

Robert Boby Ltd of Bury St Edmunds

by Mildred Cookson, The Mills Archive, UK



Milling journals of the past at The Mills Archive

By 1894 The Miller was in its 20th year and there was no slowing down in the march of the roller mill system. Following on from the erection of large mills at the ports and in large industrial centres came the conversion of the country mills, as one after another were being turned over to the roller systems.

One such example reported on December 3, 1894, was the Eddington Mills of Mr RN Hofland, just outside the Berkshire town of Hungerford. The mill had a roller plant of two and a half sacks capacity and was installed on the well-known ER&F Turner system. The mill dated back like many watermills in this part of the country to medieval times. It was believed that a mill had stood on the site from at least the 15th century.

Mr Hofland had taken over the mill from his father, who also ran the mill. The owner's grandfather and founder of the line established a sound business, which his successors were careful to maintain and extend. Eddington flour had large sales in Bath, and was well known throughout the West Country, where in the 1850s the flour sold at UK£5 a sack, a price which was in sharp contrast to that in the depressed market of 1894.

A 'thoroughly good job' done

The illustrations show the structural alterations that were required to change to a roller mill. Previously the entrance to the mill had been at the front, but that doorway was replaced with a new one on the right side. Above the doorway, and on the top floor was the lucam for hoisting in the sacks from a wagon below.

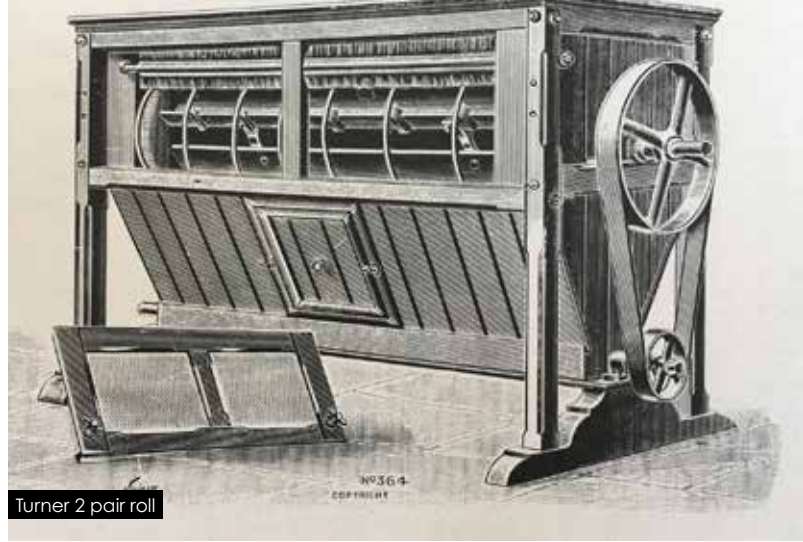
The motive power for the mill came solely from the river Kennet, powering two Hercules turbines of 33 and 27 inches respectively. Some time in the past an artificial channel had been cut to provide the water for the mill, this channel passed into Eddington millrace, rejoining the river lower down.

The turbines replaced a waterwheel, and replacement was no simple task; the preparations for the turbine pit involved a great deal of excavation and the secure underpinning of different walls of the mill. Mr Hofland who acted as Clerk of Works for the whole process had the satisfaction at the end of seeing a 'thoroughly good job' done.

Immediately behind the turbines a trash grill to catch weeds and sticks was erected on the head of the 6ft fall. Higher up the stream another coarser trash grill fended off rubbish at the headwater. Close to this was a floodgate for letting out superfluous water into the pool below.



Side view showing the Lucan



Turner 2 pair roll

The longitudinal section shows a portion of the tail water, which here consisted of a channel confined within well-built brick walls. The depth of water here was 5ft, an important feature of the new design as experience had shown that in its old and shallow bed the tail water was at times liable to take a foot from the fall by 'backing up'.

A proud capacity

From the 27inch turbine, 16 horse-power was obtained whilst the 33inch turbine could develop 24 horse-power. This meant that Mr Hofland was confident that, leaving out the wheat-cleaning machinery, he could drive the roller plant and other machines with the larger turbine alone, each turbine being controlled by a hand lever on the roller floor.

The wheat cleaning employed a No. 1 Eureka scourer and

smutter, along with a cockle cylinder. The cleaned wheat was carried by elevator to the top floor and fed into a worm, which served a system of bins. There were eight bins, six provided with mixers. The sides of the bins were of corrugated iron, while the hopper bottoms were formed of 3-inch deal boards held on steel girders. Each bin had a capacity of 85 sacks.

To take the weight and extra height of machines it was necessary for alterations to be carried out before the new machinery could be installed, especially as the floors of the old mill were not built for taking this extra weight.

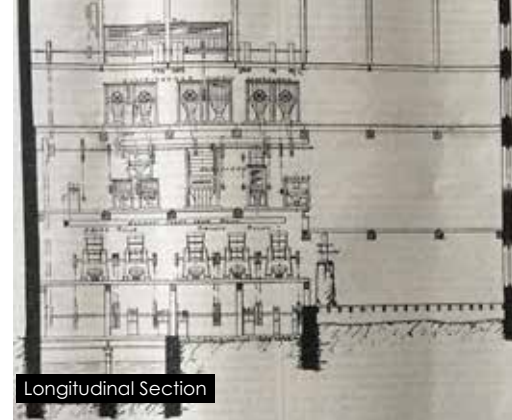
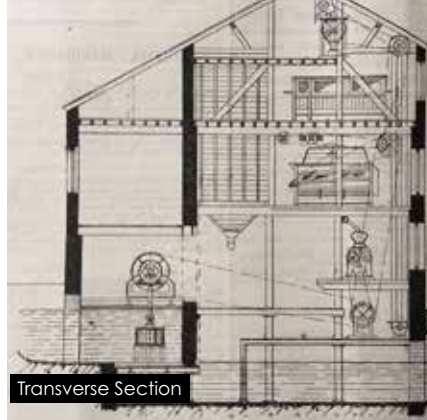
The roller floor formed a sort of platform overlooking the ground floor, with the wheat cleaning machinery. The second floor was for the purifiers and scalpers while the third floor supported the balance of the dressing machinery with the exception of a chop reel which was sited in the attic above.

Well finished with a good appearance

The system adopted involved four breaks and six reductions, effected on four pairs of break and six pairs of smooth rolls. All the rolls were the same size, 18 inches by 8 inches.

Two pairs of rolls were fitted into one case, so that the roll mills divide themselves into a set of two breaks roller mills and another set of three reduction mills. The first three breaks were scalped on three inter-elevator scalper reels, each of which had one sheet and a diameter of 16 inches, whilst the fourth break was scalped on the bran centrifugal.

This included a Turner single purifier, as well as a double



purifier. There were four centrifugal reels of two sheets and 2ft diameter; the bran centrifugal had two and a half sheets and 2ft diameter.

The dressing system was completed by an inter-elevator reel of two and a half sheets and 2ft diameter, and a chop reel of three and a half sheets 2ft diameter. There were also No. 1 size sifters, known as dickey sieves. The roller mills were exhausted on the Turner system, the contents of the exhaust trunk being blown into an Ince dust collector.

The offals were said to be a credit to the mill, well finished with a good appearance. The patent and household flours produced were both noted as of excellent quality. The patent flour had a granular feel having been produced with a large proportion of English wheat in the mixture.

THE INCE PATENT DUST COLLECTOR.

Ince dust collector

Perfection obtained.



Perfection obtained.

Guaranteed the BEST and CHEAPEST in the market.

A Machine sent on trial where desired.

J. H. TREVITHICK & SONS | **WM. R. DELL & SON,**
HAYLE, CORNWALL. | 26, Mark Lane, LONDON, E.C.

 Mills Archive
www.millsarchive.org

 ACCREDITED ARCHIVE SERVICE