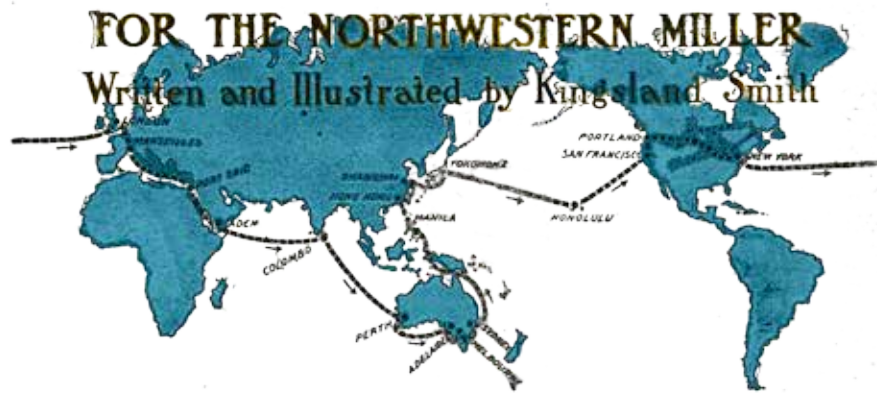


# AROUND THE WORLD



TSINGTAU

## Milling around the world at the Mills Archive No 2: A Flour Mill in China

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

by Mildred Cookson, The Mills Archive, UK



One of the collections we have at the Mills Archive in Reading is an almost complete run of the American Journal "The Weekly Northwestern Miller". More than 1500 issues of this magazine from Minneapolis were kindly donated by the Satake Centre for Grain Process

Engineering to add to our earlier, incomplete run in poor condition, which we rescued from a caravan used by visiting mill enthusiasts in the English county of Suffolk.

A report in the edition for November 4, 1903 describes a mill visited by Kingsland Smith near the port city of Tsingtau (Qindao) in the Shandong province of China. It was around "40 minutes by rickshaw" in the village of Tai-tung-tschen, a small hamlet built by the Germans for the Chinese. He describes it as a typical Chinese flour mill.

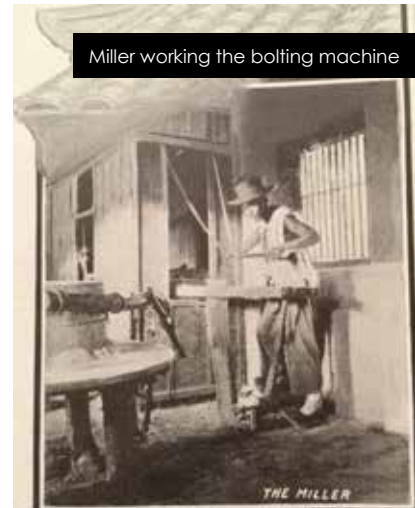
The mill looked like any other building in the village, and after introductions the proprietor showed him round and brought out the mule, which he hitched to the stone so that he could take a photograph. However, the air being so very hot and flies very troublesome, the donkey kept shaking its head and moving; and as the photo had to be taken on a long exposure it was decided to take it without the donkey.

He commented that "inside it differed from any mill I have ever seen before". At the end were grain bins of matting. Then some small stones mounted on a low frame. In the far corner on the right was a bolting-chest. A long sieve was used, covered with a cloth resembling coarse bolting cloth. He described the manner

in which the sieve was moved backwards: "a man stands on a board that is balanced on a roller. From the centre of the board a stick goes up to the end of the sieve. A piece of bamboo is hung from the ceiling, on which the miller balances himself. When he comes down on his right foot the sieve is thrown in and bangs against the back of the chest. Throwing his weight on the other foot the miller brings the sieve forward with a bang, and so it goes on." The miller had created his own private gym!

Kingsland Smith estimated the sieve inside the bolting-chest to be 2 x 4 ft and the cloth looked like No 0. Across the centre of the sieve was a rake, to keep the meal from bunching. The miller said he could sift a quantity equal to 80lbs/hour.

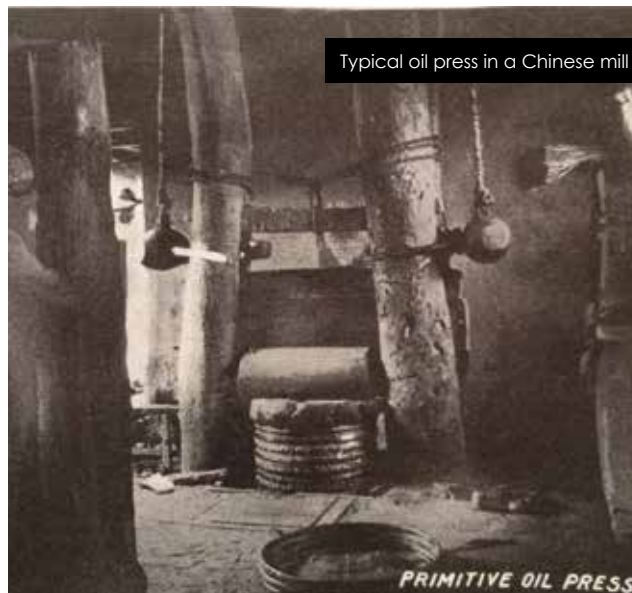
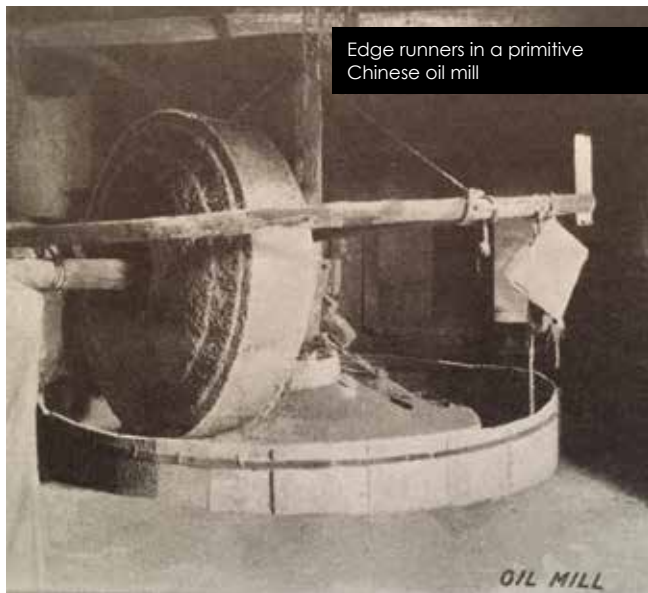
The millstones were very small (30 x 8 inches). The wheat was fed through two small holes an inch wide. A small pile of wheat was placed on top of the runner stone, the mule was hitched to the bar attached to the runner, and after being blindfolded, was started up to go round and



round, grinding out meal in a manner that reminded him of Bill Nye's Pompeian mill (see reference below) which "ground out a sack of flour every little once in a while". The meal fell out on the frame around the bedstone and the mill ground ten catties of flour and three catties of bran an hour (the catty being a pound and a third). The mill had two sets of stone for wheat, although it was not clear how they could both be operated at once. The stones, made from granite cost only \$10 a set. The miller obtained his silk from a local source a day's journey away. The stones, which needed dressing every five days, were coarsely furrowed but the lands were not cracked.

other side, continuing until no more oil could be extracted all the oil cake was sold in the neighbourhood to be used largely for fertiliser.

Such mills were common all over north China. Often the village had a common mill where anyone could go and grind his or her grist, this duty usually falling to the lot of the woman. Sometimes the mills were of a size to be driven by animals and sometimes they were merely hand mills. An itinerant lady missionary told Kingsland Smith that in many places the mill was cleaned up and given to her as a venue for her meetings. By 1903 the flour trade in Tsingtau was not very active, one firm telling the writer



In addition to the wheat mill, the establishment also has an oil mill, which like the flour mill was of very primitive construction. A big stone set on edge served to crush the beans or nuts or seed. The seed was then heated in an adjacent room. An oil press was the gem in the collection of milling curiosities; two tree trunks forming the frame with two heavy sledge hammers hanging next to it. The seed was placed in the frame with wooden blocks over it and a series of wedge shaped blocks put on top. When the seed had settled a little, a wedge was driven in from one side. After a time another wedge was driven in from the

that he used to handled 100,000 sacks before trade fell away.

These articles only give a brief glimpse of the several million records held by the Mills Archive Trust. If you would like to know more please email me at mills@millsarchive.org.

Reference to Bill Nye's visit the museum in Pompeii "Bill Nye's Red Book" published by Thompson and Thomas, 1891 or see <http://www.authorama.com/remarks-14.html>

The Masthead for The Northwestern Miller

# THE Northwestern Miller

Thirty-First Year      MINNEAPOLIS, MINN., NOVEMBER 4, 1903      Volume 56 Number 19

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FOR THE NORTHWESTERN MILLER  
Written and Illustrated by Kingsland Smith

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