

Worsbrough Mill, Barnsley

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Just south of Barnsley, our map showed a blue highlighted [Mill](#), so we went to investigate.

In 1972 West Riding County Council began to restore Worsbrough Mill as a working museum. It consists of a 17th century 2-storey water-powered toll mill and a 19th century 3-storey steam mill. Internally the two mills have been very well restored and regularly mill using French burr stones in the old mill. It is open at weekends, with free admission.



Note the stone ramps which allowed sacks of corn to be unloaded from waggons and wheeled into the mill on barrows.



In the old mill, water enters through an iron pipe which feeds a header tank over the 14ft 4in x 4ft (4.38m x 1.22m) overshot cast iron waterwheel of 1864. It drives 3 pairs of stones via a substantial upright shaft. In the 1840s a new mill was added with a Watt steam engine which was still in place until 1922. The new mill has a third storey with a bin floor beneath the roof. Before this, the old mill had worked on a 'toll' system

for farmers and smallholders who would bring their corn in small quantities (so a bin floor was not required), from which the miller would take his toll of 1/16 before grinding. Both mills stayed in use.

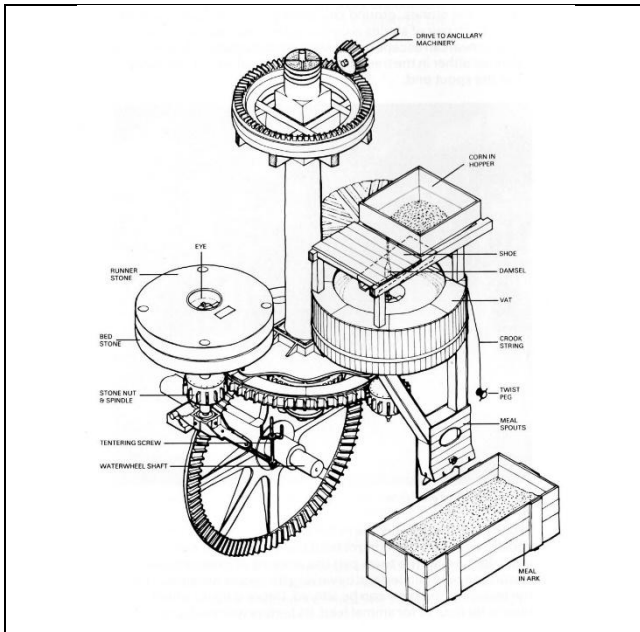
Inside the old mill, you can see the header tank for the water wheel, and the absence of a bin floor is very noticeable. From the top of the tank, a lever and chain leads to a handle down by the millstones to open the sluice. Note the label on the tank saying 'LEVEL OF WATER IN MILL POND'.



During the restoration, a rare 1911 Hornsby hot bulb oil engine (*left*) recovered from Sykehouse Windmill was rebuilt in the original engine room, to drive the two stones in the new mill, although they can also be driven from the waterwheel, as explained later.



The old mill end of the building has a traditional machinery arrangement of waterwheel, pit wheel, wallower, great spur wheel, stone nuts, and stones, as seen in my pictures and the diagram from Martin Watts's guidebook.



Three pieces of ancillary machinery are belt-driven from a layshaft off the crown wheel.



1. An oat roller in the new mill has smooth rollers for crushing oats, especially suitable for horse feed, made by Joseph Bedford's Argus Foundry in Leeds.



2. A kibbler in the old mill has fluted rollers for cracking open grains of corn or beans for feeding to pheasants, made by Joseph Barron, also of Leeds.

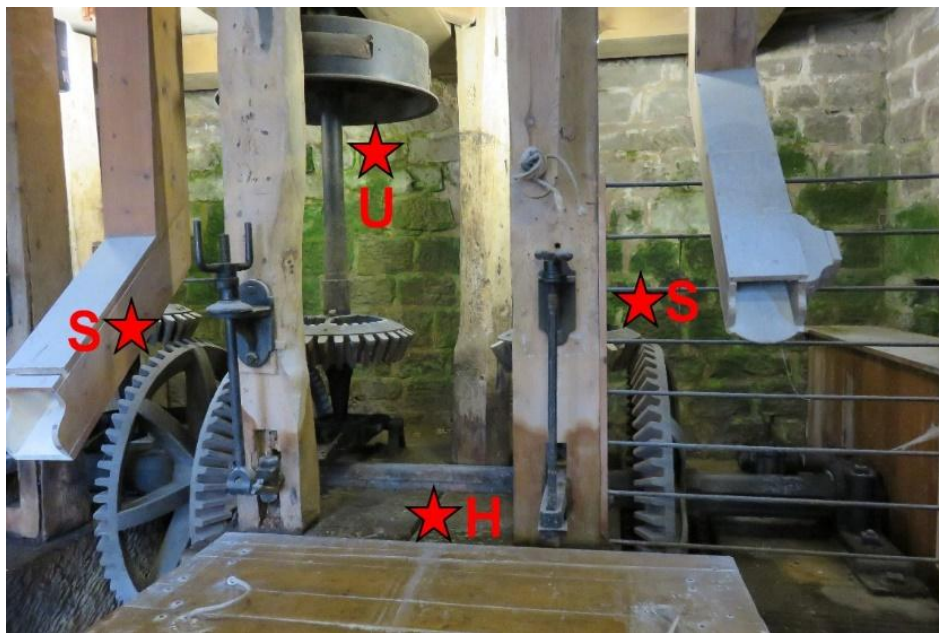


3. A centrifugal dresser, also in the new mill, probably replaced a larger one in the late 19th century. It separates the wholemeal into finer flour and coarser bran. Here, in the absence of the guide who was educating a new trainee guide, I am acting as the expert by opening the dresser to describe how it worked to some other visitors.



In the new mill the arrangements are rather more complicated. On the upper floor, the layshaft from the waterwheel (**★L, left**) also drives an upright shaft (**★U, left and below**) which is connected to the horizontal drive shaft on the lower floor (**★H, below**) from the oil engine in a room to the right. This in turn meshes with the stone nuts (**★S, below**) via several large bevel gears driving upwards to the runner stones on the floor above. This means that these stones can be linked either to the waterwheel or the oil engine (and previously the steam engine).

I hope you appreciate all the head scratching needed by Keith and I as we tried to figure this out, as the guide book is silent on the matter, and the guide who might have been able to explain it was unavailable, as already mentioned.



The mill uses a range of premium quality grains sourced from organic farms in England to produce flour and associated products for trade and retail customers. There is a tearoom in the mill house, and the mill is located at the entrance to a 240 acre country park.

Information from the mill's website www.worsbrough-mill.com, the somewhat limited guide book, and Wikipedia. The guide with the trainee had rather more extensive crib notes, but these did not appear to be available anywhere.