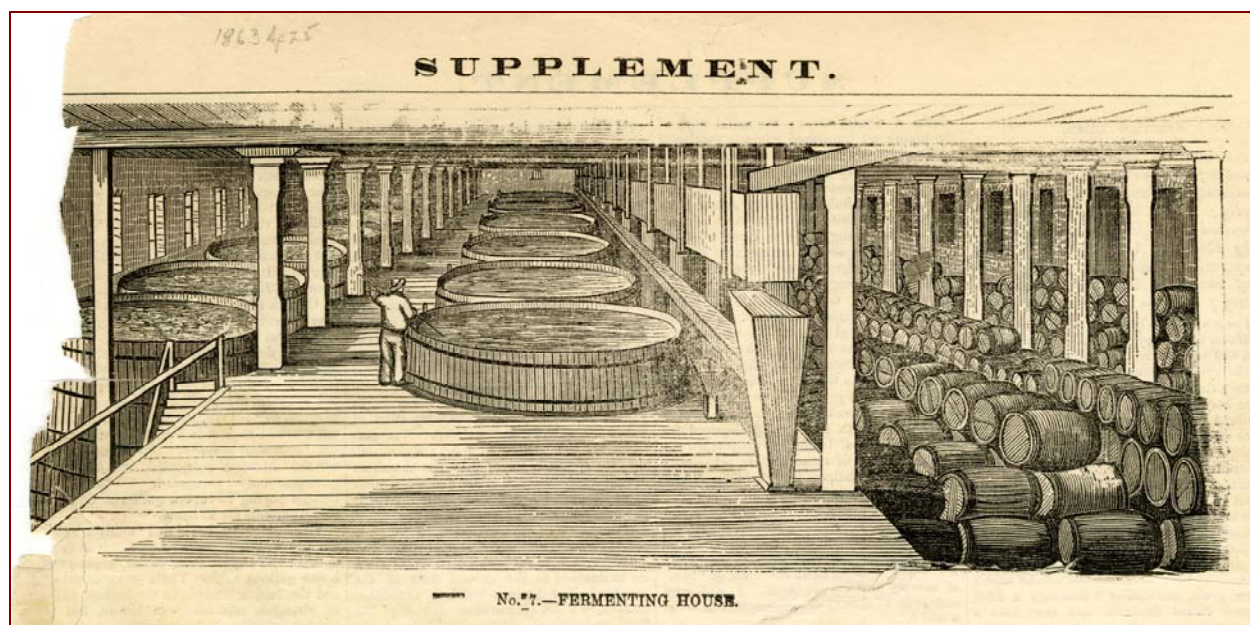


Distilling Distilled



Midway through the process of transforming grain into whisky, 1863 TPL

Whisky – or whiskey, depending on your taste in spelling – is known as “aqua vitae,” water of life, and water is certainly one of the prime ingredients. The others are grain, malt, and yeast. The alcohol-making process involves four basic stages: milling, mashing, fermenting, and distilling.

Although Gooderham & Worts distilled many alcoholic beverages over the years, whisky was the first and the most important. The type of whisky produced became a distinctively *Canadian* whisky often known as “rye.” Although rye was only one of the grains involved, it imparted the characteristic flavour to the drink .

Alcohol is derived from the fermentation of sugar, which, in turn, may come from fruit, such as the grapes in wine, or other ingredients, such as the grains found in whiskies. Making alcohol from grain requires that the starchy material in the wheat, corn or rye be broken down into sugar that can then be fermented. In the 19th century, “malt” (made from sprouted barley) was the only economic way to convert starch into sugar. At G&W the whisky grist contained up to 10% malt. By the early 1860s, malt was made on site, although the company probably started making malt earlier.

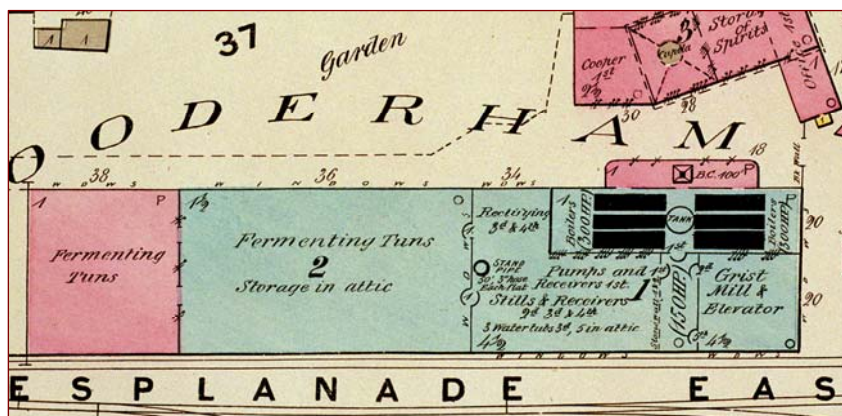
Essentially, the **grain** was ground in Building 3 and mixed with heated **water** from Lake Ontario and **malt** (from Buildings 35 and 36) in great tubs for “**mashing**” on the third floor of Building 5. After the starch had been

converted into sugar, the liquid (or “**wort**”) was pumped through a cooler into the **fermenting “tuns”** in Building 6 and 7.

Fermentation converts sugar into alcohol and carbon dioxide gas. In the fermenting room, **yeast** (either bought “brewer’s yeast” or made on site) was added to the wort to start the fermentation process. After three to nine days, depending on the season, the wort had been converted into carbon dioxide gas, which escaped, and a 6 to 7 % alcohol solution known as “**beer**” or “wash” which proceeded on to the next stage.

Distillation is a purification process that separates the beer or wash into alcohol, water, and other components by means of steam. Stills have taken various forms, but the essential idea is to heat the fermented mash, or beer, until it boils. Since alcohol boils at a lower temperature than water, it evaporates first, rising to the top of the still where it enters a condenser and is cooled back into an alcohol-rich liquid that is drained off. The material left in the bottom of the still is removed and discarded or (more often in the early days) fed to livestock.

The first distilling produces “low wines” that are relatively weak in alcohol and high in impurities. So the distilling process was repeated, producing higher-proof, purer “high wines.” G&W began with pot stills at the old windmill site and moved through various column-still arrangements in later years ... but that’s a story for another time.



Stone Distillery 1880
Fermenting (left), Distilling (centre right), Milling (right)



Stone Distillery heritage

The word “whisky” derives from *usequebaugh*., the Gaelic word meaning “water of life.”

Please send your comments or questions to Manager of Heritage Services, Sally Gibson, sg@thedistillerydistrict.com.