



## Doors Open 2014

### Secrets of Spirits at the Distillery District

Saturday, May 24<sup>th</sup>

The Distillery District is delighted to participate again in Toronto's Doors Open celebration of the city's built heritage. To illustrate this year's Doors Open theme of "secrets and spirits" we are offering tours, led by knowledgeable guides, that will explain the secrets of distilling whisky and other spirits at Gooderham & Worts Victorian distillery. During the tour, visitors will view private areas where industrial heritage artifacts, like an Archimedes screw, grain storage hoppers, distillation columns and control panels remain *in situ*.



**Archimedes Screw**

Distilling whiskey was a complicated business, involving four basic ingredients – water, grain (initially wheat, later corn), yeast, and malt – and four basic processes – milling, mashing, fermenting and distilling. Each of these basic processes was housed in the massive Stone Distillery, designed by Irish immigrant David Roberts, Sr. When the Stone Distillery opened in early 1861, it catapulted Gooderham & Worts onto the world stage, where it may have been the largest distillery in the world and certainly remained the largest distillery in the British Empire for many years.



**Grinding Floor, 1918**

**Milling** ground grains, first by millstones and later by high-roller mills, into a powder that could be mixed with various ingredients for fermenting. Milling occupied the eastern section of the Stone Distillery, with machinery on the ground floor, grinding on the second floor, grain storage and movement on the other three floors.

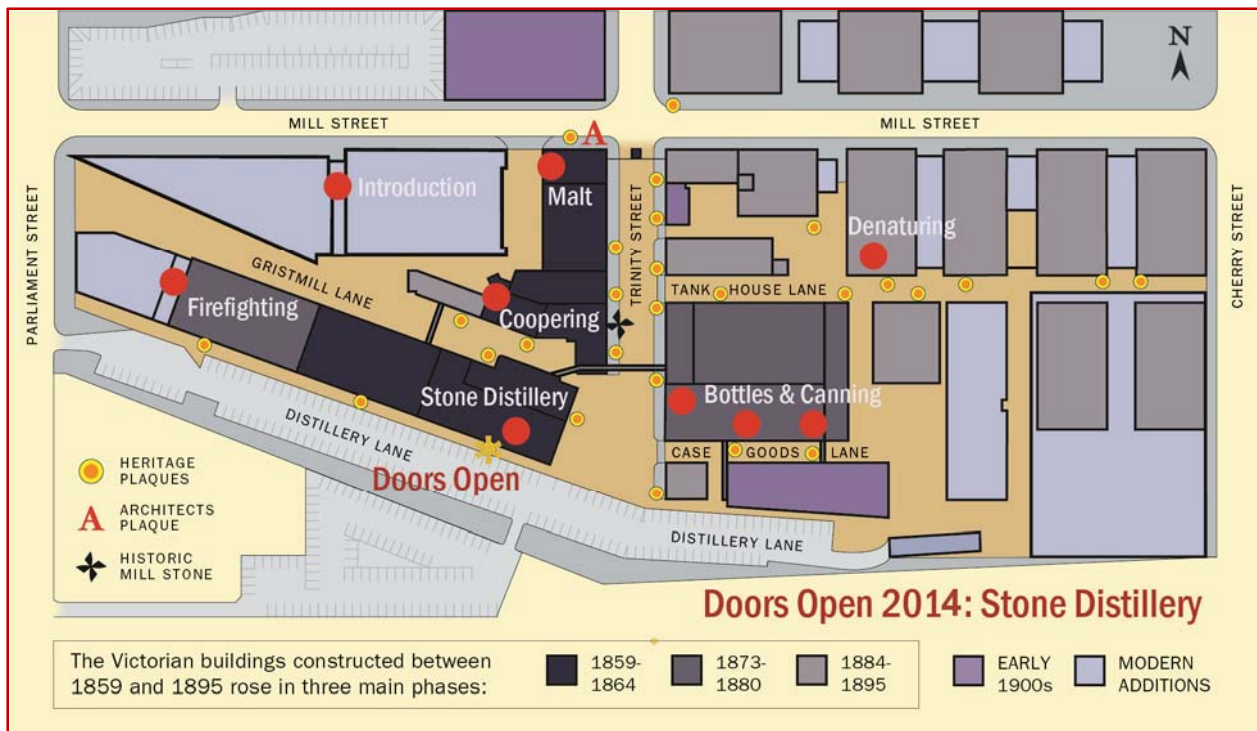
**Mashing** mixed the milled grain and hot water with *malt*, the toasted barley sprouts that Victorians used to break starchy grain down into a sugary, fermentable liquid known as *wort*. Mashing initially occurred on the second floor behind the large, arched windows under the Gooderham & Worts sign.

**Fermenting** added yeast to huge vats of wort, to yield a low-alcohol liquid called *beer*. Fermenting occupied the low, stone building attached to the western end of the Stone Distillery that is now known as the Fermenting Cellar.



**Distillation column**

**Distilling** purified and raised the alcoholic content of the beer by pumping it through a *continuous still*. This apparatus was composed of tall, multi-floor distillation columns that rose through the central part of the Stone Distillery. Because alcohol boils at a lower temperature than water, steam heat was applied to the columns, alcohol was turned into vapour that rose from the water and was then cooled by condensers back into a higher-proof spirits.



## Doors Open & Other Historical Displays

When the Gooderham & Worts distillery closed in 1990, hundreds of industrial artifacts remained on site. To help visitors appreciate the working life of the distillery, exhibits of these artifacts have been installed at several locations throughout the District. See map for Doors Open and Artifact Exhibits.

### Milling, Distilling & Aging, 33 Mill Street

This introductory exhibit offers a good overview of the industrial processes involved in creating whisky. Featured artifacts include a distillation control panel, grain mills and a section of barrel racking used for aging whisky.

### Firefighting, Pumps & Pipes, 8 Distillery Lane

With fire an ever present threat, G&W maintained pumps and firefighting equipment at the ready, including the giant 1895 1200-gpm steam pump on display.

### Coopering, Offices & Labs, 44 Gristmill Lane

These buildings contained barrel-making workshops, offices, labs and alcohol rectifying. Featured artifacts include barrel-making tools, and a giant 1870s safe.

### Milling, Mashing & Distilling, 33 Distillery Lane

The 1860s Stone Distillery formed the heart of G&W operations, housing Milling, the Steam Engine, Mashing and Distilling. A dramatic, four-storey exhibit explains each process.

### Bottling & Canning, 9 Trinity Street & 8 Case Goods Lane

Exhibits about bottling and canning operations include a large collection of G&W bottles and brands.

### Denaturing & Coppersmithing, 24 Tank House Lane

Exhibits explore alcohol denaturing, as well as coppersmithing and general maintenance activities. Featured artifacts include a large double-hulled mixing kettle and early copper fabricating and wood working equipment.

### Malting, 51 Mill Street

This exhibit explains the two-stage process used to transform grain into malt, one of the key ingredients used to make whisky.