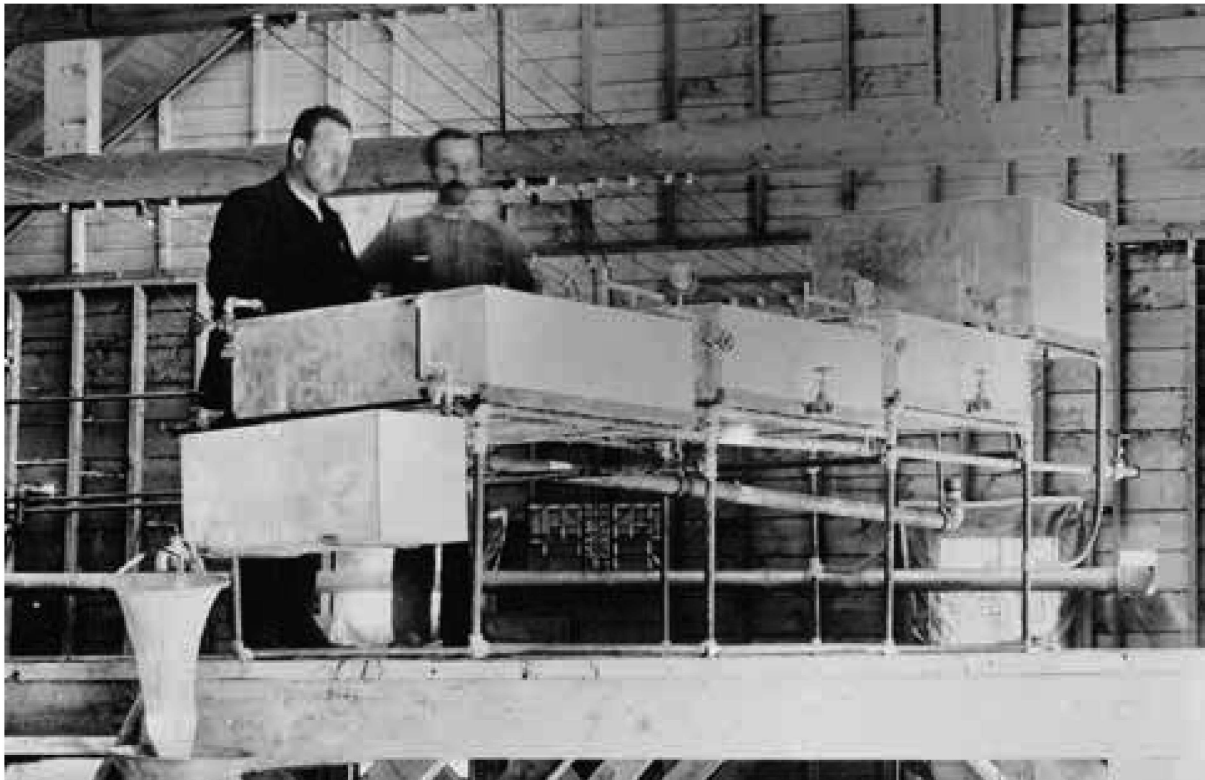


Maple Syrup Digest

Vol. 61, No. 3

September 2022



***New Producers Manual
1/4" Tubing Research
Foresters and Maple***



The Newsletter of the North American Maple Syrup Council



Railroads, Syrup Plants, and Pipelines: Large Scale Syrup Production Over a Century Ago with The Horse Shoe Forestry Company

Matthew M. Thomas

In the current world of maple syrup production, it is common to find industrial scale maple operations tapping tens of thousands, even hundreds of thousands of trees. In contrast, 125 years ago most maple operations were less than one thousand taps and a sugarbush with more than five thousand taps was rare. However, the Horse Shoe Forestry Company's maple sugar and syrup operation at the turn of the last century with its 50,000 taps, defied convention and was built on a scale and model unlike anything before or for years after.

The Horse Shoe Forestry Company



The sprawling Wake Robin syrup plant on the southeast shore of Horseshoe Lake in 1901. Image Courtesy of the Library of Congress.

maple operation was the creation of Abbot Augustus Low, Sr., a multi-millionaire from Brooklyn, New York who, in the late 1890s, purchased 45,000 contiguous acres of forested land and lakes on both sides of the Bog River in the Adirondacks of northern New York. Low was a wealthy man who was known to not spare expenses, and when he settled on the idea of using his forest for making maple syrup he started big and grew even bigger. In 1897, his first year of syrup making, he started with two moderate-sized sugarhouses containing two evaporators each, and about 10,000 taps. The operation continued to expand, and by 1900 A.A. Low had

replaced the two sugarhouses with four enormous syrup plants housing at least sixteen of G.H. Grimm's largest-sized Champion evaporators.

To operate these plants and gather this much sap, Low employed a small seasonal army of more than

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on page 30*

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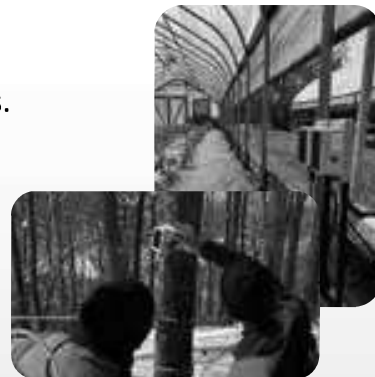


Does more than just sugarbush

Sugaring is, after all, just one of many seasons.

- Irrigation control
- Dairy line vacuum monitoring
- Weather stations (greenhouse, outdoors)

Just swap out the external sensor!



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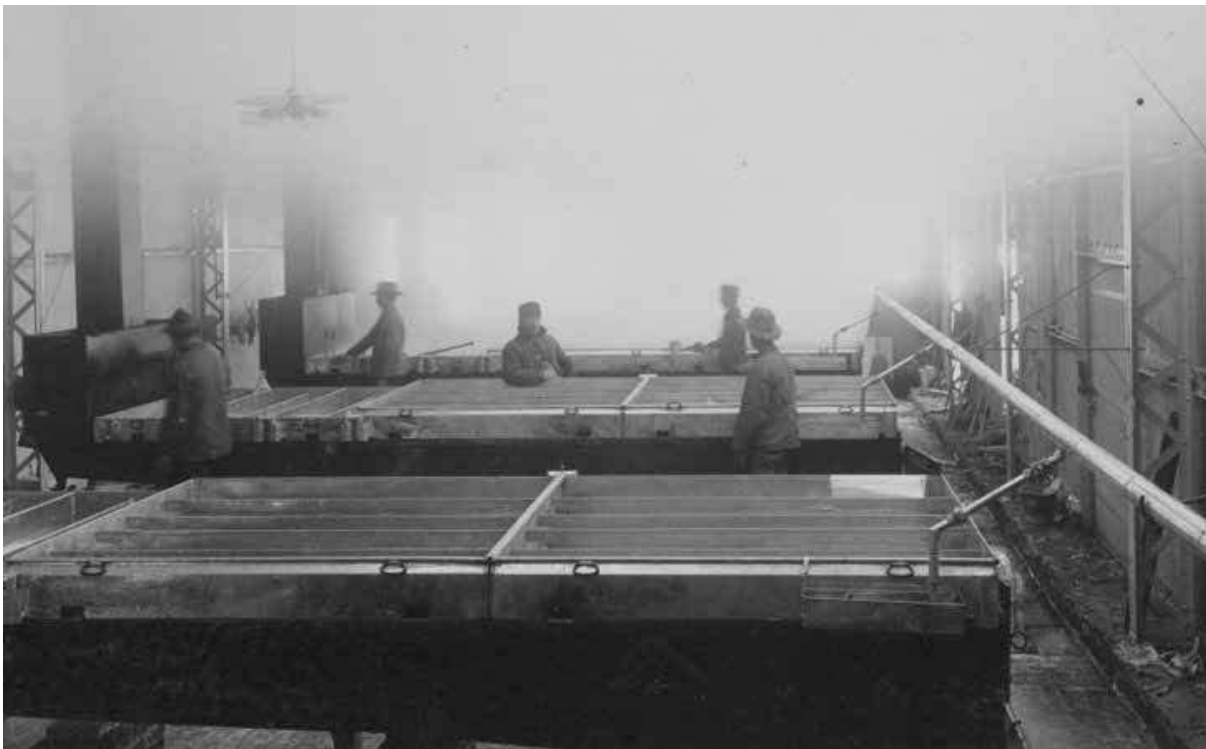
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one hundred workers, at times hiring knowledgeable maple producers from Vermont and New York. Growing up in the home of a wealthy shipping family, Low had no background or experience with maple production. Sap was gathered by hand from covered metal sap pails and hauled in tanks pulled by teams of horses. The Horse Shoe Forestry Company sugarbush spread across a large landscape and to facilitate the movement of sap, men, and supplies, A.A. Low constructed his own private railroad. Initially built using narrow gauge tracks but later upgraded to standard gauge, Low's railroad maintained at least four locomotives and spread out from the center point at the Horseshoe townsite on three lines like spokes on a wheel. In hillier sections sap was gathered and moved through two-inch diameter metal pipelines with dump stations running sap downhill to

tanks placed alongside the rail lines, or directly to the syrup plant.

The three primary syrup plants, with their individual names (Maple Valley, Wake Robin, and Grasse River) were connected to their own respective rail lines over which the sap was brought in large tanks placed on flat bed rail cars. The 75-foot by 90-foot Maple Valley syrup plant was Low's showpiece building boasting a metal frame and metal walls, wood and sap storage, a finishing and settling room, and a boiling room floor covered in marble slabs on top of which stood five 6 x 18-foot wood-fired Grimm evaporators.

Low's use of the lands on his estate was not only limited to making maple syrup on a grand scale. In addition to the syrup plants and railroads, he built mills at four locations for sawing logs, cutting lathe, and planing lum-



View of the group of five large Grimm evaporators inside the Maple Valley syrup plant. Image Courtesy of the Library of Congress.

ber; provided boarding houses and family housing for his workers; and maintained a farm and stock to help feed his employees in the wilds of the Adirondacks. He personally saw to the construction of a formal railroad station for the New York Central rail line at Horseshoe Station since the shack that had originally been built by the railroad was not up to his taste or standards. In the early years, A.A. Low's buildings were electrified and lit by a network of power lines and steam powered generators which were replaced with Low's construction of two private hydro-electric dams in 1903 and 1907. Like many wealthy New Yorkers who bought large estates in the Adirondacks to establish recreational camps, Low's estate also included a twenty-building private retreat known as Camp Marian (today Camp Otterbrook) for family and friends.

Low is sometimes credited with having the second most patents to his name, after Thomas Edison. While it is true that Low both invented and patented a wide variety of items and also used his wealth to develop the ideas of engineers and craftsmen he employed, his mythical rank as a patentee is not true. Interestingly, he did help develop and patent an early version of a steam-heated maple syrup evaporator, complete with a scale prototype. However, it was never put into operation in his syrup plants.

Combined with a certain vanity and an understanding of the value of branding and advertising, Low went as far as having his own embossed glassware made for bottling syrup and packaging maple sugar and individually wrapped maple candies that he called maple kisses. A.A. Low purchased all his ma-

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One of the Horse Shoe Forestry Company steam locomotives on their private rail line loading sap for transport to a syrup plant. Image Courtesy of the Library of Congress.

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ple sugaring equipment from G.H. Grimm out of Rutland, Vermont and even worked with Grimm to develop and manufacture two unique sap pail covers, also embossed with the Horse Shoe Forestry Company name. G.H. Grimm in turn highlighted its connection with the Horse Shoe Forestry Company in its advertising, proudly noting the largest maple sugar camp in the world used Grimm equipment.

Despite the enormity and sophistication of the Horse Shoe Forestry Company maple sugaring operation, it lasted only twelve sugaring seasons. In September 1908, a wildfire started by embers and sparks from a passing locomotive coupled with a severe drought in the forest of the Adirondacks, led to the destruction of A.A. Low's maple forest. Amazingly, all of Low's syrup plants, mills, great camp, and worker housing were saved. However, with the loss of the maple forest, it was impossible to continue to produce maple syrup, and the operation came to an end. Valuable infrastructure and equipment were sold, and in time the remaining buildings not put to new uses were salvaged or left to rot and return to the forest. Low himself passed away four years later. Over the ensuing years the family sold the estate to other private owners with the majority of the property eventually being sold to the State of New York and added to the lands of the Adirondack



Three examples of the special embossed bottles and jars used by the Horse Shoe Forestry Company for packaging maple syrup and maple sugar. Image courtesy of the author.

Forest Preserve. While short in lifespan, the grandeur of A.A. Low's maple operation is a story that still fascinates and amazes and has left its mark in the annals of maple industry history.

You can read a more detailed account of the story of the Horse Shoe Forestry Company in Matthew Thomas's book A Sugarbush Like None Other: Adirondack Maple Syrup and the Horse Shoe Forestry Company, available for purchase online at eBay and in various locations in New York and Vermont.