

The plansifter floor

## Modernisation at Lincoln Messrs Le Tall install new machines at Crown Mills

by Mildred Cookson, The Mills Archive, UK



### Milling journals of the past at The Mills Archive

by Mildred Cookson, Mills Archive Trust, UK

**L**incoln cathedral, high on a hill above the river Witham dominates the city and at the time of this article in Milling (18 June 1938) it had its modern residential districts, mills and factories. One business that combined aspects of the city's life was that of Messrs. Henry Le Tall Ltd, owner of the Crown Mills. They had a fine 10-sack set up with an up to the minute roller mill plant, a large proportion of which was housed in the tower of what was claimed to be the tallest windmill in the country.

Mr Henry Le Tall was born near Sheffield in 1824 where he ran a milling business for many years. However, the steam mill that he had erected in Chapel Street burnt down in 1871 and he decided at that point to move to fresh fields. On his move to Lincoln, he acquired a large six sailed windmill in Princess Street and at once he proceeded to improve this by installing a steam engine.

In 1882 he put in the first roller mills to supplement the French Burr millstones and in

1886 instructed Messrs. Thornton of Retford to install a complete roller system. This would include rotary scalpings, dressing machines etc., and bring the capacity of the mill up to eight sacks per hour.

#### Many improvements

At the same time, extensive warehouses and a silo of 2000 quarters capacity were added to supplement the already 5000 quarters of grain stored. The business was formed into a limited company in 1893 and in 1895 the capacity of the plant was increased to 10 sacks per hour.

In 1920 the mill was remodeled by Messrs ER & F Turner of Ipswich, and among their improvements was a line of diagonal four roller mills and three free swinging plansifters.



The new purifiers



The roller floor

The directorate of the company at this time consisted of Mr. Sydney Le Tall who had joined the firm in 1894 and after serving in all the milling departments for 12 years was appointed Secretary in 1906.

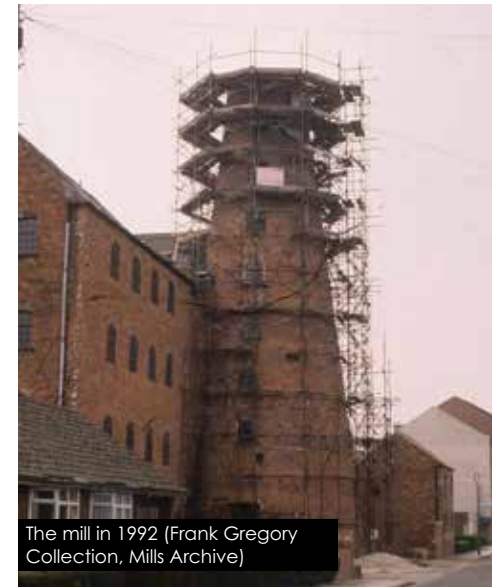
Mr Harry Birks Le Tall who joined the firm in 1898 took on the job of looking after the practical work in the mill and Mr Percy H Le Tall was the firm's engineering expert and millwright. Early in 1937 it was decided to bring the screen room up to date and at the same time, improve the purification section of the mill. Turners were called in again as consultants, work commenced in the September and was finished in the following February.

### Room for improvement

The firm's supply of foreign wheat was brought from Hull in 100-ton lighters along the River Trent and the Fossdyke Canal via the Torksey Lock. This was then delivered at the mill by motor wagons.

On arrival, the wheat was shot into an intake hopper that delivered it to an elevator of 500 bushels per hour capacity; the wheat travelled over a moving reel and a receiving separator to the dirty wheat bins.

In the screen room the wheat received a thorough washing, cleaning, and conditioning, but it was in this department that Mr Turner found room for improvement. Up to then the mill had been using the old-fashioned cylinders for the separation of barley, oats and cockle, and they were not really satisfactory to



get the best results. Turners suggested installing their well-known high-capacity cylinders. A No 5 model incorporating re-treatment cylinders in the frame, and a capacity of 80.9 bushels of wheat an hour, was chosen for the job.

The wheat, once through the screen room, was sent to the grinding bins on the upper floors of the windmill, directly above the break rolls, which were housed on the first floor.

The wheat fell by gravity from grinding to first break. There were four breaks, the second, third and fourth being graded into coarse and fine. The break scalping was done on the free-swinging quadruple plansifter on the fourth floor of the windmill.



## Advantageous for mills

The grading of semolina and middlings were carried out on plansifters on the top floor of the mill. The reduction rolls were Turner's diagonal four roller mills, installed in 1920 and which in 1938 still looked as good as new. The purifier floor had four of the double fanless purifiers in line. Each side of the double purifiers had double worms as a standard fitment. This had proved advantageous for mills with low floors, and saved worms and band conveyors on the roller floor.

## Holding his own

Although Mr Le Tall's mill was small compared to some mills, he could hold his own and his trade extended throughout Lincolnshire and into the Midlands as far as Nottingham. The new adjustments to their plant had made it possible for them to face the future boldly and with ever-increasing business.

The windmill with nine floors was built by a Mr Seely and it still stands today. It was converted into apartments in 1994, but still presents an imposing sight. It stands 77 feet and 6 inches to the curb and originally had five sails.

In 1863 a hurricane caused severe damage to the mill and the sails were taken down. The mill was repaired but with six sails. Unfortunately to date no images have come to light showing the mill with sails. By 1871 it was powered by steam and it remains Grade II listed to this day.

The Mills Archive has a press cutting showing the mill without sails and the photographer is asking the public for any image showing the mill with sails. We also have other images of the mill, showing it before and during conversion to apartments.



M81 Lincoln (le Tall's)

21.1.32

1932 sketch by Karl Wood (Mills Archive)



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