The Mill at Tadcaster

The Domesday Book records that Tadcaster had two mills. There is no record of where these mills were or how they were powered.

The earliest record of a mill on the site is to be found on the 1611 Estate Map¹. This shows a water mill and a weir close to the present site.



Fig 1 - Extract from 1611 Estate Map

The mill is clearly depicted as having an undershot water wheel. It is difficult to determine the means of construction of the "Flu" though the map clearly shows two parallel obstructions to flow going across the river.

The 1613 survey of the manor refers to "Three water corn Mills at which the Tenants are bound to grind their Corn". There is no clue as to the position of the other two mills in this document. The only other mill shown on the 1611 map is a Post Mill which appears to be outside of the manor boundary at Toulston.

There are clearly problems in maintaining the weir as a letter from Samuel Popplewell to E Lascelles on 5th April 1758 says that the weather is too bad to do anything about the dam head and that there are 40 wagon loads of timber waiting at Tadcaster.³ The need for wood suggests that the weir is of wooden construction which may explain the brown lines on the 1611 "Flu".

The 1767 Jeffrey's map shows very little detail of Tadcaster but does show a windmill near to the site of the mill.

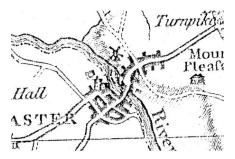


Fig 2 - 1767 Jeffrey's map showing Tadcaster

¹ Petworth House archives PHA3422

² Petworth House archives PHA3422

West Yorkshire Archive Service WYL250/SC/2/2/87

In 1773 the newspaper offered on rental Earl of Egremont's wind and water corn mill at Tadcaster, fishing in the Wharfe, and 'the Cloughs for making Flushes, whereby the Navigation of the said River is in great Measure commanded' ⁴

It is probable that Thomas Allenby (1730-1800) rented the mill from this date. He was born in Tadcaster and was a farmer.

Earl of Egremont had a survey of his estates undertaken in 1797⁵. By this date, Thomas Allenby's son Richard (1755-1812) was the tenant. This records the mill thus;

Richard Allenby. Tenant

Rent £122 - 0 -0

On lease for 23 years from Lady Day 1783

The Buildings consist of a very old messuage, brick and tiled, a stable under the same roof, stone and tiled - a large water corn mill (undershot), three floors of brick and tile, with five pair of stones, an oil mill in a separate building of stone and tile - another building brick and tiled, being drying kilns, with a granary, ill conditioned and in want of considerable repair. Also a cottage in two tenements, stone and tile - also detached a circular windmill of stone.

The contents and yearly value of the land are as follows-

	Α	R	Р	£	S	d
The mills, house, buildings, yard with orchard with the windmill	0	2	2 worth yearly	120	0	0
Mill, Mill Close, part of Windmill Field and Mill Green	10	0	0 meadows 40	20	0	0
Ings	6 =======	0	0 meadows 40 ===	12	0	0
	16	2	2	152	0	0

These premises are let to **Richard Allenby** for 30 years from Lady Day 1798 at the rent of £122 0 0 for the first 8 years and £180 0 0 - a year afterwards

Also

	А	ĸ	Р	£	S	a
Windmill Field (late Vickers)	3	0	0	6	0	0
Windmill Field (late Daniel)	3	0	0	6	0	0
	========	====	===			
	6	0	0	12	0	0

These premises are let to Richard Allenby from Lady Day 1798. from year to year at the rent of £12 0 0

The extension of the previous lease which ran from 1783 suggests that an earlier lease had been for 10 years from 1773 (when the mill was advertised for rent) to 1783.

A sketch of Tadcaster⁶ dated "about 1800" includes the weir, mill and the then Mill House. The weir is shown to include wooden posts and is labelled as breached in three separate places. This appears to link to the earlier letter of 1758 involving wood to repair the dam.

The sketch also shows the mill with at least one water wheel, this being on the side of the mill remote from the river. It is not apparent from the sketch where the "oil mill in a separate building of stone and tile" is situated.

The sketch also shows a wooden post-mill on ground above the mill. The 1797 survey refers to "detached a circular windmill of stone". Philippa Brooksbank's Diary

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⁴ Charles Hadfield – Canals of Yorkshire and North East England

⁵ Petworth House archives PHA 3076

⁶ A North Prospect of the Town and of River Wharf[e] as taken from the Windmill. By Robert Freer PHA 3385

1781-1832 records that she visited the new windmill. Philippa Brooksbank lived at Healaugh Manor, a short distance from the site of the windmill. In her diary for 1795 she says "Nov(ember) took a walk to see a windmill building". 1796 January 21st "walked with Husband and chrn (children) to see the windmill"

This confirms that the sketch of "about 1800" dates from 1795 or significantly earlier.



Fig 3 - A North Prospect of the Town and of River Wharf[e] as taken from the Windmill. By Robert Freer Thomas Allenby died on 20th April 1800.

Around 1807, the weir was rebuilt using stone. This is confirmed in 1860 when evidence was given to the Salmon Fisheries Commission that "Previous to year 1807 there was no impediment on the river to prevent the salmon getting up to the spawning bets. In Earl of Egremont's time however an alteration was made to the Tadcaster dam which prevented salmon passing this point."

In view of the survey of 1797 finding the mill to be in poor condition, it seems likely that work on the weir was contemporary with major work on the mill. The rent had been set for 8 years but was to rise significantly after that. Again, this is suggesting an expected increase in the value of the mill 1806.

Richard Allenby died 29th June 1812. It is assumed that his son John Allenby (1778-1855) took over either prior to or on this date.

In 1837, Earl of Egremont died and his estate passed to George Wyndham as the 4th Earl.

The 1839 list "Tadcaster Cottagers and their rents" refers to rent paid by John Allenby of £198 - 0 - 0 with a note "Old Rent the Notice very irregular"

The 1840 Tithe Awards list George Wyndham as owner of the Soke Mill and John Allenby as occupant.

The 1841 Census shows John Allenby as occupant of Mill House.

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 $^{^{7}}$ Tadcaster Cottagers and their rents, 1839 Petworth House Archive PHA1187

The 1844 Williams Directory of York says " 'a new corn & seed mill upon an extensive scale being built .. by John Allenby the proprietor'. A newspaper report report of January 1861 says " The mill was in very good condition, it was partly rebuilt twenty years ago,...." These point to significant work having been undertaken on the mill around 1840. The same newspaper report says "A conflagration of a like character took place on the same site, in the mill that was then occupied by My Allenby". This refers to a fire at the mill at some time whilst in the tenure of one of the Allenby's. It is possible that the work around 1840 was to restore the mill following this fire. Unfortunately no date is given and no newspaper reports of a fire around this time have been located.

The 1851 Census shows John Allenby as occupant of Mill House.

An advert in the Yorkshire Gazette in 1851 advertised the tenancy of the mill. In 1852 John Allenby died in a fall from a horse. The advert reappeared in 1873.

It seems likely that John Rishworth who had previously been a miller at Ackworth, moved to Tadcaster to take on the rental of the mill sometime after 1853. The newspaper report referred to earlier⁸ stated "... [the mill] had been in the occupation of Mr. Rishworth for the last five years...." This could mean he took up occupation as late as early 1856. Slater's 1855 Directory does not list any millers in Tadcaster.

In 1855 the Egremont estate in Tadcaster was sold to Lord Londesborough. No detailed sale documents have been located but the general sale agreement refers to the sale of "one thousand and forty three acres, two rods and thirty eight perches of land, little more or less, with the farm houses, corn and oil mills, cottages and buildings standing thereon and of one hundred and eighty messuages used as dwelling houses, public houses, shops and cottages situate in the town of Tadcaster." It later says "That in consequence of the existence of a large corn and oil mill on the said Estate and in consequence of the frequent expense necessary to maintain the annual value of so many Dwelling houses and cottages and on account of which expense the annual value of the houses etc are reckoned as a low number of years purchase. I am of the opinion that it is desirable for all parties interested under the will of the said George O'Brien Earl of Egremont that the said Estate should be sold."

The London Gazette of 12 October 1858 announced that the co-partnership of the Ackworth Mill between John Rishworth and John Jackson was dissolved. John Jackson took full responsibility for the Ackworth Mill.

York Herald (10/11/1860) reported a complaint to the Salmon Fisheries Commission Public Meeting in York that since 1807 (the construction date for the mill dam) few salmon were found upstream.

On 7 January 1861, newspaper reports⁸ record a major fire at the mill. The newspaper reports record that the mill had 12 pairs of stones in a building 30 yards in length and was 4 storeys high. It stated that the mill was water powered. The fire appears to have destroyed the mill.

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⁸ York Herald report 12th January 1861

⁹ Cluttons Sale of Tadcaster 24-3-1855 Petworth House archive PHA1188

The reports of the fire read as follows:

York Herald report 12th January 1861 (Event Monday 7th January 1861)

Great Fire at Tadcaster. Destruction of a Flour Mill

The inhabitants of the quiet little town of Tadcaster were thrown into a state of great consternation by the breaking out of a fire such has not been seen at that place for a great number of years, in the mill occupied by Mr. John Rishworth, which is situated on the left bank of the river Wharfe, and was about 200 yards above Tadcaster bridge. The mill and adjoining house occupied by Mr. Rishworth, offices and outbuildings, the whole of which occupy a large area, are the property of Lord Londesborough. The mill was in very good condition, it was partly rebuilt twenty years ago, we hear had been in the occupation of Mr. Rishworth for the last five years, during which period he had done a very extensive business, and the mill had latterly been kept going night and day. There were in it twelve pairs of stones, and the building, which would be at least thirty yards in length, and four stories high, contained some very valuable machinery, which was driven by water power obtained from the river Wharfe

Monday last was the day on which the catastrophe occurred that we are now about to narrate. On the afternoon of that day there was not the slightest indication of any impending danger, but shortly after five o'clock the fire broke out, whilst workmen were on the premises. It originated in the corn screens in the centre of the building, and from the large quantity of grain and wood in it, the work of destruction when once commenced extended with great rapidity. So rapid indeed were the flames in spreading that two boys in the employ of Mr. Rishworth, in order to save their lives, had to make their way, in the best manner possible, through the fire, and one of the men employed at the mill, being in the garret when the fire commenced, had no other means of escape but to slide down some chains at the outside of the mill. The fire bell was rang as soon as possible for the purpose of alarming the inhabitants and obtaining their aid, but even without the aid of the bell unfortunately the glare of the devouring element was so great as speedily to indicate to the whole surrounding neighbourhood the nature of the terrible accident which had occurred. A large crowd of persons, amounting to some thousands, soon collected on the spot, but the great want that was felt was not water, as that could be had in abundance from the river Wharfe, but engines that could be used to subdue the flames, which so presented a terrible aspect. As may be easily imagined, the greatest excitement was manifested, not merely on account of the ruin that was impending over the mill but from fear lest the house of Mr. Rishworth and his offices should share the same fate. These were the only buildings that were in danger, no others being near enough to render it probable that they would ignite except from burning materials which, after having been forced into the air, fell thickly around.

In the emergency, a neighbour had the presence of mind to send for a small engine belonging to H. Ramsden, Esq of Oxton Hall, about half a mile from Tadcaster, and on its arrival, and having been got into play, it was of great service in preventing the house getting on fire. The latter, it may be observed, stands only ten or a dozen yards to the north of the mill, the heat from which was so excessively intense that nothing could have saved the house had not this engine been used to keep the end of the mill cool. Another small engine from Grimston Park, belonging to Lord Londesborough, was also of service in preventing the spread of the fire, and it is only due to the inhabitants of Tadcaster to state that they rendered all the assistance they could to ave the property contained in the mill, in which there were, besides the machinery, a large quantity of wheat, pig and horse corn, flour, sacks and implements. A telegram was forwarded to York and Leeds for engines and firemen. The York firemen were about to sit down to their annual dinner at Mr. Hustwick's in Parliament-street, but of course they, along with Mr. Dent and Mr. T Taylor, their foreman, immediately proceeded to Tadcaster with two engines. They arrived there about seven o'clock in the evening, and in an hour after they were followed by three of the Leeds engines, but it was not deemed necessary to detain them, and the Leess engines consequently returned without having been brought into play. Most of the roof of the mill had fallen even before the arrival of the York engines, and although every exertion was used the work of destruction went on. The flames presented an awfully grand appearance, illuminating the country around, and the fire was seen eight miles off. During the conflagration two objects were kept in view, viz, the saving of as much of the property in the mill as was practicable under the circumstances, and preserving the machinery. The first object was fortunately partially carried out, 300 or 400 sacks of pig meal, bran, and sharps, having been removed to a place of safety, but we fear from the action of the fire upon the machinery that little of it will again be fit for use. In two or three hours from the commencement of the conflagration, the greater part of th mill may be said to have presented a complete wreck, but there was food for the flames for many hours longer. continued to burn with great intensity, and the firemen and those of the inhabitants who assisted them had to continue their exertions through the night. The morning light revealed a melancholy spectacle. Nothing was to be seen but a roofless building, paneless windows, charred and blackened timbers, from which hung numberless icicles, broken and bent machinery, scorched wheat and other grain scarcely fit for the pigs, and walls which, being left without the slightest support, threatened to fall upon the inquisitive spectator. It was not deemed safe for the York firemen to cease their labours until Tuesday at noon, when they returned to York, but the Grimston engine was kept on the premises, and was occasionally employed in throwing water upon the smouldering mass up to Wednesday afternoon. E Chadwick, Esq, of Grimston, the agent of Lord Londesborough, went to the scene of the conflagration about six o'clock, and remained there till midnight. The whole of the mill was gutted, but th drying kiln, situated at the South-East end, was saved chiefly owing to there being an internal iron door, which kept the fire from spreading to that part of the building. The slippery state of the ground rendered the occupation of the firemen anything but an agreeable one, and might have been the means of one of them, named Franks, losing his life, He slipped into a deep hole close by the mill adjoining the dam, but by taking hold of a piece of wood, he was enabled to keep himself from sinking until he was rescued from his perilous position. His limbs were frozen, and having been put to bed measures were used, under the direction of a surgeon, which ultimately restored him, and he was again able to resume his duties. No other accident occurred.

Several of the West-Riding constabulary, under the direction of Superintendant Parkin, of Tadcaster, were on the spot to keep order, and to take care of the property which had been saved from the fire. The conflagration arose entirely, no doubt, from accidental causes. Its origin is attributed to the friction of the machinery, and many similar fires have commenced in the corn screens.

The damage done amounts to £9,000, viz, £6,000 as respects to the mill and machinery, there being a stock of grain, &c, in the mill of the value of £3,000. If the premises had not been insured, Lord Londesborough would have been the loser to the extent of £6,000, and Mr Rishworth of £3,000, but inasmuch as both are insured in the Yorkshire office, in two-thirds of the amount, Lord Londesborough's loss will be £2,000, and Mr Rishworth's £1.000 from actual damage by the fire, but the latter will sustain a further loss until he can obtain suitable premises in which to carry on his business, of which, we hear, there is an early prospect. Since the direful calamity, a good deal of sympathy has been felt for him by his friends and neighbours.

A conflagration of a like character took place on the same site, in the mill that was then occupied by My Allenby, and it is very fortunate on this occasion that there was no wind, otherwise nothing could have saved the house and offices. It is nevertheless a singular fact that on Tuesday burnt grain was found scattered over the fields in the neighbourhood nearly a mile from the premises.

Bradford Observer Thursday January 10 1861

Destructive Fire at Tadcaster – An extensive and destructive fire occurred on Monday evening, in the large flour mill occupied by Mr Rishworth, at Tadcaster. Whilst the mill was in full operation, it was discovered that some of the woodwork had taken fire from the heat produced by the friction of some portions of the machinery. Every effort was made to subdue the flames without success; and ultimately fire engines from York and Leeds were telegraphed for. Those from the former place arrived about eight o'clock by which time the flames had made such progress that the roof had fallen in. The Leeds engines arrived about an hour later. The flames were not extinguished until Tuesday noon, when the whole mill had been thoroughly gutted, the only portion of the property being saved being a waterwheel and an adjoining maltkiln. At the time when the fire broke out the mill contained an immense quantity of grain, the greater part of which has been destroyed. The total damage is estimated at £6.000. The building was insured for some £4.000, in the Yorkshire and other offices.

An annex to a document¹⁰ held by Petworth House refers to a document in "Middle Office – Press E Drawer 11 – Bundle D" dated 2 April 1864 as "Plan and Estimate for rebuilding Tadcaster Mills". Unfortunately these do not seem to remain in existence.

The mill appears to have been rebuilt by 1864 with a steam engine. 11

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¹⁰ 1798 Origins and extent of Yorkshire estates inc1613 survey Petworth House Archive 3422

¹¹ John Rishworth Business Card dated 1864 with drawing of mill with chimney.

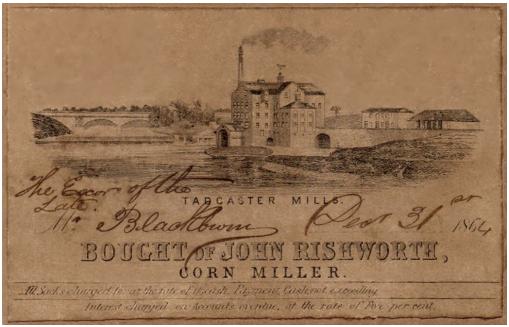


Fig 4 - John Rishworth Business Card dated December 1864

The drawing closely matches a photograph of the mill which is dated as being taken between 1865 and 1875.



Fig 5 - Part of photograph taken between 1865 and 1875

The Grimston Park estate sale catalogue of 1873 says the mill are in lease to Mr. J. A. Ingleby for a term of twenty- one years from the 6th of January, 1870. This suggests that J A Ingleby took over from John Rishworth around 1869 or early 1870. The 1871 Census shows John Ingleby in residence at Mill House and John Rishworth living in Wakefield.

London Gazette Dec 17 1872 announced that John Rishworth's partnership with John Booth.and Reuben Reynolds, relating to mills in Wakefield and Heckmondwyke had been dissolved.

In 1873 Lord Londesborough sold his estate, including all of his property in Tadcaster. In 1855, George Wyndham Ilive, became Lord of the Manor, and sold his Tadcaster estates to Albert Dennison who became the first Baron Londesborough. Lord Londesborough's son inherited the estates in 1860. Due to his love of

gambling, he lost Tadcaster "in a game of cards" resulting in the estate being auctioned in 1873.

The sales documents provide a wealth of information about the properties and who occupied them. One such property was the mill and Mill House. The mill was badly damaged or destroyed by fire in 1861 and was quickly rebuilt. The document refers to "newly erected" mill. This appears to be a near like-for-like rebuild, with a steam engine being added as part of the rebuild.

The information that appeared in the sales document appears below.



Fig 6 - Londesborough Sale Map

LOT 31.

THE TADCASTER MILLS, WITH Messuage, Land, Navigation Cloughs, &c.

These newly erected Mills, combining both water and steam power, are fitted with a 25-horse power condensing steam engine, with 4 ft. stroke, boiler, &c., complete; two powerful water wheels, one 16 ft. diameter and 7 ft. broad, the other 16 ft. 6 in. diameter and 12 ft. broad, driving twelve pairs of French stones and two pairs of grey stones, corn screen, flour dressing reels with best Swiss silk, Smith's patent corn screen, elevators, corn bins, hoppers, sack tackle, both external and internal, bean splitter, and every requisite and modern improvement in use for milling purposes, an inventory of which is appended.

The Property comprising this Lot, together with field, No. 273 in Lot 8 and Lot 33 are in lease to Mr. J. A. Ingleby for a term of twenty- one years from the 6th of January, 1870, terminable by the lessor or lessee at the expiration of the first seven or fourteen years, at the rent of £245 per annum for the mill, £90 per annum for the house, land, and navigation cloughs, and \in 15 per annum for the shop.

The Tenant pays Tithe Rent Charge and all rates and taxes, except Landlord's property tax, and also pays interest at the rate of £6 10s,. per cent per annum upon any sums that my be expended by the Landlord upon draining.

The Tenant maintains all in substantial repair; (reasonable wear and tear, the main walls, main timbers of the floors, and the roof of the mill excepted.)

The Game and Fish are reserved to the Landlord.

No. ON PLAI	N	OCCUPIER	DESCRIPTION.	CL	JLT	URE	QUANTITY.
416 A.		Willow Garth		0	2	6	
503	J A Ingleby	Wharfe Bank	Willows	0	1	6	
504	Ditto	Windmill Field	Grass	8	3	0	
505	Ditto	Mill Buildings,	Premises	0	3	15	
506	Ditto	House, Garden a	and Out-Offices	0	2	7	
508	Ditto	Windmill Field	Grass	5	2	29	
	Mrs. Brian	Cottage		0	0	1	

Mrs. Noble	Cottage	0	0	2
Empty	Cottage	0	0	1
Empty	Cottage	0	0	1
		16	2	28

Tithes payable to the Vicar are £013 8 per annum.

 Do. to A. Harris, Esq. ...
 £1 6 2

 Do. to Todd's Executors ...
 £0 11 1,

 Do. to A. Tindall ...
 £0 11 1,

The Apportioned Rents payable to the Purchaser of Lot 8 will be £18 10s. 6d. per annum, and to the Purchaser of Lot 33, £16 per annum

There is a fee farm rent of £1 2s., payable to the heirs of J. Tempest, out of the Mills.

INVENTORY OF MACHINERYAND OTHER APPARATUS, AS NOW FIXED IN AND ABOUT TADCASTER MILLS.,

STEAM ENGINE—Boiler, 25 ft. 6 ins, long, 7 ft. 3 ins. diameter, fitted with water gauge and steam pressure indicator, stop valve, feed valve, two safety valves, and blow-off cock, complete; Fire rake, clinker rake and fire poker, six spare grate bars, pair of movable Steps, out of engine-house on to boiler, three Box Screwkeys, five single-end screwkeys, one double-end screwkey, two rings for cylinder cover and. for lifting lid, hand-lifts for plates, and two ditto for slide-valve gland, a Condensing Steam Engine, 4 ft. stroke with 10-ton fly-wheel, compensating long-slide valve; cylinder and Air-pump, fitted with brass rings, cold-water pump and feed-pump, complete.

MILL DAM—LETTER A COMPARTMENT: Iron Water-grate, wood Foot-bridge, Hand-rail and Stays, iron Ladder, leaded into base of chimney, two Bye-cloughs, worm and wheel and rack and pinion motion to each.

MILL DAM—LETTER B COMPARTMENT: Iron Water-grate and four Navigation-cloughs, paule and ratchet- motion and bar complete.

CELLAR FLOOR: Sixteen cast-iron Columns, two iron Girders from wall to wall, two iron Girders about half across.

LETTER A COMPARTMENT OF MILL: IRON WATER-WHEEL WITH REDWOOD BUCKETS and float boards, 16 FEET DIAMETER, 11 FEET WITHIN journals, 7 FEET BROAD, plummer blocks and brasses complete; Double-gear Spur-wheel Motion, block and brasses all in complete repair.

CLOUGH MOTION, LETTER A: FORBAY-CLOUGH, with rack and pinion motion, worm and wheel motion, bevel-wheel motion, mitre-wheel motion, shafting handle and carriages complete.

CELLAR FLOOR—LETTER B: IRON WATER-WHEEL, 16 FEET 6 INCHES DIAMETER 12 FEET IN BREADTH, with redwood buckets, plummer blocks, made to rise and lower with square. threaded screws at each end of shaft, single-gear spur motion, with carriages, brassed top and bottom complete, and carriages and brasses to prevent shafting wearing endways.

CLOUGH MOTION, FORBAY-CLOUGH, with racks and pinions brassed top and bottom, spur wheel and pinion brassed top and bottom; One pair of Angle Wheels, pair of bevel ditto, pair of bastard bevel wheels, shafting carriages, hande and brasses all complete.

ENTRANCE FLOOR—LETTER A: Cast-iron Counter Shaft, for driving five pairs of French stones, and continuation of same by wrought-iron shaft, 8 ins, diameter, for receiving motion from steam engine for driving one pair of grey stones and one pair of French stones, with all bridges, girders, blocks, and brasses complete, the end carriage fitted with brasses top and bottom, seven counter wheels, five stone pinions geared with wood, two ditto iron and iron seven bright spindles, seven bridge trees, seven brass footsteps, seven risers and seven feeders, all complete; One pair of Bevel Wheels, geared wood and iron, for driving upright shaft, with carriage and brass footstep complete; Bevel-wheel Motion, for driving creeper and strap, 4f ins. broad, and meal creeper, all complete; Six PAIRS of FRENCH STONES with three spouts each, hoppers, shoes, damsels, and cases, each complete; Exhaust to each pair of stones and apparatus complete; ONE PAIR OF GREY STONES, cases, spouts, and all complete, panel framing front and end; One pair of small Governors for regulating speed of mill, and motion by leather belt, complete; Seven cast iron Bedplates for mill stones, and nine columns for supporting the same; Set of Meal Elevators from entrance floor to roof, cast-iron boxes top and bottom, with leather belt and tin buckets, all in thorough repair and order having been just renewed.

MOTION FROM STEAM ENGINE: One cast-iron Bevel Wheel on counter shaft, one ditto Bevel Driving Wheel on fly-wheel shaft, with plummer blocks, brasses, and Apparatus for Screwing in and out of gear; Set of Elevators from oil mill up to the dickey in roof; ONE PAIR OF GREY STONES, with cases, hoppers, shoes, stands, and damsel complete, and spouts for offal and barley meal.

ENTRANCE FLOOR— LETTER B: Three lengths of Counter Shafting, with couplings and carriages, bridges and brasses, complete; Four Journals, brassed at bottom only, middle journal brass top and bottom, six counter wheels and six pinions, wood and iron; Six bright Spindles, one pair Bevel Wheels, wood and iron for driving, Upright Shaft, with carriages and brass footstep complete; Six Risers, six Flywheels, and six Feeders complete; One Cross Shaft, and Spur-gear Motion, and Bevel-wheel Motion with carriages, fitted with brasses top and bottom, and carriage in navel hole, fitted with screw and brass to prevent cross shaft working endways, and one ditto at the end of counter shaft, fitted with screw and brass to prevent it working in the same direction; Bevel Wheel motion for creeper and strap, Meal Creeper complete, three delivery spouts to each pair of stones; set of Meal Elevators from entrance floor to roof, iron boxes top and. bottom and strap motion complete; six cast-iron beds for Mill Stones, supported by twelve iron columns; one pair of Speed Governors with pointer, pulleys, carriages, and leather belt complete.

TWO FLOUR BAGGING APPARATI or sack pursers, ten duck bag spouts, four hangers fitted with brasses, shafts, fly-wheel cranks, fast and loose pulleys, 18 in. by 2, in., leather straps 3 in. broad, driving pulleys, 10 in. by 5, in., cast-iron Crank Levers Ratchet Wheels, Ratchet Paule and chains, metal spouts top and bottom; sliding Bosses and sack hooks, lines, and agate eyes, throttle valves, set of Leather Meal Elevators from entrance floor to roof; cast-iron top and bottom box.

ENTRANCE FLOOR LETTER B continued, fifteen cast-iron columns in Oil Mill two sets of corn elevators from entrance floor into roof, with spouts from every bin, and spouts from the clean corn elevators into each bin over stones.

MILL STONE FLOOR— LETTER A: Six pairs of French stones, 4 ft. 4 in. in diameter, fitted with exhaust complete, wrought iron upright shaft 4f in. diameter, and pair of bevel wheels, wood and iron, six iron hoppers out of bin, and two for custom and tin spouts to stone hoppers from the same, six stone cases, six damsels fitted with brasses at top, six iron feed shoes, six stone brushes, and six rynds; cast iron crown wheel pitched and turned both sides, and geared with wood, wrought iron horizontal shaft, 3 in. diameter, and cone couplings, fitted with brasses, levers and screws, and carriage columns complete; two reversing wheels for driving cylinder, and two hand wheels, bevel wheel for receiving motion from wheel on shaft, letter B; Smith's Patent Flour Dressing Machine complete, four gallows carriages, fitted with blocks and brasses top and bottom complete; meal hopper, fitted with silent feeder, and worm and wheel motion complete.

MILL STONE FLOOR—LETTER B: One horizontal shaft, with three bright pulleys, one A carriage, and one plummer block in wall, all fitted with brasses top and bottom, for DRIVING CORN SCREEN, BEAN SPLITTER and washer; one BEAN SPLITTER, one BEAN WASHER, and strap motions for same complete; six pairs French stones, 4 ft. 4 in. diameter, fitted with exhaust complete; six rynds, two iron hoppers fitted with six tin spouts, upright shaft 4f in. diameter, with crown wheel and pinion complete, one extra pinion for either crown wheel, six eye bolts for taking up stones, horizontal shafts for driving cylinders and communicating motion to corn screens, &c., in letter A; compartment and bevel' wheel at end thereof to take in and out of gear; two reversing wheels for driving cylinders, turned, pitched and trimmed; cone couplings, fitted with brasses, levers, screws, hand wheel carriage column complete; Smith's patent cylinder, eight sheets of wire long, 20 in. bore, iron barrel, brush axle and pinion geared with wood, eight inside brushes, external brush and motion complete, five gallows carriages fitted with blocks and brasses top and bottom complete, sixteen columns for supporting beams and two cylinder carriage, columns for pinions, and one extra pinion.

Corn Bins, No.1	8 fee	t by16 feet	10 feet high.
2	8	16	10
3	16	15	10

Turned-up Pulley, for driving grindstone, 10 in. by 7f in.; Pulley, 10 in. diameter and 5... in. broad, for meal elevators in roof, and Leather Belt, 2... in. broad; one angle Screen, 5 ft. 6 in. long and 16 in. bore, with revolving barrel and motion, complete panel frame case; iron Fan Dust Case and spouts, and exhaust spouts into bags; cast-iron Floor, upon iron girders, for drying kiln, fireproof.

CORN AND MEAL CHAMBER FLOOR: One pair Muff Couplings, faced and bolted together, and an additional length of upright shafting, 3, in. diameter; Crown Wheel and Pinion, turned, pitched, and trimmed wrought-iron horizontal Shafting, 3,.. and 3 in. diameter, into screen room, pulley for communicating motion to shafting in roof 20 in. diameter by 12 in. broad, leather belt, 4, in. broad; Cone Coupling, fitted with brasses, lever, screw, and hand wheel for carriage column, complete, turned-up pulley for driving internal SACK TACKLE, 15 in. diameter by 9 in. broad, leather belt 4, in. broad; Face Coupling, complete, wall box and carriage, fitted with brasses, top, and bottom, 6 gallows carriages, 6 blocks, with brasses top and bottom; Turned-up Pulley, for driving CORN ELEVATORS, 15 in. by 9 in. broad, leather belt, 4f in. broad; Pulley, 2 ft. 2 in. by 8 in. broad, for driving IRON FAN, leather belt, 3 in. broad; Pulley, 20 in. diameter, with flange in middle 10 in. broad, turned up for driving Child's Patent Separator, leather belt, 3 in. broad; Pulley, 3 ft. diameter 9 in. broad, for driving Smith's Patent Upright Screen, and riding pulley, 16 in, by 6 in. broad, turned, up, leather belt, 4f in. broad, ditto, 2 in. broad; Pulley, 4 ft. 6 in. diameter by 5f in. broad, turned up and faced for driving angle screen, leather belt 4f in. broad; Smith's Patent CORN SCREEN, STEEL REEL, AND HORIZONTAL FAN, turned-up pulleys, dust and chaff spouts, two wall boxes, and

plumb block fitted with brasses top and bottom, five carriages, fitted with brasses top and bottom. HOPPER CORN BINS and SILK Room—one to Letter A Compartment, 8 ft. by 10 ft., by 10 ft. high; one to Letter B Compartment, 6 ft. by 10 ft., by 10 ft. high; two FLOUR DRESSING REELS, 21 ft. long by 52 in. diameter, clothed WITH BEST SWISS SILK, in 7 sheets, 2 worms, the whole length of each reel and all motions and leather belts complete; one Dickey for cleaning the offals from the silks and spouts connected therewith; one worm for conveying offals from silks to dickey or to SMITH'S PATENT DRESSING MACHINE, and one worm for conveying flour from silks to passer; one Stive Room, framed and covered with bunting; Corn Bins, 17 ft. by 8 ft., by 10 ft. high; Corn Chamber, 31 ft. by 16 ft., by 10 ft. high; Small Bin, in corner, 2 ft. 6 in. by 2 ft. 6 in., by 10 ft. high; Floor over oil mill, on same. level as corn and meal chambers, is divided into three compartments, and in the end next steam engine is a. Hopper Bin, 5 ft. by 5 ft., by 10 ft. high, for feeding grey stones, sixteen cast-iron columns for supporting beams.

MACHINERY IN TOP FLOOR: One Drum, 10 in. diameter by 8 in. broad, for driving MEAL ELEVATORS in Letter A, leather belt, 4 in. broad; a Carriage, fitted with brasses top and bottom, wrought iron shaft, pulley 2 ft. 2 in. by 7 in. broad; wrought iron horizontal shaft, 2Ä in. diameter; two Bracket Carriages, fitted with plummer blocks and brasses top and bottom; drum 3 ft. diameter, 8 in. broad, for receiving motion from shaft below, leather belt, 4 in. broad; Drum, 2 ft. 6 in. diameter 9 in. broad, for communicating motion- to shaft for turning OATMEAL DICKEY, ELEVATORS, AND EXTERNAL SACK TACKLE, leather belt, 4 in. broad; second wrought iron Horizontal Shaft, two bracket carriages, fitted with plummer blocks and brasses top and bottom, drum, 3 ft. diameter, 8 in. broad; Drum, 2 ft. 7 in. by 9 in. broad, two leather belts, 4 in. broad each; one iron Bevel Wheel, for driving cross shaft, one cross shaft, 2 in. diameter; one Gothic Carriage, fitted with plummer block and brasses top and bottom; one Carriage for sliding shaft in and out of gear, carriage, with block and brasses top and bottom, lever, &c.; one Hawksbill Carriage, fitted with brasses top and bottom, one bevel wheel geared with wood, one extra wheel geared with wood, one pulley, 10 in. diameter by 8 in. broad, for turning dickey, leather belt 3 in. broad, one pulley 10 in. diameter by 8 in. broad, for turning elevators which deliver on to dickey, leather belt 3 in. broad; one Set of Elevators from oil mill floor into roof, and thence by spouts on to dickey, hempen belt and ten buckets, panel framed dickey case, and dickey and motion complete, with three sets of riddles, crank motion and pulley, leather belt 3 in. broad; one Gallows Carriage and one Hawksbill Carriage, both fitted with brasses top and bottom; one large A Carriage and one small A Carriage, fitted with brasses top and bottom for elevator top shafts; one Drum, 20 in. diameter, on the same gallows, carriages fitted with brass top and bottom, leather belt 3 in. broad; Meal Elevators in Letter B Compartment, pulley 3 ft. diameter 3 in broad iron box A carriage, leather belt down to horizontal shaft in millstone floor.

INTERNAL SACK TACKLE: Drum, 4ft. diameter by 6 in broad, iron roller 9 in. diameter, 3 ft long, leather belt 4f in. broad, striking pulley and iron lever, carriage and counter balance hand lines and chain complete.

EXTERNAL SACK TACKLE OVER RIVER: Five guide pulleys, two V sheaves, horizontal sheave, framing and carriages, shafts and plummer blocks, and line and extra chain complete.

CORN ELEVATORS: Spur wheel and pinion, two shafts, plummer blocks and brasses for turning two sets of corn elevators in roof, long Spouts for taking corn into bin over Letter A and into bin over Letter B Compartments, and extra spout for screening into sacks, flange drum for giving motion to corn elevators 22 in. diameter and 6 in. broad, leather belt 4*f* in. broad, spout from these elevators on to Child's Patent Corn Separator; Child's No. 2 Corn Separator complete.

FRONT EXTERNAL SACK TACKLE: Two flange pulleys 2 ft. 6 in. diameter, fast and loose with guide rod and striking lever, complete; hollow sheave, plummer, blocks and brasses, roller and shaft; two A Carriages, one hawksbill carriage, fitted with brasses top and bottom, brake and carriage lever, counterbalance hand line and leather belt 4 in. broad, tested chain, and one iron door.

WOOD CISTERN: Fixed over sack tackle string, lined with lead, wrought iron piping down into cellar floor, and attached to FORCE PUMP, which is fixed there, and driven by a 4 in. leather belt from a 2 ft. drum on the wrought iron counter shaft 6 in. broad.

WATER SUPPLY: 2f in. brass hydrants, seven in number, fixed on the several floors for use in case of fire; one copperhand jet and hose pipe complete, branch pipe from cistern, one iron to bean washer, with draw-off cock and branch for filling engine boiler, commanded by brass stop valve.

GAS FITTINGS: Gas laid on by wrought iron pipes to four brackets in roof, four in screen chamber, three in meal chamber and silk room, three on stone chamber, seven on entrance floor, two in engine boiler house, and two entrance lamps, with lanterns complete.

LEAD PUMP, with wood case into tail race, fixed at entrance.

INVENTORY OF FIXTURES AND FITTINGS IN DWELLING-HOUSE ATTACHED TO TADCASTER MILL.

BACK KITCHEN: Patent kitchen range, complete, with draw-off tap for hot water over sink; set pot and lid.; stone sink, with cupboard underneath; lead pump, with nozzle over sink; brass draw-off tap from rain-water barrel; two shelves and brackets, gas pipes to one bracket and one pendant.

BEDROOM over BACK KITCHEN: One sham register grate and stone chimney-piece. FRONT KITCHEN: Oven and range, with boiler and tap; cupboards each side fire-place; four bells, with cranks, wires, and carriages, complete; twelve hooks and gas pipes to one pendant. OFFICE: Sham register and wood chimneypiece; two wood closets; pinrails, with eighteen hat and cloak pins; and gas pipes to one bracket and one pendant. DINING:ROOM: Register stove and marble chimneypiece; two cheffoniers; gas pipes to one pendant, and one bell lever. BREAKFAST ROOM: register stove and marble chimney-piece; gas pipe to one pendant, and one bell lever. PANTRY: Four wood shelves and brackets, and two cupboards. BEDROOMS: Five stoves, one marble and four wood chimney-pieces, two wardrobes, and gas to one bracket. BATH Room and WATER-CLOSET: Pan water closet apparatus, complete; cistern, lined with lead; washhand basin, with water laid on; gaspipes to one bracket. PASSAGES: One bell, with cranks, &c.; eleven hat and cloak pins; gas-pipes to one bracket, and one pendant.

OUTSIDE: One water butt, iron fencing to yard wall. Cow-House: Brass draw-off water tap. STABLES: Brass water tap and three gas brackets. PIGGERIES and OPEN SHED,: One wood tank, lined with lead and cover; to brass water taps, and copper set in brickwork.

INVENTORY OF FIXTURES IN THE SHOP AND COTTAGE, TADCASTER HILL.

One kitchen range, complete, and one sham register stove and chimney-piece. A Copy of the above Lease may be seen at the Auctioneers' Office, 2, East Parade, Leeds.

The mill was purchased at the sale by John Ingleby.

The mill was extended to the south over the next few years. It is believed that this mill was one of the earliest to be equipped with roller milling equipment and other modern flour milling equipment.

Bulmer's History and Directory of North Yorkshire (1890) states "Mr. Ingleby, in his desire to keep pace with the spirit of the age for improvements, was not slow in adopting the roller system of milling, and in 1879 he enlarged the premises, and commenced working the first complete roller mill in England."

The 1881 Census shows J A Ingleby living in Mill House with occupation Corn Miller employing 31 men.

The London Gazette of 21 November 1882 records the passing of an Act of Parliament allowing the construction of a railway siding joining the railway at Tadcaster and running over the viaduct constructed for the abandoned Leeds to York railway. A sharp curve was built at the east end of the viaduct to reach the mill.

The construction of the granary probably started about this time. Bulmer's History and Directory of North Yorkshire (1890) states "In 1889 a new warehouse was built, with silos holding 6,000 quarters of wheat. The wheat on arrival is emptied direct from the railway trucks through warehouse separator, and distributed automatically to the silos or any other part of the mill." The reference to "built" probably means "brought into use".

A report of the Convention of British and Irish Millers in 1885 reports that the mill has been fitted with electric lighting. The electrical power came from a water turbine. Electric lighting must have increased safety considerably over gas lighting in the days before the invention of gas mantles.

The grain store included a distinctive castellated tower. This was the site of a water tank to provide the necessary head to pressurise the water pipes. Water was extracted from the river and supplied the railway station and Tower Brewery via a pipe over the viaduct. A number of other customers were supplied with water extracted from the river.

In 1890 John A Ingleby died and the business was taken over by his son, John H Ingleby. Electoral registers show him to have moved from Mill House to his new house at Fircroft between 1896 and 1897.



Fig 7 - The mill and grain store with its distinctive tower in 1920

In 1898 the partnership of Rishworth, Ingleby and Lofthouse opened Swan Mill at Hull¹². Hull was probably better suited to milling with easy access to imported grain and better internal transport links.

Around 1900, John Ingleby ceases milling at Tadcaster. He was involved with John Smith's Brewery in giving the mill a new lease of life as an electricity generating plant in the name of Tadcaster Electric Company. It provided power at 230 volts d.c. to the town of Tadcaster.



Fig 8 Power cables feeding Tadcaster

In 1901, Tadcaster Electricity Company installed generating plant at the mill. It is said that the first generator installed sank into the floor due to its weight.

The Tadcaster District Electric Lighting Order, 1902 set out the area that the company was to supply and made provision for digging up streets to bury cables.

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 $^{^{\}rm 12}$ Milling in Hull Mildred Cookson The Mills Archive

In 1906 William Burrell took charge of the running of the Electricity Generating Station at Tadcaster. The station was recorded as being "run by steam, water, diesel engines and has a D.P. battery¹³ installed".

John Ingleby sold his interest in the station to Tadcaster Electricity Co in 1920 to John Smith's Brewery.

In the 1920s a new warehouse was built between the mill and former grain store to accommodate two rotary converters. These took the a.c. supply from Yorkshire Electrical Power Co and converted it to d.c. to supplement the locally produced power. The centre of Tadcaster remained on a d.c. supply until the early 1950s fed from these rotary convertors, which could be heard for some distance around.



Fig 9 Inside the generator room in the 1930s



Fig 10 Employees of the station 1938, The man on the extreme right is the Chief Engineer 'Billy' Burrell who lived in Mill Garth Cottage

¹³ D.P. Battery - a battery made by the Dujardin-Plante Battery Co

In 1941 the Tadcaster Electricity Company became an independent concern. It was recorded that the mill was leased from John Smith Brewery Company for a period of six years from the 1st January 1941 at a rent of £320. The premises occupied comprised the Generating Station, Water tank, Siding, Water supply and Heating plant.

The generating plant comprised one 340 KW. Mirrlees Diesel Set, one 170 KW Willans Diesel Set, one 140 KW Mirrlees Diesel Set and an 80 KW Water Turbine, making a total power output of 730 KW

Under the lease Tadcaster Electricity Company undertook to continue to supply water extracted from the river to:

Mr. J.R. Edward Brooksbank Tadcaster Rural District Council Mr Ingleby (Fircroft) Tadcaster Tower Brewery Company Mr. J.R. Page L.N.E.R (at the railway station).

The 1941 agreement lists the equipment (in considerable detail) at the mill as being:

Fast and loose pulleys on shafting of Water Turbine situate on the ground floor in 200 B.H.P. Mirrlees Diesel Engine Room with belting to line shaft and pulleys on the third floor and driven by a B.T.H. 7.5 B.H.P. motor No. R.480, 460 v, 1000 r.p.m. 12.8 amps, and situate on the second floor and used for working the Hoist, also shafting running over the Willans Engine Room to Conveyor belt over wood bridge.

- 1. One 50 H.P. Wolf Water Turbine (out of commission)
- 2. One 12 H.P. Motor for driving pumps
- 3. One 3 throw ram pump. Tangyes
- 4. One Horizontal pump. 2 stroke Tangye
- 5. One Lancashire Boiler
- 6. One small vertical Boiler
- 7. All suction and delivery pipes and control valves
- 8. One Ash Barrow (worn out) for Boiler
- 9. One Boiler Shovel " "
- 10. One Pricker Bar " "
- 11. One Rake " "

MILL TOWER

Supply Tank and all delivery and draw off pipes and valves

In 1947, the electrical supply industry was nationalised and Tadcaster Electricity Company was absorbed into the Yorkshire Electricity Board.

In October 1955 the Central Electricity Authority gave notice of termination of their tenancy of the premises. An automatic pumping plant was installed to continue to provide water to the five consumers to which it was contracted.

The mill was demolished after standing empty for many years in late 1963 or early 1964.