

**WORTHINGTON'S WATER DRIVEN
CORN MILL**



THE MILL HOUSE

**BY SAMUEL T STEWART - MAY 2023
UPDATED JULY 2023**

PREFACE

The author has found little of any real substance recorded about the Worthington water driven corn mill, which appears to have by-passed the historians even though other water driven mills in Leicestershire have been recorded in some detail. Therefore, the following is the author's own interpretation based on old O/S maps and Trade directories, census and other fragmented pieces information. Only one photograph has been located which shows a limited view of the actual corn mill building, and this was taken in 2012.

The earliest reference found to the corn mill is given in John Nichol's 'History and Antiquities of Leicestershire, written in 1800 - 1820 where he states that "the Mill and the Brook which drives the Water Wheel is in the possession of Lord Ferrers".

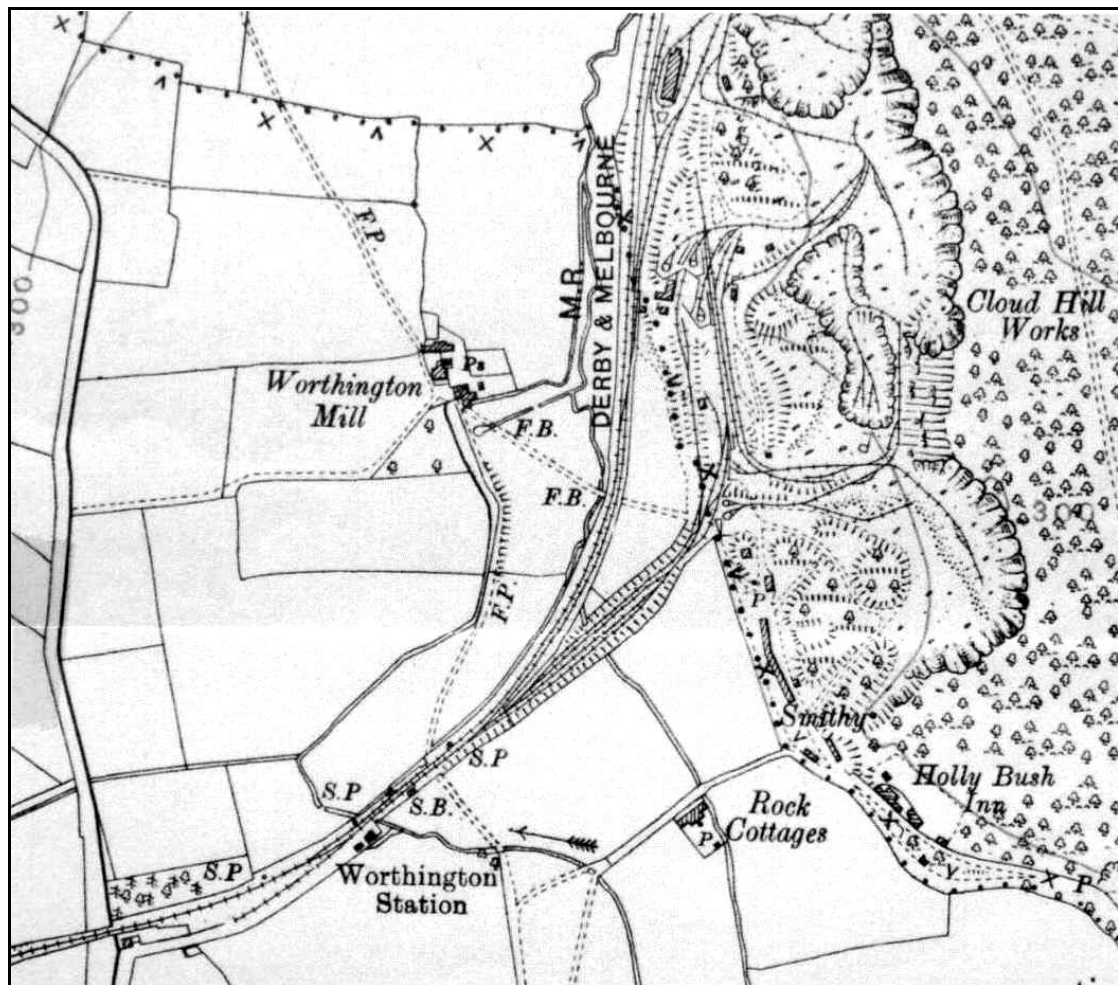
The Mill is shown on the first edition 1835 O/S map, and it was thought to be still in use till 1960 when the corn grinding machinery was apparently taken out. It is not shown on the Worthington Township 1806 enclosure map, so it is assumed that the original Mill was built sometime between then and 1820 making it over 200 years old.

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LOCATION OF THE MILL

The location of Worthington water driven corn mill is shown on this extract from the 1885 issued O/S map below, just to the west of the old Derby to Ashby Midland Railway and Cloud Hill limestone quarry. The most southerly of the buildings is the actual Mill House and a leat branching off from Boden Brook is shown going to that building to drive the water wheel via a mill race. *A leat is an artificial water trench especially leading to or from a mill.* The Mill House building and farm house (now extended) are located at the bottom of what is now Mill Lane which is a turning off the road to Breedon-on-the Hill. It is now known as Worthington Mill Farm and shown in more detail on page 5.



1885 ISSUED O/S MAP

Continued over page



EXTRACT FROM THE FIRST EDITION 1835 O/S MAP

(This shows that Worthington Mill was in operation at that time -
top left corner)

Continued over page



**2021 GOOGLE EARTH PHOTOGRAPH SHOWING WORTHINGTON MILL FARM
AND THE SURVIVING GRADE II MILL HOUSE**

KEY

- A- SURVIVING GRADE II MILL HOUSE BUILDING**
- B- EVIDENCE OF THE LEAT FROM BODEN BROOK WHICH WENT TO THE MILL TO DRIVE THE WATER WHEEL**
- C- ORIGINAL FARM HOUSE BUILDING (see following page)**
- D - POSSIBLE FORMER GRANARY STORE BUILT ON TO REAR OF MILL HOUSE**

GENERAL INFORMATION ABOUT THE CORN MILL

This photograph taken in 2012 provides a good illustration of what the Mill House looked like. It should be noted that the angle from which the photograph has been taken with a telephoto lens has "dramatically" foreshortened the distance between the farm house and the mill house, which were / are two completely separate buildings as shown on the preceding page.



Modified from a photograph originally taken in 2021 by Ian Caldecote for which he owns the original copyright and is licensed for reuse under a creative commons license

The historic England website lists the mill as being a grade II historic building (Jan 3rd 1981 - 1361237) and describes it as follows. Part of this description can be related to the photograph but unfortunately we cannot see the brick arched wheel chamber which was on the opposite :-

Mill - probably early c.19. Coursed sandstone blocks with plain tiled roof & brick gable. 3 storeys, 1 window to each floor. Windows have heavy square section stone surrounds & mullions. Front elevation has low water opening & a small round opening at ground floor level. Ground floor window has possible keystone of earlier opening above existing lintel - 2 doorways one above the other on this elevation. To the west, a semi-circular brick arch to former wheel chamber (cannot be seen in the above photograph). Formerly a breast wheel of c.14 - c.15 diameter but machinery removed c1960.

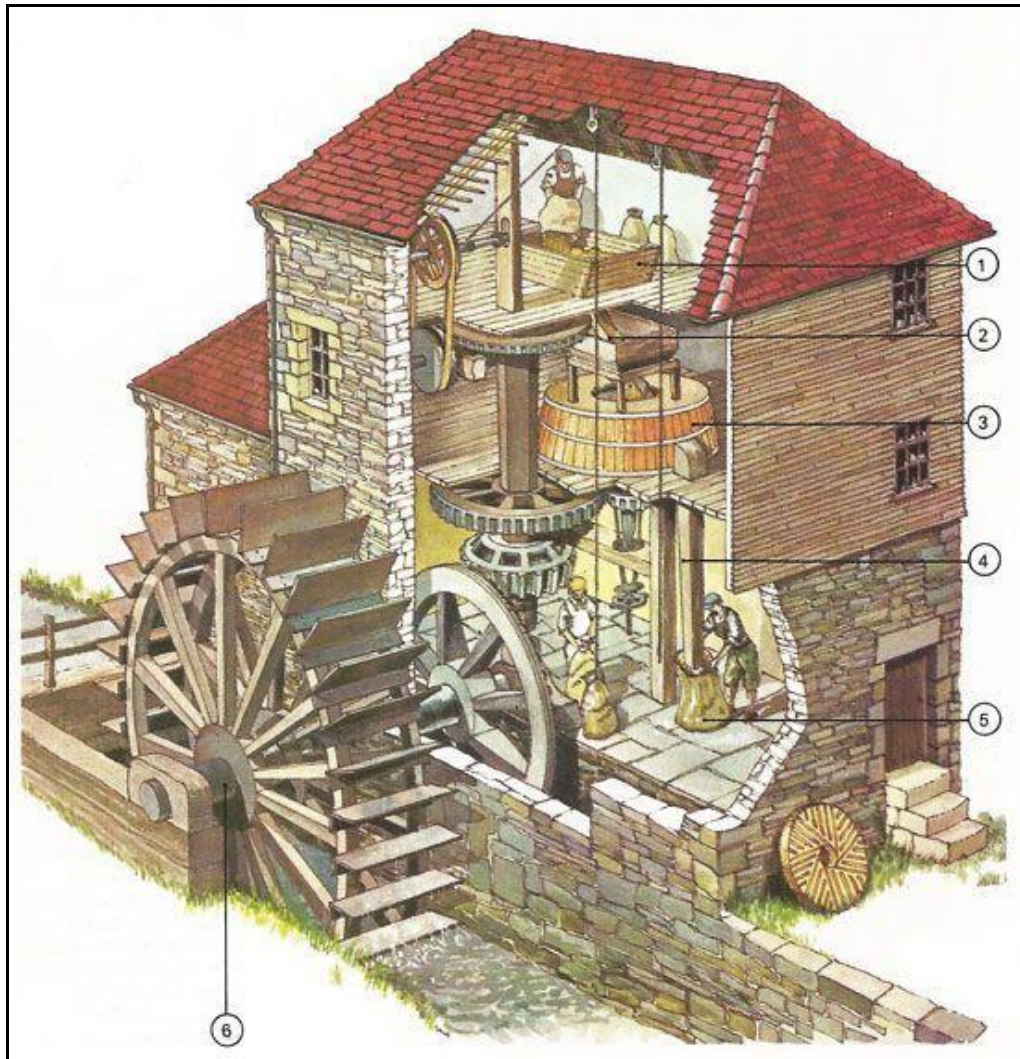
Low 2 storey brick & rubble building adjoins to the north. This can be seen on the extreme right of the photograph. (possibly originally a granary)

A granary was either attached to the Mill or built separately. We know this existed, as when the Worthington Chapel was closed for a period in 1905, William Chester who became the miller there between 1871 and 1881, succeeding John Francis, loaned the granary building for the members to continue their worship there. To the left is the original farmhouse frontage, a number of yards distance to the north. It is almost certain that there would have been a corn drying kiln on the site at one time.

Trade directories and censuses record the various millers as farmers also, and William Chester is recorded as a Miller and Farmer of 30 acres in the 1881 census.

In 1946 the RAF took numerous aerial photographs in the area, and three were centered around the Mill and Cloud Hill Quarry. Interestingly their title is recorded as Worthington Water Mill. Although the definition is not good, it is possible to relate buildings and Boden Brook to the preceding 1885 map. These are available on line for anyone who wishes to investigate further.

TYPICAL WORKINGS OF A WATER DRIVEN CORN MILL



KEY

- 1 - GRAIN HOPPER
- 2 - GRAIN SHUTE FEEDS GRAIN INTO MILL STONES
- 3 - PAIR OF MILL STONES (ONE FIXED AND ONE ROTATING)
- 4 - SHUTE FROM MILLSTONES TO PUT GROUND FLOUR DIRECTLY INTO BAGS
- 5 - FLOUR BAGS FOR TRANSPORTATION
- 6 - WATER DRIVEN BREAST SHOT WHEEL WITH MAIN SHAFT DRIVING GEAR WHEEL WHICH TRANSMITS MOTION TO GEAR WHEELS ON VERTICAL SHAFT TO DRIVE MILL STONES

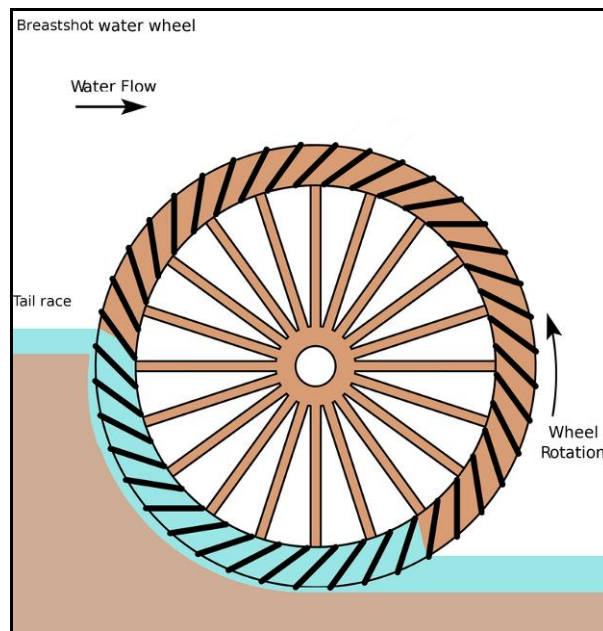
Note that the upper gear on the vertical shaft drives a winch for raising bags of grain from either the inside or outside of the mill house. As the Worthington Mill had doors on the third story, this suggests that bags of grain were winched up to the top floor externally.

The Worthington corn mill was water powered by a breast shot water wheel (14 to 15 meters diameter) through a series of gears used to drive the mill stones to grind the corn into flour. The size of the Worthington mill house suggests the grinding of the corn into flour only utilised one pair of mill stones, much like that shown in the preceding illustration.

It can be clearly seen on the page 3 map that a "leat", which would have been controlled via a sluice gate, was diverted from Boden Brook to drive the water wheel.

Suggested derivation of name Boden, but this is only conjecture of course:-

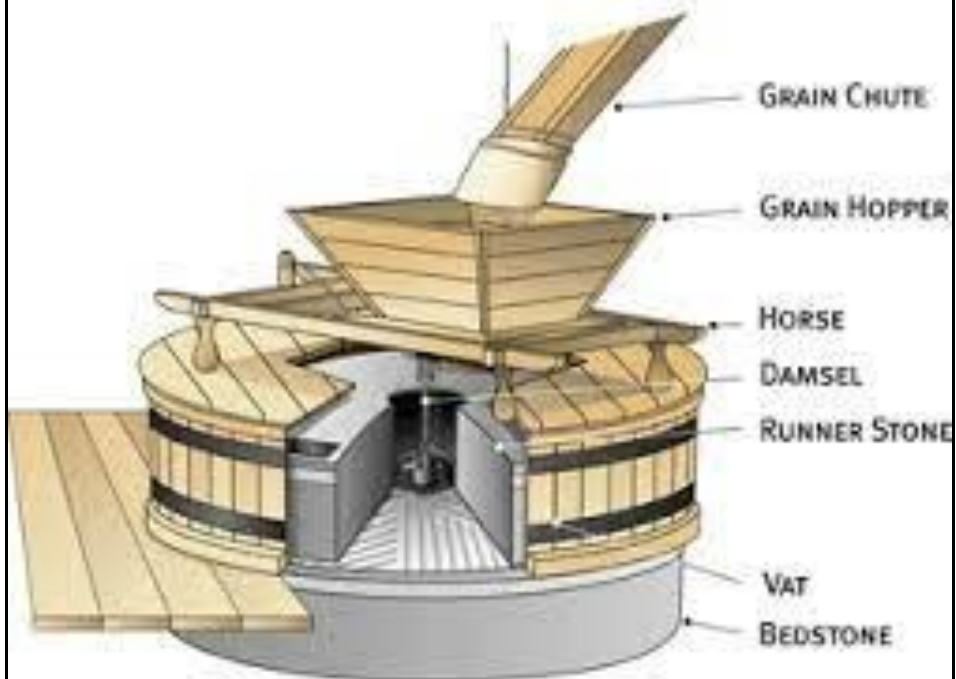
German: topographic name for someone living in a valley bottom or the low-lying area of a field Middle. High German - *boden* 'ground bottom'. Compared to English word Bottom.



A DIAGRAMATIC SKETCH OF A BREAST SHOT WATER WHEEL

A waterwheel, is a mechanical device for tapping the energy of running or falling water by means of a set of paddles mounted around a wheel. The force of the moving water is exerted against the paddles, and the consequent rotation of the wheel is transmitted to machinery via the shaft of the wheel. The waterwheel was perhaps the earliest source of mechanical energy to replace that of humans and animals, and it was first exploited for such tasks as raising water, fulling cloth, and grinding grain.

CROSS SECTION OF THE MILLSTONES



A TYPICAL PAIR OF MILL STONES

SOME INFORMATION ABOUT THE MILLERS / FARMERS OF WORTHINGTON CORN GRINDING WATER MILL AND FARM

The following 1840 newspaper article could have some relevance to the water mill. Although it seem to relate to the farm only, it does say that it will be of interest to Farmers, **Millers** and Factors

Transcribed from the Leicester Journal - Fri 13th March 1840

**WORTHINGTON, LEICESTERSHIRE
TO FARMERS, MILLERS AND FACTORS**

TO BE SOLD BY AUCTIONY MR. GAMBLE

On Monday and Tuesday, the 16th and 17th of March, 1840, all the live and dead farming stock, stock in trade, implements, household furniture and other effects, on the premises of **Mr. Pratt, Worthington Mill aforesaid**, who is leaving this country.

Descriptive catalogues to be had 6 days prior to day of . Sale each morning at 11 o'clock.

William Pratt, mentioned in the above article, is the earliest name found of a Miller and Farmer at Worthington Mill.

Corn millers / farmers, given in Trade Directories:-

Gazette & Directory of Leics & Rutland - 1861

John Poxon Jn'r - Corn Miller at Worthington Mill

Harrod & Co's Postal Directory of Derbys & Leics - 1870

Joseph Stubbs - Farmer & Miller at Worthington Mill

History, Gazetteer & Directory of Leics & Rutland - 1877

Joseph Stubbs - Farmer & Miller at Worthington Mill

Wright's Directory of Leics & Rutland - 1880

Joseph Stubbs -Farmer and Miller at Worthington Mill

Kelly's Directory of Derbys & Leics - 1891 (Pt 2. Leics & Rutland)

William Chester - Farmer and Miller (water)

Wright's Directory of Leics -1892

William Chester - Farmer and Miller (water)

Kelly's Directory of Leics and Rutland - 1908

William Chester - Farmer and Miller (water)

The Chester's seem to have been the most memorable owners / occupiers of Worthington Mill and Farm

Apparently, one of only two lorries in the village at the time, was operated by Ernie Chester at Worthington Mill for collecting corn and delivering flour after grinding at the Water Mill. It is assumed that Ernie was William Chester's son Harry E, as given in the censuses.

SOME CENSUS INFORMATION

1871 CENSUS					
NAME	RELATION TO HEAD	CONDITION	AGE	OCCUPATION	BORN
JOHN FRANKS	HEAD	MARRIED	45	MILLER EMPLOYING ONE MAN	KEGWORTH
ESTHER	WIFE	MARRIED	42		CANTERBURY
JOSHUA	SON	UNM	18		CASTLE DONINGTON
CHARLES	SON		13	SCHOLAR	"
JOHN	SON		10	SCHOLAR	MELBOURNE
WILLIAM	SON		6	SCHOLAR	WORTHINGTON
JAMES	SON		5	SCHOLAR	WORTHINGTON
SARAH K	DAUGHTER		3		WORTHINGTON
ESTHER A	DAUGHTER		6 MTHS		WORTHINGTON
1881 CENSUS					
WILLIAM CHESTER	HEAD	MARRIED	34	MILLER & FARMER 30 ACRES	THRINGSTONE
HARRIET	WIFE	MARRIED	25		SHEPSHED
GEORGE	SON		9		THRINGSTONE
WILLIAM	SON		5		THRINGSTONE
CHARLES	BROTHER	UNM	21	MILLER	WHITWICK
MARY ELLEN	SISTER (VISITOR)	UNM	19		WHITWICK
1891 CENSUS					
WILLIAM CHESTER	HEAD		MARRIED	MILLER AND FARMER	THRINGSTONE
HARRIET	WIFE		MARRIED		SHEPSHED
GEORGE	SON	UNM	19	MILLERS ASSISTANT	THRINGSTONE
WILLIAM	SON		15	SCHOOL	THRINGSTONE
HARRIET E	DAUGHTER		8	SCHOOL	WORTHINGTON
HARRY E	SON		1 YEAR 10 MTHS		WORTHINGTON
JOHN E	SON		8 MTHS		WORTHINGTON
MARY ANNE SHAW	SERVANT		14		COLEORTON
ALBERT E HARRIS	SERVANT		13		HEATH END

NOTE

In the 1871 Worthington Census - John Franks is given as a Miller employing one man. That would have been John Brooks (aged 23) who is given as a Miller's labourer in the 1871 census.