

### The Isaac Harter Company Fostoria, Ohio

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

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We are particularly proud of our collection of 'The Weekly Northwestern Miller'. An American journal first published in 1873. You may have noticed the attractive covers the magazine used during the 1920s, so enticingly displayed in the series of advertisements in Milling and Grain. Not only does

the publication give us valuable insight into the development of milling in the USA, it features many accounts from around the world. This month I have chosen to précis an article from December 30, 1898, on the Isaac Harter Company Fostoria, Ohio. The company had just commissioned a new mill with a capacity of 2,000 barrels, making it one of the largest winter wheat mills in the country. Once the decision had been taken, the contract was given to the Edward P Allis Company of Milwaukee to be built on the Universal Bolter system. They drew up all the plans, furnished all material and machinery, installed it and started up the mill. The contract was signed on March 10, 1898, and on the following 20 September, the mill was put into operation. 'The Weekly Northwestern Miller' suggested that anyone interested in modern milling would find that it was well worth a trip to examine the construction and see the results obtained by this elegant plant.

The mill was built as two mills, each of about 900 barrels capacity each. Each mill was entirely independent









of the other. The engine was a Reynolds-Corliss vertical compound condensing, with cylinders 22x44x48 inches. The engine itself was located between the two main line shafts, extending from the mill through into the engine room. The 18 foot diameter fly wheel of the engine also acted as the driving pulley for both mills and took two 30 inch belts; one to drive each mill. Each mill could be stopped by throwing out a friction clutch.

Each of the two mills contained the same amount of machinery, so the arrangement in one was reflected in the other. The basements had low ceilings and were used for storage. On the first floor there was a line of flour and feed packers on each side of the mill close to the wall, so it left the whole floor in front of the packers for work and storage. The second floor had the line



The history of milling no matter where it has taken place - is being archived by the Trust.

For well over 100 years milling technology has been global with many magazines serving or having served our industry from flour and food to feed and oilseed processing and now to fish feeds.

A most recent contribution to the Trust's collection is a complete century of past edition of the now out-of-print 'North-Western Miller' from the United States.

We are proud to present here, front cover illustrations from this valued and longserving publication as a visual reminder of the importance contribution past magazines provided to our industry.









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## Art in the Archive

We are a charity that saves the world's milling images and documents and makes them freely available for reference. We have more than two million records. We aim to cover the entire history of milling, from its ancient origins up to the present day. Find out what we have and how you can help us grow.

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Section of the engine room

shafting to drive the roller mills and the boots of the elevators and the third floor had on each side 24 double 9x30 Gray roller mills, which did all the grinding. Gray, who was the Chief Milling Engineer to Allis probably justifies an article by himself.

The fourth floor was the spouting floor and contained the piping and fans for the roll exhaust and the fifth floor had 10 Reliance sieve purifiers with one Perfection dust collector to each purifier; there were also two large dust collectors for the roll exhaust.

The sixth and upper floors contained the elevator heads with their spouting and the complete bolting apparatus for the mill, namely nine 60-inch Universal bolters and 10 centrifugal reels. The centrifugal reels were used principally for dusting bran, feed and low-grade flour.

The wheat cleaners were located at the opposite end of the mill building to the engine room and were cut off from the mill proper by a brick wall. The floors of this part of the mill corresponded in number and height with the mill itself. The only treatment the wheat received in the mill before going to the first break rolls was to pass through a suction and the wheat steamers. A 50,000-bushel elevator located outside the mill was used chiefly for mixing. The mill was always kept scrupulously clean and tidy and the company had accepted the milling engineers claim that this type of mill would do better work than reel mills or any other sieve machine. The main reason for this was that the Universal Bolter was constructed on a different principle to any other. There was nothing on the sieve to agitate and scour the stock, and cleaner work could be done on a coarser silk than on any other sieve because the impurities were always on the top and never came in contact with the silk. The only thing in common with other sieve machines was the gyrating motion.

"Harter A No 1" flour became very popular overseas as well as in the domestic markets, particularly in the United Kingdom, but also in South Africa, the West Indies, and South America.

The geographical and historical spread of our holdings at the Mills Archive mean that I can only provide snapshots; if you would like to know more please email me at mills@millsarchive.org.

