

Foster's Mill

History

There may have been a windmill on this site as early as the 1200s. Certainly there has been a succession of post mills on the artificial mound here; the foundations of the last one re-entombed under the floor of the present mill, which was built about 1857 by Fysons of Soham.

This mill worked until 1946 grinding wheat and other grains. It then lay idle and its condition deteriorated. Michael Bullied, the previous owner bought the derelict mill and plot of land in 1970, with the intention of eventually restoring it to working order. This was achieved on the 1st June 1991, when wheat was milled again, and the mill has been in action since then. Michael sold the mill to its present owners, Jonathan Cook and Dr Mark Westacott in May 1998. Tragically, Michael died soon after the sale; he would however be reassured if here were here to see the Mill today, his wish fulfilled that the tradition of milling be carried on into the next millennium. Michael Bullied was awarded a certificate by the Society for the Preservation of Ancient Buildings, in recognition of the work done here at Swaffham Prior to preserve and restore the mill.

The mill is now owned by Jonathan Cook who continues the work producing flour for sale under 'The Priors Flour' name, and regularly opening the mill to visitors and interested groups.

Thank you for your interest in the mill. You are helping support an historic listed building.

Meal Floor (ground floor)

Overhead, the upright shaft ends in a bearing carried centrally by the lower pair of beams, The cast iron Great Spur Wheel is keyed to it, and transmits power to the stones or other machinery by way of pinions which can be lowered to mesh with it. The fourth pinion (like the others, an iron mortise wheel with wooden cogs) is that which allows external power to be connected to the mill. The circular white underside of the millstones can be seen, level with the floor above. The stone spindles descend through them: they carry the runner stones above, and their lower bearings are supported from iron leavers, which can be screw adjusted to vary the gap between the stones. Centrifugal governors, belt driven from the stone spindles, are connected by steel levers to the tops of the adjusting screws, and compensate automatically for wind speed changes. A wooden Spout carries the meal down from the stones.

Outside

Above the South East Door can be seen another pinion and set of bevels connecting a shaft to the Great Spur Wheel. This is the shaft which drives the mill's auxiliary machinery - the Flour Dresser on the stone floor and another dresser which would have been situated on the Ground Floor (Meal Floor) above the south west window

Visit our website
www.fostersmill.co.uk.



Foster's Mill Guide



Fosters Mill

The Windmill
Swaffham Prior
Cambridgeshire
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Miller and owner - Jonathan Cook

Foster's Mill

Tower Construction

The walls of the mill are mainly clunch with a tarred brick facing. Clunch is the local stone, a type of chalk, not very strong and needs to be protected from the weather.

The sails are controlled at ground level by the chains hanging from the fan framework. The heavier chain moves the rocking lever which is linked through the windshaft to the shutters in the sails. The lighter chain operates the brake lever.

The large pulley wheel (on the left of the cover photo) allowed external power to be connected to the machinery when there was no wind. This has now been restored to working order, and later this year will be used regularly when there is no wind to drive the mill and it's machinery.

Inside the Mill - from the top

WARNING
TAKE CARE ON THE LADDERS
MIND YOUR HEAD
and

DO NOT TOUCH ANY MOVING PARTS

Dust Floor (3rd Floor)

In the centre of the cap is the upright shaft with the cast iron crown wheel (wallower) at eye level; this is driven by the wooden brakewheel mounted on the windshaft which is itself turned by the sails. A heavy weight on the back of this shaft counterbalances the weight of the sails outside. Behind the supporting beam are the sail controls, with the rocking lever projecting through the open

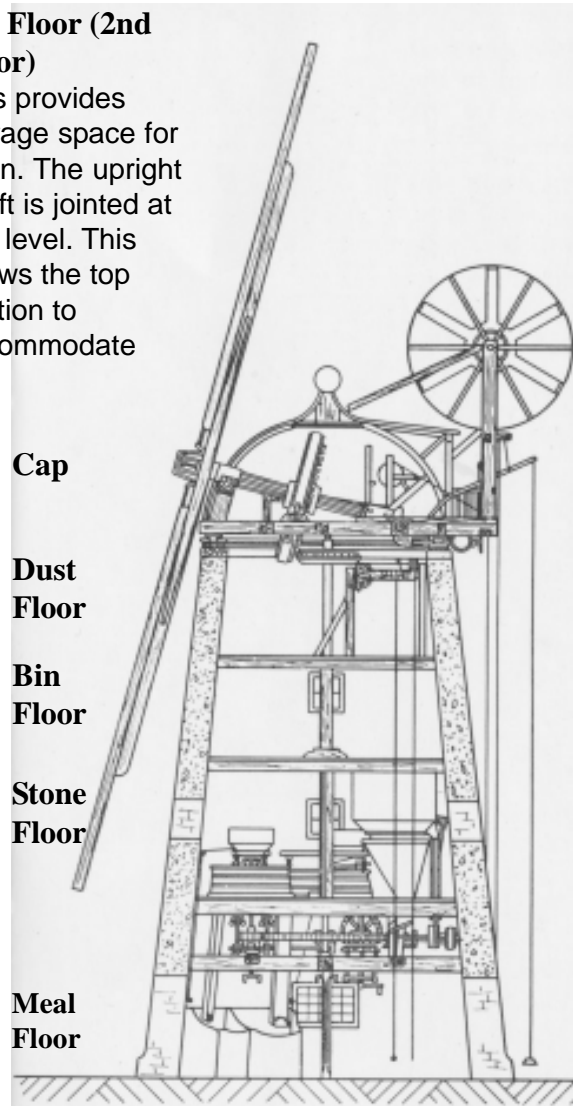
doors, An iron band brake encircles the brakewheel, its free end attached to the brake lever.

The sack hoist bollard can be friction driven by the underside of the wallower, by pulling on the control rope.

The cap turns on a ring of rollers supported by the cast iron track. It is centred by cast iron truck wheels.

Bin Floor (2nd Floor)

This provides storage space for grain. The upright shaft is jointed at this level. This allows the top section to accommodate



small variations in alignment as the cap turns.

Stone Floor (1st Floor)

Two pairs of (French burr) millstones are housed in circular wooden vats. The bedstones are stationary, carried on the floorbeams, and the runner stones rotate above them. They are 'underdrift' - driven below. On top of each vat a rectangular frame carried on four turned legs (the horse) supports a square hopper. This feeds grain to a shoe pivoted below it.

The open end of the shoe extends over the centre of the stones, and is held against cams on an extension of the stone spindle by a cord to a leaf spring. When the mill is working, these cams vibrate the shoe, and shake the grain down to the stones. The rate of feed from the shoe can be varied by altering its slope.

The alarm bell, near the centre of the horse, is held up by grain in the hopper pressing on a strap. When the grain runs low, the bell falls and starts ringing.

On the wall next to the stair well is a large case. This was originally a grain cleaner used to clean corn straight from the field. It has now been converted into a flour dresser and it is in this machine that we make our prized white and brown flour.

The process of dressing flour involves taking meal (the grain crushed into wholemeal flour) and sieving it through different grades of mesh, so that the very fine particles (white flour) are separated from the bran and testa of the grain.

Behind the two sets of stones can be seen a wooden crane, used to lift the runner stones for dressing.