock up to Sharpsbridge. It is hoped that eventually a trip boat will be able to operate on this section.

Elsewhere S.O.R.T is involved conserving other navigation structures on the river; this includes clearance work at Iron Gate lock which is in the grounds of Sheffield Park, the work being carried out by The National Trust.

Despite commercial navigation ceasing on the Ouse some 150 years ago, a remarkable amount still survives today including the navigation canals or 'cuts', locks, weirs, bridges, wharfs, etc. Associated with the navigation are the remains of Sir George Shiffner's chalk pit and lime works at Offham, which includes the remains of the earliest railway in Sussex.

APPENDIX I

Toll Rates on the Upper Ouse Navigation, Authorised by the Act of 1790

Tonnage Rates

For all chalk, lime, dung, mould, soil, compost or other manure. Timber, planks, firewood, corn ground or unground or any other article manufactured at Barcombe Mill. Beach, gravel and materials for roads conveyed between Lewes Bridge and Barcombe Mill - One Halfpenny per Ton/Mile.

For the same goods above Barcombe Mill - One Penny per Ton/Mile.

For all other goods, wares and merchandise between Lewes Bridge and Barcombe Mill - One Penny per Ton/Mile.

For the same goods above Barcombe Mill - One & One Halfpenny per Ton/Mile.

And in the same proportion for any greater or less distance or quantity.

Wharfage Rates

For all goods, wares and merchandise for a period of two months - Sixpence per Ton.

For a longer period than two months - One Shilling per Ton.

For a longer period than twelve months, the same rates to be paid as the tonnage rates for such goods.

No vessels of less than 10 tons to pass through the locks without leave of the proprietor.

Toll Rates as Authorised by the Act of 1814

For all chalk, dung, mould, soil compost, limestone, ashes or other manure (lime excepted) carried between Lewes Bridge and Sharps Lock - Two Pennies per Ton/Mile.

From Sharps Lock to Goldbridge - One & One Halfpennies per Ton/Mile.

For all beach, gravel, flints, stone and other materials for repairing the roads - One Penny per Ton/Mile.

For hay, straw, timber, planks, coal, culm or fullers earth - One & One Halfpennies per Ton/Mile.

For corn or grain, ground or unground, flour, wheat or seeds - Three Pennies per Ton/Mile.

For every hundred of faggots and hop poles, and for every cord of fire - or other wood - Two Pennies per Ton/Mile.

For all other goods, wares and merchandise - One Farthing per Hundredweight/Mile.

And so in proportion for greater or less distances, or greater or less quantities.

For every package or parcel under 50lbs weight - One Shilling per Mile.

For every person in a boat or barge, except the person having the management thereof - One Penny per Mile.

For every boat, barge or other vessel of less burthen than 10 tons, passing through any lock, the sum of Sixpence for each lock it passes through. But if laden with any of the articles above enumerated, instead of this Sixpence, the rates on such articles to be paid.

Only half of these tolls to be taken on goods passing between Lewes Bridge and Barcombe Mills.

APPENDIX II

A list of the Company of Proprietors of the River Ouse Navigation and the number of £100 shares held by them respectively

	<u>Proprietor</u>	<u>No. of Shares</u>
1.	Lord Sheffield	9
2.	Revd. Henry Chatfield, Balcombe	6
3.	Richard Wyatt, Horsted Keynes	10
4.	Executor of William Board	2
5.	Executor of Gibbs Crawford	2
6.	Executors of Thomas Rickman	2
7.	Executors of Richard Thomas Streatfield	5
8.	John Alin, Lindfield	1
9.	John Griffith, Hurst Lodge, nr. Maidenhead	2
10.	Josiah Smith, Lewes	5
11.	Samuel Gwynne, Lewes	1
12.	Edward Colbran, Lindfield	1
13.	Executor of Benjamin Comber	1
14.	Executor of Thomas Compton	2
15.	William Clutton, Cuckfield	2
16.	Joseph Francis Fearon, Cuckfield	2
17.	Thomas Cecil Grainger, Cuckfield	2
18.	William Newnham, Ardingly	1
19.	Nathaniel Drawbridge, Lindfield	1
20.	Revd. George Woodward, Maresfield	1
21.	John Cave, Fletching	1
22.	Executor of Henry Weston	1
23.	Executors of Ann Sergison	5
24.	Executors of Warden Sergison	5
25.	Camilla Moss	1
26.	Ann Firth	1
27.	Assignees of Edward Gale Boldero	5
28.	Elizabeth Carter	2
29.	Robert Snow	5
30.	William Sewell, Esquire	7
31.	Sir Godfrey Webster Bt.	1
32.	Lord Gwydir	5
33.	Executor of Revd. Johnson Towers	2
34.	Sir John Bridger Kt.	4
35.	George Shiffner	1
36.	Executor of Mary Elliot	1
37.	Executor of Thomas Wakeham	1
38.	Edward Granston	1
39.	Revd. John Hanley	1
40.	Joseph Payton	6
41.	John Tarleton, Finch House, Liverpool	2
42.	Lord Glenbiewie	1
43.	Executor of John Randall	4
44.	John Thomas Bate	10
45.	Nehemiah Winter	1
46.	Samuel Waller	1
47.	Edward Verrall	1
	Total:	134

Shares subscribed since the 2nd Lower Ouse Navigation Act - 46 Geo. III Cap. 54 Royal Assent 20th June 1800

<u>Proprietor</u>	<u>No. of Shares</u>
Warden Sergison, Esquire	5
William Lambe	2
William Sewell, Esquire	20
William Clutton	2
John Alin	1
Grand Total:	164

APPENDIX III

A Brief Gazetteer of Surviving Structures on the Upper Ouse Navigation

Although some 150 years have passed since the end of commercial navigation on the Upper Ouse Navigation many of the navigation structures survive, albeit in varying degrees of preservation. To explore the river it is advisable to use the following OS maps:

One-inch map of Great Britain sheet nos. 182 and 183; 182 (Brighton & Worthing) for the section above Lindfield, 183 (Eastbourne) for the Lewes - Lindfield section. Whilst the one-inch maps are older they often show more details.

1:50000/Landranger Series, sheet no. 198. The entire river from source to sea is on this sheet. More detail is shown on the 1:25000 maps, the relevant sheets of the first series being Lewes sheet TQ41, Uckfield sheet TQ42 and Haywards Heath sheet TQ32. Six-inch plans can usually be inspected in the East Sussex Record Office at Falmer.

It is worth stating three points: (a) please remember that many of these remains are to be found on private property and permission to view those remains should be obtained from the landowner; (b) if you are exploring the river alone it is advisable to inform someone where you are going and when you plan to return; (c) whilst you can use an electronic device, it is worth noting that if you lose a paper OS map it is annoying but they are usually easily and cheaply replaced, losing a tablet, phone or other electronic device in the Ouse is another matter!

The remains of the nineteen locks can be found at the following locations (see Table 2 on the next page):

Table 2. Locations and descriptions of the remains nineteen locks on the Upper Ouse Navigation

	Lock Name	NGR	Rise	Condition
1)	Hamsey	TQ407119	5'	The lock chamber is now only visible at low tide when the lower courses of brickwork are exposed.
2)	Pikes Bridge Lower (Barcombe Mills)	TQ433148	5'	The lock chamber has been converted into a fish weir.
3)	Pikes Bridge Upper (Barcombe Mills)	TQ434148	5'	The lock chamber has also been converted into a fish weir.
4)	Oil Mills/ Primmer Wood	TQ440168	5'	The lock chamber has been converted into a weir and is encased in concrete.
5)	Isfield/Sutton Manor	TQ441187	5' 5"	The chamber is being rebuilt and restored to working order by SORT. Just above the lock is the well-preserved by-pass weir.
6)	Sharps Bridge/ Buckham	TQ443206	5'	Most of the lock masonry is missing, leaving a muddy depression.
7)	Goldbridge	TQ427216	5'	The chamber has been removed and there are no remains.
8)	Fletching Mill/ Carver's	TQ424231	6'	The chamber was converted into a weir and encased in concrete.
9)	Iron Gate	TQ409228	5'	The lock chamber, which is in the grounds of Sheffield Park, is being conserved by The National Trust.
10)	Bacon Wish	TQ398241	5'	The lock chamber has been converted into a weir. It has a well preserved navigation bridge over its tail.
11)	Polebay	TQ393243	5'	The lock chamber is in quite good condition, but it is now becoming fragile at water level.
12)	Freshfield	TQ385244	5' 6"	The lock chamber is on the upstream side of the bridge and is adjacent to The Sloop Inn car park. The upper half of the chamber walls survive with the paddle culverts being visible.
13)	Henfield Wood	TQ376245	5'	The partly demolished lock chamber is quite well concealed in the undergrowth. It is in a very derelict condition though the remains of the upper sill can be detected.
14)	East Mascalls	TQ366254	5' 6"	The lock chamber was filled-in in the inter-war period.
15)	Pim's/Plummerden	TQ355262	8'	This lock had the greatest rise of the 19 locks on the Upper Ouse. It has been converted into a weir and is adjacent to Dean's Mill which was the last commercially working water mill on the river, Mr. Pim being the miller when the navigation was built.
16)	Fulling Mill/ Buckshall's	TQ350268	5'	This is the best preserved of the four stone locks. It was maintained by Ardingly College Rowing Club until c.1914.
17)	Tester's/Avin's	TQ346271	5'	The chamber was filled in c.1980 when the farmer lost a cow in it. Also the long navigation cut above it was ploughed away at the same time.
18)	Ryelands	TQ336275	6'	This lock is quite derelict, its stone chamber being clearly visible on the west bank of the river, half buried by the Ardingly branch railway embankment. (It is on the south side of the embankment).
19)	Riverswood	TQ332283	6'	The chamber was removed during the nineteenth century, its site being marked by a modern concrete weir.

In August 1975, the late Will Pyke and I measured Isfeld lock, its dimensions being recorded as 52 feet 6 inches long by 12 feet 6 inches wide. This tallies with the measurements taken in 1932 by G. F. Randall for his thesis *Wealden Waterways*. The 1790 Act specified a barge size of 50 feet by 12 feet 4 inches. Surviving navigation bridges can be found at Hamsey Place over the Hamsey cut NGR TQ412123, between the two Pikes Bridge lock chambers at Barcombe Mills and at Upper Ryelands Bridge, adjacent to John Urpeth Rastrick's Ouse railway viaduct NGR TQ325290. The wharf cottages can be seen below the bridge on the north bank of the river. The basin itself was filled in after World War II.

Also, as mentioned earlier, significant remains of the chalk and lime industry can be found at Offham chalk pit near Lewes NGR TQ400116. Also here are the remains of the Offham chalk pit tramway, the site is on the A275 beside The Chalk Pit Inn. The road is carried on an embankment 70' long with a 35' high brick retaining wall on the NS eastern/valley side. This embankment is pierced by two inclined 'tunnels' some 7 ft wide, through which the tramway passed (today only the northern 'tunnel' is open throughout) down a 1-in-2 incline to a wharf on the short chalk pit branch canal which runs from the wharf at NGR TQ403116 to the river at NGR TQ405116. This was the only 'plateway' in Sussex, the rails being supplied by The Butterley Company. The line appears to have been opened in March 1806 and ceased being used c.1870.

Regrettably today none of the Ouse barges survive; however, an example of a similar type of vessel, the Rye barge *Primrose*, is now preserved at The

Shipwreck Museum in Hastings. The *Primrose* worked on the rivers Brede, Tillingham and Rother along with The Royal Military Canal in East Sussex and south-west Kent.

Acknowledgement

This article is an abridged version of the author's unpublished dissertation with the principal source being the Minute Books of the Proprietors of the Upper Ouse Navigation 1790-1825 held at the East Sussex Record Office Ref AMS674/1/674 & 5.



Fig. 5 (above)
Pikes Bridge Upper Lock downstream

Fig. 6 (left)
Polebay lock upstream

(both photographed in April 2014 by Nick Kelly)



THE RAILWAY AT BARCOMBE MILLS

Alan H J Green

Fig. 1 A postcard view of Barcombe Mills station when in pure LBSC condition. The view is looking towards Isfield with the signal box beyond the level crossing. Being remote, the station was lit by oil rather than gas right up until closure in 1969. Note the milk churn on the down platform. (Author's collection)

Evolution

On 27 July 1857 Royal Assent was given to an Act¹ for the building of a railway to link the county town of Lewes with the market town of Uckfield. Promoted by the independent Lewes and Uckfield Railway Company, it opened in 1858 but its service of five trains a day each way was operated from the start by the London Brighton and South Coast Railway (LB&SCR) who purchased the undertaking in 1860.²

This was first stage of a line that would extend to Tunbridge Wells and, in due course, become the backbone of a network of LB&SCR secondary lines crossing the Weald of eastern Sussex.

The new line made a junction with the LB&SCR line between Keymer Junction and Lewes near Hamsey and followed the course of the River Ouse with two intermediate stations named Barcombe and Isfield. The first was a bit of a misnomer for the station was well over a mile from both the settlements – Barcombe and Barcombe Cross – that its name

implied it was intended to serve. It was, though, next to both the River Ouse and the Iron River and the two watermills operated by R H Billiter.

The junction for the Uckfield Line being at Hamsey meant that, somewhat inconveniently, trains approached Lewes facing east, preventing through running to Brighton. This was rectified in 1868 when the Uckfield line was diverted across Lewes to a new junction at the country end of the station facing west. Following the third remodelling of Lewes station in 1889 the junction with the Uckfield line (Lewes Main Junction) ended up on a fearsome curve of 8½ chains (170m) radius and a gradient of 1 in 50, necessitating a speed restriction of 10mph. Trains scraping their way round this curve could be heard all over the town.

The line was extended beyond Uckfield to Groombridge and Tunbridge Wells in 1868, and in 1882 it subtended a new line to East Grinstead. This new line, later to be known as the Bluebell Line, began at Culver Junction, 38 chains (760m) south of

Barcombe station, and was provided with a station in Barcombe Cross. As well as being more conveniently located for the villages, this new station featured lavish buildings designed by T H Myres, offering passengers the most opulent of accommodation.³ This station was first known as *New Barcombe* but in 1885 became plain *Barcombe* when the original station on the Uckfield line was renamed - more appropriately - *Barcombe Mills*.

Later railway development in the north of Sussex added a new line from Hurst Green, near Oxted, to East Grinstead in 1884, putting Barcombe on a direct route to London, followed in 1888 by a new line from Hurst Green to Groombridge. The Uckfield line was doubled in 1894 and the final refinement was the commissioning of an unused spur from Ashurst Junction to Birchden Junction at Eridge in 1914⁴ at last facilitating through running to London from the Uckfield line. This meant that Uckfield line stations could now have direct services to the capital, reducing the need to change at Groombridge, but strangely it was not until the 1960s that full advantage was taken of this facility. In 1912, prior to the Birchden Spur, Barcombe Mills was served by 12 up and 11 down trains between Brighton and Tunbridge Wells (West).

With both Barcombe Mills and Barcombe now placed on alternative routes between London and Brighton, the scattered parish of Barcombe was perhaps more than adequately provided for as far as train services went - but it was not to last.

Mill Connections

The proximity of the new Lewes and Uckfield line to the pre-existing mills at Barcombe suggested immediate benefits to Mr Billiter who leased them. He straightway became a shareholder in the Lewes and Uckfield Railway Company, and in 1859 tried

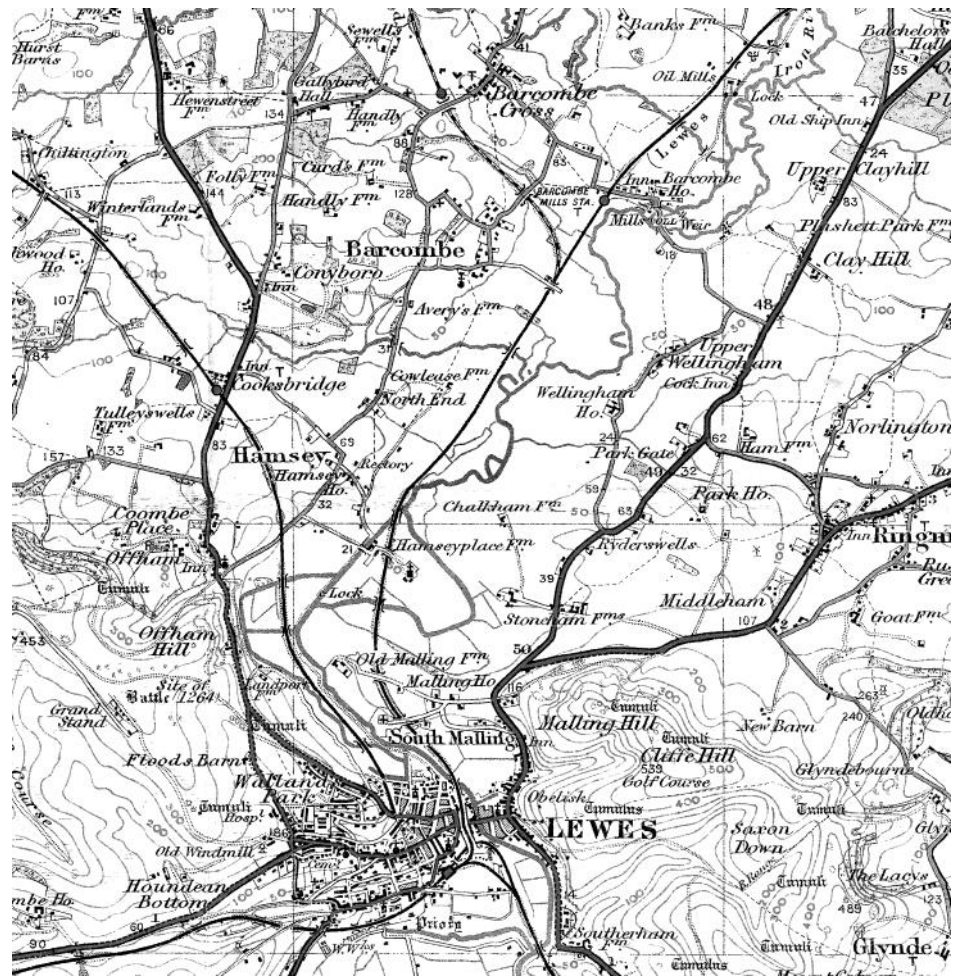


Fig. 2 An enlarged extract from the 1928 one-inch Ordnance Survey showing the settlements of Barcombe and Barcombe Cross. Barcombe Mills station is named and the siding serving the watermill is marked alongside Barcombe lane. About a mile north of Barcombe Mills "Oil Mills" denotes the site of the other rail connection, this time to the oil seed mill. To the south is Culver Junction for the East Grinstead line whose Barcombe station is in Barcombe Cross.

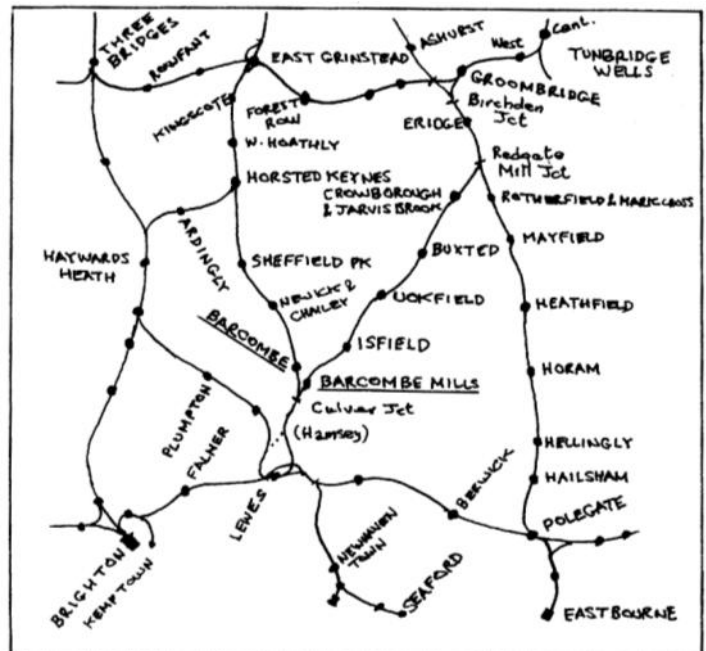


Fig. 3 A sketchmap of the network of Wealden lines in eastern Sussex showing the strategic position of Barcombe Mills and Barcombe. (Author)

to use his influence to secure a private siding to his flour mill in Barcombe Lane, but it took until 1861 to obtain the agreement of the LB&SCR. For this he had to meet the cost of the siding himself and agree to sell out to the company his right to the tolls on the road to Barcombe (Mills) station to which he was entitled under his lease. For this the company paid him the sum of £400.⁵

The siding came off the goods yard and curved away east, running alongside Barcombe Lane before crossing the river to reach the mill. No run-round facilities are shown at the mill on contemporary OS maps and a local recollection is that the wagons were either fly-shunted or propelled by a locomotive to the mill and drawn back by horse.⁶ All these moves would have been protected from the running lines by the yard trap points. Although still shown on the 1928 one inch Ordnance Survey map (see Fig. 2) this siding was not listed in the 1922 LB&SCR Appendix so the connection to the mill had been officially closed by then.⁷ The siding lived on in truncated form, though, to serve a few coal staithes, as can be seen from Fig. 9 below.

Mr Billiter also managed to get a siding to his oil mill, but this was more complicated as the connection had to be directly off the running line outside station limits, necessitating signalling and a new signal box to control it. This was sanctioned on 16 March 1876.⁸



Fig. 6 Barcombe Mills looking north in 1968. Apart from the SR pattern crossing gates and bracket signal little has changed since the view in Fig 1 was taken. The white building behind the station is *The Anglers' Rest* public house.
(Author)

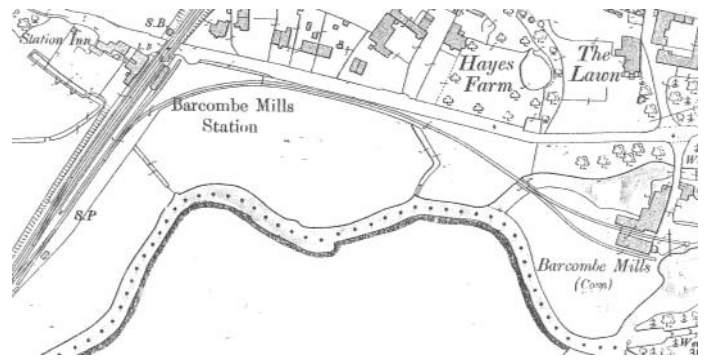


Fig. 4 An extract from the 1:2500 O S map of 1910 showing the route of the siding from the station yard to Barcombe Flour Mill.



Fig. 5 A view east along Barcombe Lane with the Station Inn on the right and Barcombe Mills signal box to the left. Beyond the level crossing can be seen the flour mill. (Lens of Sutton)

The siding was on the down side of the line* and instructions for its operation were published in the Appendix to the Working Timetable. A trailing crossover was provided along with a trailing connection off the down line. The box was only opened when the siding was to be accessed (i.e. it was not a block post so its signals were normally set to clear) and a 'signal porter' from Barcombe Mills had to accompany the train - or walk there if the train was coming from Isfield - to open the box, put the running signals to danger and work the siding under the direction of the signalmen on either side. At the end of the performance the signals were returned to clear and the train went on its way.⁹

By the time of the 1910 1:2500 Ordnance Survey the siding had seemingly been lifted and there was no mention of it, or its signal box, in the 1922 Appendix.

* When the line first opened the 'Up' direction was south - i.e. to Brighton, but once direct through running was available to London the nomenclature was reversed and 'Up' became northbound, i.e. to London. To avoid confusion I have used the latter convention throughout this article.



Fig. 7 The BR(S) enamel sign by the level crossing that advised members of the public of the conditions under which they could use the British Transport Commission's strip of land. The convoluted description of the route is rather reminiscent of the translation of Llanfair PG. This photograph was taken in 1967 but amazingly this unique and highly-desirable piece of 'railwayana' survived into the 21st century before 'disappearing'. (Author)



Fig. 8 *The Anglers' Rest* inn that conveniently adjoined Barcombe Mills station. Its changed name reflected the piscatorial delights of the area. Sadly it has long since ceased to be a pub. (Author)

Barcombe Mills Station

Barcombe Mills was the quintessential wayside station with just a pub (*The Station Inn* later renamed *The Anglers' Rest*¹⁰), a few houses and a long walk to the nearest centre of civilisation. It was approached on the east from the main Lewes to Uckfield road via Barcombe Lane that crossed the Ouse on a rather flimsy timber-decked bridge, whilst to the west lanes led to Barcombe and Barcombe Cross. The station attracted considerable leisure traffic at weekends and on bank holidays, with anglers coming to fish the well-stocked rivers and picnickers wanting to enjoy the peaceful countryside. The mills at Barcombe were anything but dark and satanic!

Flooding was (and still is) a regular occurrence and in such circumstances members of the public were permitted to use a footpath alongside the railway for which very precise instructions were given by a large enamel sign that hung by the level crossing. Alternatively they could repair to *The Anglers' Rest* and wait until the waters subsided!

The station was situated on a gentle right-hand curve of 78 chains (1560m) radius and a gradient rising at 1 in 150 towards Isfield. The buildings were on the up side of the line and early editions of the 1:2500 Ordnance Survey suggest that originally they had a smaller footprint than now, but in their extended, or maybe rebuilt, form they are very attractive. Of red brick under a tiled roof they

featured a two-storey stationmaster's house at the north end with a single-storey waiting room and office building to the south. The booking office though was beneath the stationmaster's bedroom, something that suggests that the original buildings were smaller. The windows had mildly-gothic heads and the distinctively shaped valance to the canopy was repeated on the timber shelter on the down platform. This shelter had a dual purpose, the north end serving as the goods shed with a loading bay to the rear, whilst the southern end was the waiting room.

There was a standard Saxby and Farmer signal box on the up side of the line at the London end of the station having a frame of 19 levers (three spare) controlling the signalling, two crossovers and turnout into the yard. The level crossing gates were hand, rather than wheel, operated but were interlocked with the signalling. Neither subway nor footbridge was ever provided, passengers having to cross the track via the level crossing.

The small goods yard was on the downside of the line and entered via a turnout from the down line at the country end of the station. It had only two sidings, one which served the aforementioned goods-shed cum waiting-shelter and the other being the stub end of the former siding to the mill which now served the coal staithes. The yard was serviced in the 1950s by a daily pick-up goods train that left

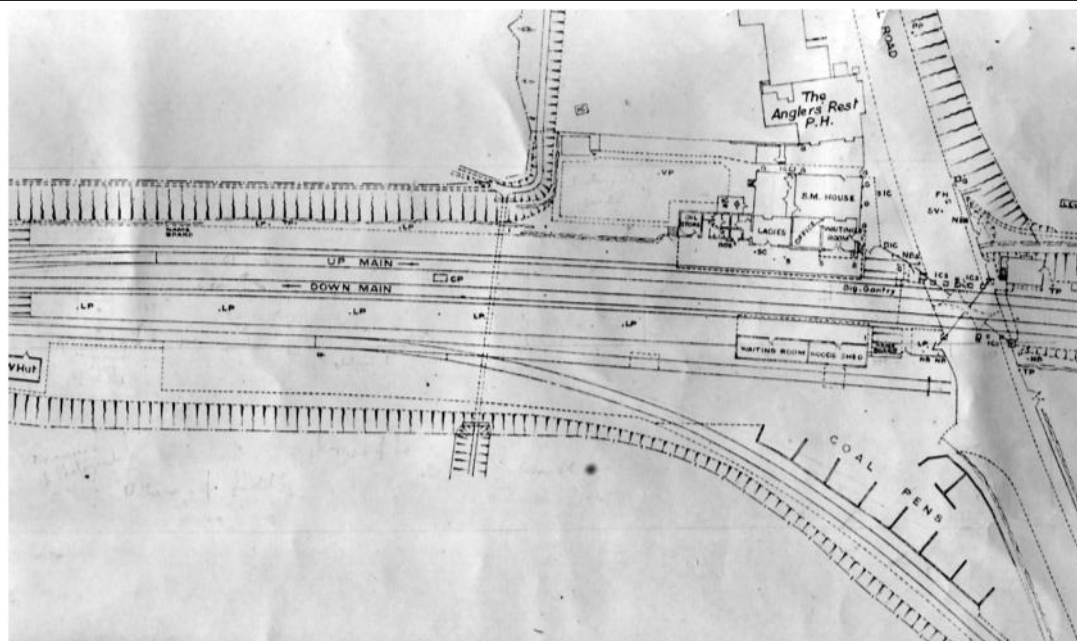


Fig. 9 An extract from the BR survey plan of the station made in 1958. Plotted at the scale of 40 feet to the inch (1:480) these useful surveys provide a wealth of detail. The internal layout of the station buildings is given as well as the position of every lamp post. The two sidings which formed the yard are shown. The one curving away past the coal pens is all that was left of the siding to the mill. (Author's collection)

Tunbridge Wells West at 1157 and trundled along visiting all the yards en route arriving at Lewes at 1713, having covered the intervening 24.7 miles at an average speed of 3.9 mph – less than walking pace. It was only allowed five minutes for shunting and transfer at Barcombe Mills so the expected quantities of goods there were light. The up goods working, which left Lewes at 0525, was allowed 10 minutes at Barcombe Mills but managed to complete its journey to Tunbridge Wells West at comparatively lightning speed - 7.6 mph! In contrast the 0832 pick-up goods from Lewes to East Grinstead was allowed 21 minutes at Barcombe, suggesting that that was the principal centre for the two villages' rail freight.¹¹

Change...

The Southern Railway timetable for the Uckfield Line changed little and in 1948, at the start of the BR era, Barcombe Mills was served by 16 down and 14 up trains. Most ran between Lewes and Tunbridge Wells West, but three each way worked through to London – two to Victoria and one to London Bridge. The trains were, though, at irregular intervals – the concept of a 'clock-face' timetable for these branch lines did not emerge until 1956.¹²

In 1955 the Southern Region mounted a cull of some of its less remunerative lines and one victim was the Bluebell Line from Lewes to East Grinstead whose closure took place on 29 May that year.¹³ However the British Transport Commission had not done their

homework prior to the closure and had overlooked the fact that Clause 12 of the Schedule to the Lewes and East Grinstead Railway Act, which set out the conditions under which the LB&SCR would operate the line, required running of "at least four trains per day each way daily."¹⁴

The redoubtable Miss Rose Bessemer of Newick famously mounted a challenge to the effect that as the Act had not been repealed BR were legally bound to reinstate the statutory four-train service. This they reluctantly did on 7 August 1956¹⁵ but as the aforementioned Clause 12 of the Act only required those trains to stop at 'Sheffield Bridge' [i.e. Sheffield Park], Newick and West Hoathly, the reinstated services did not have to call at Barcombe – so they didn't. As such, from May 1955, after 73 years the parish of Barcombe was once again served by only one station.

With the Act repealed, the Bluebell Line closed for the second time on 17 March 1958¹⁶ after which Culver Junction was abolished as a block post and the block section lengthened, becoming Barcombe Mills to Lewes Main Junction. Unusually the redundant signal box was not demolished but remained, becoming progressively derelict, until it was felled when the Lewes and Uckfield line was lifted in the early 1970s.

Economies of operation of lightly-used stations had long been a practice on the Southern, and by the mid



Fig. 10 Culver Junction signal box, which had closed in 1958, seen still standing ten years later but looking somewhat past its prime. Barcombe Mills to Lewes Main Junction was now worked as one long block section. (Author)



Fig. 11 Barcombe Mills in January 1967 by which time it had become one-man operated. The entrance to the booking office is beneath the tiled canopy behind the signal. Note the ladder propped against the wall for use during lamplighting. (Courtesy of *Sussex Life* magazine)

1960s Barcombe Mills was under the control of one man. The days of a full retinue of staff including a stationmaster and the aforementioned signal porter had long since gone.

The one man was signalman, crossing keeper, booking clerk, goods agent and lampman. At some stations (e.g., Amberley) one-man operation had been made simpler by moving the locking frame onto the platform adjacent to the booking office, but that did not happen here. When a train arrived the first duty was to give the 'right away' and collect the tickets, then our man proceeded to the signal box to give 'train entering section' to the next box and put the signals back, then, and only then, would he go down and open the level crossing to relieve any waiting motorists! One of the men, who carried out the duty on shifts, lived in the station house – literally over the shop.

Following the closure of the Hailsham to Eridge (*Cuckoo*) line in June 1965, the Uckfield line timetable was revised and instead of running to Tunbridge Wells and Tonbridge the line's trains were diverted via the Birchden Spur to Oxted where better connections were available to London. Not only that, the number of trains working through to London was increased. Barcombe Mills had its best-ever train service from June 1967 until closure with 21 up trains (including six to Victoria and one to London Bridge) and 24 down trains (including nine from Victoria two from London Bridge). The through London trains started and ended at Brighton but the others only ran between Lewes and Oxted.¹⁷

In 1962 a fleet of 19 new three-car diesel electric multiple units (classified '3D') were introduced on the Oxted and East Sussex lines as steam began to be phased out, but as there were insufficient diesel sets to operate the full service some peak hour trains remained loco-hauled until closure.

...and decay

Storm clouds began to gather in 1963 with the publication of the infamous Beeching Report.¹⁸ In this report Dr Richard Beeching, who had been appointed as Chairman of the British Railways Board by the Conservative Minister of Transport Ernest Marples, proposed closure of the entire network of East Sussex branch lines, leaving only East Grinstead to be served by the line from Oxted. The first casualty was the Ardingly branch which was lopped off that year and by February 1967 the Uckfield line had lost all its connecting branches, but its own death knell had also been sounded.

Just before Christmas 1966 posters went up advising the intention to close the lines from Tunbridge Wells Central to Lewes, Hurst Green to Eridge and Ashurst to Groombridge on 6 March 1967. Objectors were advised to make their representations by 16 February 1967. Needless to say the proposal caused much local angst and a stormy public inquiry at Tunbridge Wells gave the Minister of Transport, who was now Labour's Barbara Castle, much to think about.

It was not until August 1968 that yet another

Minister of Transport, this time Labour's Richard Marsh, gave his verdict which was published on posters at all the threatened stations. He did not agree to closure of Hurst Green to Eridge and Tunbridge Wells Central to Uckfield since hardship would result, but did consent to closing Ashurst to Groombridge and Lewes to Uckfield, at a date to be announced, subject to the licensing of alternative bus services.¹⁹

Whilst the saving of most of the route was a victory for democracy, the closure of just the last eight miles seemed on the face of it illogical. There had however been another force at work, namely proposals for a controversial new Lewes Relief Road across the northern part of the town. In 1964, the year after Dr Beeching had sentenced the Uckfield line, ministerial approval had been given to East Sussex County Council to build Stage 1 of this road which would cross the line near Every's ironworks; a level crossing did not feature in the design. Construction of this road had already started in 1968 in anticipation of the railway closure.

On the railway map the closure proposal looked even more ridiculous; Uckfield would become the terminus of a highly indirect 35 mile branch line from South Croydon.

The death throes of the line rapidly descended into a farce with, as it happened, Barcombe Mills taking centre stage. It was so farcical you could scarcely have made it up.

Nunc Dimittis

The closure date was announced as 6 January 1969, but a highly embarrassed Frank Harrison, the Central Divisional Manager, told the *Evening Argus* that a shuttle service might have to be introduced after that date as the line could have to stay open a while longer. This was because the Traffic Commissioners might not have concluded their consideration of the application for alternative bus services.²⁰ In this he was right; two days later the *Evening Argus* reported that after a two-day hearing in Lewes, at which Barcombe and Isfield residents had put their objections, the Commissioners had not managed to complete their inquiry and so decided to adjourn it until after Christmas.

Train services were thus set to continue, but in the new year an examination of one of the major underbridges near Lewes revealed a defect necessitating the immediate closure of the up line. To get over this an emergency service was



Fig. 12 3D DEMU No 1316 approaches Barcombe Mills on a working from Oxted during the 'shuttle era' of 1969.

It will terminate and transfer its passengers to another train waiting in the up platform which will run through to Lewes. (Courtesy of *Sussex Life* magazine)

introduced; down trains terminated in the down platform at Barcombe Mills where passengers transferred to a connecting shuttle service at the up platform which ran under single line working conditions over the down line to Lewes and back.

Closure was rescheduled for 24 February (i.e., the last trains would run on Sunday 23rd) but as the alternative bus services had still not been agreed this date also had to be postponed. However, rather than continue with the shuttle trains it was decided to substitute an emergency bus service on and from 24 February between Lewes and Uckfield railway stations, serving only Barcombe Mills and Isfield. Legally the two stations had to remain open, albeit devoid of trains, and did so for the sale of tickets.

Now, the bus driver was not allowed to sell tickets so the only people who could board his vehicle were those already in possession of rail tickets - which could only be bought from the stations. In the case of Isfield this was no problem as the bus passed the door, but the restricted bridge over the River Ouse in Barcombe Lane prevented a bus from accessing Barcombe Mills. To get over this a minibus/taxi service was provided between a bus stop on the A26 at the end of Barcombe Lane and the station. This meant that anyone living by the main road wishing to travel to, say, Tunbridge Wells, had first to walk a mile and a quarter to the station, buy a ticket and then ride back on the minibus to the A26 to await the emergency bus. On arrival at Uckfield they would

transfer to train and complete their journey. Inevitably, on at least one occasion, floods brought about a cessation of the minibus service. It was little wonder that most just resigned themselves to using the parallel service bus for the whole journey as it was quicker overall and much less hassle than enduring this rigmarole.

During this period the *Evening Argus* regularly reported the mounting public pressure to reinstate the original route from Hamsey across to the Plumpton line (the 'Hamsey Loop' as it had become known) which would both facilitate the relief road and save the line, with Baroness Emmet going so far as to make a plea in the House of Lords for the track to remain after closure. Sadly, the Noble Lords rejected her idea.

In April 1969 posters went up again, this time giving a definitive date for the closure of the Lewes and Uckfield railway; it would take place on 4 May 1969. The poster contained an explanation of the Minister's thinking which I give here in full:

The Minister has now considered the views expressed by the Traffic Commissioners on the needs of users of Barcombe Mills and of passengers travelling towards Lewes at off-peak periods on Mondays to Fridays. He is concerned to ensure that satisfactory arrangements for the alternative bus services are completed as soon as possible in order that closure may be completed and progress resumed with the completion of Stage 1 of the Lewes Relief Road which, when completed, will make a valuable contribution to the relief of traffic congestion in Lewes. He has therefore decided to require that further bus services should be provided beyond those already required by the conditions of consent.²¹

At least he had owned up about the effect the Lewes Relief Road had had on his decision. Twelve additional buses (service 22X) would run between Lewes and Uckfield bus stations, calling only at the end of Barcombe Lane and Isfield station and four additional services would be added to the existing Southdown service 19 from Newick to Lewes. The 22X service was of little use for those arriving by train at Lewes as they had to walk to the other end of town to catch it. Needless to say the 22X was short-lived.

Within minutes of the closure the bridge over the Ouse came down, the embankment next to the former foundry was breached and construction of the relief road, known as *Phoenix Causeway* after the erstwhile foundry, resumed. It opened in the summer of 1969.

Envoi

I was first attracted to the Uckfield line in the mid 1960s when my elder sister moved to Tunbridge Wells and the line

provided a convenient way of getting from Chichester to see her. Once closure was mooted I began to explore the line in more detail and decided that I would capture its spirit in a 4mm scale model of Barcombe Mills. Over the course of several visits, with a group of friends I measured up the buildings to produce working drawings. This took place with the kind connivance and assistance of the resident member of staff who provided ladders and tea, but I am ashamed to say that I cannot remember his name. Lunch, of course, was taken at *The Anglers' Rest*.

I watched the death throes of the Lewes and Uckfield with bemusement and found the journey to Tunbridge Wells very tedious after closure, and even more so when the 22X was withdrawn as the service buses provided only makeshift connections at Uckfield. Luckily my sister moved away from Tunbridge Wells but I continued to enjoy visiting the line from time to time.

When the track was lifted the signal box was demolished but the main station buildings, downside waiting shelter and crossing gates remained. The station became an up-market tea room serving the many visitors who continued to



Fig 13. Barcombe Mills in 1970 after closure and awaiting track lifting. The buildings and signal box have been boarded up and vegetation is taking over the track, but curiously the signal arm has not been removed. This view shews the downside buildings at the far end of which can be seen the loading bay to the goods shed.

(Author)

visit the area but it closed in the 1990s. Since then the station buildings have been extended and converted into two dwellings and, although the canopy remains, the space beneath it has been enclosed with a brick and timber erection. The area between the platforms has been filled in and the waiting shelter has been demolished to be replaced with chalets in a faux-railway style. Only one derelict crossing gate remains on the London end of the former level crossing; turned away from the road and leaning drunkenly into the bank.

The environs have changed also; the bridge carrying Barcombe Lane over the River Ouse has been rebuilt with the roadway approaching it realigned, and as the whole lane has been widened it now carries considerably more through-traffic than it did when the railway was open. Tragically *The Anglers' Rest* is a pub no longer, and has been converted into a private house.

The local desire to see the missing eight miles of line reopened using the Hamsey Loop never went away, and proposals came and went; as recently as 2008 Network Rail carried out a study which, sadly, was rejected by the Department for Transport on the grounds of its business case being too weak.

At the time of writing the campaign group BML2 is proposing the creation of a second main line between London and Brighton by redoubling between Hurst Green and Uckfield, reinstating the Lewes and Uckfield to Hamsey and then tunnelling under the Downs to emerge and join the East Coast line at Falmer. The line would be electrified throughout. In 2013, 44 years after Baroness Emmet lost her case in the Lords, BML2 got a boost when Brighton and Hove City Council took up its cause by including the scheme in its city plan to be submitted to government that April.²²

I'm afraid my model was never completed. I built the baseboard, made the track and the signal box and then, for some long-forgotten reason, the project was abandoned. The announcement of this special Barcombe Mills edition of *Sussex Industrial History* gave an ideal opportunity after some 40 years to revive my interest in this most charming of stations, dig out all my material, and put pen to paper. Although it is highly unlikely that my abandoned model will ever see any trains it is just possible that the abandoned *real* Barcombe Mills might. Who knows..?

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Postcard of front of Barcombe Mill c1910



Collection of buttons made at the Barcombe Mills Button Factory, a Corozo nut (bottom right) and a steel finger stall (top right) (Mike Green collection)