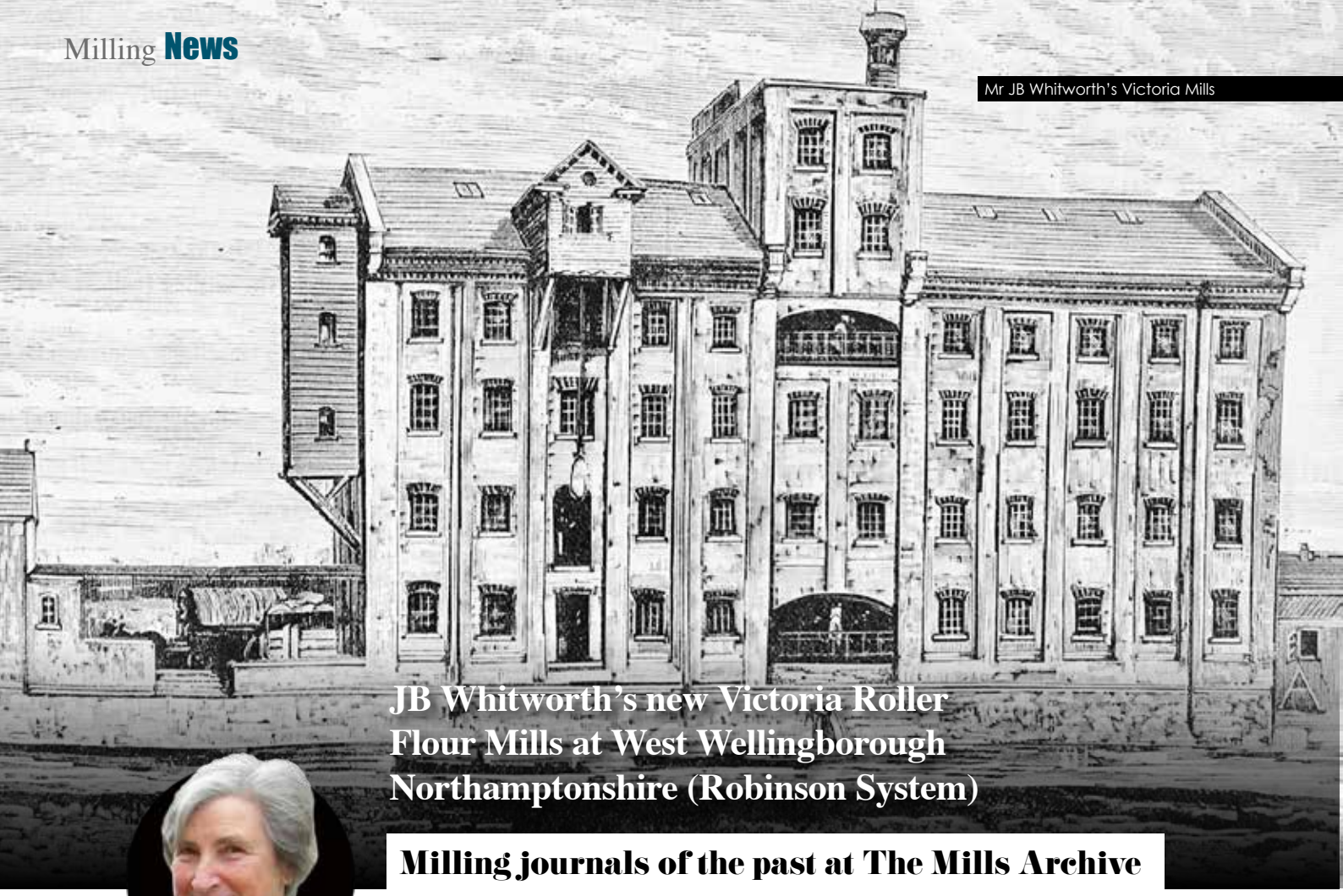


Mr JB Whitworth's Victoria Mills

JB Whitworth's new Victoria Roller Flour Mills at West Wellingborough Northamptonshire (Robinson System)

Milling journals of the past at The Mills Archive

by Mildred Cookson, The Mills Archive, UK

An article in The Miller of November 7th, 1887 celebrates the erection of JB Whitworth's new roller mill following a disastrous fire two years earlier. The name Whitworth had for three generations been associated with the Turvey mills of Bedford where Mr Whitworth "was conspicuous for the success and enterprise he displayed in conducting his business and his readiness to adopt any new machinery which he saw would improve the quality of the flour manufactured in his mills".

Unfortunately, on the night of Friday 13th November 1885 the flour mills at Turvey were totally destroyed (The Miller 1885, vol 11, p 718).

"Nothing left but the bare walls"

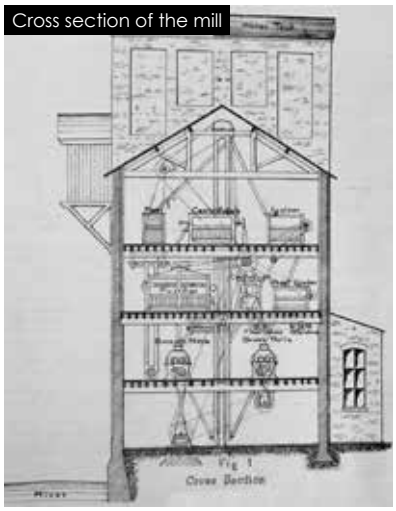
The mill was at work at the time and the fire discovered at 19:45pm by a miller in what was termed the old water mill. Becoming aware of the smell of fire, he called for help from the adjoining building, known as the new roller mill.

A second miller promptly appeared, and the two men proceeded to the wheat cleaning department, which was located on the first floor of the old mill. Here everything was alright but looking to the upper floor they found the roof was ablaze.

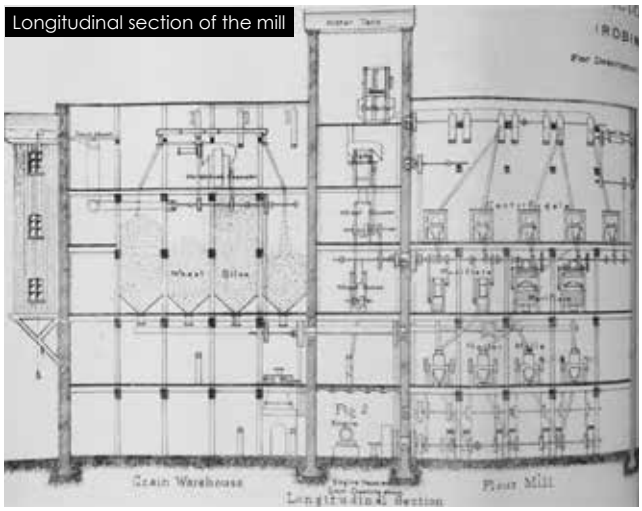
Mr Whitworth, who lived only a quarter of a mile away, was informed immediately and came right over to see if he could save his mills. Soon three fire engines arrived but to no avail, and at 12.15 am, about an hour and a half after the fire was discovered, the overhanging roof of the lofty roller mill took fire and the conflagration began to gain the upper hand in every direction, till both buildings were completely burned out with nothing being left but the bare walls.

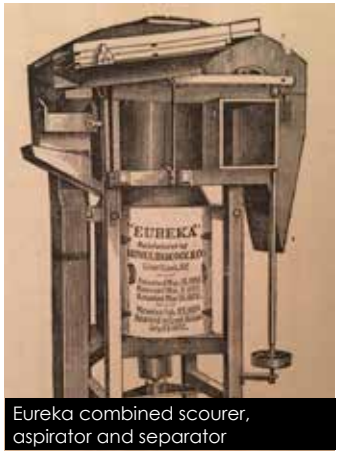
The old millstone mill was entirely worked by waterpower. However, in 1884 Mr Whitworth decided to convert to roller mills and built the new mill alongside the old, fitted out with a

Cross section of the mill

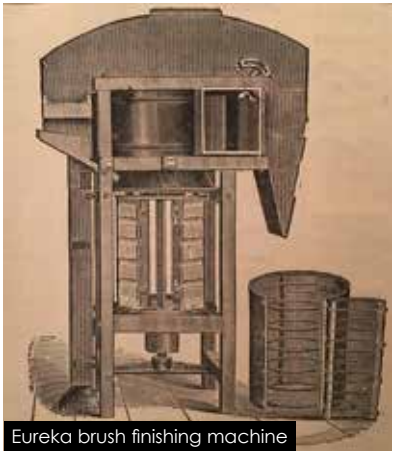


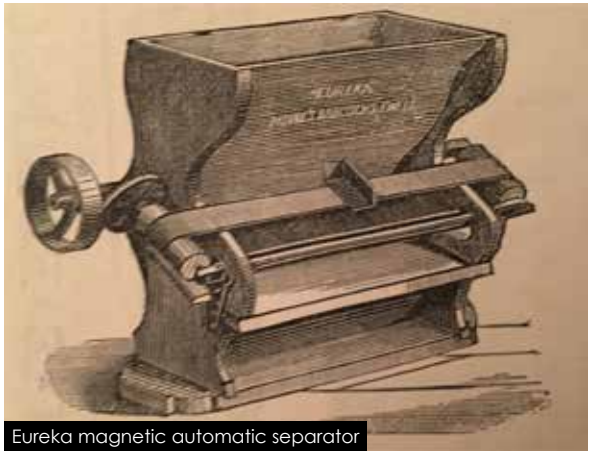
Longitudinal section of the mill





Eureka combined scourer, aspirator and separator


Eureka brush finishing machine


Eureka magnetic automatic separator

roller plant worked by a steam engine. The old mill continued to be used for cleaning and screening the wheat.

The fire was thought to have been caused through friction among the elevator heads. The mill was insured for UK £8,500, but the insurance only just covered the damage.

The new mill

There was some delay in the building of the new mill as it became necessary to appoint arbitrators to decide who should rebuild it. In the end the decision was given in Mr Whitworth's favour, and he determined, in spite of the depressed state of the milling trade at the time, to build the mill on a new site.

Having obtained permission for a most advantageous site at Wellingborough with access to both water and rail, he went ahead and erected his mill using the latest improvements that the architects and engineers could together devise. He very wisely delayed taking steps in the design of his mill until he had settled to whom he should entrust the contract for the machinery.

After inspecting the different systems at work in various parts of the country, he decided to place his order with Thomas Robinson & Son Ltd of Rochdale. The milling engineers consulted the architects Usher and Anthony of Bedford and used their best efforts to erect a mill designed to prevent any possibly repetition of Mr Whitworth's previous disaster.

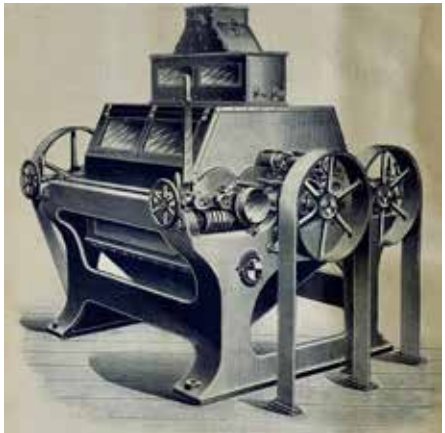
The resulting building was impressive for its elegance, convenience and accessibility. It was said that every visitor was bound to be impressed with the ample space and light provided in every part of the mill, as well as the dimensions of the wheat bins which allowed the different qualities of wheat used to be thoroughly mellowed before grinding.

The wheat was cleaned in the warehouse initially by a 'Eureka' warehouse separator placed on the third floor and it was then fed

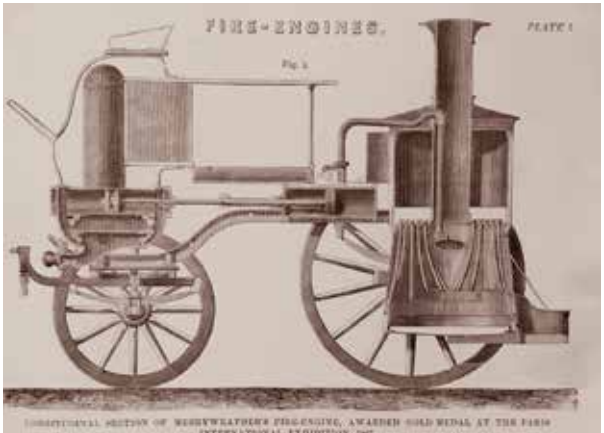
directly into any of the twelve mixing bins.

The required mixture of wheat was then passed into the cleaning department, situated over the engine house. It was processed there by a 'Eureka' scourer and brush machine and also a 'Eureka' magnetic separator. The layout on several floors can be seen in the illustrations.

Once the wheat had been cleaned it went through the grader with a fan and from there to the roller mill proper where two sizes of wheat were reduced on the six-break system to flour and offals. These were passed back into the warehouse where they were each was taken off and packed in sacks by means of two flour packers.



Robinson's double horizontal roller mill



Merryweather fire engine, Paris Gold Medal winner in 1867

The milling machinery comprised a first break mill with three grooved chilled iron rolls, 9 x 18 inches; three double horizontal mills, with grooved chilled iron rolls 9 x 30 inches, for the second, third, fourth, fifth and sixth breaks together with four double horizontal roller mills, with smooth chilled iron rolls 9 x 18 inches.

In addition the mill was equipped with two bolting reels, five sheets long and 32 inches in diameter; eight centrifugals, two sheets long, with double worms; two gravity purifiers; two patent diamond purifiers; a bran duster; four dickey sieves; six scalpers, five-ft long by 32 inches in diameter; an exhaust fan and a dust collector. The various products were conveyed from the different machines by 15 elevators.

To enable the men on different floors to communicate quickly with one another, Christy, Son and Norris fixed a complete electric bell plant combined with speaking tubes. The whole mill was fitted up with electric lighting, again fitted by the same electrical engineers from Chelmsford Essex.

Due to the previous fire tragedy, no expense was spared to install the very elaborate fire system, fitted out by Merryweather & Sons of London. A tank 60ft high contained 7,000 gallons along with a steam fire engine of their own design fixed on the ground floor.

Together this ensured a duplicate water supply was provided. The tank was kept full and in the event of fire, before this could be exhausted, the engine would be started to pump water directly onto the fire from the River Nene. The system was tested daily.