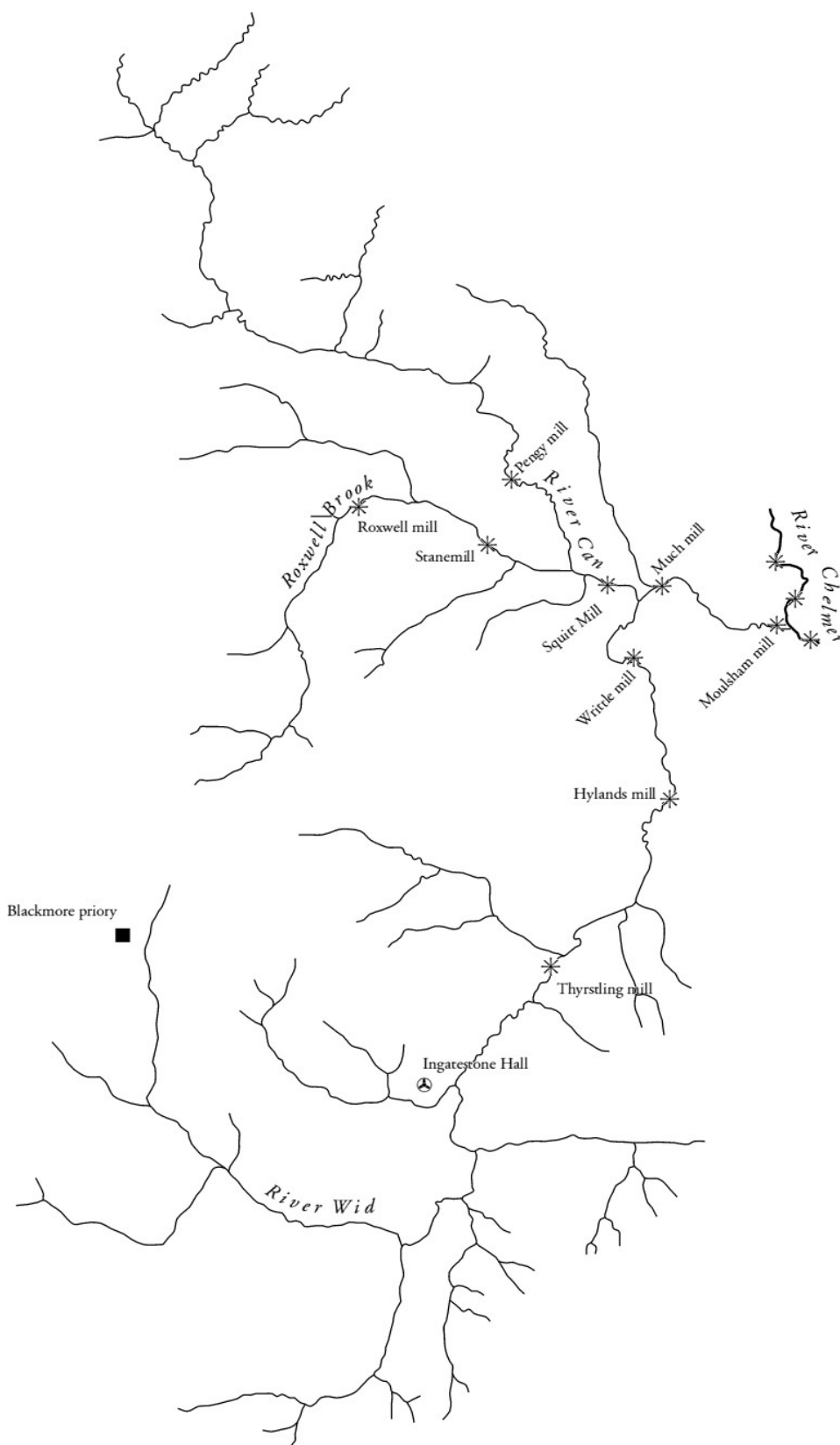


## Water mills along the Rivers Wid, Can and Roxwell Brook



## Water mills along the Rivers Wid, Can and Roxwell Brook

### WATER MILLS OF THE RIVER CAN

#### GOOD EASTER

*Estra* (GoodEaster)

In, 1086, in the lands of St Martins London, (held before by Aelmer, a Kings thane, until Count Eustace gave the manor to St Martins), now one mill. [1,12]

This manor was divided into the manor of Newark or Newlands Fee and the manor of Wares.

#### MASHBURY

Grant of millpond in Mashbury T/A 172/1118 (calendar of medieval Essex deeds in Westminster Abbey muniments)

#### CHIGNALL ST. JAMES

#### PENGY MILL

1279 F of F [v2/22/114/] Manor of Chygehole Smetheleye with appurts and 1 mill and 16 acres of land with appurts in Chygehole de Zoun.

Manor of Ciggenhall St Mary and St James. In 1544 the manor was granted to Ambrose Barker and included a watermill and two woods called Penge-park and Rookes-nest. [Morant V2, pp80]

1563 F of F [v5/104/24] purchase of Manor of Chingenhall alias Chignall St James by Wm Petre from Thomas Barker. inc 2 mills.

A survey, dated 1566, of the lands of William Petre of Ingatestone Hall included the Manor of Chignall St Mary & St James in which stood a water mill called Chignall mill, on a stream in the south west part of the manor. [D/DpM186]

Session Rolls 1630 ((Q/SR 269/22

(The inhabitante of) Writtle and Roxwell for not amending the lane "betwixt pengy Mill and Balck wall" (for 6 months).

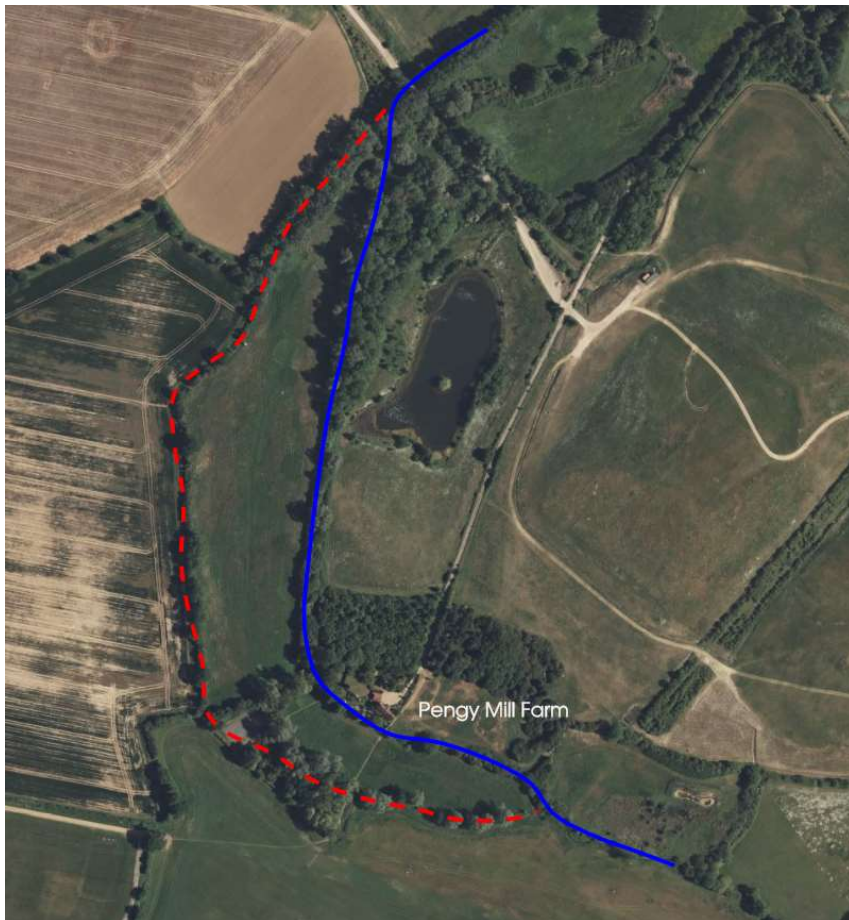
Pengy Mill, is marked on maps at a point where a right of way crosses the river Can. The course of the stream has been diverted and banked up against the side of the valley, this form of damming would give mill pond of some six hundred yards going up stream along the river bed, forming a lateral or a long- valley dam. The earth bank comes to an end just downstream of the existing house which in the past has formed more than one dwelling and the site may have included the mill. An additional point of interest is that the parish boundary, below Pengy mill follows the stream until at a point just below the mill where it then sweeps to the south to re-join the stream above the earth works as if to follow the old course of the stream in the middle of the valley.

Chelmsford Chronicle 21 July 1815. Pengy Mill farm for sale 94 acres.

## Water mills along the Rivers Wid, Can and Roxwell Brook



6 inch O.S map



Aerial view Pengy mill showing Parish boundary, in red, following the original course of the river and current line of the river Can, in blue.

The Can has been diverted along the contour line to give a mill head for a water wheel. The water mill was located at or near the present farm house.

## Water mills along the Rivers Wid, Can and Roxwell Brook

### WRITTLE

In *Writelam* in the lands of the King then 1 mill now 2

### MUCH MILL

Map refs

Warburton 1726

A & C 1775 Muchmill.

1853 [D/Dc 27/523-526]

1421-22. Memo of agreement between Rich Alfred overseer of the lady's mill, with John Carpenter of Writtle for renewing all the waterwork (copus aquatican) at 'Mochell mill' viz le znedelez [et] solez and a new water wheel with one ext[r]e (axletree), remaking a new door with two new dorestoths and laying a a new a grodcell there, also for mending the faults of lez Calfres taking for his salary 51 shillings and 8d. also a further agreement with the fermer to scour the mill pond and to provide timber for the use of the mill. [D/DP M223]

1577/1628 lease of under shot water grist mill called Much mill or Lords mill, Bedells End Writtle. [D/DPT182/4]

The last mill on this site was a leather works although the mill may have operated as a corn and leather mill up to the middle of the 19th century. The site became developed as Beeches, Writtle Oil and Leather mill. In 1870 a fire starting in the oil mill caused the mill to burn down. Although the site was rebuilt it is not clear as to the type of mill that was rebuilt. All that remains are three brick arches across the river, The by-stream can still be traced by a line of willows in the adjoining park. The mill was possibly fitted with two undershot wheels.

The mill was sold in 1853 as part of the Hylands estate and described as an Oil Mill with a fall of 7 ft engaged in the manufacture of wash leathers and let at £50 per annum. [D/DC 27/523-526]

1855 sale part of water mill nr Writtle [D/DB E29]

D/F 21/1, pp56

Leather dressing. £700 on building of watermill & dwelling house under one roof with stove for drying leather in adj building. The whole brick & timber & tiled.

£100 on the water wheel standing and going gears mills tones wire machine & dressing mills Mr Wm Jones Chelmsford. 1802.

31 Nov 1626 [D/DP T182/4] manor of Writtle lease water grist myll & myll house sometimes called Much Mull now the Lord's mill.

1728 [D/DP E10] Much Mill Writtle. rental book Lord Petre. Richard Skinner assignee of Jihn Godfrey 21 years @ £12 per annum.

1734 [Q/RRb 3/8] Much Mill in occ by Rich Skinner £12 rent leased from Lord Petre.

1839 [D/CT 414A] Oil Mill, land owned by Lord Petre, occupier William John & others.

22nd June 1855 [D/DB E29] sale particulars: The oil mill and premises situated between Chelmsford and Writtle on the river Can with a fall of 7 feet of water.

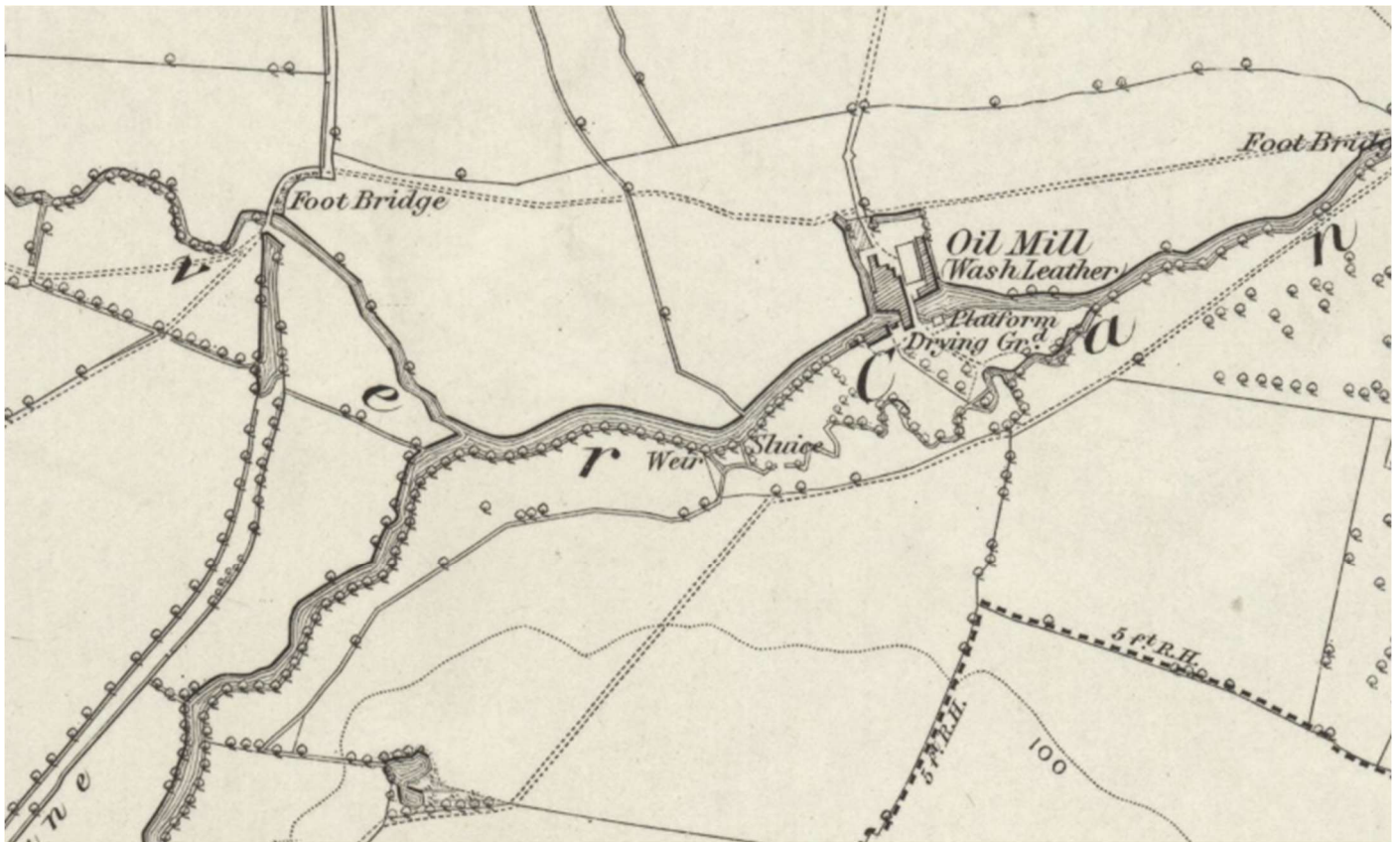
## Water mills along the Rivers Wid, Can and Roxwell Brook

The mill (which is also used in the manufacture of wash leathers) includes the varies mill rooms and drying rooms with drying shed, store house and two cottages attached. Also, the island called Great Mill Mead (94) and mill mead (93) containing 5a 2r 20p.

The mill & premises are let to Messer's Johns on a lease expiring Michaelmas 1860 at an annual rent of £50.

Grain accounts for The Manor of Writtle 1361 (E.R.O D/DP M559)

Wheat threshed. From farm of water mill - 6 qtrs 0 bus 0 p



Much Mill, Writtle

(6 inch O.S map, the by stream is now filled in, all buildings demolished)

## Water mills along the Rivers Wid, Can and Roxwell Brook

### MOULSHAM

*Molesham* (Moulsham Lodge)

In lands always held by St Peter's, Westminster Abby, one mill. [14,6]

### MOULSHAM MILL

Map refs

1591 [D/DM Pi]

Warburton

Thos Yeoman 1762 Moulsham mill

A & C 1775

1818 Q/RHi 4/3

In 1380 a mill in Mulsham that was held for the rent of 20 shillings per annum, was given to the Abbot of Westminster.

1366-1582. Deeds of lands called Swanshope in Baddow Mead abutting on river bank between Moulsham Mill and the fulling mill, later the mill of Thomas Mildmay in Great Baddow, and Ley Croft in Springfield D/DU 480/1

In 1534 the Abbot of St Peter, Westminster, leased the mill to Jon Longe for 18 years at £4 6s 8d per annum. On the dissolution of the Abby Thomas Myldmay was granted in 1540 the Manor of Mulsham with the lands of St Peters, Westminster; and a water mill called Mulsham Mill. [Morant V2, pp 3]

Note that in 1534 the Abbey of Westminster leased Moulsham Mill to John Longe D/DMy 15M50/74/6

6<sup>th</sup> March 1534 Lease for 18 years at an annual rent of £4 6s. 8d.

(i) Abbey of Westminster

(ii) John Lenge of Great Dunmow, miller

Water mill at Moulsham, Chelmsford and appurtenances held by William Braban, miller, one 'hope pasture' next to the mill, between the mill pond, and road called 'le Caweye D/DMy 15M50/73

In 1591 Moulsham Hall was the seat of Thomas Mildmay and in a survey taken that year was said to have- a very good watermill.

1406: Proceedings at Essex Assizes at Chelmsford between Abbott and Convent of Westminster and various persons over diversion of mill stream at Springfield. [D/DM M160]

1326/7 [D/DAy T2/42] quitclaim of a meadow abutting on the water flowing from Sanford Mill to Wlypsinggs ford in Sandon

C1275 refers to bank leading from Moulsham mill to Sandford mill. [D/DAy T2/16] From 1667 to 1767 the mill was leased to the Strutts at rents from £50 to £119 per annum, during this period the mill was largely reconstructed. In 1813 the mill was leased to Abraham Bullen of Gt Baddow for 21 years at £200 per annum. The lease referred to-a water corn mill called Moulsham mill together with two water wheels and two pit

## Water mills along the Rivers Wid, Can and Roxwell Brook

wheels in the said mill. In 1839 the Marriages became tenants in whose hands the mill has since remained. In 1917 along with the rest of the Mildmay estates the mill was sold and was described as being partly built of brick and timber with tiled roof on four floors and fitted with an under-shot water wheel. The water wheel, housed in a timber extension, was 10 foot diameter and 10 foot wide, clasp armed with elm paddles, with an 10 foot dia iron pit wheel.

1613. Will of William Stumes of Moulsham Mill. D/ABW 36/218

1657 [Q/CP3 ff 190/197/198] John Grandy miller. The inhabitants of Moulsham ordered to repair a causeway leading from Moulsham to Moulsham mill (water mill) the miller should reimburse them if found guilty.

1659 John Gandy indicted for not repairing a common footway or causeway - was ordered by the court to repay the surveyors of Moulsham the money they had paid out.

1406 [D/DAY T2/136] river from Sandford mill to Lt Baddow mill

+++++uncheckedinfo+++++

1810-43 deeds [D/DGe T6/6, 6/7]

1839-92 deeds [D/DGe T148]

1899, 1903 fire insurance [D/DEE E11]

1366-1582 deeds inc ref to mill [D/DU 480/1]

1381-95 ref to water mill and mill house. [D/DM M87-97]

1813 correspondence relating to dispute over lease of Moulsham mill

[D/DOP B12/1]

+++++

1860 Mildmay papers repair to mill, repairs needed. [D/DU 1056/3]

Tith book 1718, records John Strutt wind & watermill. [D/P 94/3/1]

Sale plan Mildmay estates 1839 [D/DOP B12/23] other notes?? [B3026]: [D/DWv p.5] rebuilt water mill 1844

1844 lease purchased by Joseph Marriage

[T/P 238] report on Moulsham 1200-1900 inc ref to mill.

1651 lease for 10 years Moulsham Hall inc mill Henry Mildmay to Carew Mildmay of Hornchurch.

[D/DMT33/9]

The Miller 7/12/1891.

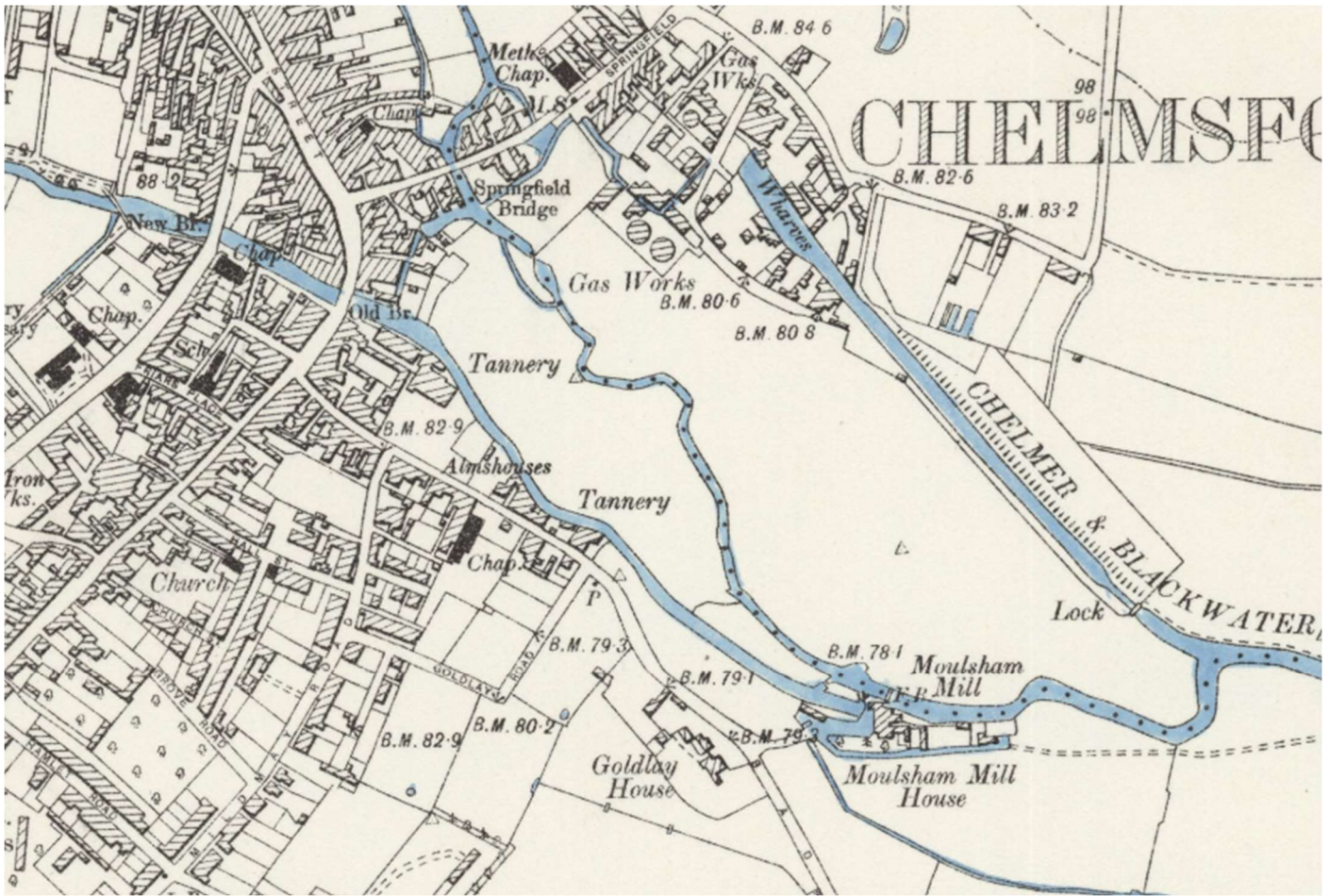
Moulsham Mill, recently fitted with 5-sack roller plant by Henry Simon for Messers W & H Marriage & Sons. Barges are able to unload at mill door. The roller plant has been fitted up in a new brick building of 3 floors, built on the old premises at the back, and when the foundations were being excavated the remains of an ancient water mill were unearthed; and an old oak beam was found being the name of the mill owner and mill-wright who erected that mill, and dated in the year 1712. The mill stones mill which contained altogether 7 pr of stones is now being used for ware housing purposes. Roller mill is driven by a compound tandem type steam engine. Messers Marriage also have the Broomfield mill, the Bishop Hall Mills and Croxton water mill, all three being stone mills. It was only when Messers Marriage observed that the flour made by the roller process was competing with them successfully that they decided to replace the 7pr of mill stones at Moulsham mill by a roller plant.

+++++

1548-1678 chelmsford deeds inc watermill ??? very interesting details of mill [D/DM T28,33] {checked }



## Water mills along the Rivers Wid, Can and Roxwell Brook



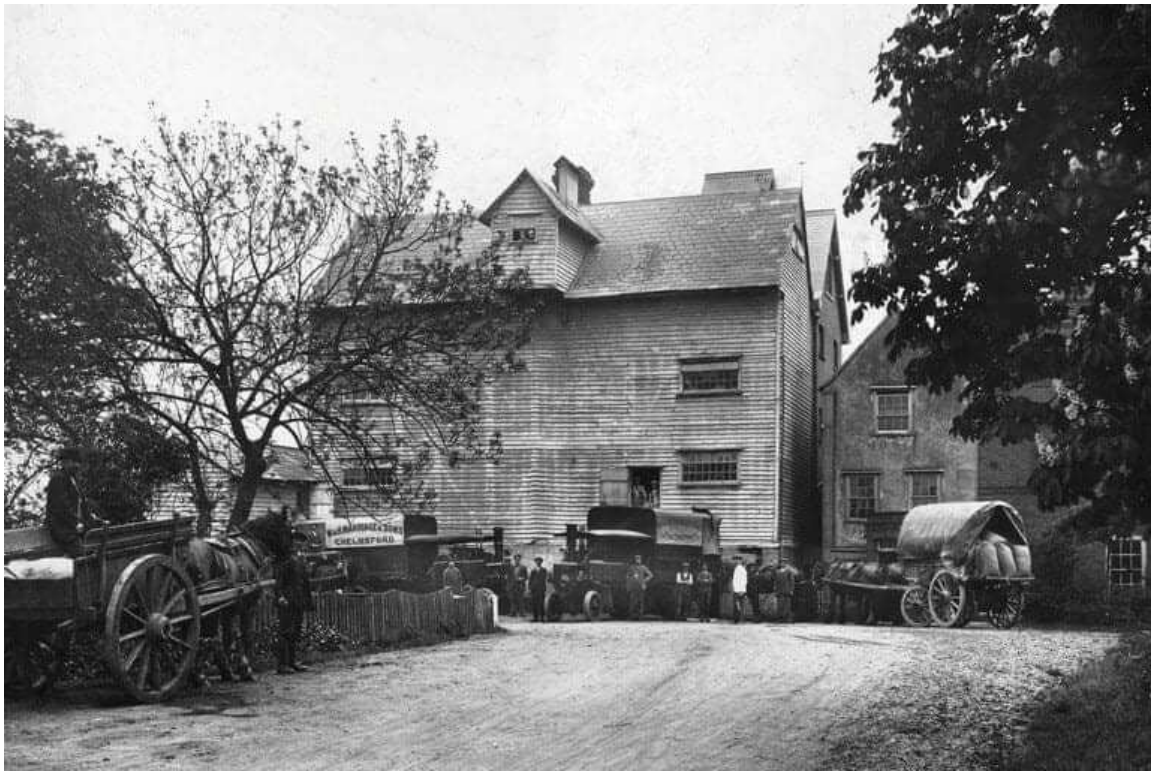
Moulsham mill. 6 inch O.S map

Following construction of a flood prevention scheme for the centre of Chelmsford the mill stream has been filled in and is now covered by car parking.

The rivers Can and Chelmer now united upstream of an automatic sluice.



## Water mills along the Rivers Wid, Can and Roxwell Brook





## Water mills along the Rivers Wid, Can and Roxwell Brook



## Water mills along the Rivers Wid, Can and Roxwell Brook



Spillway Moulsham mill. Waters of the river Can discharging into the river Chelmer.

## Water mills along the Rivers Wid, Can and Roxwell Brook

### ROXWELL BROOK

#### ROXWELL MILL

##### Map refs:

A & C 1775

1865 [D/DGe P58/2]

1666 D/DXa 21

1805 Q/RHi 3/48 wind mill & water mill

1661 {?} Tye Hall shown moated with a pond called mill pond and field called mill lay also shows mill on river.

Manor messuage or farm called Tye Hall together with a water mill belonging to the manor

2nd Jan 35 Eliz, 1593-4. [D/DSx 350]

20 Feb 36 Eliz ,1593-4, D/DSx 351

39 Eliz D/DSx 353

1635 D/DSx 355

Manor of Writtle -exemplification of final concord. 1780. [D/DGe 191, 192] George Cornish to Thomas Cooch and wife Elizabeth. one messuage one windmill one water mill one barn one stable one orchard one acre of land one acre of pasture in Roxwell.

Chelmsford Chronicle 21/7/1780 mill auctioned by G Cornish- overshot watermill with 2 pr French stones & 2 bolters.

R.E.F.I No.97894-1786. Joseph Cooch miller windmill and watermill, timber built and tiled.

R.E.F.I. No. 185722-1801 Robert Marriage miller & mealman

R.E.F.I No.191998-1802 George Jostling miller & mealman

Essex Standard 11/1/1850 wind & water mill for sale water mill- 2 pr stones.

Chelmsford Chronicle 6/7/1866 & 21/9/1866 wind & watermills for sale.

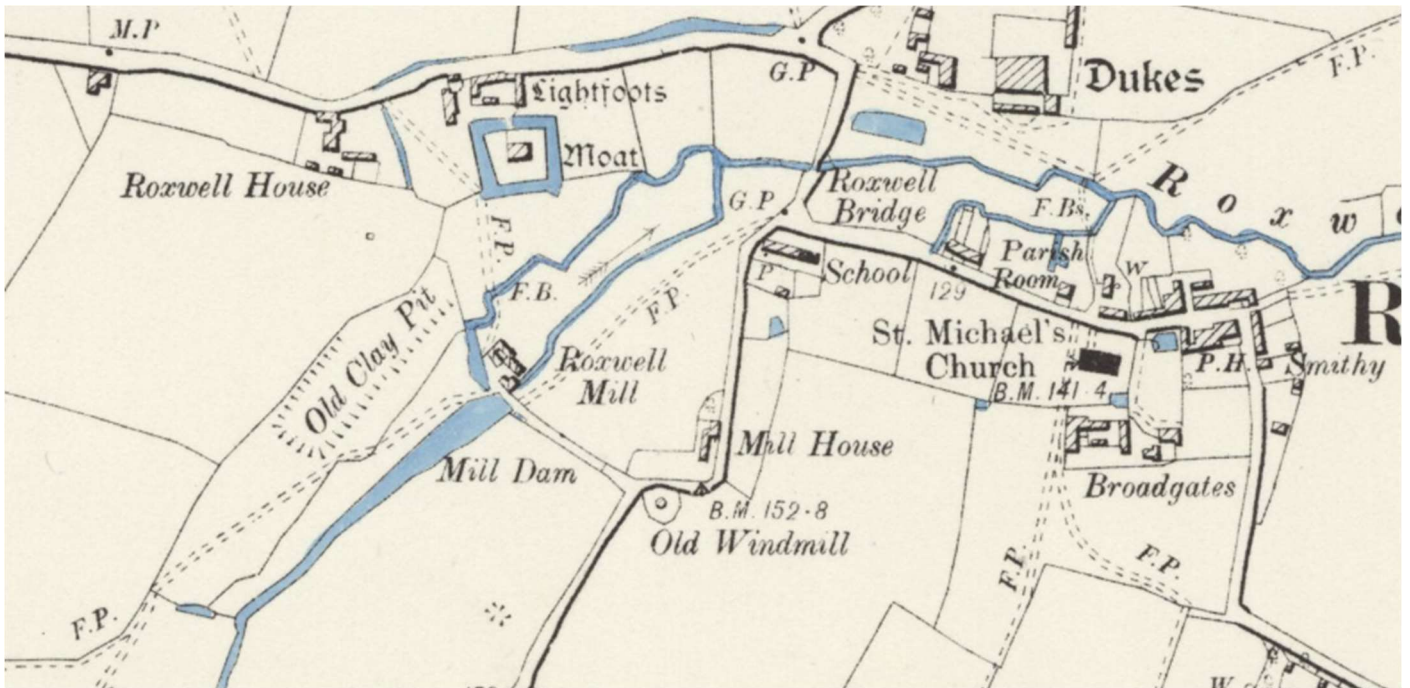
The Miller--1/4/1904 report the explosion of steam mill boiler-mill had 3pr stones

Water mill worked by Sheppard Ray until his death in 1914.

The mill was converted into a house around 1950



## Water mills along the Rivers Wid, Can and Roxwell Brook



Roxwell wind and water mills





## Water mills along the Rivers Wid, Can and Roxwell Brook





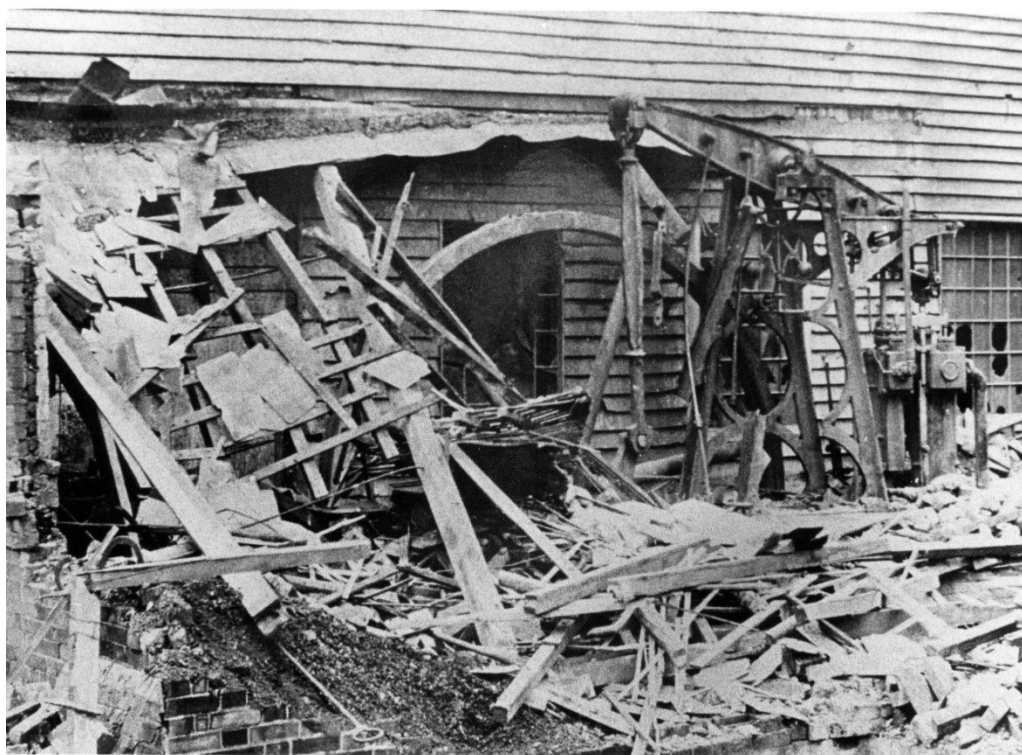
## Water mills along the Rivers Wid, Can and Roxwell Brook



## Water mills along the Rivers Wid, Can and Roxwell Brook



On 5<sup>th</sup> February 1901 the steam boiler exploded destroying part of the mill. The incident was the subject of a Board of Trade inquiry held in Chelmsford.



## Water mills along the Rivers Wid, Can and Roxwell Brook

### BOILER EXPLOSION NEAR CHELMSFORD.

A FORMAL investigation has been conducted at the Shire Hall, Chelmsford, by the Board of Trade, with regard to the cause of a boiler explosion which occurred on February 5th, at the Roxwell Corn Mill, Roxwell, owned by Mr. E. S. Ray. The Commissioners were Mr. Howard Smith, barrister-at-law, and Mr. G. Fullerton Bell. Mr. K. E. K. Gough appeared for the Board of Trade, and Mr. Suthery, solicitor, for Messrs. Coleman and Morton, engineers, Chelmsford, who were interested in the case, having made repairs to the boiler. In opening the proceedings, Mr. Gough said that the boiler was of the single-flued or Cornish type, 12 ft. 2 in. in length by 4 ft. 6 in. in diameter, no information could be obtained as to the name of the maker or the date, but it was purchased with the Roxwell Mills in 1868, by the father of the present occupier, Mr. E. S. Ray. It was only used occasionally when the adjoining stream was too low to drive the water-wheel. In 1885 the boiler was taken to Messrs. Coleman and Morton's works at Chelmsford, and a new steel furnace tube was put into it. The same firm in July, 1899, cleaned the boiler out and put in a new fusible plug, afterwards applying the hydraulic test to 70 lb. pressure, twice the pressure to which it was presumed the boiler was ordinarily worked. On January 27 last the furnace tube leaked, and Mr. Ray communicated with Messrs. Coleman and Morton, who sent over a boiler-maker to effect repairs. The boiler-maker, it was said, then told Mr. Ray that all the brickwork ought to be removed and the boiler thoroughly examined; but being busy at the time, Mr. Ray said he wished to run it a little longer, and therefore did so. On Wednesday, February 5th, the boiler exploded, the bottom plate of the middle ring of the shell ripping longitudinally, and being torn away close to its longitudinal seams and circumferentially at one side through the solid plate, and at the other side partly through the solid plate and rivet holes at the seam, leaving an opening measuring about 7ft. in length by 2 ft. in width. The steam and water rushing from the orifice thus made, wrecked the walls of the engine and boiler- house, and scattered the brickwork of the external flues. The boiler itself was carried 60 ft. into a road, striking the mill in its flight, many of the windows being broken. Mr. Ray, the owner, who was attending the boiler at the time, was severely scalded and otherwise injured. The boiler had been examined by an engineer-surveyor to the Board of Trade, and the cause of the explosion was found to be wasting of the plates through corrosion.

Mr. Gough then called a number of witnesses, among them being Mr. South, engineer-surveyor to the Board of Trade, who stated that the plate at the bottom of the shell where it had rent had thinned away through corrosion, due to dampness arising from the seating. The plate at that part was only 1/32 in. in thickness. the evidence of the other witnesses need not here be reproduced, inasmuch as the substance of the greater part is included in the lengthy summing up of the proceedings by the presiding Commissioner,

Mr. Howard Smith. At the close of the taking of evidence Mr. Gough submitted a list of questions to the Court and requested judgment thereon. The main question was whether the explosion was due to the neglect of the owner of the boiler, Mr. Ray, or to the neglect of the boiler-maker who had examined the boiler, and whether Messrs. Coleman and Morton, the employers of the boiler-maker, were responsible for such neglect.

Mr. Suthery addressed the Court on behalf of Messrs. Coleman and Morton, and contended that when their workman, Charles Potter, told Mr. Ray, as he had done, that he might work the boiler at a pressure of 20 lb. or 25lb. per square inch, it was merely by way of conversation for which his clients could not be held responsible. On the two occasions on which Potter had been sent to the boiler he did precisely what he was instructed to do, and if he chose to give voluntary ad vice, sound or unsound, that, Mr. Suthery said, was outside the scope of his authority.

Mr. Ray, addressing the Court in his own defence, said that, knowing very little about the boiler himself, he consulted Messrs. Coleman and Morton with regard to it, so as to be on the safe side. He felt that when they attended to the boiler in July, 1899, they had made a thorough examination of it, and so had put him on a firm footing. He sent to

## Water mills along the Rivers Wid, Can and Roxwell Brook

them because he wanted to have the boiler safe, and when it stood successfully the test of 70 lb. he thought it was safe enough for anything. In January last he saw a little leakage at the back of the furnace, and again sent for Messrs. Coleman and Morton, and their man, Potter after doing some repairs, advised him to have the boiler thoroughly examined, as it was corroding a good deal. He (Mr. Ray) said as he was very busy at the time, he would like to use it a little longer before doing that, and Potter replied that he must use it for as short a time as possible, and at as low a pressure as possible, mentioning 20 lb. or 30 lb. Apart from the personal injury he had sustained, Mr. Ray said he estimated the damage done to his property by the explosion at £350.

Messrs. Coleman and Morton's bill to Mr. Ray for 1899 mentioned "journey and time examining and cleaning boiler," &c., the total amount of the charges being £4. 10s. Referring to this account, Mr. Howard Smith commented upon the use of the word "examining" as applied to the boiler. Mr. Coleman replied that the word was perhaps a wrong one to use in the account. He denied that his firm had ever received instructions to really examine the boiler. They could not make a thorough examination for the amount named, nor could they have done so in this case without taking the brickwork down. Mr. Gough, replying on behalf of the Board of Trade, commented upon the action of Messrs. Coleman and Morton's man, Potter, and referred to the test of the boiler he had made in 1889, to a pressure of 70 lb., as having been made without sufficient data. Potter admitted that when he was sent to the boiler the second time he saw that the soot taken from the flues was damp but he took no steps to ascertain the source of that dampness. He (Mr. Gough) did not profess to be an engineer but he should have thought that it would have suggested a leakage from the boiler. There appeared to be at least some justification for Mr. Ray continuing to work the boiler, having regard to the fact that the pressure at which it might be worked had been named to him by a competent man, or at least by one sent out by his employers as a competent man.

Mr Howard Smith pointed out that Mr. Suthery contended that Potter was only sent to the mill to do certain repairs, and that the advice which he afterwards gave was outside the scope of his authority.

Mr Gough replied that this was true, but could it be urged that when the fact was brought to Mr. Coleman's knowledge that Potter had been to Mr. Ray's and had found the boiler in the bad condition described, no information had been sent to Mr. Ray by Messrs. Coleman and Morton?

Mr. Howard Smith said that at present he thought Potter was acting within the scope of his authority, but it was a point of law which he would have to consider. Mr. Coleman said that the principal part of the work charged for was not by any means the examination of the boiler. There were repairs made and the boiler was then tested by hydraulic pressure. He thought the use of the word "examining," in the account, was wrong.

Mr. Howard Smith then gave judgement. He dealt very ably and at great length with the evidence which had been given, and traced the history of the boiler up to the day of the explosion, together with all the various details of its construction and working. The owner, Mr. Ray, who had given evidence, had had no mechanical training, but he had seen his father work the boiler and engine, and from what he had seen he worked them himself. According to his statement, about July, 1899, he requested Messrs. Coleman and Morton to examine the boiler for him. Mr. Coleman in his evidence had told the Court that he received no instructions to examine the boiler in the sense of seeing that it was in good condition; but that he understood his instructions to be to see what repairs were necessary and to affect such repairs. Accordingly, Charles Potter, who had had 26 years' experience in boiler repairing, and had been employed by Messrs. Coleman and Morton for two years, received instructions from the foreman to go to Roxwell Mills, as it was thought there was a leakage at the flange of the feed pipe. Potter, and others with him, cleaned the boiler out and put in a fusible plug. Potter said the boiler then looked in very fair condition, and the thickness of the plate where he bored a hole for the insertion of the plug was 5/16th of an inch. No brickwork was taken down from the shell so that he could not make a real examination of the boiler. He subsequently applied a coldwater test to a pressure of 70



## Water mills along the Rivers Wid, Can and Roxwell Brook

lb., or twice the presumed ordinary working pressure. The account for this work as rendered by Messrs. Coleman and Morton read "journey and time examining and cleaning boiler &c." The question was, what would an ordinary person think from the conduct of Potter at the boiler, and from the account afterwards sent in? The Commissioners, Mr. Howard Smith said, had come to the conclusion that such a person would suppose that the boiler had been examined in the sense of being thoroughly examined, although of course any one acquainted with such matters would have known that such was not the case. The Commissioners thought that Mr. Ray was justified, considering what he knew of the management and upkeep of boilers, in believing that the boiler was examined and was in safe condition, especially as he had stated in his evidence that his object in going to Messrs. Coleman and Morton was to get the boiler examined. In January, 1901, there was a leakage in the furnace tube, and Messrs. Coleman and Morton, who were again called in sent Potter, who removed the defective rivets, caulked the plates that were sprung, and put in a new fusible plug. The boiler had been short of water, and Mr. Ray required if much damage had been done, and Potter replied in the negative. Potter then noticed damp in the soot taken from the flues. On taking out some bricks near the blow-off tap where he thought leakage would be found, he ascertained that there was corrosion going on, and he told Mr. Ray that the boiler was getting into a bad state. and that the sooner he had it examined the better. Mr. Ray, however, wished to work it a little longer, and Potter informed him that a pressure of 30 lb. to 35 lb., at which it had been working, was too much, and that it should not exceed 20 lb. or 25 lb. at the utmost. Potter moved the weight on the lever, thinking the valve would blow-off at 20 lb., and then left. He never inquired from Mr. Ray as to the age of the boiler, a question the Commissioners were rather surprised he did not put. On February 5th, the fire was lighted, and soon afterwards the steam gauge registered 28 lb., but the safety valve did not blow off. Some little time after this the boiler exploded, with the serious results laid before the Court. The boiler was subsequently examined by Mr. South on behalf of the Board of Trade, and he found that the explosion was due to the wasting of the bottom plate of the shell for about 2 ft. circumferentially, through external corrosion caused by dampness. The plate torn from the shell, and which was found among the debris in two pieces, was about 1/32 in. thick at the thinnest part, and Mr. South was of opinion that it was of even less thickness at the original line of fracture. The boiler was unable to stand any useful pressure at all, and burst from sheer weakness through the wasting of the shell plates externally.

In answer to questions put by the Board of Trade, Mr. Howard Smith said the Commissioners found that no specific instructions were given by Mr. Ray to Messrs. Coleman and Morton, and that he was justified in thinking that the boiler was thoroughly examined by their man in July, 1899. But the boiler was certainly not that the boiler was thoroughly examined by their man in July, 1899. But the boiler was certainly not thoroughly examined on that or the subsequent occasion. Neither was it properly tested by hydraulic pressure, because Potter, not knowing the working pressure or the age of the boiler had no reliable data to go upon. He was not justified in giving assent to the boiler being worked at 25 lb. pressure. Mr. Ray did not take proper precautions to cause the boiler to be periodically examined by a competent person, but he was justified in working it after the information given him by Potter. Proper measures were not taken to ensure the boiler being worked under safe conditions. The explosion was not caused by the neglect of Mr. Ray, but by the neglect of Charles Potter, who had behaved in a most negligent manner. He was sent in January last to see to a leakage in the furnace, and this he remedied, and he then found the boiler to be much corroded. As the representative of a competent firm, he ought to have told Mr. Ray that the boiler was not safe; but instead of this, although he advised an early examination, he said the boiler could work at 20 lb. or 25 lb. for a short time. What right had he to say that, seeing that the boiler was not fit for any pressure? With regard to Mr. Suthery's contention the Commissioners considered that Potter was acting within the scope of his authority when he gave his opinion as to the condition of the boiler and that what he did was not outside the ordinary work of an engineer. Therefore, having found him negligent, they must find Messrs Coleman and Morton responsible for their servant's neglect. The Commissioners did this with reluctance, because they thought Potter had not wittingly been guilty of negligence, and also because Messrs. Coleman and Morton were a firm of engineers of experience and repute.

## Water mills along the Rivers Wid, Can and Roxwell Brook

On this finding of the Court, Mr. Gough asked that Messrs. Coleman and Morton should be ordered to pay a part of the cost of the investigation. The total expense would be about £60.

Mr. Suthery urged that no such order should be made, as Potter had not done anything which he believed to be improper. He ought, of course, to have reported to his employers without expressing any opinion to Mr. Ray. It was just one of those cases where an unfortunate event had occurred without anyone being particularly responsible.

Mr. Coleman, in reply to Mr. Howard Smith, said that Potter's wages were 26s. a week, That showed they never intended him to "examine the boiler, although wages were very much lower in that locality than in London.

Mr. Howard Smith said that some order must be made, but it should be as light as possible. He thought that Messrs. Coleman and Morton should pay to the Board of Trade the sum of £10. He was sorry to make such an order, but it would be of no use to make any order against Potter.

Mr. Suthery said he agreed with the judgment, the Court having found Potter guilty of negligence, but, with all deference he asked the Commissioners to grant a case on the point as to whether employers were bound by the voluntary advice given by their servants.

Mr. Howard Smith declined to do this, and said he must leave Mr. Suthery to obtain a writ of mandamus if he wanted a case.

The proceedings then terminated.

(From a report in Engineering Volume 72 pp527 Oct 11 1901)

## Water mills along the Rivers Wid, Can and Roxwell Brook

### WATER MILLS OF THE RIVER WID

#### INGATSTONE.

Ingatstone Hall.

Petre family papers. memorandum of the felling of oaken timber in Horsefrith Park and Highwood for the repair of the water mill. 1414-15. [D/DP M218] location of mill not identified.

Map of hall 1566 shows water courses constructed on the site shows buildings standing over a water course. [D/DPP1] also mention of a myll house.

An inventory of the Hall in 1600 inc--The mill house: containing two mill stones, with stabling within mill house, mentioned elsewhere in the document are two mill horses---this could have been a horse mill.

During the sixteenth century the Petre estates possessed several mills. These included water mills in Writtle and Margaretting; post windmills at Mill Green, Ingatstone and West Horndon. There were also horse mills at Ingatstone Hall and Thorndon Hall. It was the practise to let the mills on long leases.

Sir William Petre who had made his fortune in royal service, took in 1538, a forty year lease on the manor of Ingatstone from the abbey of Barking. He was able to purchase the manor in the following year from Henry VIII.

There is among the papers of Sir William a document apparently in his hand and dated 1555, on requirements for bringing of water to his house and for making of an over shot water mill. This new mill was to replace a horse mill, which was then to be rebuilt at Thorndon Hall. There is no indication of the intended location of the new mill, which must have been near Ingatstone Hall, possibly by damming a small stream that ran near the hall.

Note in Sir Wm Petres hand on requirements for bringing of water to house and for making of an over shot mill with reference to plan of mill made by 'Flemmyng' (the tenant) 1555. [D/DP L36/1]

"For the making of my overshot mill

Fyrst a hedd to be well mad on the northsid wher the pale standeth which hedd must conteyn cx yardes or more as the ground shall require in lenght est and west. The same hedd to be in breadth and thycktnes xvij foot in the bottome and xij foot in the topp and att thatt hedd a myll to be placed.

Item ther must be one other hedd mad on the west side conteyning in length ccc yardes which hedd shall conteyn in the sides xv foot in the bottom and xij in the topp.

Item on the west sid of this west hedd ther must be a damme or greatt dich cast for conveyaunc away of the water which must be as long the sayd west hedd and the same damme or dych shall conteyn in breadth at the sowth end xij foot in the bottom and in the topp xvj foot in the bottom and xx foot in the topp the depnes to be as the grownd will require and so as the may allwayes conteyn water.

Att the north end of the sayd damme or dich ther must be a payre of fludd gates for the stay of the water, a grat and wayre for the stay of the ffysshe; and att the sowt end ther must be also a grat for keping in of the ffyssh.

The sowth hedd must be mad in length est and west lxxxij yards or more as the ground shall require. The thycknes or breadth of this hedd to be as the north hedd and in this hedd must be a fludgat and a grat and

## Water mills along the Rivers Wid, Can and Roxwell Brook

on the sowth sid of the sowth hedd ther must be a damme or dych for the conveyaunce of the water of the bradness and largenes of th other damme on the west.

Ther must be also beyond the north hedd one great dych cast from the wear to be mad att the end of the damme ther to the Ryver sufytien for conveyaunc away of the water att all tymes.

Att the myll ther must be a bolt or sluse mad for letting out all of the water of the myll ponde as often as I shall think good.

The myll pond shall bear water att the north end viij foot and att the sowt end iiij foote att the lest.

I must fynd Tymber nough for the said myll fludd gates grates and wearr and the same cast to be caryed to the place

I must also fynd vijm yen nals

Item thatt all the trees growing within the compass of this work shall be felled att his charges to be occupied ther.

Item thatt the old ryver shall be purged for rootes and biushes growing within the compass of this worke.

Item for a swannes nest to be mad within this pond.

Item this bargayn being fynished and the mill going the said Flemmyng shall tak down my horse mill att Ingatestone and the same amend and sett upp ageyn att Thorndon hall.

For the well doing of all which premisses the sayd Flemmyng shall have one hundreth powndes wher of xx li payed in hand, and for the said c li the sayd Flemmyng doth covenawnt to mak and perfectly finissh all and singular the premisses and the same upholde to be well done in all thinges according to a plat drawn by the said Flemmyng remayning with me.

Item thatt is agreed thatt all the heddes both on the north west and sowth sid shall be in hight att lest ij foot when it shall be settled more high then the water when it shall most over flow."

Why the horse mill was to be moved from Ingatestone to Thorndon is not clear since Thorndon was at this time owned by the Mordaunt family. However it seems that the horse mill remined for a map, dated 1566, of water courses constructed on the site of Ingatestone Hall shows buildings standing over a water course and also mention a myll house. An inventory of Ingatestone Hall taken in 1600 included "the mill house: containing two mill stones, with stabling within millhouse". Mentioned elsewhere within the document are two mill horses.

Sir William Petre died in 1572 and was succeeded by his son John Petre. Sir William's widow, Anne lady Petre, was to hold Ingatestone for the rest of her life. John Petre therefore required his own house and in 1573 purchased the manor of West Horndon from Lord Mordaunt and began to remodel the mansion house. Around 1575 John Petre moved to Thorndon Hall, which became the family seat for over three hundred years, although the Petre's retained Ingatestone Hall.

Sometime during 1580 a decision was made to build a water mill at Thorndon Hall either to replace or supplement an existing horse mill. It seems probable that although the overshot mill was never built at Ingatestone the plans for replacing the horse with water power was transferred from Ingatestone to Thorndon Hall. Interestingly both sites required the building of a swan's nest.

## Water mills along the Rivers Wid, Can and Roxwell Brook

### INGATSTONE PARISH

Ingatstone & the Essex Great Road, E E Wilde, 1913.

Gives some possible mill sites identified by Miller Cristy::

page 38:: mention of a possible mill dam in grounds of St Leonards, which is thought to be a possible site for Gingattestone Priory. page 42 ::: notes that there are remains of an old mill dam at the back of Ingatstone Grange.

page 282:: Furze Hall. Large pond in field called Burrins thought to possible be a mill pond, and feed by two excellent springs which never fail. In 1870 a part of the bank was excavated and some old earthen ware hand-made pipes were found. pond with upper and lower halves 4-6 ft deep divided by a shallow bar.

page 289 ::: The Grange in grounds behind the house traces of what was thought to be a dam for a mill, small stream of water still flowed. (the Grange was called Little Phillips.- so marked on A & C )

Thomas Berners who died in 1561 possed of the manor and advowson of Fryerning, 20 meeuages, 3 granges, 4 mills, 5 woods, 20 cottages, 200 acres of arable land, 300 acres of meadow land, 400 of pasture, 400 of woods and underwood, and 40s. rent, with the appurtenances in Ingatstone, Gyng Fryerne and Ging Hospital. [Inquis.Eliz.3]

### MARGARETTING

#### FRYSTLING MILL

Manor of Fristling Hall. Frystlings mill

Manor of Fristling hall 1271-1281 amercement of miller for failing to mill lords corn. [D/DPM715]

C1340 grant of rent of mill to Blackmore Priory. [D/DPM1411]

1492-94 annual payment of 2 shillings is recorded from the Lord of Fristling Hall for running water through Margetting demesne to the mill. [D/DPM632]

C1590 rebuilding of mill. [D/DP A79] Accounts of monies laid out 'abought the new byldynge and makynge of Thryslynge [Fristling] Mylle' (Petre family records)

Six-inch OS map revised 1895. Shows Hopes's Lane leading from Margaretting Tye crossing the Roding at Hope's Bridge (foot bridge). Near the bridge are marked Mill Hole and Bull's Hole on the Roding.



## Water mills along the Rivers Wid, Can and Roxwell Brook

### WIDFORD

#### HYLANDS ESTATE MILL

A small 19th century turbine mill that was part of the Hylands estate until 1920 when it was offer for sale and described as having one pair of 3ft stones, 1 disintegrator, 1 crusher, 1 cake breaker and one grind stone, all powered by a 2½hp turbine. The water level was controlled by two sluices, one up stream of the mill that led water round to the east of the mill and another guillotine gate that controlled the water past the mill, water entered the turbine through a grill up stream of the gate and discharged out of the building below.

Mill not shown on map of Hylands estate of 1853 and was possibly built at the same time as the new water mill at Writtle

mill not marked on 1st ed 25• OS map (1874)

mill marked on 2nd ed 25• OS map (1896)

1924 sale part water mill Widford [D/F33/8]

The building is now a house.



6 inch O.S map

## Water mills along the Rivers Wid, Can and Roxwell Brook



Hylands Mill, guillotine gate with turbine water intake grill.

## Water mills along the Rivers Wid, Can and Roxwell Brook



## Water mills along the Rivers Wid, Can and Roxwell Brook

### WRITTLE

*Writelam* (Writtle)

In the lands of the King, (held before by Harold), then one mill, now two. [24,1]

### WRITTLE WIND AND WATER MILLS

Map reffs

Chapman and Andre map of Essex 1777. Only post windmill with a bridge over the river, at site of later brick water mill erected, is shown.

On a map of Hylands estate 1853 only the wind mill is shown.  
shown on 2nd 25 • OS map 1895.

1839 D/CT 414 wind mill owned by New College Oxford.

refs:

William of Wykeham, Bishop of Winchester, founder of New College Oxford in 1399 made over the Rectory to his college. The rectory was also the manor of Roman Fee, having once belonged to the Hospital of the Holy Ghost in Rome and Writtle mill once called Roman mill. [Morant V2, pp69]

1388-89. [D/DP M195]

Plea of debt for rent of a water-mill and wind-mill claimed by Nich de Acula, majister of Writtle church, against John Lutt, weaver (plea found to be unjust)

1397-98. [D/DP M200]

Wm Mellere, miller of the mill of the rector, was amerced 4d for appropriating part of the highway next to the said water mill.

1399. [D/DP M202]

John Newille to fell timber for repair of the Lady's mill and to remake le furbay, letrowe and all the works operated by water as well as within as without the mill, and the water wheel and all other work pertaining to the mill, except le hynd bay, for 100 shillings.

Court rolls of New College: [T/A 316/837-904] 1406-1720

In 1406 New College, Oxford let water & wind mills to John Turner for 14 years. [T/A 316-839]

1515 John Pynchow wind mill latly rebuilt by John leased for 20years.

1591; Rose Pinchon leased mill for 20 years at £8. 8s 4d part in kind [T/A 3316-841]

1599 Rose Pinchon (T/A 316-844]

Stuff & implements at Writtle mill: 1599 D/PP E2/7  
at West Horndon water mill

1595 D/PP E2/13

dito 1592 D/PP E2/18

1602; 1606; 1610; 1614: Edward Pinchon water and wind mill for 20y ears @ £9. 0s 8d part in kind. [T/A 316/845-848]

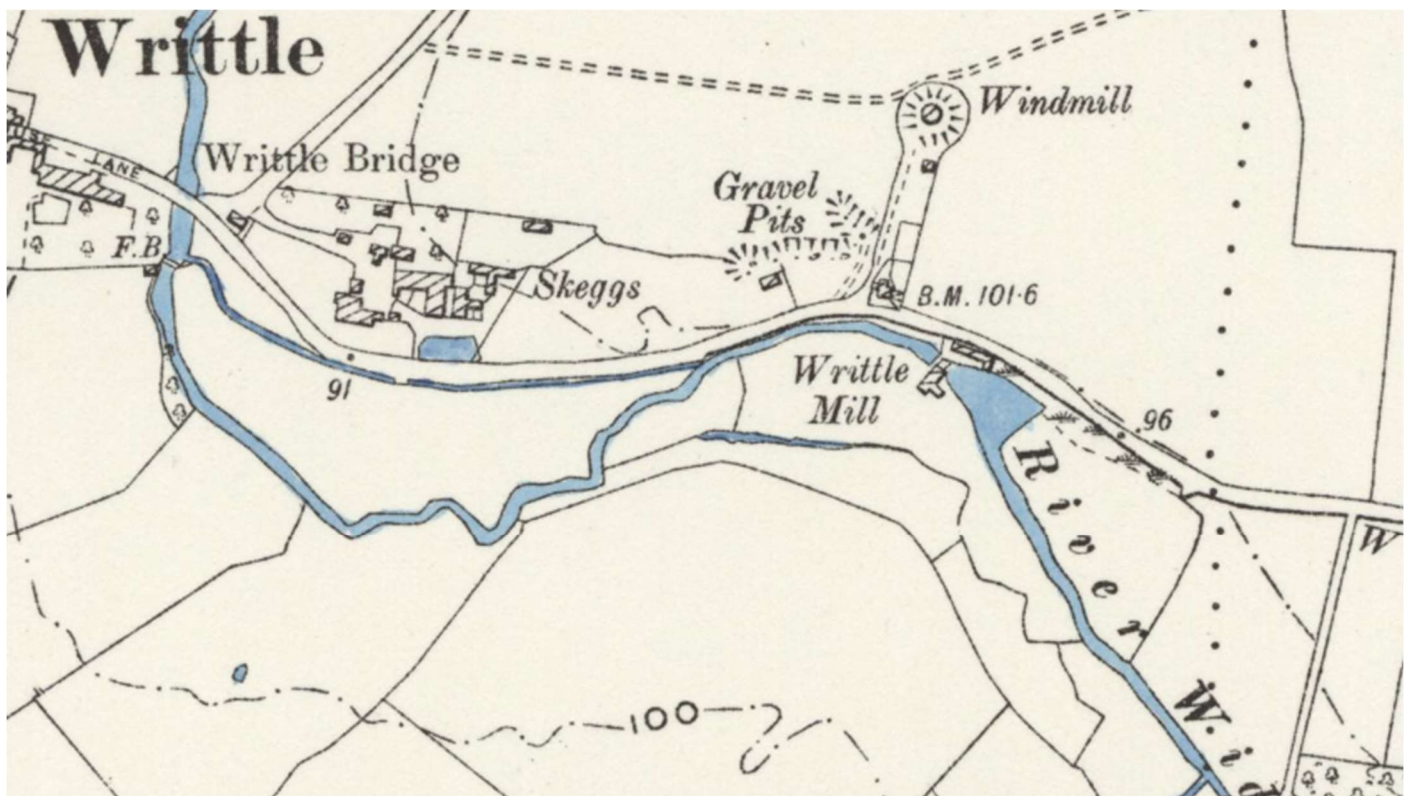
## Water mills along the Rivers Wid, Can and Roxwell Brook

The water mill site seems to have gone by about 1715. The wind mill was destroyed by fire about this time as papers for 1703-10 refer to leasing and rebuilding of and litigation over Writtle mill burnt down before 1703. [D/DP L41/89]

A new mill building was erected about 1870 and was part of the Hylands estate until it was sold in 1920 to Herbert South who was the tenant of the mill. The mill suffered damage during the second world war during an air raid and the north end was rebuilt from the ground floor. The mill had an outside 12ft diameter Poncelet wheel on the north end of the building, this drove a 10ft dia pit wheel geared to a horizontal main shaft running the full length of the ground floor. Two pairs of stones were on the ground floor with a third pair in the 2nd floor driven by belting.

The mill stream has been filled in with the river diverted back to its natural course. The building subsequently used as a builder's store.

In 1996 mill demolished following a fire. The site is now occupied by a new built house.



Writtle mills. 6 inch O.S map

The mill stream is now filled in and the river diverted to its original course.



## Water mills along the Rivers Wid, Can and Roxwell Brook



Writtle mill viewed from above and below mill dam



## Water mills along the Rivers Wid, Can and Roxwell Brook



Writtle mill, when used as builders store, 1970's.





## Water mills along the Rivers Wid, Can and Roxwell Brook



Undershot water wheel, Writtle Mill.

## Water mills along the Rivers Wid, Can and Roxwell Brook

### Manor of Writtle

Court Rolls of the Manor of Writtle mention several mills other than those identified as Writtle Mill or Much Mill

#### Peypyrgemelle

A survey of the demesne meadows in Writtle in 1328 in the hands of John de Bohne included “at the - water mill in Pepyngho- 1 rood.” [The manor of Writtle. K. V. Newton *pp.*27]

1398-99. [D/DP M201] an order to enquire in to timber taken for “repaire of enclosurs of Mochilmelle and Peypyrgemelle”

Note : This may be Pengy Mill Chignall St James.

#### Pacchingmelle.

1405-06. [D/DP M209]

plea of agreement by John Friday, 'fuller' and John Fullere jun against John Herry atte Turgeys concerning the rebuilding and lease of a fulling mill called Pacchingmelle.

(NB: A John Freday, fuller, was one of the keepers of the torch light of Writtle church 1418-1419. [D/DP M223]

A John Fuller is mentioned in Gt Waltham in 1413. [D/DTu 57)

Note : (Patience Bridge Roxwell: Patchyng ford Bridges in 1570; name from family of Thomasle Paccher. Placenames of Essex- P. H. Reaney)

#### Stane Mill

C 1280: mention of riverlet running from the mill of la Stane to Corbregge.

1407-08 .[D/DP M211] John Mellaforde, miller at Stanemelle amerced 1d for taking toll with an unsealed dish and not by strict measure.

1411-12. [D/DP M215] Plea of dept by Rob Wright chaplain against John Melford melle for recovery of 10s 6d for the tithes of Stane mille for past 3½ years.

1557. Roxwell leases from New College, Oxford, mention a farm called `le stane' with appurtenances in Writtle and Roxwell. (T/A 316/577)

1605 (D/DSx/447). Demise for 100 years; at an annual rent of 1d. Sir Richard Weston, Kt., to Barth. Lowgar, Yeoman, both of Roxwell. A parcel of pasture with a tenement and a water mill called Stanemill (cont. 3r.), abutting on the highway from [-] inges to Chelmsford on N., the river on S., the highway from Roxwell to Chelmsford on E., and Motts garden on W.

Note : The water mill may have stood near Blackwall bridge. Roxwell

## Water mills along the Rivers Wid, Can and Roxwell Brook

### The Squit mill or Little mill.

Documents relating to the Manor of Writtle mention a Squit mill or Little mill.

(1227) Feet of Fines. v1/75/171 = 2 mills in Writtele 1 called the Little mill

Sara daughter of Ralph, dem. Gilbert de Reynes, ten. 2 vergates except 8 acres of land and two mills with appurts in Writtele. Recog of grand assize. Dem. Acknowledge the right of ten., who granted to her one of the said mills, to wit that which is called the little mill; to hold of him by the yearly rent of 18d. for all the services and extraction

1588 [Q/CP2 ff 40] Squit moll Bridge in Writtle to be made by the owner of Squit mole mead Robert Wood of Chelmsford owner of the said mill.

1657 [Q/CP3 ff 183/187

1656 {Q/CP 3 ff 179] a bridge in Writtle called Squit mill bridge. Mathew Gaddon of Little Baddow & Abram Bousoy of Chignall St James presented for not repairing bridge ( a roll entry reff to a horse & foot bridge in the highway from Chelmsford to Ongar--Squit mill bridge)

1665 [Q/SR 366/34]. A bridge in Writtle leading from chelmsford to Roxwell (to be in decay and to be repaired by the owner of "Squit(?me)il Meade", viz. Matth. radd gent.)

#### Note:

The mill may have stood near Warren Bridge, either on the river Can or on the stream that runs from the manor house moat

The term *squit mill* can also be found with reference to mills at Bradwell Hall and Coggeshall. Both mills were powered from spring feed ponds.