



Irish mills and Irish millers

Milling journals of the past at The Mills Archive

by Mildred Cookson, The Mills Archive, UK

An article in *The Miller* in February 1903 was written to celebrate the setting up of the Irish Association of Millers. It pointed out that the millers had a good reputation for proficiency and commercial enterprise in their craft, and underlined “their plucky efforts and the fine fight” they made to compete with the large mills on their island and the great imports of American flour.

In the city of Cork, St John’s Roller Flour Mills, belonging to Messrs George Shaw and Son, were well known. ER & F Turner had fitted out the mill with an excellent five-sack plant. The installation, which was described as being on the most modern

lines, was working very satisfactorily.

The milling arrangements in Ireland were not the same as England, with the arrangement of spouts, machines and flow of material requiring a great deal of business acumen to ensure the absolute perfection seen at the model plant of Messrs. George Shaw and Sons.

These problems did not deter Turners’ engineers who “had entered into the work with their customary energy and nerve”. The highly commendable results were demonstrated by Mr Pertwee, from the staff of Turners, who had managed the installation and showed the visitors round the mill.

Mr Brown, the managing partner, in charge of ensuring the



Turner’s erecting shed



The roller floor

mill's prosperity, was a fine first-class practical miller. He was very willing to exchange views and give the benefit of his observations on flour mills and flour milling science.

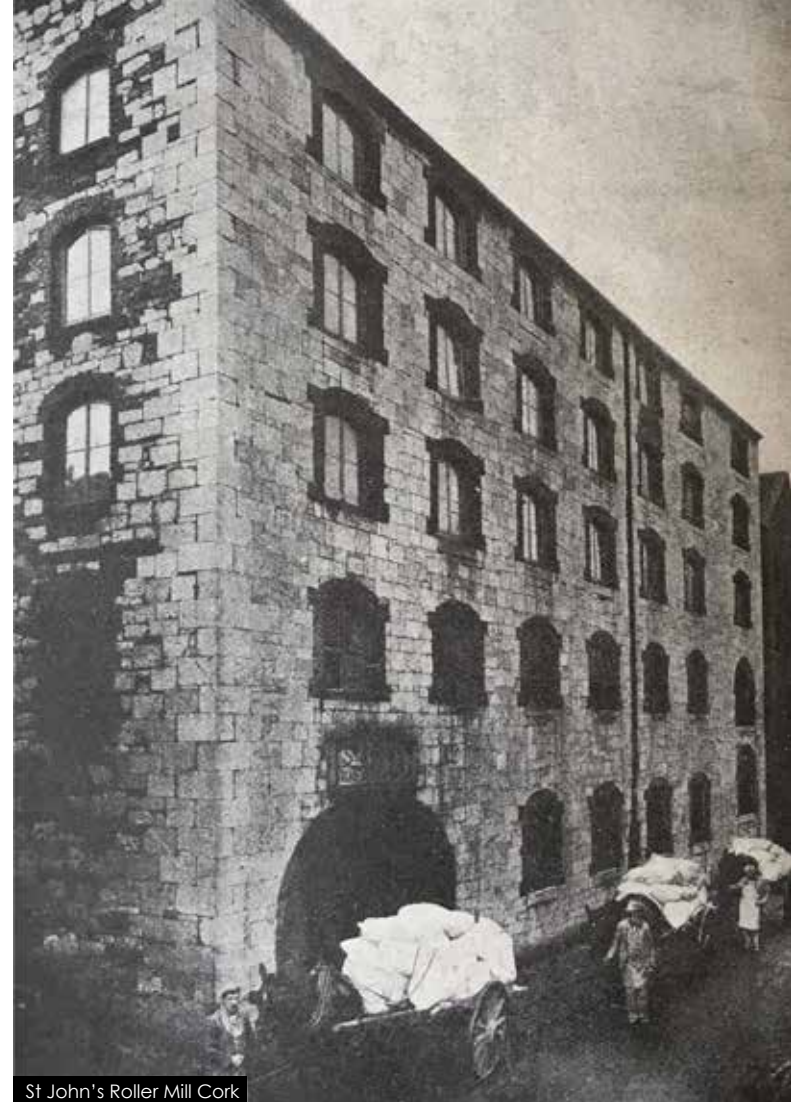
The mill itself had the customary array of elevator bottoms on the ground floor. The spouts connecting these with the roll hoppers were built very symmetrically, the room being around 14 or 15 feet high. This loftiness was always a good starting point for milling engineers, as it cleared the way for building a plant on economical lines.

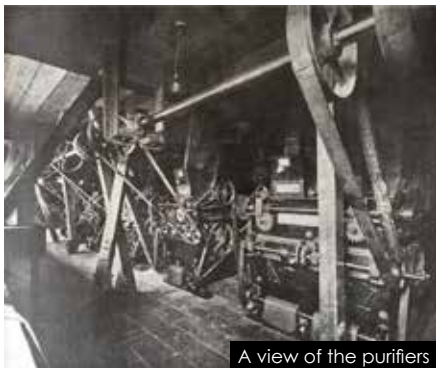
In the whole mill there were only three short worms for byproducts, the rest falling into their appointed hoppers and elevators by gravity. Around the elevators and shafting on this bottom floor there was plenty of walking space, which was another good point.

Mounting the first flight of stairs led to the roller floor, where one was faced with a fine array of Turner rolls. The visitors were surprised at the stated capacity of five sacks an hour and were reassured that this was indeed the case. It was found that they employed more break roll surface than had ever been seen before either in England or elsewhere.

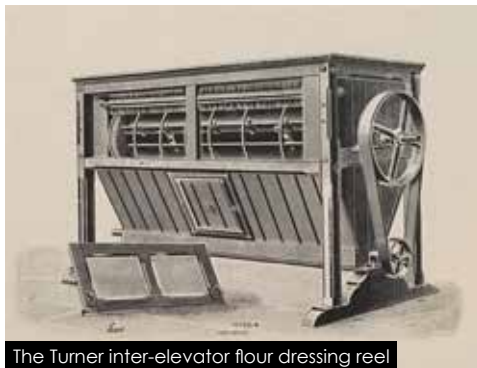
The number of inches allotted to the first break was a revelation. On closer inspection of the whole, each of the rollers had its own particular surface area which, when run conjointly with the others, resulted in a much superior performance to the generally accepted practice at the time. Detailed personal examination verified the innovation and the visitors had no doubt that this would ultimately stand as an additional principle in the technique of flour milling.

The same lavish roller surface was seen on the reduction side of the mill. The set up had evidently been studied both physically and scientifically and the available allotted space was utilised in





A view of the purifiers



The Turner inter-elevator flour dressing reel



Mr Brown, Managing Partner for George Shaw and Sons

the best way to enhance the nature and yield of the product.

It was abundantly evident throughout the mill's arrangement that a maximum of patent flour had been aimed at, and that only the highest qualities were saleable, anything under a good patent was not accepted. This total percentage of high-class flour was only made possibly by Turners making a personal and local study of what was required in the making of the mill equipment.

All the processes at the St John Mills had been thoroughly thought through before installation by Turners during their local study of wants and surroundings. There were seven Turner "Dustless" purifiers, the middlings being treated upon the first five. As a result of the elaborate division of stock upon the first break rolls, the sizes of middlings produced were so uniform and appropriate that there was very little secondary purification needed.

It was clearly stated that it was becoming more widely known and recognised that elaborate primary purification was 'the thing' and that middlings once or twice rolled never purified so easily. Attention to this middlings problem could be obviated if millers went all the way in the important matter of primary preparation.

It was found that Turner's inter-elevators did a first-class job as

scalpers; the stock from each break was treated with just the right amount of friction and movement necessary to free the feed to the succeeding roll from all sign of dusty material. The last break stock was treated on centrifugals. On the top floor of the mill was the usual complement of dressing machinery.

For better examination of the flour from each machine the triple flour worm was not bolted to the roof but was as a table worm running alongside the wall, about 40 inches above the floor. Any flour could be diverted to any worm and it was possible to make almost any grade that was demanded by the trade.

Throughout the whole mill simplicity and efficiency went hand in hand and the mill was noted as a great credit to all concerned. Messrs George Shaw and Sons were the oldest millers in Cork and extended back to the third or fourth generation. They had advanced with the times and had always been right in the forefront of scientific milling practice.



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