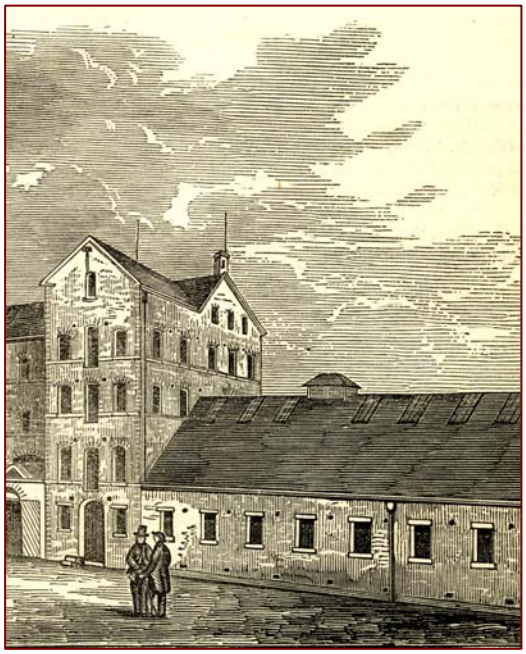
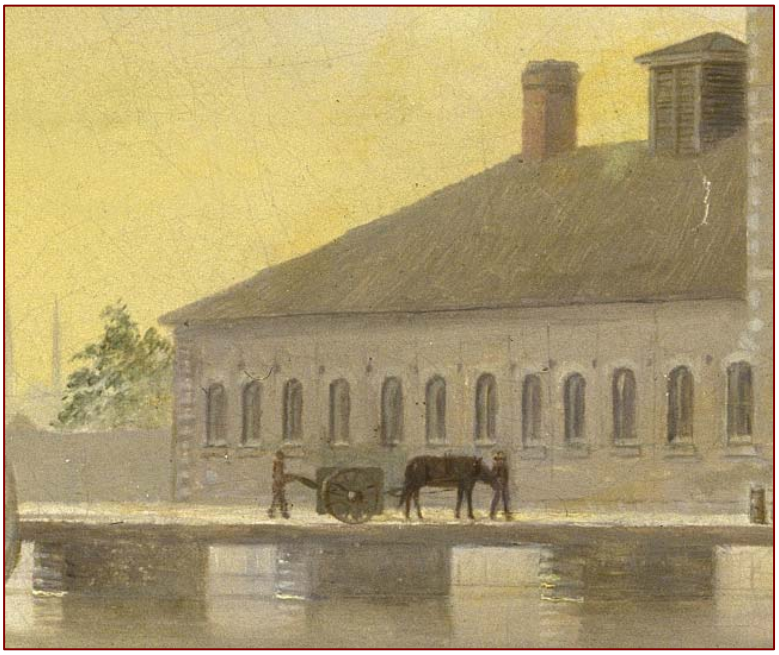
Building Histories
Building 6: Fermenting Cellar



North side of Fermenting Cellar, 1863
TPL



South side of reconstructed Fermenting Cellar, 1870
DHD

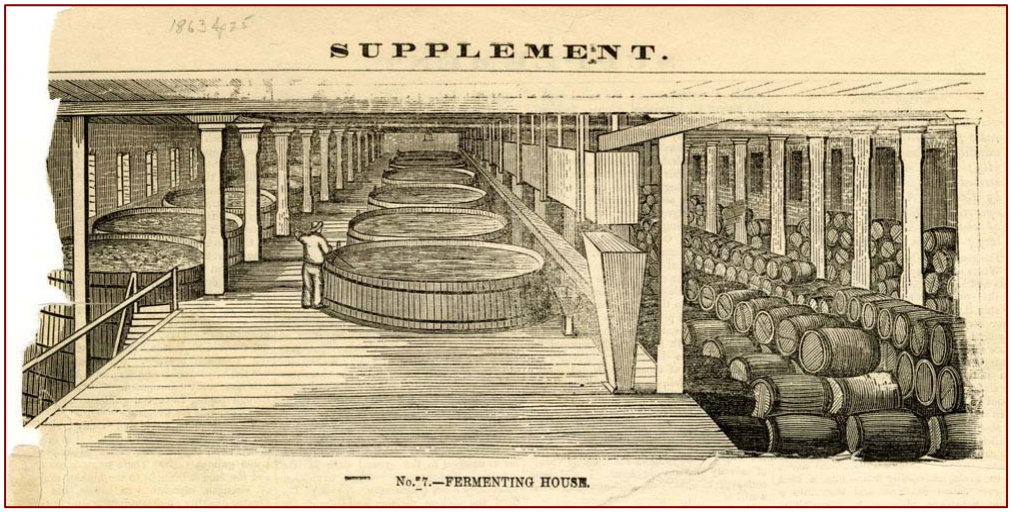
The exterior of today's fermenting cellar looks much as it did when it first opened in January 1861, and after it was reconstructed following the great fire of October 1869. Designed by David Roberts, Sr., the fermenting cellar was a one-and-a-half storey, limestone structure that stretched west from the five-storey stone distilling and milling building. Like the adjacent distillery, it was parallel to the nearby shoreline, was composed of hammer-dressed coursed-rubble masonry and was punctuated by a dozen, regularly spaced windows with massive stone sills and lintels. Three of these windows were later replaced by doors. The 1863 view of the north façade indicates that there were windows in the roof for light and/or ventilation. Until the late 1960s, the roof was slate.

Fermenting Cellar today

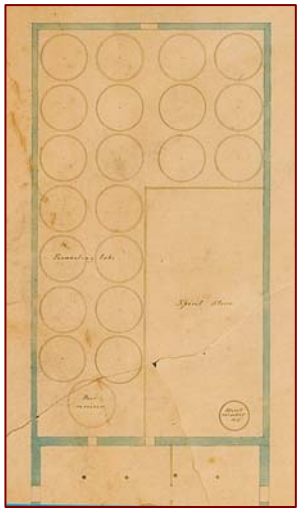
Fermenting lies at the heart of making whisky or other alcoholic beverages. By adding just-the-right type and amount of yeast to a non-alcoholic liquid called "mash," the sugary liquid is transformed into low-proof alcohol known as "beer." This beer is distilled into high-proof alcohol that can be blended and aged as desired.

A *Canadian Illustrated News* reporter described operations in the fermenting cellar of 1863, linking the second-floor mashing and multi-floor distilling processes that occurred in the five-storey distillery with the fermenting that occurred in the one-storey building next door:

> The mash is drawn from the [mash] tubs, two emptying at a time, and two filling, and conducts itself in troughs made for it along the fermenting cellar. The troughs are above the level of the tubs there and have valves to be opened into spouts conducting into each as it requires to be filled. There are fourteen, each fifteen feet in diameter, and seven deep. The mash remains in about four days to ferment. When in a proper condition it is drawn out, and raised by pumping to the fifth or loftiest floor, and there conducted into a vat whose mouth is on that floor, and whose bottom allows the fermented 'beer' to descend into the head of the still the height of which is forty feet above the still room [on the ground floor].



Fermenting cellar interior, 1863 ***TPL***



Plan mid-1860s ***DHD/CTA***

The interior of the Fermenting Cellar maintains its 1860s outlines and industrial feel, but the contents have changed dramatically over time. At some undetermined point, the single large room was subdivided into two distinct spaces later named Buildings 6 and 7. None of the original, regularly spaced wooden columns remain. Whether the columns destroyed in the 1869 fire that started in this building were replaced with metal is not known; but the existing columns are metal and irregularly placed as use or construction dictated. During its working life, from the 1860s through the 1980s, the ground floor of the 140 x 80 x 20 foot structure contained large fermenting "tuns" where yeast added to mash started the fermentation process. In the 1860s and '70s, the attic above the vats was used for bonded storage of whisky in barrels. Later, yeast-making facilities and a laboratory were substituted for storage.

In 1860, the tuns were made of wood and had probably been constructed by Gooderham & Worts' own coopers. Two lines of seven tuns ran along the southern half of the building (left side of 1863 sketch), while the north half was devoted to barrel storage. Access to the open tops of the tuns was via catwalks, as also shown on the 1863 newspaper illustration.

Over time, the number, size, composition and arrangement of the tuns varied, as did the height and arrangement of catwalks. (Traces of earlier catwalks are still evident on the walls.) Gradually, the number of fermenting tuns increased, while the barrel storage decreased until the entire ground floor was devoted to fermenting. (Separate

barrel storage structures – or rack houses - only started to be built in the 1880s and '90s.)

Tops of wooden fermenting tuns, 1918
CTA 1583-87

Copper tank and empty bases, ca. 1986
by Larry Turner, DHD

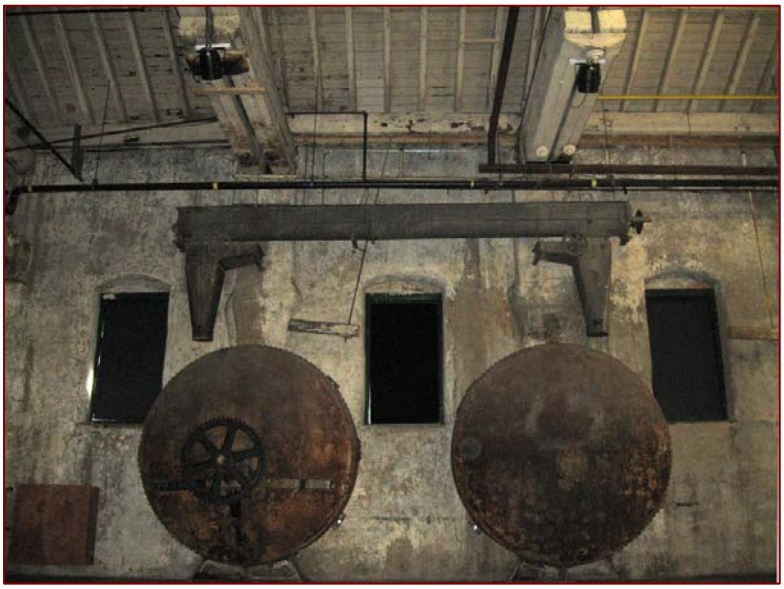
By 1882, for example, the fermenting cellar contained 46 wooden tuns, each 16-feet in diameter and 8.5-feet high. During the Great War, wooden tuns started to be replaced by copper ones. And at its twentieth-century peak, the floor was covered by copper tuns, about 16-feet tall, placed on raised concrete bases, and overlooked by catwalks, some of which remain. Throughout its working life, Building 6 emitted a rich – some would say overpowering – scent of fermentation, both inside and outside the building. The purpose of the building was evident to all the senses.

In 1957, Gooderham & Worts stopped making grain alcohols such as whisky, but continued making rum and industrial alcohols from molasses. Production decreased; and then halted altogether in mid-1990. Fermentation was a thing of the past. The great copper tanks were sold for scrap. And uncertainty descended on the site.

When Cityscape took over the Distillery District in December 2001, the Fermenting Cellar was a great, "industrial" volume with a strange floorscape of giant concrete disks. What "new" use could replace and reinvigorate this part of the site? In 2003, the new owners decided to transform the old fermenting cellar into a modern event venue exuding "industrial chic." Much of the industrial era remains on view. Rough walls. Double timber beams resting on limestone corbels and steel columns. Open rafters and remnants of catwalks. But a level floor was required for safety and functionality, so most of the tank bases were buried under a smooth layer of concrete. To reveal and celebrate the industrial heritage of the building, however, parts of four circular tank bases were left uncovered near the main door. Note the size, the depth, and the slits where pipes were attached to the tanks.

Most of the fermentation tank bases disappear under a new concrete floor in 2003
by Thane Lucas

Although none of the big copper fermenting tuns has survived, other important industrial artifacts are on display. To mark the important relationship between fermenting and mashing, one of the mammoth (16 x 10 x 7 foot), early-twentieth-century "mash cookers" (5A-1-3/4) that used to be on the ground floor of adjacent Building 5 was cut up and the two ends mounted on the south wall. Above it, the 20-foot auger feeder (5A-2-5) that directed grain into the cooker is mounted. Under the stairs stands a small mash cooker (5A-2-6) dating from about 1910. And just to the west is a long, low, cast-iron water filter unit (6-1-3) dating from about 1900 that can be seen in some of the other illustrations.



Mash cooker (ends) & Mash auger feeder
Note also double timber beams

Small mash cooker, ca. 1910

Water filter unit (6-1-3), ca. 1900

If you have a chance to experience the industrial chic of today's Fermenting Cellar, take a moment to inspect the heritage artifacts and reflect on the 130 years when Building 6 was simply industrial. And, even as you pass by the building, take a deep sniff and imagine the glorious, but stinky, fermenting that used to occur within its hallowed walls.

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

For more about the history of the Distillery District, visit www.distilleryheritage.com.

To unsubscribe from this newsletter, contact sg@thedistillerydistrict.com