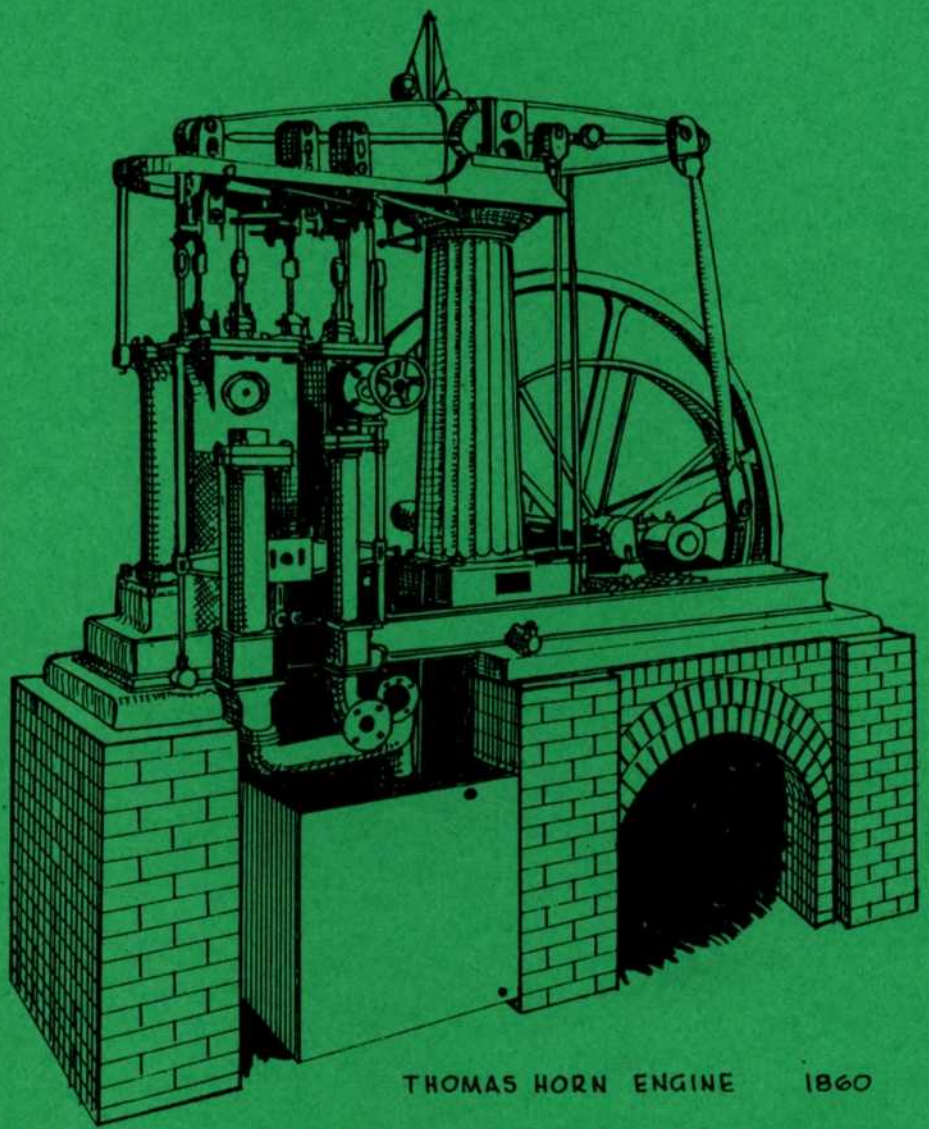
# SUSSEX INDUSTRIAL HISTORY



THOMAS HORN ENGINE 1860
FORMERLY AT IFIELD STEAM MILL



**Henry Turner, Brickmaker – Crawley Water Company – Tamplins, Brewers – Ifield Steam Mill – Burgess Hill Pug Mill**

**ISSUE 32** **PRICE £3.95**

**2002**

# SUSSEX INDUSTRIAL HISTORY

**Journal of the Sussex Industrial Archaeology Society**

THIRTY TWO 2002



Edited by Dr. Brian Austen, 1 Mercedes Cottages, St. John's Road, Haywards Heath, West Sussex RH16 4EH (Tel. 01444 413845). The Editor would be interested to hear from prospective contributors of articles of any length. Shorter notices can be included in the Society's *Newsletter* which is issued four times a year.

The annual subscription to the Sussex Industrial Archaeology Society is £10 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.

Membership enquiries to the Hon. Secretary, R.G. Martin, 42 Falmer Avenue, Saltdean, Brighton BN2 8FG (Tel. 01273 271330).

ISSN 0263 5151

# HENRY TURNER, BRICKMAKER MASTER 1804 - 1872

## Valuations for The Broyle Brickyard, Ringmer and Pound Land Brickyard, Laughton

*Pat Bracher*

Ringmer parish, situated at the foot of a northern slope of the South Downs and lying on gault clay, greensand and weald clay, is thought to have been a centre for pottery making since the Norman Conquest. The remains of medieval kilns and waste scatter occur all round the centre of the village. In the late seventeenth century Ringmer brickmakers were fined in the Manor Court for digging clay on the Broyle for brick and tile making.[1]

Field names on the c.1841 tithe map of the parish include two "Potters Fields", four "Kiln Fields", one "Brick Clamp Field" and one "Brick Clamp Plot". The property on the Broyle with which this article is concerned is named as a Brickyard. *Brickmaking in Sussex* gives the definition of 'brickfield' as a clamp burning site and 'brickyard' denoting the presence of a kiln. Eleven brickmaking sites in Ringmer are listed in the *Brickmaking in Sussex* Gazetteer, these dating from the seventeenth century onwards. Ringmer brickfields sup plied bricks and tiles for the building of Stanmer House in the early eighteenth century and Glynde Place stables in the 1740s.[2] In the late nineteenth century William Martin, the local builder, operated a brickyard near Ringmer Green on the site of one of the medieval "Potters Fields".

The Broyle , once an ancient hunting forest lying to the north east of the village, and until the sixteenth century the property of the Archbishop of Canterbury, was enclosed by a bitterly disputed Act of Parliament in 1767. A straight road, nearly three miles long, with wide verges, was drawn on the enclosure map by the surveyors and subsequently built to their specifications.

The Broyle Brickyard TQ476141 (Fig. 1) occupied one acre of land. It opened in 1820 and lies on the band of weald clay along the northern side of this turnpike road just over two miles from the centre of the village. Henry Turner worked the Broyle brickyard and the Pound Lane brickyard in Laughton from some time in the 1830s until 1872. He was born in Barcombe in 1804, probably of a brickmaking family. He came to Ringmer in 1832 and the 1841 census shows him as a brickmaker living on the Broyle. The household consisted of Henry Turner and his wife, Philadelphia, four children ag ed be tween nine and three years, three twenty year old and three fifteen year old brickmaker's labourers and one sixteen year old female servant.

The household continued along these lines until Henry Turner's death in 1872. He had two more wives, Harriet and Frances, and three more children. His two sons, Henry and Edward, followed their father as was the custom and became brickmakers. Always there were young labourers living in. In 1861 Henry is described as "Farmer of 44 acres and Brickmaker Master employing eight men and three boys". This census shows the boarders not as brickmakers but as agricultural labourers, one of whom was also a carter, but they would have done both jobs seasonally. In 1871, just be fore his death, he had 20 acres of farmland and employed twelve men and four boys with the boarders in this census again described as brickmaker labourers. This is consistent with Molly Beswick's comments in *Brickmaking in Sussex* that brickmaking in country brickyards was a seasonal activity. Clay would be dug in the autumn and left in the winter to weather ready for the pugmill in the spring and the brick-making. After the harvest the bricks were fired.

Henry Turner farmed Barnfield Farm, probably the farm of that name on the Laughton Road. Like most successful men he invested in local property, including ten cottages in Ringmer which brought him about £120 a year in rent[3] and land in Laughton.[4] The house by the brickyard is still there, converted into two semi-detached dwellings now called Jubilee Cottages. To an older generation it was known as Brickyard House. The valuation in 1872 shows it to have be en a five bedroom house with a parlour, a kitchen, a dairy, a bakehouse and a stable. The bakehouse existed to within living memory and was probably demolished, along with the stable, when the house was converted in the 1970s when the brickyard finally closed. In 1890 Henry Turner junior, farmer and brickmaker, was living at Middle Broyle Farm[5] to the north of the brickfield, and Turners continue to live there to the present day.

In 1874 James White and Brother were granted the lease of the Broyle brickyard[6] and in 1889 W.L. Christie of Glyndebourne bought the land and from then the brickworks were managed by the estate. In December 1891 the kiln had been drained, repaired and a side wall rebuilt, the brick lodge was repaired and a road built to the clay yard. There were two pugmills and a pipe machine in operation. Stock for resale amounted to about £450 with a further £274 owing for stock supplied including £92.17.6d. from William Martin, the Ringmer builder with his own brickyard at Potters Field.[7]

A valuation taken in 1920[8] shows a double kiln valued for demolition at £15. There were three pugmills and 394 yards of portable light railway track used for transporting clay from the pits. The total value of the

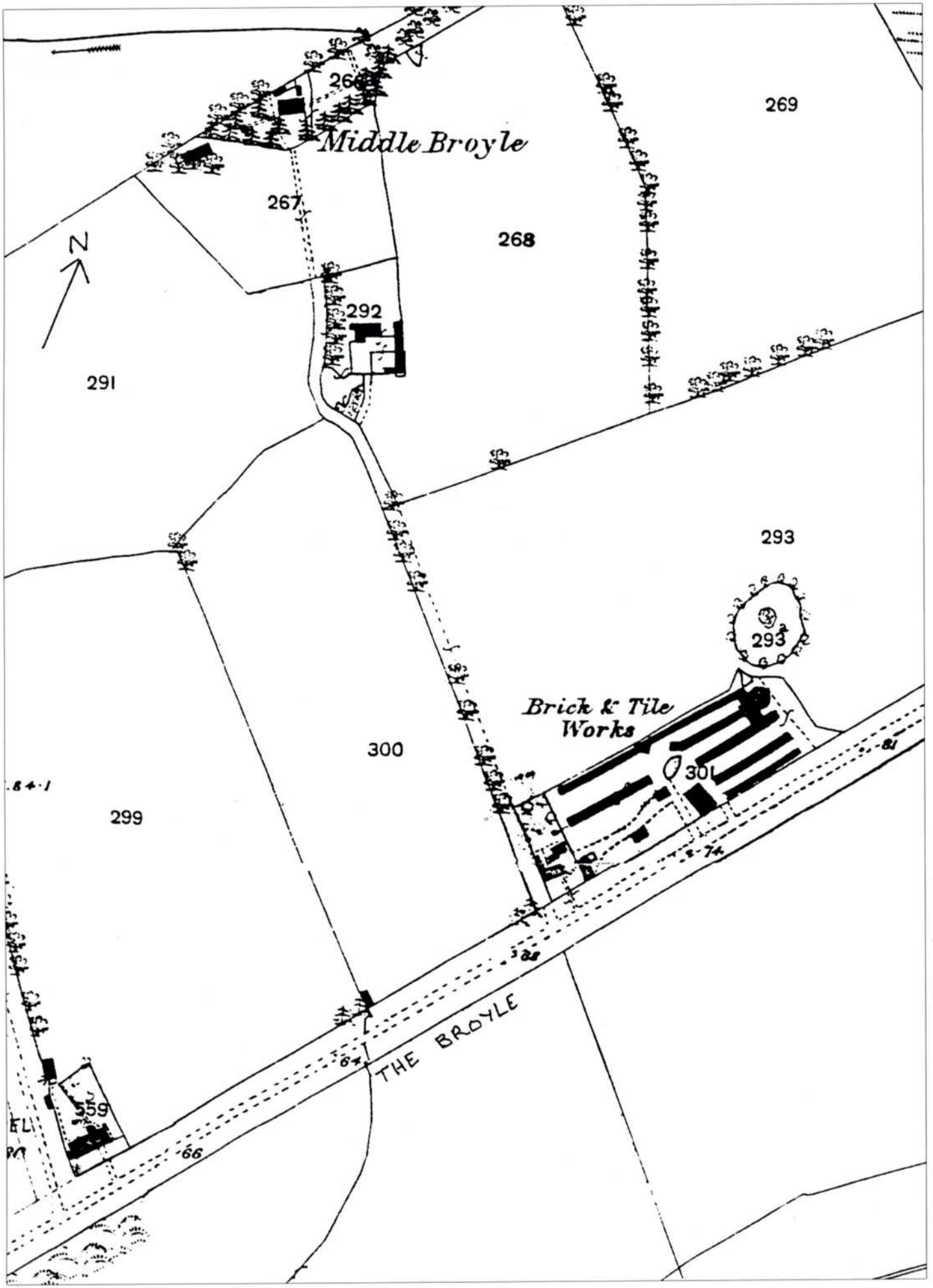



Fig. 1 The Broyle Brickyard (25" O.S. map 1875 sheets 54/4 and 54/8)

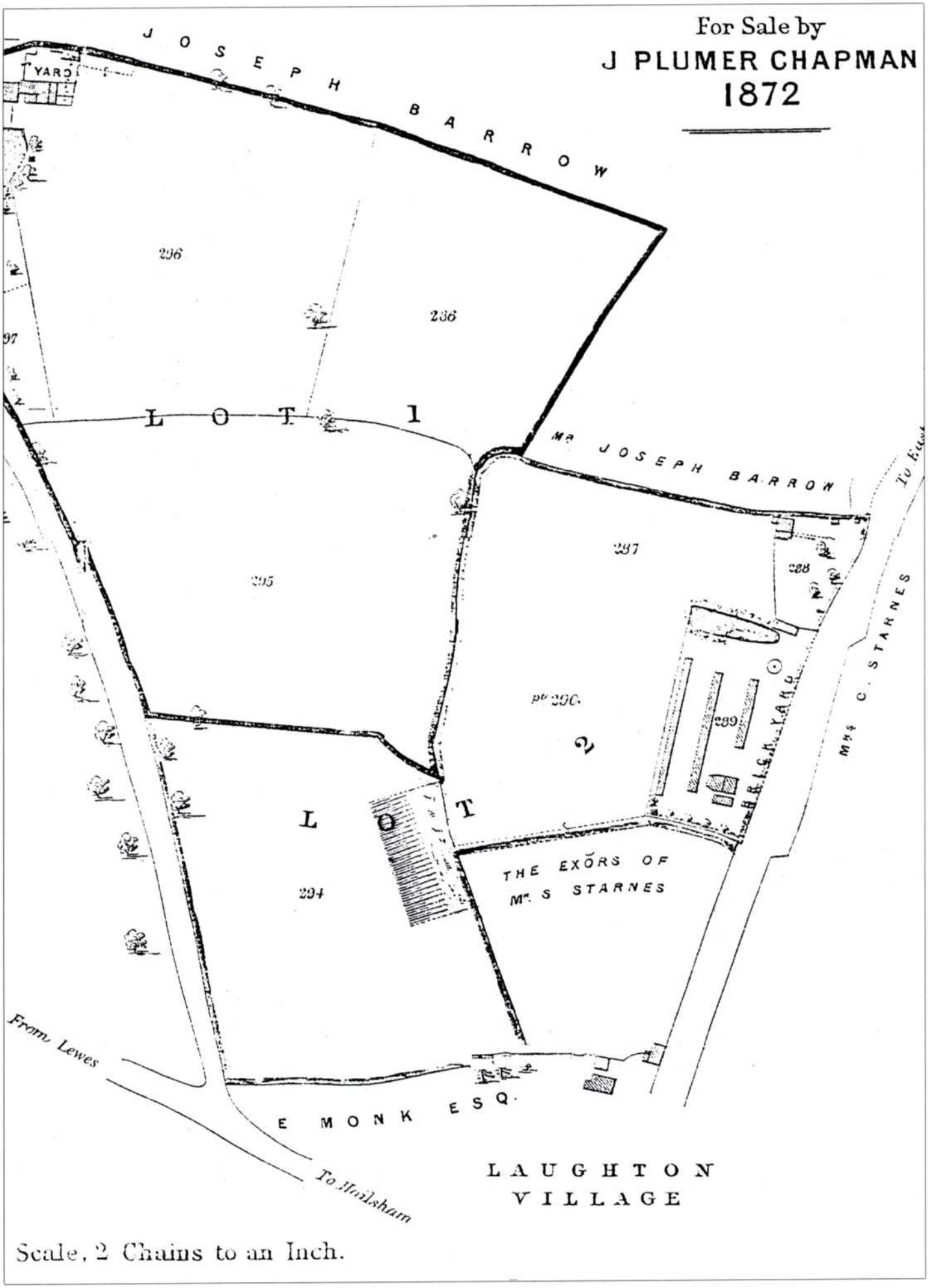



Fig. 2 Pound Lane Brickyard, Laughton 1872

yard including goodwill was £929. After 1920 only clamp fired bricks were made until the site was closed about 1930. In 1936 it reopened when the Ringmer Building Works, Mr. Christie's building business, was awarded the contract to build the Nevill estate in Lewes. The brickyard finally closed in 1971.[9]

Henry Turner also leased the Pound Lane brickyard in Laughton TQ503133 (Fig. 2), which may have been run by family members, the manager being Abraham Turner in 1841 and Albert Turner in 1861. In July 1872, three months before Henry Turner's death, Brickyard Farm, on which the brickyard was situated, was for sale in two lots, in all just over fourteen acres. The sale particulars state that the brickyard was 'a going concern with a deep vein of excellent light working brick earth, together with a brickyard, sheds, kiln, pugmill, pond and just over six acres'. The small print at the bottom of the Lot 2 sale notice states that 'Possession of the whole of the Property may be had on completion of the Purchase, except the Brick Yard, No. 280 on Plan, and that part of Field No. 294 from which the Brick Earth is dug, this being in the occupation of Mr. HENRY TURNER, at a Yearly Rent of £15, and an additional Rent of 2s.6d. for every Thousand Bricks burnt over and above the first 5 Kilns'.[10]

The site was a smaller business than the Broyle, valued in 1872 at £151.11s. It was, however, making some special types of bricks not mentioned on the Broyle valuation: 5,000 rubbing bricks, the carefully made soft bricks which were rubbed with hard stone to acquire different shape s; splay bricks, the obtuse angled bricks used for building b ay windows, and well bricks, again curved, for lining wells. This brickyard finally closed some time in the early twentieth century, before 1910. Today Pound Lane is quiet and leafy and the brick-yard site is overgrown. A grass covered mound in the south east corner of the brickyard field marks the site of the kiln.

Neither of the brickyards can be walked over at the present time[11], both have been viewed from the road-side. Nothing can be seen on the Broyle site. The boundaries of the brickyard are still the same and the field appears to be marshy, with reeds growing along the northern edge. The source of the clay is to be found to the north east. The pond surrounded by trees shown on the 1875 map at the corner of the brickyard had obviously not been used for clay extraction for many years. This pond, still in water, is now alongside the car park of Chandler's Building Supplies where many of the same products including bricks, tiles and drainage pipes are sold today. Other ponds, both dry and in water, are now in the grounds of Raystede Centre for Animal Welfare to the east of Chandler's. They now accommodate many species of wildlife.

All transport to and from the brickyards would have been along the toll roads by horse-drawn wagons. Henry Turner had five cart horses, a stallion and three 'aged' horses in 1872.[12] No railway reached either Ringmer or Laughton and although together the brickyards made a comprehensive range of late Victorian building materials the growth found in brickyards operating alongside the railways passed them by.

The valuations which form the basis of this article[12] were taken by Burtenshaw and Son of Hailsham, Auctioneers and Valuers, on the death of Henry Turner in September 1872. In addition to the two brickfields it contains valuations of the tackling, crops and livestock on Barnfield Farm, Ringmer and all his household goods.

**September 18th 1872. Valuation of Effects at Broyle Land Ringmer the property of Mr. Henry Turner deceased.**

| Clamp Brick Yard | | £ | s | d |
|---|---|---|---|---|
| 4 Wheel Barrows | | 1 | - | - |
| 2 Bearing off Barrows | | 1 | - | - |
| 5 Crowding do. | | 2 | - | - |
| 80 Brick boards | | | 6 | 8 |
| Earth for good bricks | 1/- | 4 | 10 | - |
| Ashes for half quantity | | 6 | - | - |
| 84,000 Clam burnt bricks | 16/- | 67 | 4 | 2 |
| 137,000 do. not burnt | 16/- | 109 | 12 | 2 |
| 44 l4ft. l-inch deal boards) 3 20ft. deal planks) | | 2 | - | - |
| Sand sieve Soil sieve ? sieve | | | 6 | - |
| Brick Table | | | 5 | - |
| | | 194 | 3 | 8 |

| Broyle Brick Yard | | | | | |
|---|---|---|---|---|---|
| 544 Building Bricks | | 2/6 | | 13 | 6 |
| 2,250 do. | | 2/6 | 2 | 16 | 3 |
| 200 do. | | 2/6 | | 5 | - |
| 5,000 do. | | 2/6 | 6 | 5 | - |
| 450 do. | | 2/6 | | 11 | 3 |
| 2,492 do. | | 2/6 | 3 | 2 | 6 |
| 777 do. | soft | 4/- | 1 | 11 | - |
| 150 do. | | 4/- | | 6 | - |
| 250 Paving do. | hard | 3/6 | | 8 | 9 |
| 3,136 do. | do. | 3/6 | 5 | 9 | 6 |
| 697 do. | soft | 3/6 | 1 | 4 | 6 |
| 240 do. | hard | 3/6 | | 8 | 6 |
| 140 do. | hard | 3/6 | | 5 | - |
| 2,520 Red Paving | do. | 3/6 | 4 | 7 | 6 |
| 324 do. | do. | 3/6 | 1 | 11 | 6 |
| 2,025 do. | do. | 3/6 | 3 | 10 | 6 |
| 260 do. | do. | 3/6 | | 9 | - |
| 6,000 2in. drain pipes | | 18/- | 5 | 8 | - |
| 140 4in. do. | | 5/- | | 7 | - |
| | | £38 | - | 3 | |

| | | | £ | s | d |
|---|---|---|---|---|---|
| 4,000 | Weather tiles | 2/6 | 5 | - | - |
| 1,000 | Edge Coping Bricks | 3/6 | 1 | 10 | - |
| 200 | Red & Black paving tiles ) | | | | |
| 100 | Fancy Ridge Tiles ) | | | 5 | - |
| | Chimney Pot ) | | | | |
| | Sundry fancy ridge tiles ) | | | | |
| 2,000 | Roof tiles | 2/6 | 2 | 10 | - |
| 600 | Half round coping bricks | 3/6 | 1 | 1 | - |
| 150 | Gutter Bricks | 1/- | | 12 | 6 |
| 60 | ? bricks | 3/- | | 15 | - |
| 140 | Quoin bricks | 3/- | | 4 | 6 |
| 10,318 | Roof tiles | 2/6 | 12 | 17 | 6 |
| 715 | 6in. drain pipes | 3/- | 8 | 18 | 9 |
| 1,500 | 4in. do. | 5/- | 4 | 10 | - |
| 3,000 | Fancy roof tiles | 2/6 | 3 | 15 | - |
| 700 | do. | | 17 | 6 | - |
| 75 | Step bricks | | | 3 | - |
| | Sundry damaged | | - | - | - |
| 1,040 | 5in. Pipes | 2d | 8 | 13 | 4 |
| 1,000 | Slated hip tiles | 2d | 8 | 6 | 8 |
| | | | £59 | 19 | 9 |
| 650 | Slated ridge tiles | 4d | 10 | 16 | 8 |
| 3,350 | Fancy roof tiles | 2/6 | 4 | 2 | 6 |
| 300 | 4in. coping bricks | 4d | | 12 | - |
| 3,500 | Fancy roof tiles | 2/6 | 4 | 7 | 6 |
| 100 | 3in. pipes | 30/- | | 3 | - |
| 600 | Damaged roof tiles ) | | | 5 | - |
| 2,600 | do. ) | | | | |
| 440 | 9in. Sewer pipes | 5d | 9 | 3 | 4 |
| | Sundry damaged tiles etc | | | 10 | - |
| 400 | Red Ridge Tiles | 2d | 3 | 6 | 8 |
| 200 | Black do. | 2d | 1 | 13 | 4 |
| 80 | Large Sewer tiles | 3d | 1 | - | - |
| 50 | Elbow and Socket pipes | 4d | | 16 | 8 |
| | Sundry damaged pipes bricks etc. | | | 10 | - |
| 100 | Bushels ashes | 4½ | 1 | 17 | 6 |
| 2,000 | 2in. pipes | 18/- | 1 | 16 | - |
| | | | £41 | 0 | 2 |

Green ware

| | | | £ | s | d |
|---|---|---|---|---|---|
| 38,400 | Green tiles | 9/9 | 13 | 14 | 6 |
| 2,000 | 3in. pipes) | 10/- | 2 | 16 | - |
| 15,000 | 4in. do ) | | | | |
| 23,000 | 2in. do | 7/6 | 8 | 2 | 6 |
| | Pipe Mill (The Bedford) | | | | |
| | all in good order | | 10 | - | - |
| 5 | Bearing off Barrows | | 2 | 10 | - |
| 4 | Crowding do. | | 1 | 12 | - |
| | Sundry tile moulds | | 1 | 10 | - |
| | Pug Mill | | 5 | - | - |
| | Clay Hook Shovel & Couple | | | 3 | 6 |
| 9,428 | Building bricks green 8/6 | | 4 | - | - |
| | Hot damaged bricks 300 | | | 5 | - |
| 13,608 | Green brick building | 8/6 | 5 | 15 | 6 |
| | Pug Mill | | 2 | - | - |

| | | | £ | s | d |
|---|---|---|---|---|---|
| 6,530 | Paving bricks Green | 11/6 | 3 | 15 | - |
| 300 | Roof tiles | | | 6 | 0 |
| | | | £59 | 12 | - |
| 8 | Tables | | 1 | 5 | - |
| 10,400 | Green building bricks | 8/6 | 4 | 9 | - |
| 5 | Sets of Brick boards | | | 10 | - |
| | Healing of kiln | | 2 | - | - |
| 5 | Short planks | | | 5 | - |
| | Prong, poker & 2 iron hoes | | | | |
| | 1 wooden handle hoe | | | 2 | - |
| 25,000 | Faggots | 10/- | 125 | - | - |
| 14,700 | Building bricks | 9/6 | 6 | 19 | - |
| 135,000 | Plain tiles | 10/9 | 7 | 5 | - |
| 3,500 | 2in. drain pipes | 8/6 | 1 | 9 | 9 |
| | Lit(?) 1 per 1,000 for filling kiln | | | | |

In Kiln

| | | | £ | s | d |
|---|---|---|---|---|---|
| 10,500 | Building bricks | 9/6 | 4 | 19 | 9 |
| 14,200 | 2in. drain pipes | 8/6 | 5 | 19 | - |
| 1,200 | 3in. do.) | 6/- | 7 | - | - |
| 7,000 | 4in. do.) | | | | |
| | + 1 for filling Kiln | | | | |
| | Refuse hollow ware etc. 1900 | | | 3 | - |
| | | | £172 | 1 | 6 |
| 4 | Tons of sand | 5/- | 1 | - | - |
| | Enough earth dug for | | | | |
| | 20,000 bricks | 1/- | 1 | - | - |
| | & 30,000 tiles | 9d | 1 | 2 | 6 |
| | | | 3 | 2 | 6 |
| | | | 194 | 3 | 8 |
| | | | 38 | 0 | 3 |
| | | | 59 | 19 | 9 |
| | | | 41 | 0 | 2 |
| | | | 59 | 12 | - |
| | | | 172 | 1 | 6 |
| | | | £567 | 19 | 10 |

**September 18th 1872. Valuation at the Brick Yard Laughton the Property of Mr. Henry Turner deceased.**

| | | | £ | s | d |
|---|---|---|---|---|---|
| 130 | Half round bricks | | | 4 | - |
| 250 | Building bricks | 2/6 | | 6 | 3 |
| 900 | do. | 2/6 | 1 | 2 | 6 |
| 2,700 | do. | 2/6 | 3 | 7 | 6 |
| 350 | Quoin bricks | 3/6 | | 12 | 3 |
| 10,906 | Building bricks | 2/6 | 13 | 12 | 6 |
| 733 | Red Building bricks | 2/6 | | 18 | - |
| 212 | do. | 2/6 | 1 | 10 | - |
| 2,443 | Well Bricks | 4/- | 4 | 19 | - |
| 1,443 | Red Building bricks | 2/6 | 1 | 16 | - |
| 1,595 | 4in. Splay bricks | 3/6 | 2 | 16 | - |
| 480 | 9in. Splay bricks | 3/6 | | 17 | - |

| | | | £ | s | d |
|---|---|---|---|---|---|
| 500 | Quoin bricks | 3/6 | | 17 | 6 |
| 495 | do. | 3/6 | | 17 | 6 |
| | | | £33 | 16 | - |
| 1,716 | 4in. pipes | 50/- | 4 | 15 | - |
| 972 | flat well bricks | 3/6 | 1 | 14 | - |
| 5,000 | Rubbing bricks | 4/6 | 11 | 5 | 6 |
| 28,000 | 2in. drain Pipes | 18/- | 25 | 4 | 4 |
| 170 | 3in. do. damaged | | - | - | - |
| 100 | do. | | - | - | - |
| 364 | 3in. good do. | 18/- | | 9 | 6 |
| | Sundry damage bricks and pipes | | | 10 | - |
| 18,000 | Green bricks in kiln | | | | |
| 3,780 | in hacks ) | 8/6 | 10 | 12 | 6 |
| 3,240 | do. ) | | | | |
| 6,000 | Green 2in. pipes in hacks | 5/- | 1 | 10 | - |
| 293 | Hip Gutter & ridge tiles | | 1 | 5 | - |
| 3 | Bearing off Barrows | | 1 | 16 | - |
| 3 | Crowding Barrows | | 1 | - | - |
| | | | £59 | 11 | 6 |
| | Pipe Mill in working order by Saunders & William Bedford | | 8 | - | - |
| | Earth for 25,000 bricks | | 2 | - | - |
| 10 | Brick Moulds | | 9 | - | - |
| 50 | Brick Boards | | | 4 | 2 |
| 50 | Tile Boards | | | 8 | 4 |
| | Kiln Boards etc. | | 1 | 10 | - |
| | Poker) | | | | |
| | Hoe ) | | 1 | 10 | - |
| | Prong) | | | | |
| 20 | Bushel kiln ashes | 4½ | | 7 | 6 |
| 8,500 | Kiln Faggots | 10/- | 42 | 10 | - |
| 20 | Bundles Stakes | | | 4 | - |
| 2 | Brick Tables | | | 10 | - |
| | | | 58 | 4 | - |
| | | | 33 | 16 | - |
| | | | 59 | 11 | - |
| | | | £151 | 11 | - |

**Glossary of Terms used in the inventories**

| | |
|---|---|
| Half round bricks | Coping bricks for the top of a wall. |
| Edge coping | Pointed bricks for the top of a wall. |
| Quoin bricks | For corners of building. Unusual as ordinary bricks usually sufficed. |
| Well bricks | Curved for lining the inside of a well. |
| Splay bricks | Bricks with an obtuse angle for use in building bay windows. |
| Rubbing bricks | Softer bricks made with well-mixed clay, carefully fired and then rubbed with a hard stone to the desired shape. |
| Green bricks | Unfired bricks. |
| Black bricks | Probably had manganese added to darken the colour. |
| Gutter bricks | Paving bricks with a hollow across the top surface to form a drainage channel in a stable yard. |
| Hot damaged bricks | Overburnt bricks. These had various uses including hardcore. |
| Weather tiles | Mathematical tiles. |
| Slated tiles | Tiles probably coloured to resemble slate. |
| 2in., 4in. etc. pipes | Unglazed agricultural drainpipes. |
| 9in. sewer pipes | These would have been glazed. |
| Elbow & socket pipes | Also glazed. |
| Brick mould | The wooden frames in which a handmade brick is made. |
| Brick table | On which the brickmaker used the mould. |
| Hacks | Where the green bricks were stacked on boards and dried in double rows in the open, protected from the weather by wooden boards. |
| Healing | Removable roof sections of a kiln. |
| Faggots | Bound bundles, usually of brushwood, for firing the kiln. |
| Bearing off barrow | A long, flat wheelbarrow on which up to 36 green bricks were taken from the moulds to the kiln. |
| Crowding barrow | Wheelbarrow with a vertical platform at the front end, holding up to 60 bricks, to take bricks from the hacks to the clamp. |
| Pugmill | Horse driven device for mixing the clay before moulding. |
| Pipemill | Machine which extruded clay through different sized dies to produce circular drain and sewer pipes, from 1 inch to 9 inches. |

REFERENCES


1. M. Beswick *Brickmaking in Sussex,* (Midhurst 1993).
2. *Ibid.*
3. East Sussex Record Office. BUR2.1.210.
4. E.S.R.O. CHRmss. 3/16/2, 3-4.
5. *Kelly's Directory* 1890.
6. *Post Office Directory* 1874.
7. E.S.R.O. BMW/A2/44
8. E.S.R.O. BMW/A2/316.
9. Ringmer History Group. *Newsletter* No. 124. September 1996
10. *Laughton Past* No. 7. November 1995. Angela Snelgar.
11. Written during the recent foot and mouth disease outbreak.
12. E.S.R.O. BUR/2/1/216.

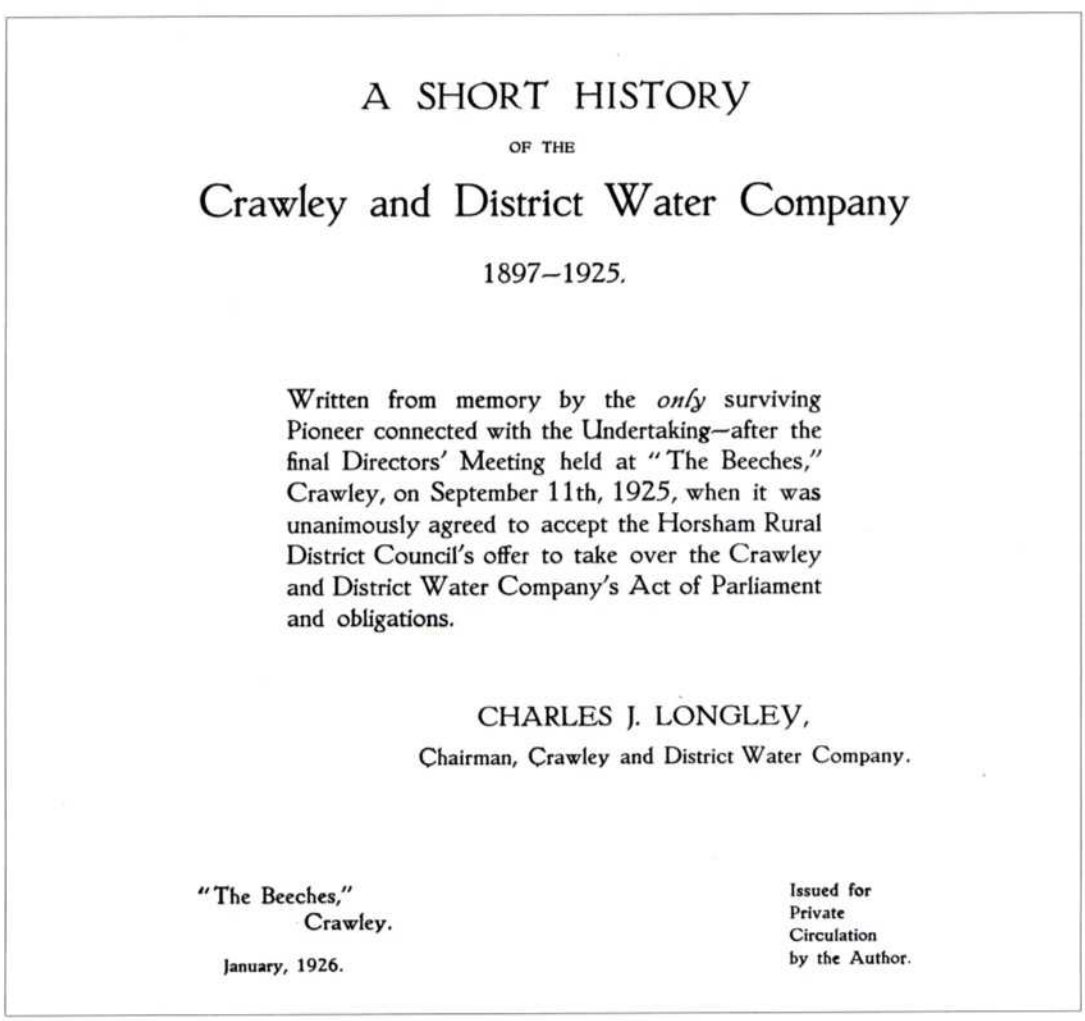

ACKNOWLEDGEMENTS


My grateful thanks to Molly Beswick for providing the glossary and for all her help and encouragement and to Angela Snelgar for her information about Laughton and permission to reproduce Fig. 2 from the sale document in her possession. Thanks also to the staff of East Sussex Record Office and Lewes Public Library for all their help.

# CRAWLEY AND DISTRICT WATER COMPANY

## *Charles J. & Peter Longley*

James Longley commenced his business as a builder and contractor in 1863 and from 1881 the Company operated from Crawley. He was joined in the business by his three sons and substantial contracts were undertaken such as the building of the new Christ's Hospital on a site at West Horsham which was commenced in 1897. In the same year James Longley was persuaded to take an interest in a local venture that was about to be established. This was the Crawley and District Water Company of which he became Chairman with his son as Vice-chairman. He also provided substantial amounts of finance for the Company. It immediately ran into problems, the bore-holes required for the supply being of much greater depth than had at first been anticipated. With the growth of the business they proved inadequate to supply the demand and water had to be purchased from the East Surrey Company. In 1915, on the death of his father, Charles J. Longley became Chairman, but problems increased with public discontent at the intermittent nature of the supply, not helped by equipment failure. In 1926 the enterprise was sold to Horsham Rural District Council, shareholders only recovering about 45% of their original investment. In January 1926 Charles J. Longley wrote *A Short History of the Crawley and District Water Company* (Fig. 1) which was privately published and is now a scarce work. For this reason the Society thought it desirable that the content should be made available to a wider readership. Apart from detailing the history of the undertaking, the *Short History* provides a valuable commentary on the troubles the Company experienced in its later years and Charles J. Longley's feelings about some of the prominent figures of the Crawley area who orchestrated the complaints. The text is reproduced in full and is followed by a commentary by Peter Longley, his grandson, which reproduces letters and documents relative to the later history of the Water Company.



A SHORT HISTORY

OF THE

Crawley and District Water Company

1897–1925.

Written from memory by the *only* surviving Pioneer connected with the Undertaking—after the final Directors' Meeting held at "The Beeches," Crawley, on September 11th, 1925, when it was unanimously agreed to accept the Horsham Rural District Council's offer to take over the Crawley and District Water Company's Act of Parliament and obligations.

CHARLES J. LONGLEY,

Chairman, Crawley and District Water Company.

"The Beeches,"
Crawley.

January, 1926.

Issued for
Private
Circulation
by the Author.

Fig. 1 Title page of C.J. Longley's *A Short History ...*

# The Crawley and District Water Company

Limited.

A SHORT HISTORY

## By C. J. LONGLEY.

*January, 1926.*

EARLY in 1897 Mr. George Simmins invited me to meet him and Mr. Blaber, an Engineer, at Brighton. This I accepted, and to my surprise they had rigged up between them a scheme to supply Crawley and District with water. Crawley and District at that time was supplied in the old-fashioned way from wells, in many cases within 10 to 20 ft. from a cesspool, a great many wells being condemned. I thought the matter over and came to the conclusion it was a very good proposition. At that meeting it was suggested I should rope in my father. This I did the next day, and about a week after I persuaded Dr. Martin, Mr. J. Goddard, Mr. T. Caffyn, of Handcross, being introduced by Mr. George Simmins. With this somewhat influential crowd it was decided to form a small syndicate to prospect for water. Buying from Mr. T. Caffyn a piece of land in the proposed Goffs Park Road, which was then a cul-de-sac, we let a contract to Messrs. Duke and Ockenden to drill a 3 in. bore hole to test the position of water. This was more or less guaranteed at 200 ft. by our Engineer, Mr. C. O. Blaber. At 200 ft. no sign of water other than surface springs, so we decided to go on deeper, and went on and on until we reached about
3 – 950 ft., having no end of trouble. Here we found water, and thought we were in clover, it rising about 4ft. above the surface. It was quite a by-word in Crawley, "At last *they* have found water." The Syndicate many times having been jeered at, etc., as is usual with many

pioneers. However, having found water, we then decided to form a Company, but with considerable opposition from Mr. Robus, who had acquired powers to supply water for an area in Mid-Sussex, and thought he also had included the district we scheduled to supply with water, as also did the Horley Gas Company. ⟨Hearing about the Horley Gas Company's proposed opposition, we found Mrs. Montefiore wished to sell all her shares in the Crawley Gas Company. So we thought we had better get an interest in the Gas Company. My father, Mr. Goddard and myself bought her out at £200, at £5 per share— which very soon after fetched £10 per share — the Crawley Gas Company being bought up by the Horley Gas Company —the only piece of luck we had over the C.W.W. undertaking⟩. At this period we persuaded Mr. Moses Nightingale to join the Board of Directors, and we then set to work. My father ⟨Chairman⟩, Mr. G. Simmins, myself ⟨Vice-Chairman⟩, Mr. T. Caffyn, Dr. Martin, Mr. J. Goddard, Mr. M. Nightingale and Mr. C. O. Blaber, Engineer, went to Parliament for powers, a costly job, which of course the Directors had to finance, as well as the bore hole. However we got our Bill through Parliament, which the opposition made much more costly. Having our Act of Parliament we issued a prospectus, fully advertising, and especially asking the local inhabitants to take up as many shares as possible, as it was absolutely to their benefit, but alas, the present register of shareholders will show what happened, then and later on. I heard it said at the time: "Let them carry on, it is for their own benefit." ⟨I mention no names, but could do so⟩.

4 –

Well, our undertaking did not appeal to the public generally, a few outsiders did follow my father and self, who, they thought could not be connected with anything but a certainty. Not being well supported, the Directors had to borrow money from the London and County Bank to carry on the completion of the works. Having done so, we commenced to supply water with a constant supply, and went blindly on, with the Bankers' assistance. But they, in the end, got tired, although they had the Directors' guarantees for the money, jointly and

severally, for repayment at any time. That time came like a thunderbolt, the Bankers demanding repayment, and the Directors had to find the cash, somewhere between £800 to a £1,000 each. This they scraped about and did, taking up fully-paid shares for their security, which, as everyone knows, has not proved a lucrative investment, when I say no one has received on an average more than 1 per cent. for their investment since the Company's inception.

Soon after supplying Crawley and District with water, we found we wanted more, so set about boring another hole, which went down about 50 ft. lower than the first, viz. 975 ft. In doing so we got considerably more water, and would have gone lower, but our Contractors had the misfortune to break their tools at the bottom, spending weeks to recover them, without avail. We had to be satisfied with this bore hole and used this, being our principal supply ever since. My Firm lent the Company most of the cash, at interest 4½ per cent., as they did the whole of the money for laying the mains from Crawley Church to the Three Bridges district, at 4 per cent. interest, and only last year were the Company able to clear off these loans. Not a very profitable concern for my family, who, I am certain, are not so well off by over £10,000, had I never introduced my father into the concern. However, I claim here to say that Crawley and District would not
5 – have been in the same position as they are to-day without water—water rarely found of such purity.

All went ploughing along ⟨not smoothly⟩ until 1915, when my father had to leave us. Then I was elected Chairman ⟨a very enviable position⟩, in more troublesome waters than before, and until 1921, the exceptional dry summer, which made us short of water and the constant supply had to be reduced somewhat, but not to anything like the extent of many other districts throughout the British Isles, vide., "Wells," in Somersetshire, which speaks of water. This town happened to be some 50 per cent. worse off than Crawley. To my discomfort no bath before 7.30 a.m. ⟨not that I bathe every day—I heard one sympathetic consumer of Crawley water say I have three, I pay for my water, etc.,

etc.—Ignorant ass〉 and no water for drinking purposes, or otherwise, after 5 p.m.

About July of this year 〈1921〉 my Vice-Chairman, Mr. George Simmins, elected to sell his considerable holding in the Company 〈without my knowledge〉 to Sir John F. Drughorn, Bart. Knowing this, I set about getting an introduction to Sir John, through my friend, Dr. Matthews, so one evening an appointment was fixed. Sir John met me, a perfect stranger, in a gentlemanly, friendly and business-like manner, and soon asked me why I wished to see him. I then explained it was about the Crawley and District Water Company's position, from its inception up to date. My principal object in view was to get Sir John to take up some new shares, as buying shares on the market at any price did not help the position for developing or assisting the Company to get more water. Sir John said he would think the matter over and see me again. Soon after, one evening, I, with my son Norman 〈just before his 21st birthday〉 called by appointment about 9 p.m. and further discussed the position, with the result he accepted
6 – my invitation to join the Board of Directors, so that he could get a further insight into the financial position of the Company 〈he, Sir John, being a particularly clever financier, as most people must know〉.

On October 12th, 1921, I decided to call a Public Meeting of the Shareholders at The George Hotel, so that Sir John should hear all the pros and cons 〈of which there were many〉, most being replied to by myself and Mr. Nightingale. In the end I proposed Sir John as Vice-Chairman. This was carried unanimously. Having succeeded, I was very delighted, after hearing Sir John's short speech accepting the position and saying that as long as I stuck to the Company he would do so and assist all he could with financial and general matters in his power, which I am pleased to say, he has done, and attended practically all the Directors' meetings 〈as others have done〉, without remuneration, ever since the Company was promoted in 1897.

Having Sir John elected on the Board, I called a meeting of the Directors as soon as I could, and it so happened at this meeting we

had to decide, or had just previously, that we must curtail the continuous supply of water, owing to the drought which was almost phenomenal all over England, so much so, that many wells and sources of water supply have not yet fully recovered. Having cut down the continuous supply, we were at once inundated with complaints, threats, and even insulting letters. Most were signed, but several anonymous ⟨these were located at times⟩. All letters were replied to by explaining the position in the local paper, but this did not satisfy every consumer, so they elected ⟨the Big Three⟩ Mr. de la Mare, Mr. Harris, afterwards an M.P. in the Short Parliament, and Mr. Rowe. These three called a Public Meeting in the celebrated "Square" of Crawley, and of course received considerable response to hear their somewhat ignorant eloquence and arguments as to why Crawley and District water supply was curtailed, and the engineering element of the Big Three—Mr. de la Mare was listened to with very enthusiastic admiration ⟨thinking then they had found the right man and men to take up the water question⟩, he explaining he knew all about artesian wells, pumping plant, compressors, etc.; and in fact, all that was to be known, he knew it made listeners more or less believe in him; so much so, that Mr. de la Mare, in public, offered his services free to the Crawley and District Water Company. This more than delighted his hearers; they almost called him a hero ⟨no doubt he was during the Great War⟩, but the Chairman ⟨myself⟩ thought he knew more, and his public offer was treated with contempt, much to the surprise of some of his so-called friends and admirers.

7 –

Here I give the Big Three credit in arranging for a Government Enquiry from the Ministry of Health, who sent down one of their Inspectors in July, 1923, this being hurried or brought on through the influence which Mr. Harris had in the House of Commons, where several times the position of the Crawley Water Supply was discussed. The public meeting referred to was well attended by the *élite* of Crawley, including many ladies, and several special admirers of Mr. de la Mare, who, when called on by the Government Inspector to put his case before the

meeting, held a portfolio containing scores of notes with which to refresh his memory. (The Inspector specially asked me, as Chairman of the C.W.W., if I intended to be a witness. I replied "Certainly not," knowing if I accepted the position some of my answers would have been more forcible than polite). Then and there Mr. de la Mare stood up, and one of his first questions to the Inspector was: "Can I see a balance sheet up to June 30th?" Then the Inspector appealed to our Accountant to produce the balance sheet asked for, but, unfortunately,

8 - he could not do so, although he had all the figures with him, but had been too busy to get the balance sheet completed. Nothing would satisfy the Inspector but a balance sheet up to June 30th, 1923, and intimated he must close the meeting, asking Mr. Newman, our Accountant, if he adjourned the meeting until three o'clock could he produce a balance sheet. To the surprise of Mr. de la Mare, Mr. Newman replied in the affirmative.

The meeting at 12.30 was adjourned until 3 p.m. This suited my arrangements admirably, having arranged lunch for Mr. Newman and Mr. Small, the Secretary. I invited the Government Inspector, who, of course, had to refuse, so no one could accuse him of partiality. We certainly had to hurry over our meal, to set about preparing the balance sheet pressed for, so sent for all books from the Secretary's office to my Dining Room, where Mr. Newman and Mr Small, with my son Norman, soon set about the figures, I looking on, and by 2.45 the balance sheet was complete. Having this in hand we sallied forth to the Assembly Room and found the Big Two in their seats (fully refreshed), the general company all in their places (except any of my Directors).

The Government Inspector asked Mr. Newman if he could produce the balance sheet, and somewhat to his surprise, Mr. Newman immediately presented the figures representing the balance sheet asked for. The Inspector, after carefully perusing it for some minutes, complimented Mr. Newman on being able to produce the figures at such short notice. Being satisfied, he then and there called on

Mr. de la Mare to continue his questions, etc., principally firing them at Mr. Pearce, the Mechanical Engineer in charge of the pumping plant, who held his own on every question put to a man of his position, but not being able to answer some of Mr. de la Mare's somewhat doubtful theoretical questions.

9 –

Mr. de la Mare then asked to see the balance sheet recently prepared and accepted by the Inspector. Having studied this, he set about asking a lot of questions which any intelligent County Council schoolboy of sixteen could answer. Of course, Mr. Newman politely answered his questions—the questions being so simple and numerous, so much so that the Inspector had to politely tell Mr. de la Mare he had heard enough. Mr. de la Mare then sat down. In doing so he received quite an ovation from many of his lady friends and admirers, he being quite exhausted, after more or less making an ass of himself, with his, I say again, ignorant questions.

Then Mr. Harris got on his feet to ask a few questions. These, I must say, were more or less sympathetic with the Water Company's many troubles, etc. He, as well as Mr. de la Mare, made several very pertinent questions directed at me. A few I answered, but the Inspector asked me to leave them alone, as I was not a witness.

But one question put to the meeting in a very stentorious voice by Mr. de la Mare was: "Who were the Contractors for the Crawley Water Works?" thinking it was J. Longley & Co. I replied: "Mr. Nunn, of Tenterden, Kent—whose wife shot him and herself in an hotel at Hastings." This reply caused the only little piece of merriment during the six hours' sitting in a stuffy, hot room.

Mr. Rowe, one of the Big Three, could not get leave from the Stock Exchange to attend the meeting, otherwise the enquiry would have lasted another few hours.

The meeting over, I retired to get a glass of Crawley water, in doing so, ran against the Inspector, who congratulated me on surviving such a trying ordeal. (This he said in a joke.)

One serious breakdown with the pumping plant I would like to

put on record, viz., happening about midnight on the Thursday preceding
10 – the August Bank Holiday of 1922. Calling in, on the Friday, as I usually did every morning, I found Mr. Pearce full of trouble with the big engine, since about midnight—trying to get her to start, without avail, He, of course, put the small engine in action, and, to add to his trouble. this auxiliary engine broke down about mid-day, this I found when going home to lunch—a cheerful outlook for a Bank Holiday. He, of course, at once asked for the assistance of the East Surrey Water Company, who promised us as much water as they could, with an intermittent supply during the day. We, of course, sent around to get what outside help we could to assist Pearce to get the engine started again, being on the eve of the great Bank Holiday, but without much luck. So Pearce had to do his best, with the ordinary labourer to assist him, with no result by Saturday mid-day, so I decided to go and help him about two o'clock, thinking, perhaps, encouragement and sympathy might assist, and at three o'clock Mr. Jack Goddard ⟨a big Shareholder and Director⟩ turned up with his tennis racquet, off to tennis in usual flannels, spick and span. Jack says: "You appear in a hell of a mess." I replied: "We are," personally all over grease, etc. Jack says: "I'll stand by!" So he did with me until seven o'clock, both of us fitter's labourers of the usual type. I often laugh at Jack's once creamy white bags—mine, being blue, did not show the state we were in.

At 7 p.m. we decided to go home to entertain a house full of young bloods in both houses. Arriving home I was met with a howling crowd: "Baths—baths—baths," etc., and of course a considerable amount of leg-pulling—no water, etc. During the Saturday, Sunday and Monday, in fact all the time, the Engine works were inunudated with the grousers, asking why couldn't they have water—"becoming a nuisance, etc." Yes, I think it was—one of the great *élite* called in and demanded water, and made an extra fool of himself. He being somewhat noisy, I partly
11 – lost my good temper, and quietly told him to go to *Hades* for water, or to Bewbush Ponds. Several other kind and not sympathetic enquirers received a similar answer, evidently thinking it was a great pleasure for

all of us to stick to the sinking ship. However, about Wednesday following we were out of the mire—once again. No more August Bank Holidays like that for me!

During the summer of 1924 the Three Bridges inhabitants were very dissatisfied with the intermittent supply of water. They held several meetings and ultimately forced the hands of the East Grinstead Rural District Council to insist on the Crawley and District Water Company giving Three Bridges a constant supply. This was impossible. We then suggested they should take over the water mains which were in their district, commencing from Crawley Parish Church to Three Bridges. The East Grinstead Rural Council fell in with our suggestion and agreed to take over the mains at a valuation agreed between us, subject to the Ministry of Health's sanction to grant them a loan to cover the cost of same, and for the extension of their mains to connect with those of the East Surrey water mains to connect up to the Crawley and District mains at Three Bridges Station. A Public Enquiry was held at Three Bridges on May 29th, 1925, before one of the Ministry of Health Inspectors, myself attending and answering all questions, technical and otherwise, with the aid of Mr. W. L. Small, Secretary, which evidently satisfied the Inspector, as soon after the East Grinstead Rural District Council received the sanction of the Ministry of Health for the loan.

Having arranged with the East Grinstead Rural District Council to take over the mains in their district, the Directors decided to ask the Horsham Rural District Council to take over our Company. At first they were very reluctant to entertain our suggestion, but in the end they agreed to take over the whole undertaking by valuation. This we agreed, and appointed Mr. Fred Dixon, Engineer, to act for us, the Horsham Rural District Council appointing Mr. Silcock, Engineer, to act for them, and after much correspondence the Horsham Rural District Council made us a definite offer to take over the Crawley and District Water Company in its entirety as from March or April 1st, 1926—this the Directors agreed to. Had they not done so I am afraid we could not have gone on for many years, as we could not raise any

new capital to increase the water supply or to renew and duplicate our pumping plant. The shareholders will receive about 45 per cent. of their original capital invested. Here I may say all the largest shareholders are satisfied, I and my family included.

I am afraid, under the new management the price of water will increase, as if the Crawley Water Works had been well advised, they could have got a sanction for an increase of about double the 66⅔ per cent. additional charges (as other districts obtained from the Ministry of Health). I take it for certain, the water rate charges will be governed by the cost of producing same. The probable increased charges will undoubtedly meet with considerable surprise and disgust from many of the late dissatisfied consumers (of which there were many) who were more forcible than polite to the late Secretary, Mr. Small, let alone myself as Chairman, who, if alive on April 1st, 1926, will then wash off the mud slung at him for many years past.

However, I have offered my services to the Council (for what they are worth), as being one of the largest ratepayers in the district, of course, anxious to keep the water charges as low as possible.

It may not be generally known that we have taken millions of gallons of water from the East Surrey Water Company for years past, latterly to keep up the curtailed supply, and to get their assistance Mr. M. Nightingale and myself made several visits to the Ministry of
13 – Health, also the Surrey County Council to get their permission to allow the East Surrey Water Company to come to our assistance, as they are not allowed to supply water over the Surrey boundary. Here words cannot express the Directors' grateful thanks (more especially myself) to Mr. Cornewall-Walker, the Managing Director and Engineer of the East Surrey Water Company, who has been our salvation. I say more especially myself, as I always knew the position, the other Directors did not.

I must eulogize the assistance at all times—day, night and Sundays—of Mr. E. Pearce, who for the last twenty years has kept the works going under very trying difficulties, and has survived the

extraordinary number of vicissitudes of any mechanical engineer it has been my lot to hear of, and with a smiling face. He has my very grateful thanks and appreciation.

One other assistant to the Company is Mr. W. L. Small, the Secretary, who, since his appointment some few years ago, has been of invaluable service to the Company, and I am sure I can voice the Directors' many thanks as well as my own.

It may interest a few, that Goffs Park Road was the outcome of the advent of the Crawley Water Company. The Crawley Water Works had to get land on a high level; the summit of Goffs Hill being the highest elevation, the Directors approached the Trustees of Mr. Pepper Stavely to buy a small piece of land for the erection of the Tower and Reservoir, but they would not consent to this, although in sympathy with the project, they could only sell about 20 acres. This the Directors could not see their way to do, so I approached the Trustees, through Dr. Atchison, and eventually bought the 20 to 21 acres, and sold a small piece to the Crawley Water Works for the Reservoir and Tower, taking up fully-paid shares for the land, and
14 – afterwards made Goffs Park Road at my own expense and handed it over to the Horsham Rural District Council, which has not turned out a very profitable investment, as there are still several plots to sell. However, I don't regret being one of the pioneers of the Crawley Water Works or the only one left connected with the demise of the Crawley Water undertaking.

To whom it may interest.

Yours faithfully,

CHARLES J. LONGLEY.

"The Beeches," Crawley.

*January, 1926.*

[The marginal numbers refer to the original pagination of *A Short History* ... ]

# ADDITIONAL NOTES ON THE CRAWLEY AND DISTRICT WATER COMPANY

***Peter Longley***

On page 3 of his *History*, Charles Longley refers to the bore being sunk by Duke & Ockenden but on page 10 he states that the contractor for the Water Works was Mr. Nunn of Tenterden. In the periodical *Water* of February 1899 it was reported that "the contract for the shaft and boring was let to Mr. Nunn of Tenterden, a well-known and reliable contractor". Perhaps he sub-let to Dando (as they were known). In 1901, Duke & Ockenden were advising on the method of pumping "as members of the Company". The Crawley & District Water Company was incorporated by the Crawley and District Water Act 1898. The authorised capital was £30,000 of which £10,050 had been subscribed when the Prospectus was issued (updated). However, by then water had been struck, the water tower and pump house built and the machinery was being installed. The area authorised to be supplied embraced the parishes of Ifield and Crawley and part of Worth which included Three Bridges with a total population of about 7,000.

With reference to the thought on page 13 that the $66^{2}/_{3}$% additional charges could have well been doubled it appears that the percentage relates to the charge settled in the Crawley & District Water Act. The increase of $66^{2}/_{3}$% was authorised by the Ministry of Health in 1923 for one year from 1 January 1924. This was extended for 1925 but for only the first three months of 1926 The Inspector sent by the Ministry of Health in July 1923 evidently considered the level of charges. It appears that the increase of $66^{2}/_{3}$% was already in operation although there only survives the authority for 1924-26. The following draft letter from Charles Longley dated 26 July 1923 was intended for the Ministry of Health.

> *"With reference to the Enquiry held by your Inspector Mr H R Cooper MICE, at Crawley on the 24 inst. with respect to an application to continue the increase of $66^{2}/_{3}$ per cent over prescribed charges it was explained that the Company was very short of water and could not give a continual supply owing to the failure of the exceedingly deep boreholes which puts the district in a very awkward position. This could be remedied if the East Surrey Water Co had permission from the Surrey County Council to come to our assistance as they have done on previous occasions but at the present time the East Surrey Water Co are forbidden to supply water out of the County although willing and they have plenty of water.*
>
> *Now Sir, I humbly ask you as Chairman of the Crawley & District Water Co and promoter to do what you can to assist us by asking the Surrey County Council to give their consent for temporary assistance from the East Surrey Water Co.*
>
> *Trusting this application will meet with your favourable consideration. "*

On the same date, 26 July 1923, Charles Longley wrote to Dr. Matthews as follows: -

> *"With reference to the Minister of Health's Enquiry re Crawley Water Co I noticed that the Sussex Daily News gave practically a verbatim report of your speech for the objectors, I suppose owing to your being Chairman of the Ifield Parish Council. It was a pity you had not found out facts about other water supplies in adjoining districts which are well known to me. With regard to your emphasising and belabouring the mismanagement of the Company I must say I am somewhat surprised you could follow the (two words indistinct) especially on the mismanagement which is all piffle as far as I and others are concerned.*
>
> *However, do not think I am quarrelling with you, but get facts before you speak in public and pray do not imagine the enquiry worried me. I quite enjoyed and was amused at the idiotic suggestions put forward and I would have replied to your speech and others at the meeting had I been fool enough to elect to be a witness.*
>
> *I say no more and I hope you will understand the spirit in which this letter is written".*

The acrimony is reflected in two letters preserved. On 21 July 1923 (three days before the enquiry), the Company Secretary, W. L. Small, wrote to Charles Longley:-

> *"The Ministry of Health has evidently not considered it necessary to advertise the enquiry on Tuesday, yet when I go to the bank this morning, I see a written notice exhibited on the counter calling attention to the enquiry. I said nothing but I do not think Mr Cloke should show this partiality. It is recognised that banks and post offices should not exhibit this sort of thing. Possibly, it has been done without Mr Cloke's knowledge but at the same time I do not think the bank should become an advertising medium in opposition to the Water Co who is one of its friends".*

Charles Longley's complaint does not survive but Mr. Cloke wrote on 23 July:-

*"In reply to your letter of 21st inst. the notice you refer to was placed on the counter at the request of a customer of the bank and seeing that it was advertised in the local paper I did not consider that I was doing any wrong in doing so.*

*I was under the impression that the Enquiry was a public one and that the subject would be of interest to all water rate payers.*

*I regret that you should think that I have exceeded my duties in obliging a bank customer in this matter".*

In 1921, it was considered to be very important to have got Sir John Drughorn on the board. There survives an undated report from Charles Longley to Sir John on the valuation of the Company for his "private perusal". This would be after receipt of Horsham RDC offer of £8,333 made on 2 July 1925.

Charles' value of the water mains, reservoir, water tower, pumping station office, coal store and two cottages came to £15,959. He thought Horsham RDC would split the difference i.e. £12,196.

*"Arriving at this figure they will be further dissatisfied and offer us at least I should think £10,000 at which price I would accept willingly and say goodbye to it forever. So would nine persons out of ten having such a concern hung round their necks for 25 years. My family lose about £4,000 and have never received more than 2½% dividend and for the last twelve years nil.*

*I hope, Sir John, I have made myself clear, if not I should go to London to see you by appointment at any time and place".*

The commentator has never seen anything written about Sir John Drughorn but it is understood that he was a Dutch shipping owner who came to Ifield about 1900. I do not know whether he built or bought Ifield Hall (demolished in 2000). There are memorials in the grounds to two of his sons. I believe his baronetcy was bought from Lloyd George and he had no successor. At the winding up he was the biggest shareholder after Charles Longley (there were fifteen Longley shareholders). Sir John commissioned James Longley & Co to build a number of houses in Rusper Road during a slack time in the 1930s. This ended in a big falling-out between Sir John and Norman Longley.

As Horsham RDC had not completed its purchase by March 1926, the Company applied for an extension of the authorised increase in rates to 30 September 1926 and submitted accounts in support. These showed a surplus of £425 in 1924, £959 in 1925 and estimated £260 in 1926. The application was flatly refused.

It is not clear whether Charles Longley ever had a meeting at the Ministry of Health to press his argument but undated notes in preparation survive as follows: -

"1. The principal bone of contention will be 66⅔% extra charges.

2. The non-continuous supply. This is caused by water dropping in borehole and increased consumption owing to more population.

3. Mr. Newman (Auditor) to push the question of the Rural District and Parish Councils to take over the concern at a fair valuation. The board of directors are prepared to sell at any time.

4. The power we are using is obtained from two gas engines, one about 125 HP the other about 50 HP. The large one drives a large Worthington compressor, the other a Bailey compressor that distribute compressed air to the bottom of the borehole which is about 920 feet deep starting at ground level with a 12" tube. This could not be got down the full depth owing to boring trouble so that the lower section of borehole had to be reduced to 7" diameter. The air lift pipes are inside these tubes.

5. The capital of the company is £20,970 [1] and the dividends paid have not averaged 1% per cent since the company was formed in 1897 and no director's fees have been paid. The approximate number of households connected is 975 representing about 5,000 consumers. On several occasions the engines have broken down which compelled the Company to get the assistance of The East Surrey Water Co at County Oak, our boundary. Now should there be a breakdown the East Surrey Co say they cannot help us as they are under a covenant to the Surrey County Council not to supply further water out of the county of Surrey. Should a break down now happen, Crawley & District would be without water within two days unless the Surrey County Council would come to the Company's assistance.

   All the Directors of CDWC are very large shareholders but cannot increase their holding to seek for other springs in the district and it would be useless to try to get any support from the public in Crawley & District or elsewhere. In my opinion the only solution is for the Councils to take the Company over. In doing so they could borrow the money on loan in the usual way, the interest being guaranteed out of the rates."

The Receivers' report dated 21 April, 1927 gave a very fair summary of the company's history. The winding

up order was made on 8 February 1927 but the cash received from Horsham RDC had been held by the bank and was passed to the Receivers between the above dates. The final statement of accounts to have survived is dated 8 February 1928 which showed shareholders having a return of £4 per share and a balance of £770 which represented a further 8/-.

In 1993, Noel Cochrane, a water engineer, commented that the "first borehole to 950 feet with a 3" hole is still something of a miracle and then to run into artesian water sounds as if the hole was just on the East side of the Crawley/Pease Pottage fault. The technical problem with such artesian sources is that they are depleted fairly quickly and take a long time to refill. In modern times, we have been able to date underground waters by the presence or absence of tritium (an isotope of hydrogen) which covered the earth from the first nuclear bomb explosions in the 1950s".

Cochrane gives several examples of water being pumped "twelve years old". No wonder the Company could not keep up with demand.

REFERENCES

1. In the winding up papers it was stated that only £18,470 was subscribed during the history of the Company.

APPENDIX

**Resolution proposed by C J Longley 11 September 1925**

That we the Directors of the Crawley & District Water Company accept the Horsham Rural District Council's offer of £8,333 as reported in their letter of August 29, 1925, for the whole of the C & DWC undertaking as valued by their surveyor. It is understood the anthracite, coal, coke, oil, spare new water pipes, valves, fittings, meters and various tools can be taken over by valuation just prior to the completion of the purchase.

We suggest that Horsham RD Council should take over the undertaking as from Christmas 1925 or March 25th, 1926 or December 30th 1925, or March 30th, 1926. The Crawley DWC to collect all charges up to the date fixed for the handing over the undertaking to the HRDC.

**Resolution No 2**

Proposed by CJL that the Secretary Mr W L Small has the assistance of Mr J R Newman as Accountant and Mr Stockdale Ross our solicitor to act for all legal work. The reason I propose Mr Ross as solicitor is because he is on the spot and at my beck and call at any time as I have no time to mail our solicitors at their offices, as I take it I have to see this through being the only survivor of the Pioneers of this Company. I am anxious and willing to see to the end of Crawley Waterworks which undoubtedly has been a great boon to the neighbourhood, although not fully appreciated by many of the inhabitants. Many of them thought I and the other directors were at all times thinking for their own ends or pockets. Financially, my family have at least £10,000 lost in the undertaking. Most people are under the impression that my father and Mr Goddard were the pioneers of this somewhat unfortunate undertaking – that was not so. The facts are as follows. Mr G Simmins under the influence of Mr Blaber engineer were absolutely the pioneers who persuaded myself to join them. In doing so, I roped in my father, Mr J Goddard, Mr T Caffyn and Dr Martin into the concern having said so much about boring for water in the early days of 1897 and was persuaded by the engineer (who knew nothing about geography) that we should find water by Jubilee Day 1897 at about 200 feet. Alas, it was months after that we struck water at about 950 feet deep which rose to about 4 feet above the surface (we thought we were in clover or on velvet as the lawyers say). We thought we had obtained all the water that could ever be required for Crawley and District and proceeded to form the Crawley & District Water Company and in doing so had to go to Parliament for a special Act. This we eventually got after considerable opposition by an engineer Mr Robus who just prior had got a scheme through the House of Commons for power to supply mid-Sussex with water and further opposition we had from Horley Gas Company. Both opponents claimed they had powers over the district we had included in our application for powers to supply water in the district we specified. In the end, we received our Act of Parliament not without very considerable cost, in fact so much so that it near crippled our adventurous start. However, the directors (after roping in Mr Nightingale to the secret of supplying water) we formed the C & DWC, issued £10 shares which were responded to by only a very few of the local inhabitants or elsewhere so it fell to the lot of the directors to give a guarantee to the County Bank for a considerable overdraft to assist us in carry out out the scheme. This overdraft one fine day was called in, the directors having to take up roughly £800-£1,000 worth of shares each, in doing so which satisfied the Bankers but did not help the position. Then some of the directors had to continually finance the concern and eventually completed and commenced to supply water (of an excellent quality) until about three years after they found the supply insufficient so pluckily commissioned and bored another well about one foot diameter at the surface but through an untold series of accidents we got down to a depth of 970 feet but at that depth the borehole had reduced to 7" diameter not 12" as was anticipated. However, we got

a better supply of water which kept us going with a full supply for some years but owing to the increased population about 1921 we had to have the East Surrey Water Company to assist us which of course reduced prospects of paying a dividend.

Dividends in the concern might average 1% from the commencement not more if as much. However, now we are selling the troublesome water company to the Horsham RDC with my personal wish that they have better luck in supplying the district with a continual supply than we have. Here I must say it has been a constant bugbear to me and my faithful engineer Mr Pearce for over 20 years – further if I had not had Mr Pearce's assistance many more sleepless nights would I have had.

The only satisfaction we have received from the majority of the consumers is a continual grouse and many insults – never once did the Company receive any appreciation for their labours.

lt is a great satisfaction to the Chairman to know that we have a water engineer in the district now who claims publicly to know all there is to know about finding and distributing water – here is his opportunity to assist the HRDC.

Again good luck and good bye to the Crawley & District Water Company.

P.S. I on behalf of the Directors, want to put on record that we fully appreciate the assistance of Sir John Drughorn since he joined the Board of Directors, he having attended practically all the meetings (at some considerable inconvenience at times) since joining the Board.

P.P.S. I on behalf of the Directors must put on record our many thanks and appreciation for the assistance received at all times from the East Surrey Water Company in allowing us water when required. Mr Cornwall Walker their Chief Engineer and Managing Director never once refused our applications for help.

What started off as two resolutions developed into *The History* privately published in January 1926.

The Agreement with Horsham RDC was signed on 27 January 1926 but the completion date was set as within three months of the date at which East Grinstead Rural District Council disconnected the water mains in the Parish of Worth or within three months of HRDC receiving loan sanction from the Ministry of Health (whichever was later).

Completion was eventually achieved on 30 September 1926 but it appears the money was held by the bank. During those last six months, the Ministry of Health did not sanction the higher prices for water which had been in operation for some years before because of the difficulties in maintaining a regular supply.

The papers relating to the Crawley & District Water Company have been deposited with the West Sussex Record Office as part of the records of James Longley & Co. Ltd.

# TAMPLINS, BREWERS OF BRIGHTON

## *Peter Holtham*

If Messrs. Tamplin and Sons' brewery were removed from Brighton, it would be possible to put up three streets in its place. So wrote a reporter of the *Sussex Daily News* in an article printed in the edition dated 22 Oct 1902 following a visit to the premises.

The business was founded by Richard Tamplin, born in 1779 and the eldest son to a father of the same name, a mercer of Horsted Keynes who died on Christmas day 1792 aged 52. Richard's younger brother Thomas Roff Tamplin became a brewer at the Bear Brewery in Lewes in partnership with Thomas Wood. This Thomas was named Roff-Tamplin after his great uncle Thomas Roff and fared better than a relative who was saddled with first names Frederick Augustus (and the embarrassment resulting from the initials). Their only sister Sarah married John Pollard who owned the White Hart Lewes. Like his father, Richard became a mercer in Horsted Keynes, married Elizabeth Pagden in 1800 and probably moved to Brighton soon afterwards. Their first child was Henry Pagden born 1801. The family home was a spacious house at 1, Lennox Terrace later known as Richmond Terrace that finally became the brewery's offices, supplementing the smaller red brick counting house at the entrance to the yard.

In 1820 Richard was trading as the Sussex County Bank of Castle Square with Creasey, Gregory and Company. That year he purchased, from a Nathaniel Hall, a small brewery in Southwick on the south side of the present Southdown Road. Unfortunately on 11 Sept 1820 the *Sussex Weekly Advertiser* reported:-

> *in the forenoon of Wednesday last the 6th of September, a fire broke out in the thatch of an old building called the remote storeroom of the Southwick Brewery belonging to Mr Tamplin. This quickly communicated with the main building also covered with thatch and in a short space of a little more than an hour the whole premises including the dwelling house and their contents fell a prey to the devouring element. The damage is estimated at ten thousand pounds and we regret to state that not any part of the premises or stock was insured. Mr Tamplin had recently purchased the valuable concern and had been in possession of it only a few months.*

In spite of suffering what to most men would have been a crippling loss, Richard appears to have continued brewing by taking over temporary premises in Worthing before beginning to build a new brewery in Brighton the following year. The foundation stone was laid by Henry Pagden Tamplin his eldest son. The *Brighton Herald* of the 8 February 1821 hoped:-

> *That from the calamity which rendered the present erection necessary will come far greater advantages than the heavy loss which it inflicted. The building, we understand, was named "The Phoenix Brewery" by Mr Tamplin and the plan, by Mr Henry Wild is one of the most perfect and architectural that ingenuity has devised. Previous to the ceremony Mr Tamplin entertained his friends with an excellent dinner at the Gloucester Hotel.*

The new building was therefore rising from the ashes albeit on a different site. It is remarkable that Richard, was able to buy land and employ the best known of local architects, who with his father Amon Wild was responsible for the greater part of Regency Brighton, to build such an "extensive brewery" a bare six months after suffering the loss of £10,000. By 1902 the premises had become the largest brewery in the county occupying an area of 100,000 square feet bounded by Albion Street, Albion Hill, Newhaven Street and Southover Street and employing 150 men.

Richard prospered steadily as he had many customers for his beer. This was the golden age for brewers when more and more new breweries were being established and old ones rebuilt. Independent publicans were being bought out and tenants installed "tied" to the brewery. The national annual beer consumption per capita almost doubled by 1830. This was further aided by the proliferation of retail outlets resulting from Duke of Wellington's Beer House Act of 1830 that abolished the duty on beer and permitted its sale by any person paying the poor rate on obtaining a two guinea Excise licence. Consumption per capita increased from 20 gallons in 1855, to 29 gallons in 1867. Richard is recorded as saying that his beer was so good and the thirst of the Brighton fishermen was so great that if all the water in the Channel was turned into Tamplin's beer there would never be a high tide at Brighton! The Wine and Beer Act of 1869 checked the growth of beer houses and brought them under the control of licensing magistrates. However, in 1874 it was estimated that over 34 gallons of beer were being drunk annually per head of the population.

Richard was partnered by his son Henry Pagden Tamplin who after learning the trade inherited the business upon his father's death in 1849. He boasted that he brewed the best beer in Brighton and only sold to others what he could not drink himself. Henry in turn was partnered in 1863 by his eldest son 29 year old William Cloves Tamplin. The number of licensed properties owned was then about fifty and the business was valued at £52,000. Father Henry gave half of the business to his son agreeing to sell him the


Fig. 1 Brewery Buildings from Phoenix Place, August 1976

remainder for £26,000 allowing him to pay interest at 4% on the amount outstanding. Each year father and son took half of the profits. Henry gradually left more and more of the running of the business to his son so that he could indulge his other interests mainly what was to become the Sussex County Cricket Club. He died in 1867 of a heart attack at the end of a hard run while out hunting with a pack of harriers on the Downs between Patcham and Pyecombe to the north of Brighton and was buried in the new Brighton Municipal Cemetery, Woodvale.

William Cloves Tamplin inherited the business on his father's death. He had married Henrietta Christiana Schneider in 1865 and fathered ten children in just over twelve years, six girls and four boys. The brewery business had multiplied six fold during the past thirty years and accounted for the bulk of his wealth. Clearly he could not transfer that to his eldest son while disinheriting the other children. It would be necessary to realise a good part of the capital in order to provide for all ten children. He therefore transformed the business into a limited liability company in 1889 with a capital of £270,000 later increased by £100,000 with himself as chairman. The number of licensed properties had risen to 83.

In 1885 together with a brother-in-law A.J. Berger William he bought a paint and varnish factory in St. Petersburg. So as to avoid confusion with the family firm this traded as King's Paint & Varnishes so as to conceal the Berger involvement and impress the Russian customers who assumed a connection with British monarchy. After a disastrous fire at the paint factory in 1890 William purchased the remains and financed the rebuilding. His eldest son Richard William became the General Manager.

William Cloves Tamplin commanded the 1st Volunteer Battalion of the Royal Sussex Regiment and as their colonel built at his own expense a drill hall in Church Street Brighton. He died in 1893 leaving an estate worth over £200,000 and absolute control of the brewery passed out of family. A third son Henry Robertson Tamplin became the Managing Director of the maltings owned by Messrs. Swonnells of Oulton Broad Norfolk and later became Deputy Chairman of Tamplin & Sons Brewery Brighton Ltd. in 1916.

The business expanded by the acquisition of several smaller concerns. In 1892 the nearby Albion Brewery belonging to M.P. Castle in Albion Street was purchased for £41,178 bringing in 35 houses. Brewing here ceased in 1894 and the premises were retained as a wine, spirit and bottled beer store. At the same time an agreement with Mr. Charles William Catt, late of Vallance Catt & Co. owners of the West Street Brewery gave exclusive rights to supply beers to a large

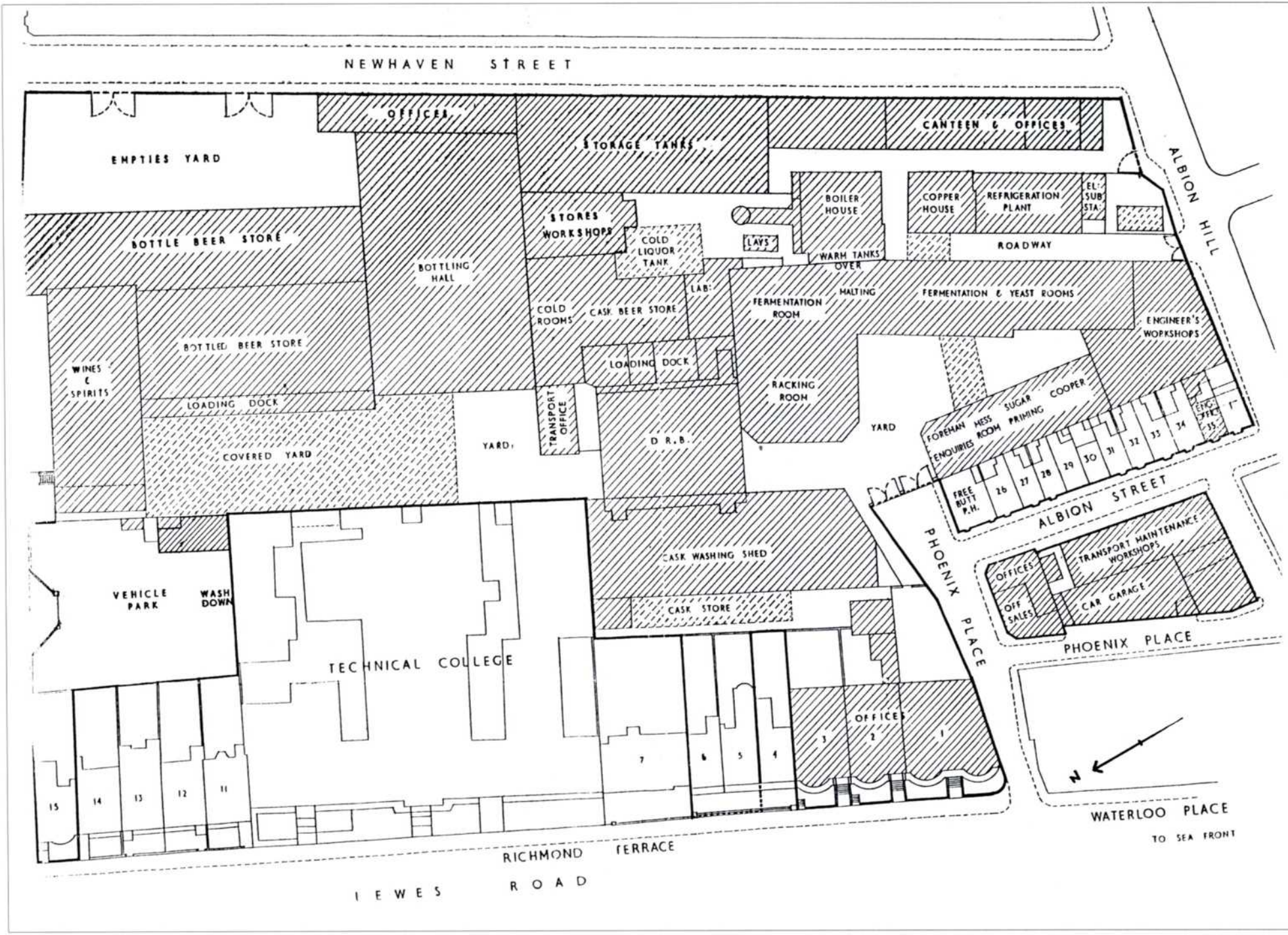



Fig. 2. Site Plan of Brewery Buildings in the 1970s

number of his licensed houses. In 1899 these houses were bought for £386,009. In 1896 the business of the South Malling Brewery at Lewes was purchased for £22,004. The year 1899 saw the purchase of the 12 houses of the Brighton Brewery Co. from R.C. Weeks for £46,144. His brewery at the north end of Osborne Street, Hove was retained as a store for a short time before demolition in 1902. In the 1870s an old malthouse, built by the West Street brewery at the top of Hove Street was used to supplement the brewery maltings but this was soon disposed of to the Amber Ale brewery of Henry Longhurst who in 1880 built the Connaught pub on the site.

A further take-over was the business of the Southdown & East Grinstead Breweries at Lewes in 1924 from Thomas Sackville Manning for £274,075. Manning joined the Board and the malthouse at South Malling was retained to replace the older house adjoining the brewery in Southover Street, Brighton which became a wine and spirit store. The former brewery premises at Lewes and at East Grinstead were sold off. In 1926 the business of the Brighton brewers Kidd & Hotblack was acquired for £55,376 and Seymour Hotblack joined the Board. The purchase brought in 53 licensed properties together with the former Canon Brewery in Russell Street which was retained as a bottling store. In 1928 two thirds of the licensed premises of the Hove brewers E Robins & Sons were purchased followed in 1929 by two thirds of the houses of the Brighton brewers Smithers.

Finally in 1955 the business of Henty and Constable of Chichester was bought jointly with the Guildford brewers Friary Holroyd Healy Breweries Ltd. (later Friary Meux). Over lunch at the "Unicorn" the pubs were divided between them. Each pub had been listed according to barrelage and the first choice was decided by cutting cards. Friary having first pick chose the "Red Lion" at Cosham, Tamplins took the next highest the "Old House at Home" Wittering.

Eventually Tamplins owned two thirds of all the licensed premises in the Brighton area amounting to over 200 and a further 400 elsewhere. Although many of the acquired pubs were upgraded, Tamplins, unlike the Kemptown Brewery or the United Brewery of Portsmouth do not appear to have altered them to any common design. Most retained the features established by their previous owners. The brewery was rebuilt in 1921.

Tamplins themselves were taken over by the London brewers Watney Coombe & Reid in 1953 who merged with Mann Crossman & Paulin of Whitechapel in 1958 to become Watney Mann. The business continued unchanged for some time until the company was acquired by Grand Metropolitan in 1972. The last brew was in November 1973. The brewery building was eventually demolished although the site continued in use as a distribution depot trading as the Phoenix Brewery Co. Ltd. until the end of the 1980s. In 1996 the premises were cleared and houses erected on the site by the Chichester Diocesan Housing Association who have happily named some of the roads after the former brewing company. The former counting house that was situated at the south west entrance to the yard and the brewers house in Richmond Terrace remain intact.

The brewery is of special interest to the writer as it was here over 40 years ago as a pupil he learnt his job as an Excise Officer. Fond memories survive of Sussex Bitter, Watney's Special Bitter and even the much maligned Red Barrel. In bottle there was Watney's Brown Ale, Best Pale Ale, Pale Ale, Brown Ale and Cream Label Stout. His notes record:-

"Premises entered from the main gate in Phoenix Place. Two mash tuns with two sugar dissolving vessels and two cases for holding grist above. Close by was a milling room and malt and sugar stores. A copper house contained three coppers with associated hop backs for boiling and straining worts. There were two coolers and seven refrigerators to cool worts, twenty seven vessels for the fermentation of worts and four for the collection of sugar solutions. On the north side of the yard was a bottling hall with storage for bottled beers. Finally there were several stores for cask beers, and cold storage of beers in tanks.

A visit by the reporter from the *Sussex Daily News* provides an interesting insight to the operation of the brewery in 1902. He enthused at the spacious courtyards, lofty buildings, and towering shafts finding the place not unlike a small town, the interior being a veritable home of industry and that it would be difficult to find, among the commercial enterprises of Sussex, a more successful example than that of Tamplin and Sons' Brewery Company A tour of the brewery which the representative made under the guidance of the head brewer (Mr. Lade) proved quite an instructive and interesting event and he reports the following:-

*SOME OPERATIONS IN BREWING*

*Even to look inside the building containing the cask washing plant reveals something notable in its way. As a matter of fact this part of the premises conveys a very good idea of the development of the business since its conversion into a Company some thirteen years ago. During that time this part has been enlarged to ten times its original size, and as practically the entire output of the brewery eventually finds its way into the casks which are treated in this department, the acute mind may be able to deduce an*

*interesting fact regarding the Company's increase of business. A first glance at the cask-washing apparatus suggests the presence of a miniature battery of guns in action, for one sees a line of barrels belching forth clouds of vapour, and masses of steam ascending to the roof. This, however, is really nothing more terrible than the drying of the casks with hot air. But although this is the first process to strike the eye, it is not, as a matter of fact, the first in actual order. The cask washing is a very important process, far more so than the ordinary observer might think, for it is most essential that the wood should be properly sterilised; in other words, that none of those microbes against which it is the brewer's chief business to fight shall survive in the wood, and thus find their way into the beer: if they did the beer would not keep nearly as long as it should. First of all the casks are treated with boiling "liquor"after which hot air is driven from the boiler by means of a fan into underground pipes, which are connected with the casks. All the casks are ready to be filled half an hour after they have been emptied of "liquor". When the old methods were in use the time which had to lapse was twenty four hours. The many store rooms constitute another important department. There are four rooms, and in two of them elaborate special machinery is in use, brushing the malt no fewer than five times, so that it is thoroughly cleaned from all impurities passing to the grinding mill, and for grading it so as to separate the heavier and lighter malts and ensure perfect grist. The lighter grades are sold for feeding purposes, not being considered suitable for the production of the high-class beers. Another feature of the machinery here is a dust destroyer, which absorbs and destroys all the dust arising from the process.*

## *IN THE MASH TUBS*

*After being ground the malt goes to the malt hopper for the mash-tub. The mash-tub room suggests to a visitor the presence of some naval machinery. The tubs (for there are two) are covered by huge copper domes, which can be raised by chains and pulleys; and the copper domes are bright with an astonishing brightness. There are three glass windows in each metal lid, through which the process which goes on inside can be observed. These tubs are furnished with Steele's masher and rakes and other ingenious appliances, all of copper, and capable of mashing 100 quarters of malt. Two grist cases, holding 50 quarters each are also a feature of the equipment, and it may be observed that here, as well as all over the brewery, the appliances are duplicated so that if necessary two or more different kinds of beer can be brewed at the same time. When the liquid has left the mash tubs it is what is technically known as "wort." The wort runs from the mashing tubs for the next process through 24 taps and in conjunction with taps are 24 sample jars for testing purposes. The room in which this testing is performed is called the "underback" room, and is fitted with underbacks, copper steam coils and two wort pumps, which last convey the wort through copper pipes to coppers, where it is boiled with hops. The liquid now runs into coppers which are fitted with slotted plates; and these slotted plates act as strainers, allowing the liquid to run through, but arresting the hops. Everything in the room is made of copper. When the process is actually in progress it is not easy to obtain a view of it for the apartment is an abode of steam, and one peers through a dense and odorous atmosphere, a quality of which is that it is a guarantee to create an excellent appetite.*

## *AN APPROPRIATE MOTTO*

*Next comes the cooling process; and the great object aimed at in the apartment used for this purpose is thorough ventilation, air finding admittance in every direction, the idea being to cool the wort rapidly. In a great many breweries no special room is kept for this purpose, but Tamplins have fully recognised its importance. The exposure of the wort to air causes the steam to evaporate. In the coolers are more strainers to prevent the smallest particle of hops from passing to the refrigerators. The refrigerators are interesting and important apparatus. They consist of a vertical screen composed of 109 tubes running horizontally. Water drawn straight from the well passes through these pipes and the wort pours over them in a miniature cataract. Here rapidity is most necessary, as the faster the wort runs the more stability is ensured. Thorough ventilation and cleanliness are essential through out the brewery, and most particularly in this room. The walls and other parts are of glazed brick, and the windows work on pivots, which makes it possible to direct the air into the apartment at any angle. There are also a double set of windows above to allow the steam to escape, and to prevent it from falling back on the wort. Altogether, the room is a magnificent one, fitted with the latest appliances, and considered by experts to be equal to anything of the kind in the country. The four large refrigerators are capable of cooling 1,800 gallons per hour. Now the wort passes on to the fermenting rooms where the yeast is added. The fermenting rooms are also appointed in the best possible manner: the ten fermenting vessels in the round room can ferment 32,400 gallons a week, and a similar number in a square room have a capacity of twice that number. A word here upon the yeast store room may be appropriate. The walls are enamelled, and there are 5 large tanks standing on glazed bricks. These have false bottoms, to enable the water to run through, and they are also fitted with electric fans. The air finds entrance through a canvas sheet, over which water is constantly running, to arrest the ingress of any microbes which may wish to incorporate themselves in the yeast. These minute enemies necessitate double doors to this apartment; in fact the place is practically air tight. The fermenting process, for which the yeast is prepared, is the end of brewing, and the next thing is the barrelling of the beer, which takes place seven days after the addition of the yeast. The underground store cellars are built in arches in the form of a crypt. Despite the rows of barrels, there is something vault-like in the arched roof, its supporting pillars, and in the semi-darkness, relieved only by a few solitary gas jets. On either side are arranged long*

*rows of vats, each capable of holding 10,800 gallons. The temperature here never varies. Near this part of the premises there is a cellar in which is machinery for elevating the barrels on to a platform, from which they are transferred to the vans. A motto which might apply to the whole of the processes throughout the brewery is "Cleanliness and Despatch".*

*METHODS OF DELIVERY*

*The two fine engines on the ground floor, which drive the whole of machinery in the brewery, are 20 and 15 horse power respectively, and the boilers are Galloway's, with Dewrance's fittings, while in an adjoining room are fitted up two powerful Worthington pumps for pumping water into the boilers, whose capacity is 1,000 and 600 horse power respectively. Even a cursory inspection of the brewery shows that it is equipped throughout with ingenious labour-saving appliances, and that in all the various departments the administration leaves nothing to be desired, and that cleanliness is a first consideration in all phases of the Company's operations. The scrupulous care in this respect extends to the smallest pieces of brass work; gas brackets and knobs receiving as much attention almost as the large metal surfaces. The public, indeed, are hardly aware of the great pains which are taken in this matter, or of its importance. In a corner of the immense yard opposite the engine house and boiler room are a range of seven horse boxes, which make a comfortable hospital for horses needing rest and care; and the general stables provide accommodation for 30 horses, a splendid stud, the services of which have latterly been supplemented by an expensive motor delivery van, which has answered its expectations. Mention should be made of the loading out stage, in the centre of the main building, which is provided with a steam hoist capable of delivering into the vans at the rate of 500 casks an hour. Another busy corner on the ground floor is the racking room, fitted with immense slate tanks for dropping beer before racking.*

*THE WINE AND SPIRIT TRADE*

*Outside the brewery gates are the offices, a handsome modern brick building, with ample accommodation of the best character. On the ground floor are the manager's office, typewriting department, general counting-house, and a specially-constructed strong room with steel doors; while on the upper floor are the Board Room for the Directors' and shareholders' meetings and other private offices. A stone's throw away, in Albion Street, is the wine, spirit and bottled beer store. The premises formerly known as the Albion Brewery have been specially adapted for the purpose, and now form a branch of the Company's trade which is progressing by leaps and bounds.*

*AN ENORMOUS UNDERTAKING*

*The trade has grown so rapidly that frequent alterations and extensions of the brewery have become necessary. In 1889 the business was converted into a limited liability company, with a capital of £270,000 afterwards increased by an issue £100,000 four per cent. "A" mortgage debenture stock, for the purpose of paying off the then existing mortgages and loans entered into for the acquisition of the Albion and South Malling Breweries, and also to meet further business developments. In 1899 the capital was further increased to pay for the purchase of 76 houses, the property of Mr Catt. In 1900 the Brighton Brewery at Hove with 12 licensed houses was purchased, and a further issue of 5½ per cent preference shares was made. Mr James Tasker, who died in 1890 after fifty years connection with the firm, was the first Managing Director. The late Colonel Tamplin was also a Director until his death, in July, 1893. For many years Colonel Tamplin took a keen interest in the affairs of the town, and was an enthusiastic supporter of the Volunteer movement. His association with the 1st V.B. Royal Sussex Regiment, to the command of which he was promoted in 1887, dating from the Regiment's formation in 1859. The supervision of the general administration is entrusted to Mr Henry Beaumont, General Manager and Secretary, whose connection with brewery extends over 36 years.*

*GOOD MANAGEMENT AND EXCELLENT RESULTS*

*The position of "Tamplins" in the share market is sufficient to show the success that has been attained from the very commencement of the present Company's operations. The progress, indeed, has been phenomenal, and the firm has a fine reputation alike in the brewery world and in the county of Sussex. The Board of Directors is at present constituted as follows:- Mr H.J. Gordon-Rebow (Chairman), Mr Charles Page Wood, Mr Charles Horsley, Mr William Sendall, Mr Alexander Miller-Hallett, Mr George Lionel King and Mr Charles William Catt. The last annual Report showed that the net profits of the business for the year ending May 17th, 1902, before charging directors', trustees' and auditors' fees amounted to over £45,000. Dividend and bonus for the year amounted to twelve per cent and the general reserve fund was increased to £53,000.*

ACKNOWLEDGEMENTS

Much of the Tamplin's family history came from research made available to the writer by the late Lt Col Richard Tamplin, great-grandson of William Cloves Tamplin. Details of the 1902 brewing plant were taken from an article that appeared in the edition of the *Sussex Daily News* published on 22 October 1902, a copy of which can be found in Worthing Reference Library. Trading details of the business were extracted from the Company Records that can now be found in the East Sussex Record Office. The remainder has been acquired over the years from the writer's contact with the Company.

# IFIELD STEAM MILL, OFF RUSPER ROAD, IFIELD, CRAWLEY

*Ron Martin*

GENERAL

The building is located off Rusper Road, at the rear of the car park serving the village green. The original access via Mill Lane has now been blocked off. The mill is located at TQ 2504 3787. The former windmill was originally located a few yards to the east of the Steam Mill. For the purposes of description the front of the mill is deemed to face due east. Room numbers have been shown on the plan using the prefix "G" for ground and "F" for first floor rooms respectively. The mill, having been recently vandalised, many of the vulnerable doors and windows have been blocked or boarded up and the former have been shown on the drawings as extant in August 2000, but cross-hatched. The mill had been recently partly converted into a craft centre but these alteration have been largely ignored in this survey.

DESCRIPTION

The main body of the mill is three stories high with an attic and is four bays long, 10.2 x 4.9 m (33'6" x 16'1") on plan. Both ground and first floors comprise three rooms (G 3 - G5 and F2 - F4) but the second floor and third floor (attic) are each one open space. There are casement windows one in each bay at each floor level, some with opening lights. The south end room was added as a Cart Shed with double entrance doors and possibly with living accommodation over, accessed from the mill and provided with a fireplace. At the west side is a cross wing comprising two rooms each at ground and first floor level, the main room (G6 and F4) 3.3 x 5.4 m (10'10" x 18'0") (hereinafter referred to as the "Engine Room") and smaller rooms at the north side (G7 and F6) 1.9 x 3.8 m (6'3" x 12.6"). Between the main mill building and the extension F3-F6 and F4-F6, there are arched blank openings. At the northwest corner there is the inner wall of a chimney stack, with a soot door through the wall. There are staircases at the south end the main mill building connecting all levels, the upper flight to the attic being in the form of a treaded ladder. A second staircase runs between ground and first floor from rooms G4 to F3. There are changes in floor level, one step high, between rooms, G5 and G7, between F2 and F3 and between F5 and F6. Part of room G3 incorporates a timber hursting to support the three mill stones which would have been at first floor level. There is one door opening on the east elevation into room G3 and two bricked up openings in the east of room G5 and an opening that had been cut into the north side of room G5. Recent doors have been formed from previous window openings to serve as escape doors on to a recently built fire escape on the west side, from room F2 and from the second floor.

CONSTRUCTION

The ground and first storeys of the main mill building and the engine room are built with solid brickwork 380 mm (1'3") thick except that the walls of north end bay (rooms G5 and F4) are 225 mm (9") thick. The south extension (G1, G2 and F1), and the second storey north, east and west also have solid brick walls 225 mm (9") thick. The brickwork generally is in Flemish bond, faced externally with kiln fired bricks having grey headers and red stretchers, typical of Sussex mid-nineteenth century practice. The exception to this is the north and west side of the west extension which has a section of the wall laid in English bond.

Floors generally are of plain edged boarding laid on 180 mm (7") deep softwood joists mainly 55 mm (2") wide at c.380 mm (15") centres. Additional strengthening beams have been inserted over rooms F2, and F4. The floor to Room F3 is an ad hoc mixture of steel joists, sheet steel flooring, timber joists and timber boarding. The soffits of most of the floors have been lined, so close inspection of the joists has not been possible.

Most of the walls have bare brickwork, but the walls of the second storey have been lined out with battens and hardboard. It is possible that this lining was a recent replacement for lath and plaster, a common feature of 19th century buildings.

The roof over the main mill is gabled and carried on softwood queen post trusses at 2.45 m (8'0") centres, the ties, carrying the floor joists not being connected to the feet of the principal rafters. The roof plates are connected to the posts with short horizontal members. All the other roofs are standard close-coupled with ceiling joists, purlins and collars. All roofs were previously covered with countess-sized natural slates, but the roof of the south extension has been replaced with asbestos-cement slates. Most of the roofs are now badly damaged due to the recent fire.

Windows generally are of timber having two lights with a dividing mullion, except for the one to the south end of room F1a which is four lights wide and to the west side of room F2 which is three lights wide. Some of the windows have timber casements still extant divided into small panes. All the ground floor windows have been removed. The window to the west end of the engine room is a semi-circular headed double-hung sash window with a stone sill.

INTERPRETATION

The original mill building is strange in that there does not seem to be any obvious means of hoisting the grain to the upper levels for storage. There is no evidence of any lucam or similar structure. The only access was through the now blocked doorway at first floor level into room F2, clearly shown on an early photograph[2] and at the east side of room G5. Furthermore, the scantlings of the timber of the upper floor (apart from the hursting) seem hardly adequate for the loads associated with a mill. It is also unusual for an industrial building to be built in Flemish bond as this bond is not as strong as English bond due to the unavoidable presence of straight joints. It is possible that this building had another use before being used as a mill.

The hursting is built on dwarf brick walls, and apart from the longitudinal members, are independent of the mill structure. The hursting is constructed of 180 x 200 mm (7" x 8") oak posts and beams on a 180 x 150 mm (7" x 6") sill. There were two 100 x 200 mm (4" x 8") transverse beams now cut away, located underneath each of the three stones. The hursting could have been a later insertion (see above). One of the longitudinal members of the hursting has been cut through to accommodate the staircase and it seems likely that all the original staircases were in the form of treaded ladders, as the extant one between the second floor and the attic. The use of ladders would have reduced the well sizes, giving greater working space on the stone and upper floors. There is evidence of this ladder on the wall beside the staircase from the first to second floor levels.

The existing door opening at the south side of room F2 would have been too close to the mill stones for comfort and it seems probable that when the stones were in position there was an opening further east. There is some vague evidence of this opening. The present door opening would have been formed after the existing staircases were installed.

As originally built it seems that there was an extension at the north west corner (Room G7). This is shown on a map of 1855.[1] The brickwork of the north wall is continuous along the extension without a straight joint, apart from the top five courses and the lower part is built in English bond, together with the return at the west end. The reason for this panel of brickwork in English bond is not apparent. The chimney stack is attached to the outside of this wall and it seem possible that this was the original site of an engine, maybe the one that James Bristow might have acquired in 1835.[2] The floor of this room is 270 mm (10½") above the rest of the ground floor, which suggests that it might have been intended as an engine bed or possibly housed the boiler.

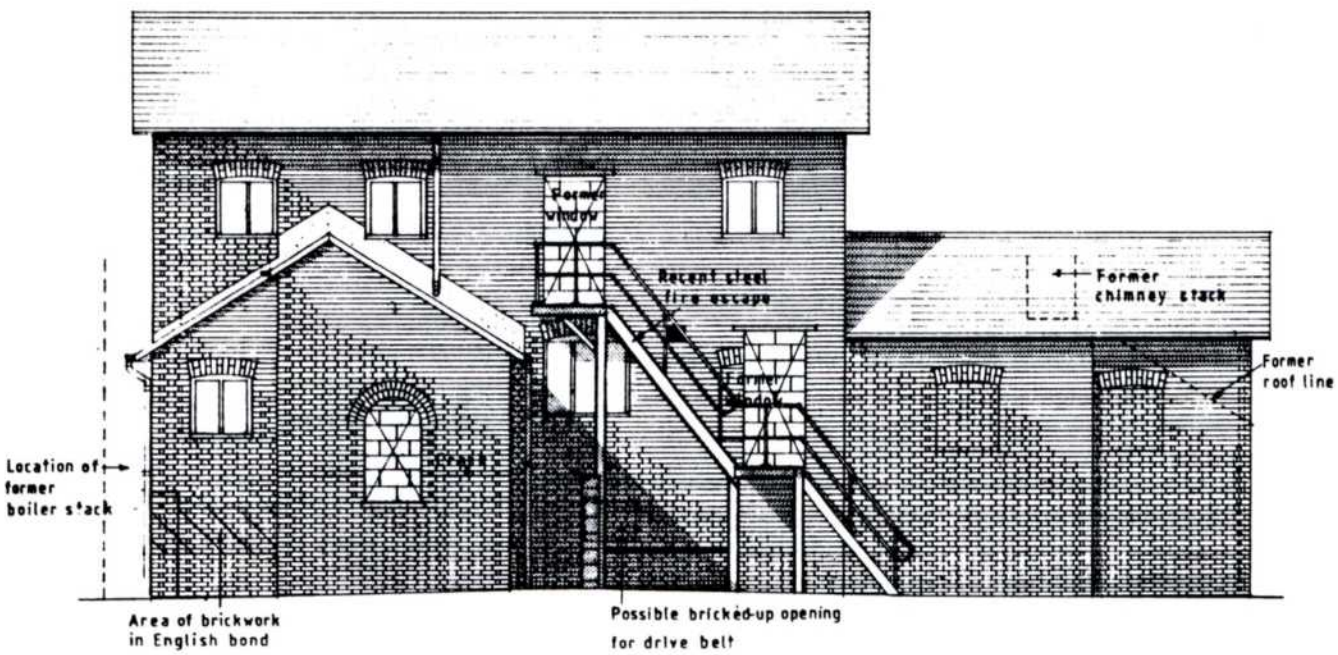
The roof over the engine room appears to have been originally built only spanning the width of the Engine Room itself. The ceiling joists over this room have their north ends cut off at an angle, on the line of the rafters which would have formed the north slope. The odd fact is that if the roof was actually finished like this there is no evidence of any flashing on the west face of the original mill building. Was there a change of mind and the roof structure altered with the ridge line made higher, before being slated?

As originally built, it is possible that in the area of rooms G4 and F3 there might have contained some form of hoisting apparatus.

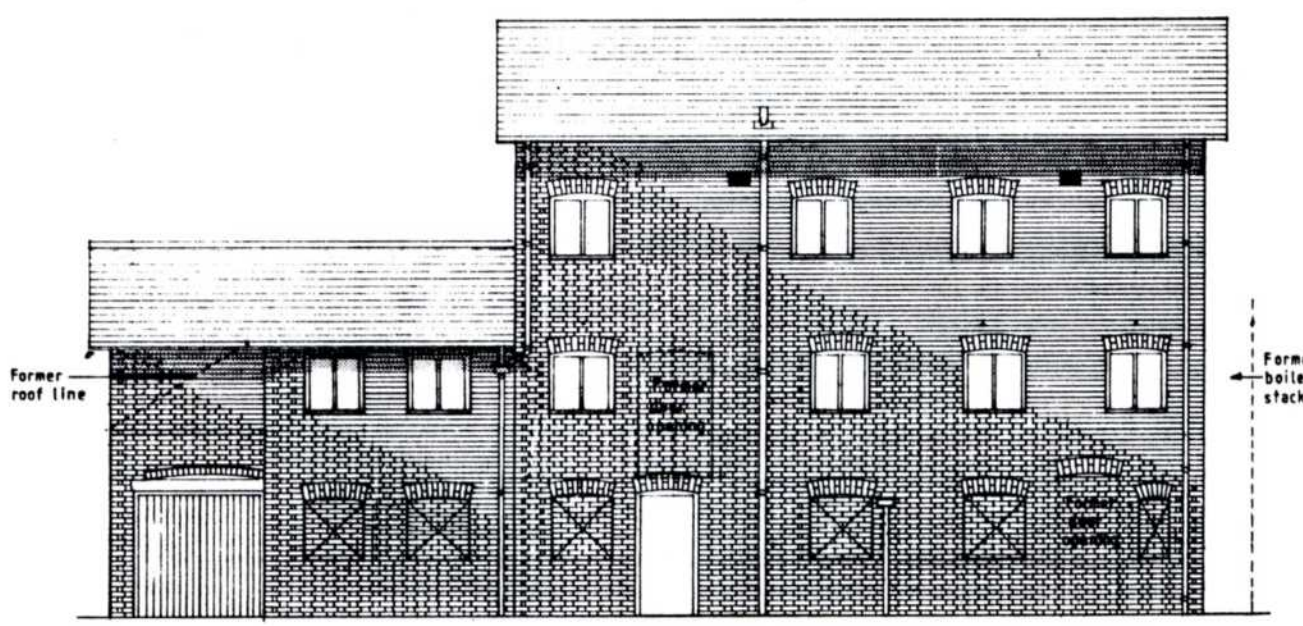
Another steam engine was erected in 1860, this is determined, the writer has been informed[3], by the date on the engine itself, now housed in the Technical Museum of Berlin and in a working condition. The engine as described by the Newcomen Society[4] is of a double-acting compound beam engine made by Thomas Horn of Westminster. The general arrangement is that of the type patented by Jonathan Hornblower in 1781 and repatented by Woolf in 1804. The engine has a cast iron bed and central column and crank. The beam is 2.44 m (8 ft.) between the centres and the two cylinders are side by side. There was a well 24 m (80 ft.) deep under the crankshaft. The flywheel is 3 m (10 ft.) diameter and the power is taken off from a belt pulley 2.0 m (6'6") diameter and 200 mm (7¾") wide.

The engine room was also built at the same time and there is an inscribed brick at the southwest corner of the building, which although this is not proof positive, does suggest there is some truth in this date. The engine sat on a brick plinth 1.1 m (3'7") high, which is shown on a photograph.[5] This photograph shows an installation, probably in a museum and is not the same as in the photograph of the engine at Ifield.[6] When erected the engine house would not have had the intermediate floor, which must have been inserted after 1928, when the engine was removed to the Science Museum. The staircase leading up to room F4 would also have been erected at the same time.

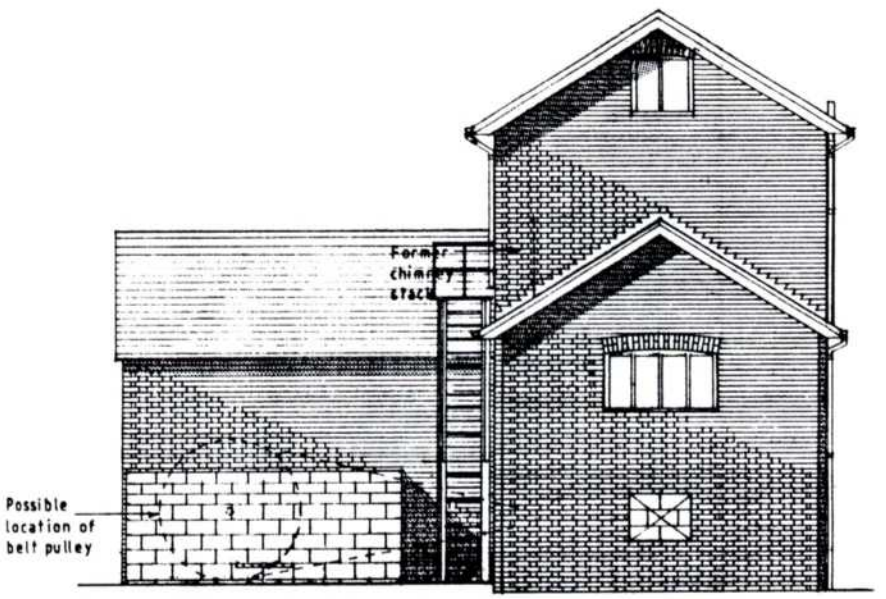
The engine was presumably located opposite the arched opening (now partially blocked) at the south side of the engine room. The reason for this opening could be explained by assuming that the drive shaft penetrated the wall with a belt pulley wheel on the outside of the wall. There is a 225 mm (9") clinker block wall built 1 m (3'3") south of the south wall of the engine room, which may have been associated with this, although the use of clinker blocks at this date seems unlikely and there is no sign of a hole for the shaft or a bearing block. There is evidence of a bricked-up opening in the west wall opposite the hursting 0.75 x 0.5 m (2'6" x 1'6") which could have




WEST ELEVATION




EAST ELEVATION



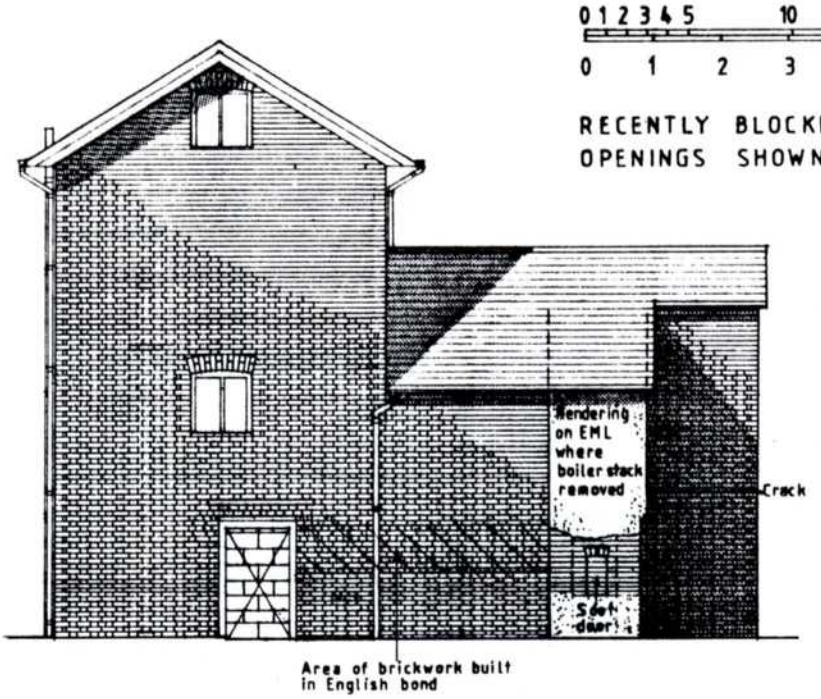

SOUTH ELEVATION

SCALE 1:50 (on A1)

0 1 2 3 4 5 10 15 20 25 Feet

0 1 2 3 4 5 6 7 8 Metres

RECENTLY BLOCKED UP OPENINGS SHOWN THUS




NORTH ELEVATION

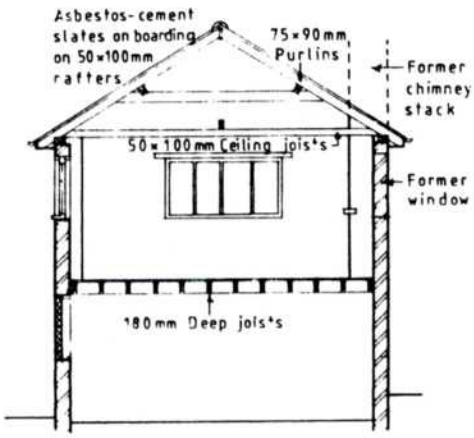
# CRAWLEY
## RUSPER ROAD
## IFIELD

*IFIELD STEAM MILL*

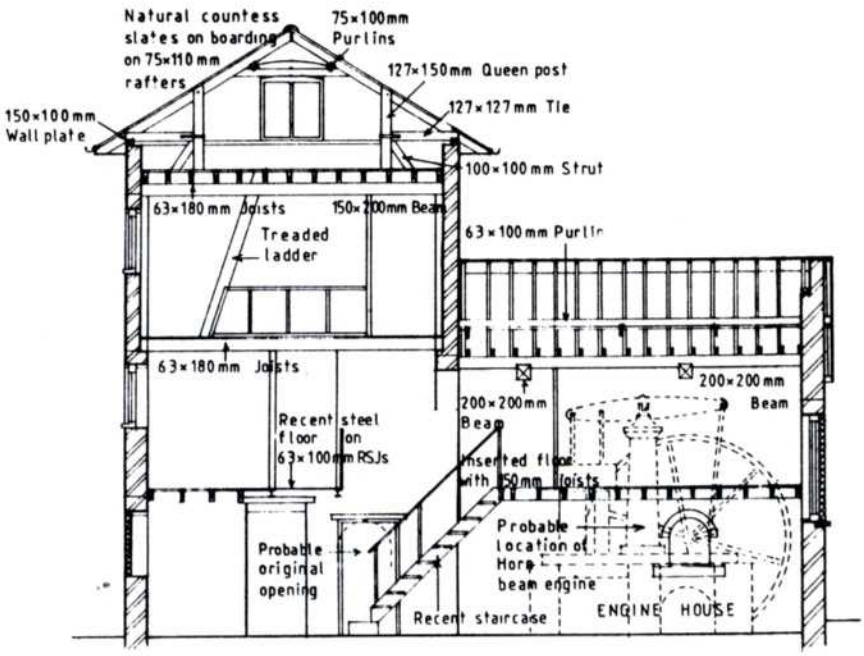
ELEVATIONS

DATE: Aug. 2000

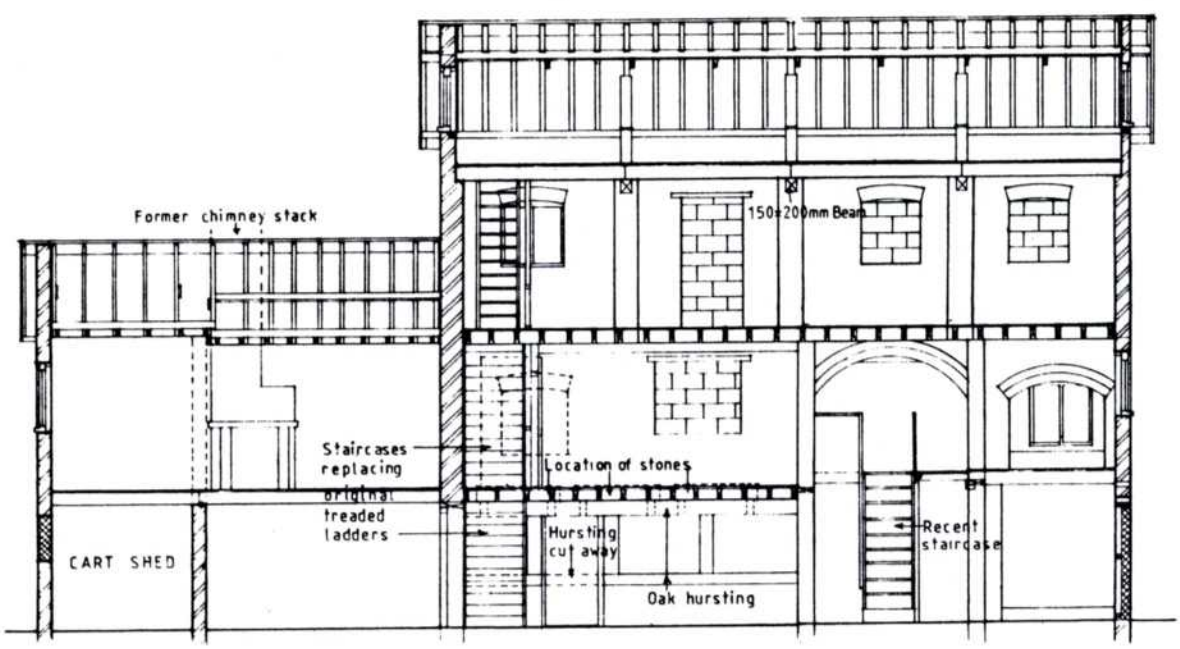
SCALE: 1:50 (on A1)



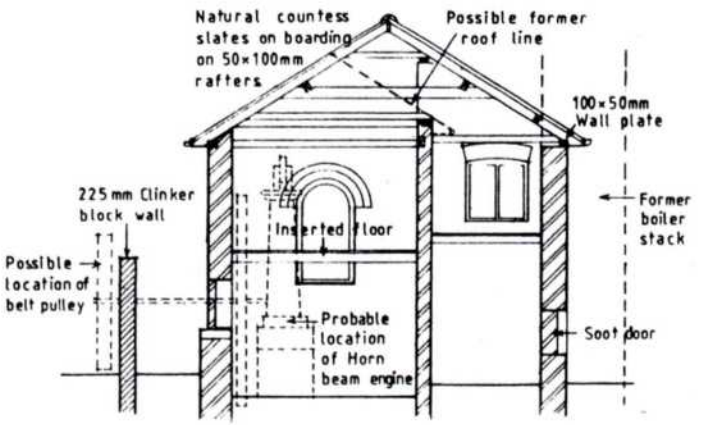

SECTION A-A




SECTION B-B




SECTION D-D



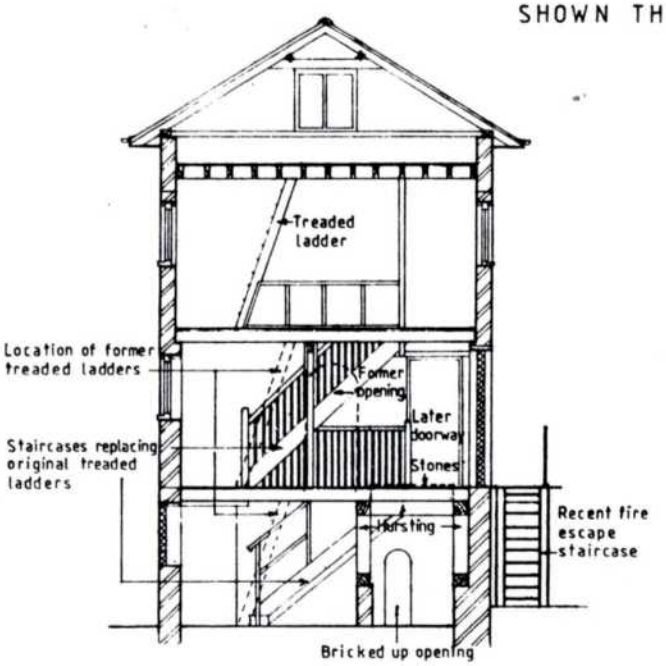

SECTION C-C

SCALE

0 1 2 3 4 5 10 15 20 25 Feet

0 1 2 3 4 5 6 7 8 Metres

RECENTLY BLOCKED OPENINGS SHOWN THUS




SECTION E-E

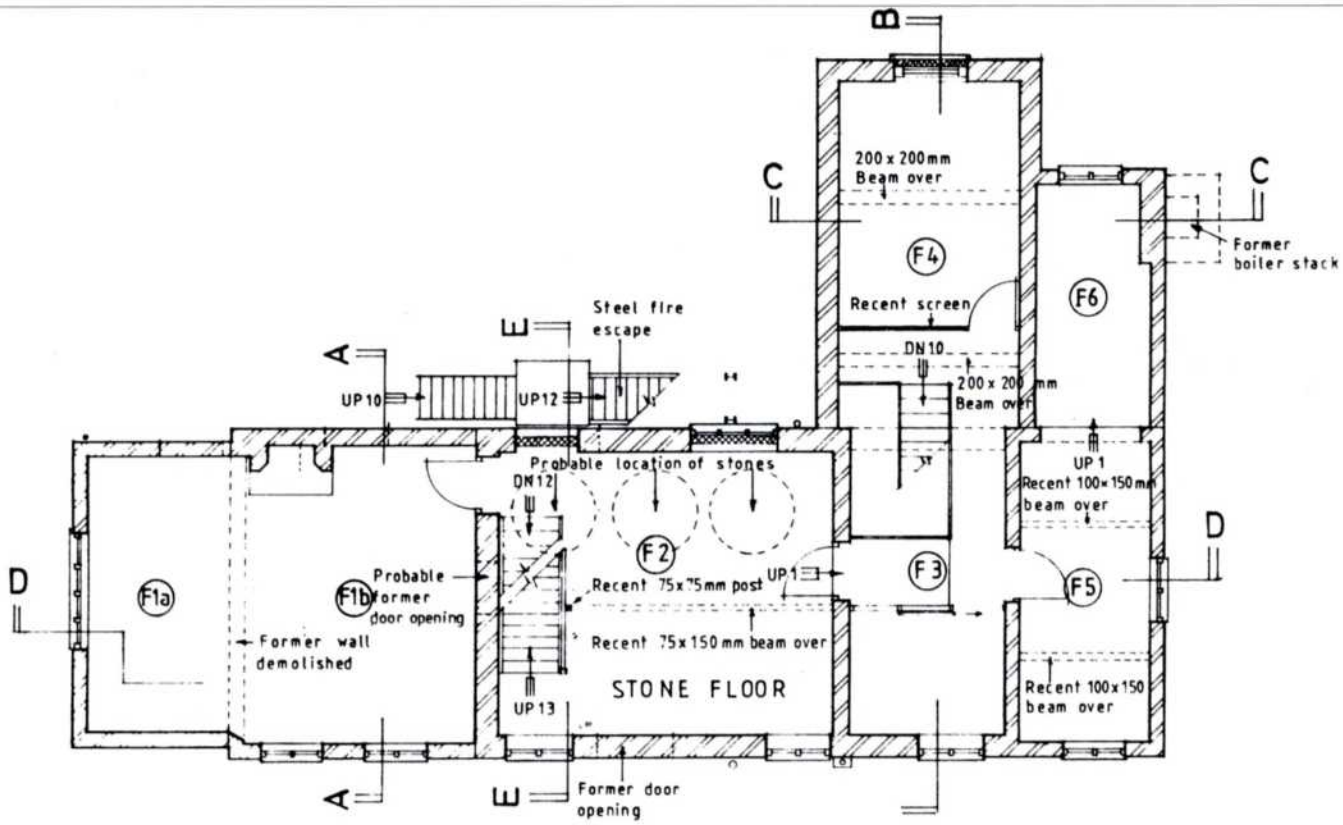
# CRAWLEY
## RUSPER ROAD
## IFIELD

*IFIELD STEAM MILL*

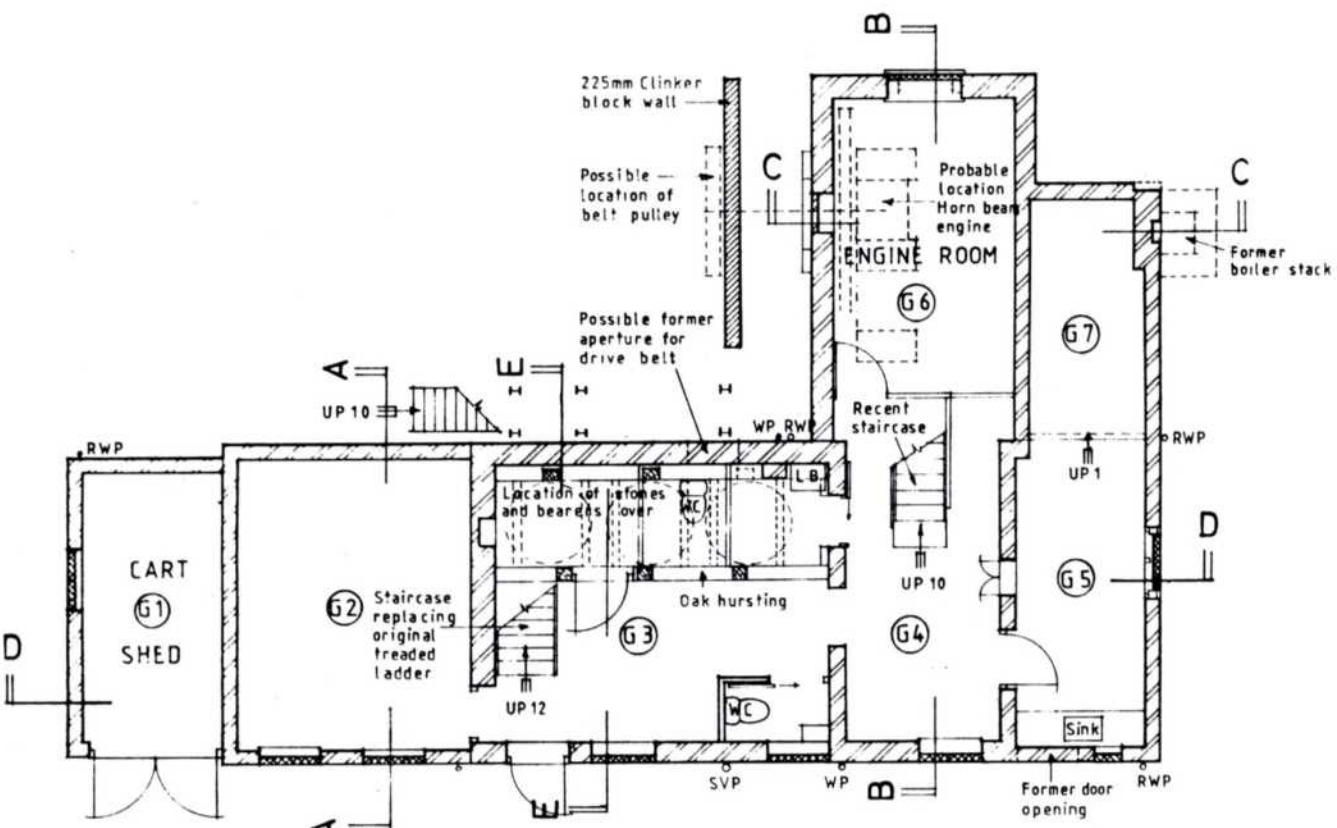
SECTIONS

DATE: Aug. 2000

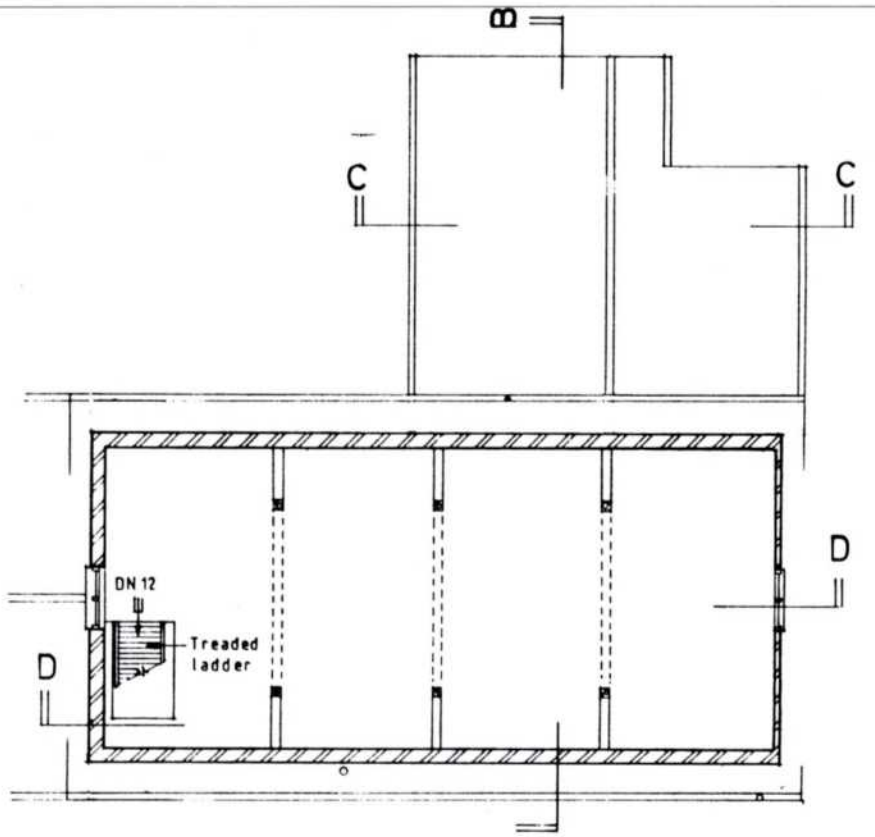
SCALE: 1:50 (on A1)




FIRST FLOOR PLAN




GROUND FLOOR PLAN



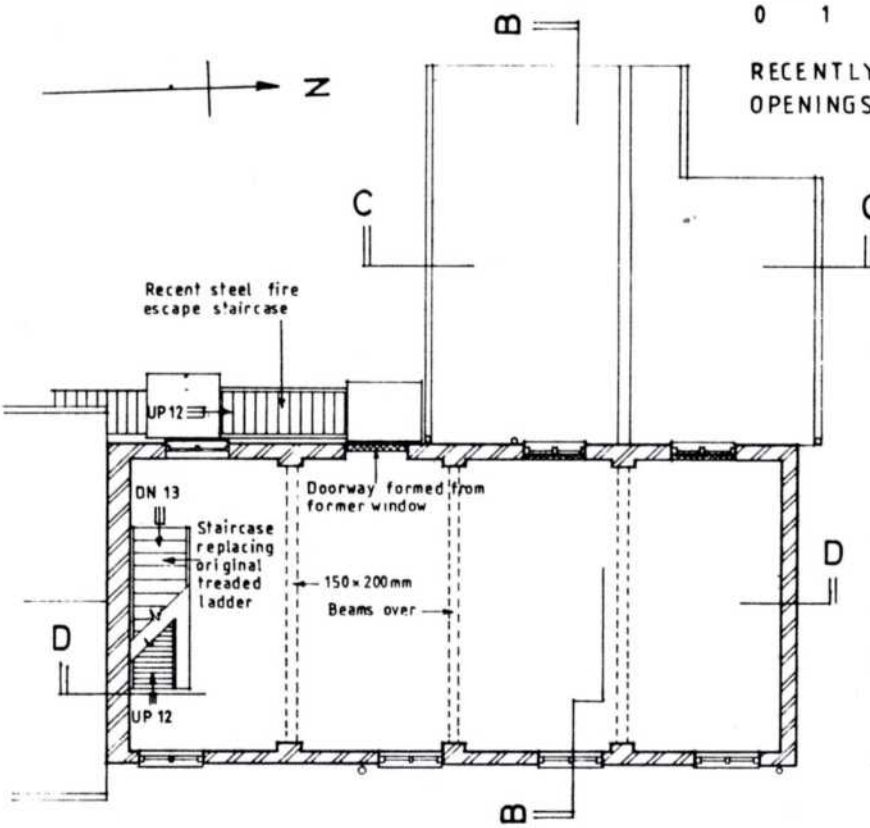

THIRD FLOOR (ATTIC) PLAN

SCALE

0 1 2 3 4 5 10 15 20 Feet

0 1 2 3 4 5 6 Metres

RECENTLY BLOCKED UP OPENINGS SHOWN THUS




SECOND FLOOR PLAN

# CRAWLEY
## RUSPER ROAD
## IFIELD

*IFIELD STEAM MILL*

PLANS

DATE: Aug. 2000

SCALE: 1:50 (on A1)

DRAWN BY AND © R.G.MARTIN

taken the driving band from the engine which would have driven a lay shaft running under the stones. There is also an arched opening at both end of the space under the stones which could have taken the drive from the lay shaft into rooms G2 and G4. The photograph of the engine installed in a museum[7] shows the flywheel and the belt pulley adjacent to each other, but the photograph of the engine as installed at Ifield[8] only shows the flywheel. This seems to indicate that the drive pulley was outside the engine room.

The south extension was carried out in three phases. Initially rooms G2 and F1b were built. Later the cart shed (room G1) was added with a lean-to roof. The line of this roof can be seen on the east and west faces, where the character and colour of the brickwork changes. The last alteration to this part of the building is when room F1b was extended over the top of the cart shed. The end wall of room F1b was demolished and the gabled roof extended. At the same time the windows at the west side were bricked up and a chimney breast with grate at first floor level was inserted. This chimney breast appears to be unsupported.

Another alteration from the original design may have been to insert the doorway at the south side of room G3. The original doorway with stable doors at first floor level into room F2 which can still be seen is shown on a photograph.[9] Unfortunately this has a cart parked immediately in front of the ground floor door so it is not possible to see if the ground floor door existed at that time.

REFERENCES


1. W.S.R.O. *Ifield Inclosure of the Commons Map* (1855).
2. *Sussex Advertiser or Lewes and Brighthelmstone Journal*, 2 June1835.
3. R. Smith, an archaeologist and member of the Crawley Museum Society, personal observation.
4. Newcomen Society description of engine.
5. R.M. Crowe, contemporary photograph.
6. Science Museum photograph 1928 - 1077 (see front cover drawing).
7. R.M. Crowe, contemporary photograph.
8. Science Museum photograph 1928 - 1077 (see front cover drawing).
9. Photograph from a postcard postmarked 1905.


[The cover illustration of the Thomas Horn engine formerly at Ifield Steam Mill is based on a photograph in the collection of the Science Museum, South Kensington, London.]

# THE FORMER PUG MILL AT THE REAR OF STOCKWELL COURT, LONDON ROAD, BURGESS HILL

*Ron Martin*

## SITE

The site of the pug mill is in the car park area at the rear of Stockwell Court in London Road, Burgess Hill, at TQ 3070 1509 and it was used prior to its demolition as a store.

## DESCRIPTION

The building was hexagonal in plan, 7.11 m (23'4") internally between sides, with one- brick walls 229 mm (9") thick and 2.06 m (6'9") high rendered externally. There were four attached piers to the external face of the south side and a chimney stack at the northwest side, extending upwards to roof level. There were two door openings in the north and south sides and casement windows in the southeast, northeast and northwest sides. The brickwork beneath these windows appears to have been inserted later as there were vertical cracks in the rendering beneath the reveals of two of the windows, suggesting straight joints in the brickwork. The brickwork generally was in Flemish garden wall bond and the area on each side of the south doorway was built partly in 2" bricks and partly in 2⅝" bricks. The ground was built up around the north side and there was a ramp up to the north door opening.

The roof was constructed entirely in softwood and has been carefully removed for re-erection. The wall plates were 127 x 102 mm (5"x 4") and did not sit evenly on the walls, most being nearly flush with the outer faces of the wall but at the south side with the plate flush with the inner face of the walls. The trusses spanned from side to side bearing on the plate over each opening. The truss ties were 133 x 152 mm (5¼" x 6") with one continuous member (southeast to northwest) the other two ties being tenoned in. A star shaped wrought iron strap was coach screwed to the soffit at the central intersection. This had a central bolt, with a head at the bottom to anchor the ties to the ex 178 x 178 mm (7" x 7") hexagonal central post. The ends of the ties were pegged to the rafters and secured to the plates with 6 x 38 mm (¼" x 1½") wrought iron straps, coach bolted to the ties and turned over the top of the plates. The truss principal rafters were 140 x 127 mm (5½" x 5") generally. The purlins were 102 x 127 mm (4" x 5") with 57 x 102 mm (2¼" x 4") struts. The hip rafters were 51 x 127 mm (2" x 5") and the nominal 51 x 102 mm (2" x 4") common jack rafters were at 406 mm (1'4") centres. Additional purlins and bearers had recently been inserted to form additional storage space in the roof, but none of this has been detailed.

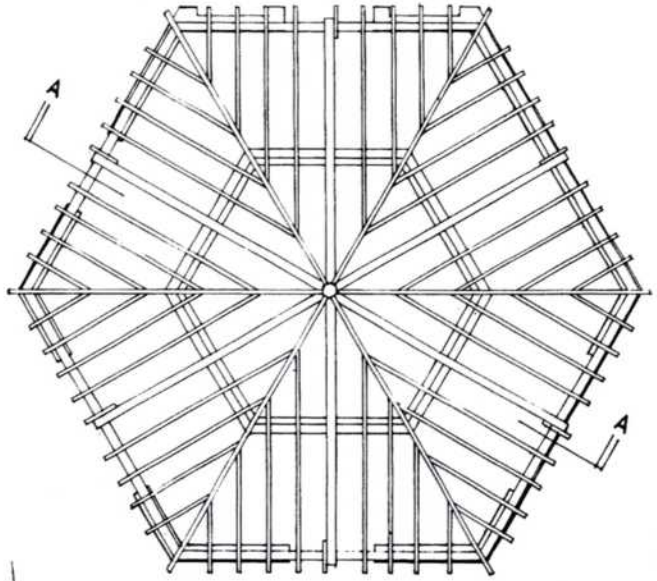
The roof was covered with clay plain tiles, laid on feather-edged boarding with bonnet hip tiles. There were some special tiles haphazardly incorporated in the roof indicating that is had been re-roofed at some time in the past. The roof was finished with a terra cotta finial the upper part of which was missing.

## HISTORY

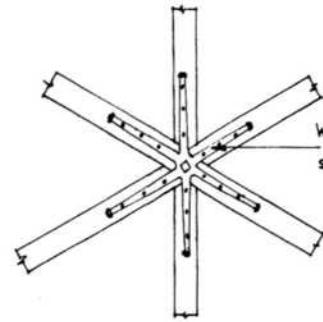
The site was probably occupied by Richard Berry at least from the 1870s, renting it from the Normans. His son Frederick probably took over in the 1890s, when his father retired or died. The works appears to have closed in the 1920s and the pug mill building was opened as the Scout Headquarters in 1930. In 1985 the site was bought by Burgess Appliances, who wished to develop the site and have since demolished the pug mill.

## CONCLUSION

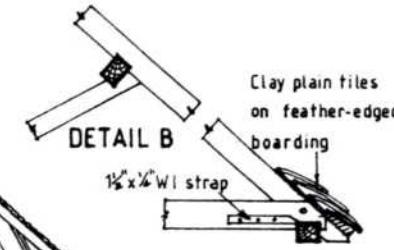
It appears likely that, when originally built, there were blank openings where the existing door and window openings occur, only the southwest side being solid. The windows and the brickwork under, with the additional timber in the roof were probably inserted after 1930. The rendering was probably also applied at this time and the chimney stack and fireplace inserted. The building was demolished in 1999, but the roof structure has been preserved and it is hoped that this can be re-erected at some time in the future.

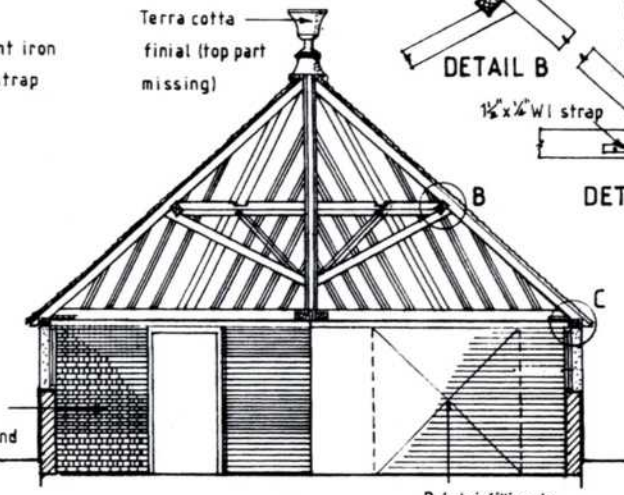



PLAN OF ROOF STRUCTURE

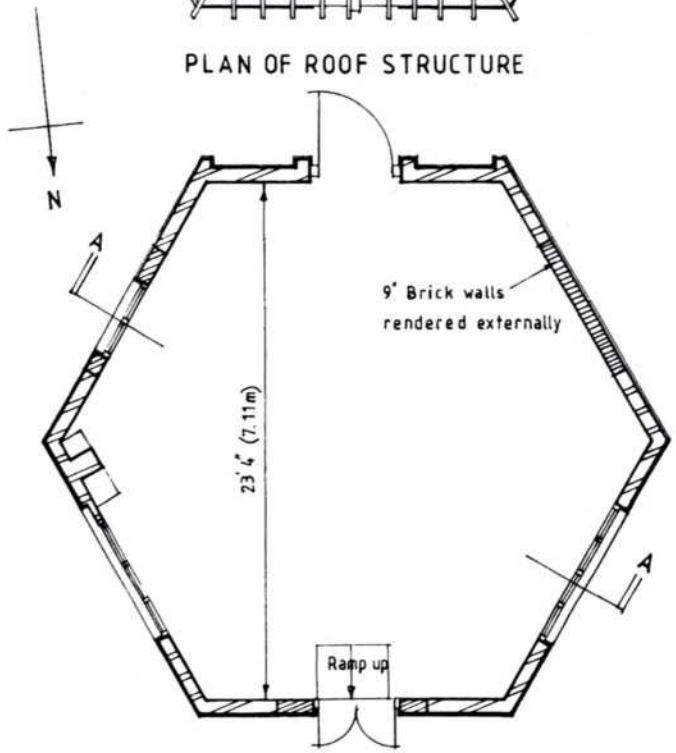



PLAN OF INTERSECTION
OF TIES (LOOKING UP)




SECTION A A




GROUND FLOOR PLAN

NOTES

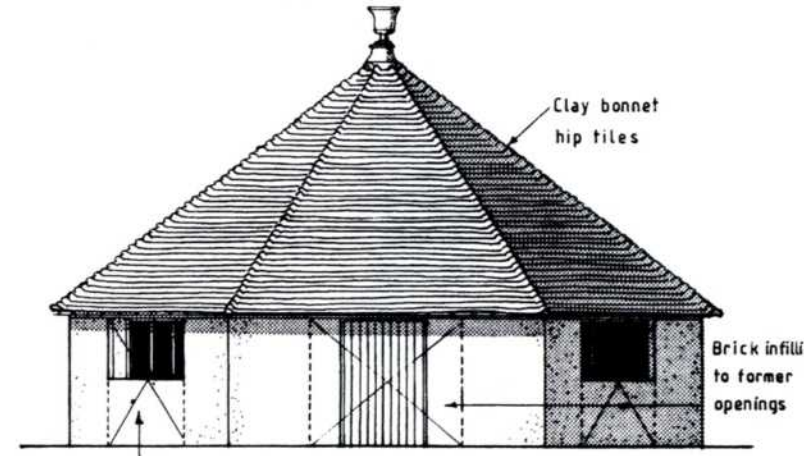
1. All timber sizes nominal
2. No details of recent additions to roof shown
3. Defective timbers not shown
4. All timber softwood
5. Timber scantlings:
   - Wall plate 5"x 4"
   - Hexagon post ex 7"x 7"
   - Tie 5¼"x 6"
   - Principal rafter 5½"x 5"
   - Purlin 4"x 5"
   - Purlin strut 2¼"x 4"
   - Hip rafter 2"x 5"
   - Jack rafter 2"x 4"

Brick infilling to former open sides

SCALE 1:50 (on A2 sheet)

0 1 2 3 4 5 6 7 8 9 10 Feet

0 1 2 3 Metres




NORTH ELEVATION

# BURGESS HILL, LONDON ROAD

*FORMER PUG MILL*

## PUBLICATIONS

Previous numbers of *Sussex Industrial History* still available:-

| | |
|---|---|
| No. 2 (1971) | Dolphin Motors of Shoreham; Lime Kilns in Central Sussex. |
| No. 3 (1971/2) | Lewes Population 1660-1800; Kingston Malthouse. |
| No. 5 (1972/3) | East Sussex Milestones; West Brighton Estate; A Bridge for Littlehampton 1821-2. |
| No. 14 (1984/5) | Palace Pier, Brighton; White & Thompson Ltd., Shoreham Airport; Charcoal Burner's Hut, Fittleworth; Ice Houses and Trade in Brighton; Mining and Subterranean Quarrying in Sussex. |
| No. 17 (1986/7) | The Bognor Gas, Light & Coke Company Ltd.; Mineral Transport by the Telpher System (Glynde Aerial Railway); Bricks for the Martello Towers in Sussex; Jesse Pumphery, Millwright |
| No. 19 (1989) | Leather Industry; Bignor Park Pump; Lowfield Heath Mill; B.M.R. Gearless Car; Wadhurst Forge. |
| No. 20 (1990) | William Cooper, Millwright; Foredown Isolation Hospital; The Ford Trimotor and Ford Aerodrome. |
| No. 21 (1991) | Quick's Garage, Handcross; Punnett's Town Wind Saw Mills; Hollingbury Industrial Estate. |
| No. 22 (1992) | Swiss Gardens, Shoreham; Brighton Brewers; Mill Bibliography; Beddingham Kiln. |
| No. 23 (1993) | Sussex Limeworks; Mills of Forest Row; Machine Tool Manufacture; Brook House Estate; Mill Authors. |
| No. 24 (1994) | Pullinger's Mouse Trap Manufactory; Ice Houses; Forest Row Mills; Lewes Old Bank; Lumley Mill; Estate Industry at the Hyde; Slindon Bread Ovens. |
| No. 25 (1995) | Ricardo at Shoreham; Windmill Hill Mill; Portslade Brewery; Brighton General Hospital; Bognor Bus Station; Kidbrooke House Farm; Contents *Sussex Industrial History*. |
| No. 26 (1996) | Eastbourne Buses; Sussex Lidos; The Sea House Hotel; Bishopstone Tide Mill; Mountfield Gypsum; Uckfield Workhouse; Brighton Oven; Medieval Water Mills. |
| No. 27 (1997) | Sheffield Park Garden; Brighton Tunbridge Ware Industry; Railway Cutting Excavation; Eastbourne Mills; Tunnels of South Heighton; Sussex Lime Kilns. |
| No. 28 (1998) | Frank Gregory; Brighton Railway Station; Construction of H.M.S. Forward, Bevendean Isolation Hospital, Brighton; Tank Roads on the Downs; Hastings Early Power Supply. |
| No. 29 (1999) | Sussex Windmills and their Restoration. |
| No. 30 (2000) | Balcombe Tunnel; Ditchling Common Workshops; Midhurst Whites; Keymer Brick & Tile. |
| No. 31 (2001) | Chimney Cowls; Longley's Wood Block Flooring; Private Press Movement; Hunston Bridge; King's Standing Transmitter. |

Issues 2, 3 and 5 £1 each, issues 14 and 17 £1.50, issues 19, 20, 21 and 22 £2.25 each, issues 23 and 24 £2.50 each, issues 25 and 26 £2.75 each, issues 27 and 28 £2.95 each, issues 29 and 30 each £3.95, issue 31 £4.25. Post and packing extra, 60p for one issue plus 40p for each subsequent issue. For a list of the articles in volumes no longer available for sale see *Sussex Industrial History* 25 (1995). The Honorary Secretary is prepared to quote for photocopying articles in these issues.

Also available:-

M. Beswick, *Brickmaking in Sussex* (revised edn 2001) £12.95 post free

F. Gregory, *A Sussex Water Mill Sketchbook* £6.95 post free

H.T. Dawes, *The Windmills and Millers of Brighton* (2nd edn.) £4.95 (£5.50 incl. post and packing)

Orders with remittance to:-

R.G. Martin, 42 Falmer Avenue, Saltdean, Brighton BN2 8FG.