The History of the Greater Horseshoe Lake Landscape Part One: A.A. Low and the Horse Shoe Forestry Company

by Matthew M. Thomas and Mary Kunzler-Larmann



Figure 1. Abbot Augustus Low, Sr. relaxing at Camp Marian. At age 40, A.A. Low's 1888 passport application described him as 5 feet, 10 inches tall, with blue eyes, a florid complexion and blackgrey hair. Photo courtesy of private collection.

For the south woods of St. Lawrence County, there is perhaps no other historical narrative that captures as much interest and attention as the story of Abbot Augustus Low and his Horse Shoe Forestry Company.¹ In the final decades of the 1800s, notable wealthy families were establishing large preserves of land and Adirondack Great Camps. In contrast, St. Lawrence County was witness to the development of a different grand estate. Neither a hunting preserve nor an elegant retreat like the estates of Webb, Durant, and Vanderbilt, A.A. Low's estate was the fast-developing creation of an inventive man of the times who did not need to make money from the enterprise.

A.A. Low was a wealthy Brooklynite who, at the turn of the last century, used his enormous wealth to purchase great blocks of land around Horseshoe Lake and the Bog River (Figure 1). He established a sprawling industry exploiting forest products and built an electrified settlement for his hundreds of workers, private railroads, hydropower dams, sawmills, maple sugaring plants, and a private camp

for his family (Figure 2). A notable thread in the story of the Horse Shoe Forestry Company is how it quickly sprang from the wilderness only to come crashing down following the catastrophic forest fire of 1908. However, the Horseshoe story continues well beyond the time and works of A.A. Low. In fact, following the death of A.A. Low, it was his son, A.A. Low. Jr., who directed and enabled a significant portion of the second chapter of the history of the Horseshoe Lake landscape.²

A great deal has already been written about A.A. Low and the Horse Shoe Forestry Company by authors such as Clark, Gove, Dean, Kudish, McMartin, Frenette and others.³ However, in the telling of history, there is always room for a fresh look from new perspectives using new sources and research materials and applying new technologies not previously available. This has been demonstrated in recent books by John Taibi and this article's co-author Matthew Thomas.4 The objective here is to refine and deepen our understanding of the Horseshoe story, and we have taken the existing histories not as immutable truth but instead as a starting point to develop questions and direct our research efforts. Most notable among past works that have led us to guestion our assumptions and sources of evidence is the often cited and seminal article on Horseshoe history by F. Mark Clark that was published in this journal in 1974.5 With that connection, it seems fitting to share the updated story here. This newly expanded story of Horseshoe has been divided into two parts and will appear sequentially in this journal. The first part, appearing here, focuses on A.A. Low, Sr. from the origins and progression of the Horse Shoe Forestry Company through to his death in 1912. The second part will explore the Horseshoe landscape under A.A. Low, Jr. and what became of the Low estate from 1912 to the 1990s.

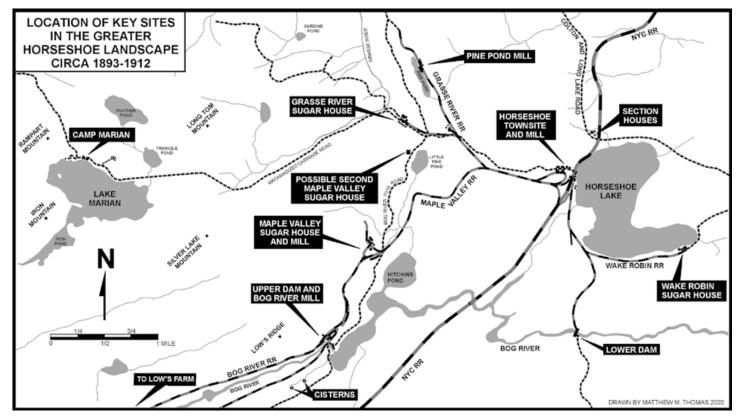


Figure 2. Locations of railroads, roads, and primary activity areas at the A.A. Low estate and industrial landscape of the Horse Shoe Forestry Company. Drawn by Matthew M. Thomas.

In this article, the names of the geographic locations of the lake and settlement of Horseshoe are spelled as one word consistent with most recent naming conventions, despite the earlier names of Horse Shoe Lake and Horse Shoe Pond being written as two words. For reference to the Horse Shoe Forestry Company, it is always written as two words following the formal naming of the company as designated and trademarked by A. A. Low.⁶

The Practical Philanthropist

A.A. Low's first taste of the Adirondack wilderness probably came in 1858 or 1859 when, as a teenager traveling with his cousin (who later became his stepbrother) William G. Low, he visited the home of William Constable in Lewis County. From there they traveled by wagon and foot to Raquette Lake where the young Lows were treated to an impressionable two weeks of hunting, fishing, and camp life.⁷ As a young man, Low made guided outings in the Independence River area with a guide from the Puffer family in 1869 and 1874. He and William also made a European tour, as was traditional for young members of wealthy families for acquiring culture.⁸ A.A. Low's father Abiel Abbot Low was a founding

member of the Preston Pond Club at Tahawus in 1876, providing a further connection to the wilds of northern New York.⁹ The Low family was said to have spent part of their summers in Lake Luzerne, tragically documented in the record of the death of A.A. Low's young son in Luzerne in 1884. Low continued his Adirondack connections with eventual purchases of thousands of acres of remote forest land.

With a privileged upbringing, A.A. Low was wellacquainted with the manners and formalities common among those who moved in circles of people with influence and equally great wealth. Low was described as "a man of unusual appearance and great dignity of bearing and a kindly manner that made friends for him everywhere...A commanding figure...(that) dressed with care...He was formal, but courteous in meeting strangers, and his high standards of excellence prevailed..."10 There is no question that by the mid-1890s, A.A. Low was a very wealthy man, just how wealthy is unclear. In 1888, when brothers A.A. Low and Seth Low liquidated the company started by their father, Seth was reported to have earned \$3 million. It can be assumed that A.A. Low's share was a similar amount at a time of no inheritance tax and no income tax. A 1901 newspaper



Figure 3. Two men, possibly James Hill and John Rivet, standing alongside a model of steam heated evaporating pan for making maple syrup, identical to an evaporator in patents sponsored by A.A. Low. Image taken from Fox and Hubbard booklet, The Maple Sugar Industry from 1905.

article estimated A.A. Low's wealth to be as much as \$40 million, the equivalent of over a billion dollars today.¹¹

Born and raised in the prestigious section of Brooklyn Heights, Low always maintained a strong connection to that community. In a time of no tax "write-offs," he was personally involved in Brooklyn's charities and improvement institutions, providing financial assistance and promotional support. Low was once described as a "practical philanthropist" and was a notably generous man, especially as the primary benefactor supporting St. Michael's Episcopal Church where he even taught Sunday school.¹² In addition, Low was known for his efforts at beautifying Brooklyn with the planting of hundreds of trees on the streets and making trees available to any individuals that wished to plant more.¹³ A.A. Low was said to have been an unselfish man who spent money freely and took care of his workers and his community. One report said, "he made an effort to keep every worthless character in the neighborhood of his shop employed, to keep him out of mischief."14 Low's "neighborhood shop" was a workshop he maintained in the old Brooklyn Bank building. It was here that he worked with his personal team of engineers and assistants to develop his and his team's ideas and inventions.

Putting his "ideas laboratory" to work, Low was prolific in his attempts to bring his and others' ideas to life, and he had many patents to his name to prove it. Interestingly, that legacy has reached mythical proportions, figuratively and literally, with an oftenrepeated claim that "during his lifetime (he) was second only to Edison in the number of individual patents granted."15 A careful and exhaustive search of patent records by railroad historian John Taibi and this article's co-author Mary Kunzler-Larmann has found the claim to be unsubstantiated. Their research found 367 patents attributable to A.A. Low (10 design patents, 306 US inventions, 23 foreign inventions, 2 labels, and 26 trademarks) in comparison to the 1,093 US patents attributed to Edison. In reality, there were many other inventors with more patents than Low in his lifetime. One list from 1900, published by the United States Patent Office, identifies the number of patents awarded individuals in rank order to that date, and A.A. Low was not even in the top twenty.¹⁶

Low was what might be called a gentleman inventor as well as a gentleman forester, akin to a gentleman farmer who owns and runs a farm more for pleasure than for profit or success. As described by one of his patent attorneys, "Mr. Low was just the reverse of the run of ordinary inventors...He would spend years in perfecting a machine, and as soon as he had it developed to the point where it satisfied him, he dropped it as quickly as he had taken it up, and there was no effort made to put the invention on the market or exploit it in any way."17 There is also a question about how appropriate it is to ascribe the title of inventor to A.A. Low. He has his name on many patents, but it is not clear how many nor which ones were truly his invention or idea. Some ideas may have come from others, but because of his resources and his patronage, Low was able to develop some of them, resulting in his name being added to the patents. The truth probably lies somewhere in the middle. Low did come up with many ideas himself, but he also was named on other patents, both as patentee and assignee, where the original idea probably came from one of the workers he employed and supported in his ideas laboratory.¹⁸

Following the Brooklyn workshop model, Low continued his research and development activities at his Horseshoe operation, a virtual northwoods ideas laboratory. Ideas for items connected to activities at Horseshoe that he designed and patented range from sap pails and covers (US patents 658039, 658040, 659033, 659373, 661221, 668313, USD 34539)



Figure 4. First passenger and freight station of the Mohawk and Malone Railroad, later the New York Central Railroad, at Horse Shoe Pond. Image Courtesy of John Taibi and the New York Central System Historical Society.

to natural wood fuel (US 660863), and even a cast iron wood stove embossed with the logo of the Horse Shoe Forestry Company (US626838). In some cases, he facilitated the invention and design of technology that was never put to use, such as a steam-heated evaporator for making maple syrup designed by James H. Hill and John Rivet (US patents 684242 and 697484). Low and these men did build a small prototype or model steam heat evaporator that matches the patent design, but there is no indication that steam heat was ever used in the extensive manufacturing of maple syrup and sugar by the Horse Shoe Forestry Company (Figure 3). Rather, all the maple sugar houses were designed for, and used, wood-fired evaporators.

Opening of Horseshoe

In the years prior to the construction of the New York Central and Hudson River Railroad (NYC)¹⁹ and A.A. Low's arrival and purchase of the lands around Horseshoe Lake, the woods were witness to sporadic softwood logging and visitation by hunters and sportsmen. Travel was by foot, horse and wagon over primitive trails and roads or by canoe and guide boats on the Bog River and inland lakes. Two overland routes were in existence prior to Low and the coming of the railroad. The Canton to Chester Road, also called the Colton and Long Lake Road, ran from the southwest corner of Tupper Lake west-northwest toward Massawepie Lake and was in use

from at least as early as the 1850s. This route from Tupper Lake was also used by guides and others as an overland portage into Horseshoe Lake, avoiding the falls and rapids on the lower Bog River. The other overland route was the Bog River Tote Road which ran west and south from an intersection with the Colton and Long Lake Road, southwest past Hitchins Pond and westward, crossing and recrossing the Bog River before terminating near Goose Pond.

Through the late 1800s, the region encompassing Horseshoe Lake and the Bog River was some of the most remote land in the Adirondacks and experienced limited softwood logging. Like most lands in the Adirondacks at that time, nearly all the acreage in the area was owned by lumbermen like Moses Herrick, and F.A. Weed and George W. Sisson of the Sherman Lumber Company, in what were then the townships of Oakham and Atherton, as well as the Hollis Snell Lumber Company along the Bog River.²⁰ Logging was most active in the late 1880s and early 1890s with the cutting of spruce and white pine. By the time A.A. Low began to purchase lands around Horseshoe Lake, nearly three quarters of the spruce and pine had been logged off.21 Logging generally occurred in the winter months, and logs were sent down river in the spring when the rivers were high from snow melt.22

In 1892, while the NYC Railroad was under

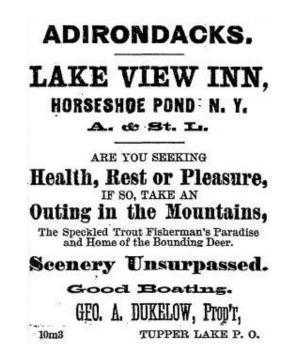


Figure 5. July 1894 Herkimer Democrat newspaper advertisement for George Dukelow's Lake View Inn at Horseshoe Pond.



Figure 6. View from the railroad tracks looking west at the residence of A.A. Low at Horseshoe settlement. Courtesy of the Piercefield Museum.

construction, Seneca Ray Stoddard reported in the 23rd edition of his Adirondacks Illustrated guidebook that "a station to be called 'Horse-Shoe Pond' will be established on the new (rail) road about 5 miles west of the (Tupper Lake) house, and stages will run to connect with (the) trains." There is evidence to suggest that the initial stop and first Horseshoe railroad station may have been situated a half mile north of the later Horseshoe settlement, where the Colton to Long Lake (aka Old Canton to Chester Road) intersected the newly laid rails. Photographs and descriptions of the original station tell us it was a simple wooden shed, 7 x 9 feet in size with an accompanying freight car parked alongside on a rail siding with a station agent who assisted travelers and handled freight shipments (Figure 4). In addition, unpublished maps from Conners and Sewall show a cluster of buildings at this location north of the Horseshoe settlement, identified as "section houses," a term commonly used in reference to railroad worksites.²³ Field investigations by the authors recorded historic remains and the earthen berms of multiple structures at this location. Research into this question is ongoing.

The NYC Railroad began running in October of 1892 and, by the spring of 1893, a settlement along the west shore of Horseshoe Lake had begun to form. George Dukelow had established a simple two-story hotel called the Lake View Inn with patrons arriving at a scheduled stop on the NYC Railroad (Figure 5).

At this location along the shore of Horseshoe Lake, the NYC rails ran close to the shore of the fresh and clean, spring-fed lake, permitting the railroad to locate a pump station and water tank for refreshing the steam locomotives. The clean water source was further exploited by the railroad company for ice harvesting each winter beginning in 1893 or 1894.²⁴

Arrival of A.A. Low

Establishment of the Forest Preserve and the State initiative to acquire lands inside the blue line prompted many well-off New Yorkers, like the earlier mentioned Webb, Durant, and Vanderbilt, to purchase large tracts for the establishment of their own private forests and Great Camps. As one of their contemporaries, Abbot Augustus Low followed their lead. A.A. Low's arrival at Horseshoe began with land purchases in August and September of 1896, acquiring title to the lands around the south and southwest shoreline of Horseshoe Lake. Additional purchases, including 10,000 acres from the Sherman Lumber Company for \$100,000, expanded his holdings to the west and south, adding portions of the Bog River, Trout Pond, and Silver Lake and its surrounding mountains.25 By March 1898, Low had taken ownership of Hitchins Pond and additional stretches of the Bog River.²⁶ A.A. Low was clearly interested in something more than a camp and estate in the Adirondacks as evidenced by a November 1896 article in Brooklyn Life, which stated that A.A. Low had been especially interested in the "study of



Figure 7. Buildings at the Horseshoe settlement, (left to right) carriage house, stock barn in background, syrup house. Image courtesy of the Piercefield Museum.



Figure 8. Horseshoe settlement taken from the front of the carriage barn looking east towards Horseshoe Lake. Notice the large boarding house on the left, a small servant's house in the middle and the back of A.A. Low's residence, to the left of the road. Courtesy of the Piercefield Museum.

arborculture and forestry" on his estate, and he was "now enabled to make practical experiments" on his new preserve.²⁷

With ownership of the core lands of his estate secured, in the spring of 1897, Low and his engineer John Erehardt began construction of a five-milelong macadam road from Horseshoe Lake to Low's new camp on Silver Lake.²⁸ Construction began with stonework for the main buildings of the camp along with stone foundations for ice houses and barns nearby and at the growing Horseshoe settlement. Along with the stonework, carpenters worked to construct the wood framed cottages, boat house, stables, kitchen, dining room, and other buildings of the camp on Silver Lake. As the sole owner of the lands around Silver Lake. Low had the luxury of formally renaming the body of water Lake Marian and christening Camp Marian in honor of his wife, Marian Ward Low.29

By purchasing all the lands and property at and around Horseshoe Pond, Low turned his estate and the settlement of Horseshoe into a private reserve, closed to the public. Dukelow's Lakeview Inn for guests was closed and the hotel was remodeled as A.A. Low's personal residence at the Horseshoe

settlement (Figure 6). A *New York Times* newspaper writer described the house as looking like the "residence of a prosperous farmer or country lawyer," which, in effect, he was.³⁰ To house the hundreds of men he employed, Low built a large boarding house on the flat land behind his residence. With Dukelow's departure from Horseshoe, A.A. Low requested Dukelow's former title of Postmaster of Horseshoe, a position Dukelow held from October 1896 to January 1898. Dukelow relocated to Sabattis in early 1898 where he purchased the Wilderness Inn, established a guide camp on Long Pond, and took over duties as the Sabattis postmaster. Dukelow later sold the Wilderness Inn in Sabattis to A.A. Low in 1902 for \$40.000.³¹

The settlement at Horseshoe saw rapid growth and development under Low's ownership. Low deepened and straightened the creek alongside his residence, drying out the adjacent land, which was then cleared for use as a pasture and gardens. To the west, "behind" his residence, he added a variety of farm-related structures, including a two-story carriage barn, a long barn for horses and cattle, another long barnlike structure with a deep foundation constructed of massive stone walls and possibly used as an ice house or warehouse (Figures 7 and 8). To the east of the residence, between the NYC Railroad tracks and the shore of Horseshoe Lake, Low erected a sawmill and waste burner, an additional boarding house or guest residence sometimes called Low's clubhouse, a company office, storehouse, locomotive engine house, and a group of separate cottages for the families of married workers (Figure 9). The Horseshoe settlement was illuminated with electric lights from a steam powered generator or dynamo, bringing the modern convenience of electricity to the wilderness even before it was in regular use in the nearby Adirondack town of Tupper Lake.³²

In 1899 Low built three branches of a private narrow-gauge railroad extending out into the forest like spokes on a wheel with the Horseshoe settlement as the central hub (Figure 2). Each branch of Low's railroad was given a name (Wake Robin, Grasse River, Maple Valley) and the rails were used to efficiently move men, equipment, logs, maple sap and maple syrup though the forest and into the Horseshoe settlement (Figure 10). Low's railroad was centered at the Horseshoe settlement to access the central

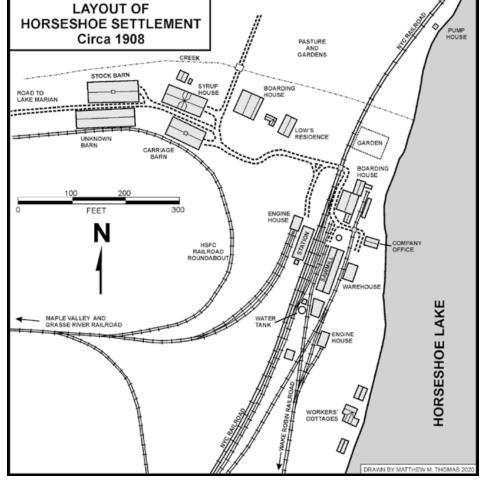


Figure 9. Layout of settlement at Horseshoe, circa 1905, showing buildings, railroad tracks, roads, and other features. Drawn by Matthew M. Thomas.

barns and warehouses via a large teardrop-shaped loop with other connecting spurs located parallel to both the east and the west sides of the NYC Railroad (Figure 9). Early operation of Low's railroad saw three locomotives running on narrow gauge rails. In later years, the rails were replaced with standard width tracks and locomotives.³³

A few years later, Low had a more formal railroad station built in the new Horseshoe settlement at his own expense, replacing the NYC Railroad's wooden shed used as a depot (Figure 11). According to a *New York Times* article from 1901, "When Mr. Low went to Horseshoe, he told the New York Central that he wanted a station. The New York Central suavely replied after its fashion, that the aged freight car then officiating served its purpose amply. Mr. Low digested this remark for a year, and then built the station and presented it to the New York Central."³⁴

Maple Sugaring

Maple sugaring, one of the most important forest industries at Horseshoe, was in operation by the 1898 season, using two small sugar houses, each equipped with two evaporators that in combination produced 2323 pounds of maple sugar. One was located at the Grasse River sugarbush alongside the road to Camp Marian and the other at the Wake Robin sugarbush along the southeast shore of Horseshoe Lake. Low continued to expand the maple sugaring operations and was tapping 7,000 trees in the 1899 season. Following the end of the 1899 sugaring season, Low added two sugar houses in the Maple Valley vicinity and enlarged his Grasse River and Wake Robin camps to shelter a total of nineteen large-sized wood-fired evaporators (Figures 12 and 13). Low was now prepared to tap 50,000 trees in the 1900 season. Low used the three branches

of his private railroad through the forest to access his maple trees and move sap to the sugar camps. The Horse Shoe Forestry Company maple sugaring operation was now widely recognized in print as the largest sugarbush in the world.³⁵

The showcase sugar house for the Horse Shoe Forestry Company was built at Maple Valley in 1899 for first use in the 1900 season (Figure 14). Located at the end of the branch known as the Maple Valley Railroad and placed in the center of a triangular railroad turnaround known as a wye, the Maple Valley sugar house was a large 76-foot by 93-foot three story structure, built on a stone and mortar foundation with a poured concrete slab, a metal frame, and metal siding. As a sugar house, it featured a full-length cupola running along the ridgeline to emit steam as well as five tall smoke stacks, one for each evaporator. The most notable and extravagant feature of the Maple Valley sugar house was a marble slab floor (Figure 15).³⁶ The Maple Valley sugar house



Figure 10. Horse Shoe Forestry Company locomotive "The Washington" loading sap on A.A. Low's private narrow-gauge rail line. Courtesy of the Library of Congress.



Figure 14. Horse Shoe Forestry Company's showcase sugar house at Maple Valley. Courtesy of the Library of Congress.



Figure 11. Photo of railroad station at Horseshoe settlement built by A.A. Low and given to the New York Central and Hudson River Railroad, circa 1950. Courtesy of John Taibi.



Figure 15. Interior Maple Valley sugar house with a series of enormous Champion Brand maple sap evaporators manufactured by the G.H. Grimm Company. Shows steel building walls and pipe delivery of sap. Courtesy of Library of Congress.



Figure 12. Grasse River sugar house, circa 1900 from glass magic lantern slide. Courtesy of Matthew M. Thomas.



Figure 16. Second Maple Valley sugar house, exact location unknown. Courtesy of the Library of Congress.



Figure 13. Wake Robin sugar house, on the southeast corner Horseshoe Lake. Courtesy of the Library of Congress.



Figure 17. Horse Shoe Forestry Company syrup house for finishing and packing maple products at Horseshoe settlement. Courtesy of the Library of Congress.



Figure 18. March 1900 advertisement from Harper's New Monthly Magazine for Horse Shoe Forestry Company maple sugar and maple syrup. Courtesy of Matthew M. Thomas.

as well as the Wake Robin and the Grasse River sugar houses were lit with electricity from individual dynamos at each site.

A fourth Horse Shoe Forestry Company sugar house, also identified as associated with Maple Valley, is known from two historic photographs (Figure 16). Its precise location has not been verified; however, recent investigations by the authors have identified evidence that it may have been located north of the Maple Valley sugar house in a small valley west of Little Pine Pond along the Bog River Tote Road.³⁷

In addition to the four large sugar houses built by A.A. Low, he also erected a large one-and-a-half story metal building in the center of the farm area of the Horseshoe settlement that he called the syrup house (Figure 17). This building was used to store, process, and bottle maple syrup and maple sugar in jars and bottles embossed with the Horse Shoe Forestry Company logo and the name of Low's three sugarbushes, Grasse River, Wake Robin, and Maple Valley. The *Plattsburgh Evening News* reported in 1903 that "the syrup manufactured at different points and taken to Horseshoe Pond, (was) manufactured into sugar, put up in fancy packages and sold."³⁸

Another source noted that "in the summer months, thirty girls made sugar cakes, candy, etc."³⁹ The 1900 season was the first season where the entirety of the maple sugaring facilities were fully operational and the Horse Shoe Forestry Company glass containers were put to use (Figure 18). Although this is not confirmed, the syrup house was probably also used for the manufacture and packaging of other Horse Shoe Forestry Company products like fruit jams, jellies, butters, vinegar, and as a fruit wine "distillery."⁴⁰

Horseshoe Workforce

Beyond mill work, maple sugaring, and general construction activities, the Horse Shoe Forestry Company employees were also put to work gathering wild foods of the forest. Actual logging activities at Horseshoe were carried out by contracts to local logging companies or jobbers.⁴¹ Summer and fall months were for harvesting such things as blueberries, raspberries, chokecherries, cranberries, and crab apples for making jams and jellies and even crab apple butter. The syrup evaporators were reportedly used for processing these fruits in making large volumes of jams and jellies. In some cases, additional purchases of barrels of fruit such as cranberries were made to augment what the local pickers were able to gather.⁴² A November 1902 advertisement from the Adams Dry Goods Company of New York City stated that they had purchased the entire output of jams and jellies from the Horse Shoe Forestry Company. 43 Norwood News reported "immense quantities of raspberry jams,



Figure 19. Powerhouse and structure of the Upper Dam on the Bog River at Hitchins Pond, circa 1914. Note the railroad tracks crossing the dam. Courtesy of private collection.

jellies, grape and elderberry wine are manufactured on an elaborate scale under Mr. Low."⁴⁴ Low also kept honey bees adjacent to the gardens at Horseshoe.

True to form and protecting his ideas, images, and advertising, Low filed for trademark protection of a series of artistic renderings of fruits and berries for labels on his bottled and jarred food products.⁴⁵

For Low to build and maintain so many work sites in the woods around Horseshoe, he had to house and feed a sizable workforce. Newspaper reports indicate that for most of the year, there were around 75 men put up in three boarding houses at the settlement plus a handful of small cottages for men with families. The size of the crews would grow during the maple sugaring season as needed, sometimes increasing to between 100 and 200 men. Data from the United States Census, taken in late June 1900 for the Town of Atherton in St. Lawrence County, provide further insight into the background and roles of the people working at Horseshoe.⁴⁶ The five men listed in the census as heads of household held prominent positions in the Horseshoe community, such as Superintendent of the forestry company, forester, engineer, and two railroad section bosses. Households ranged from private, single family cottages to the boarding houses where most of the servants and day laborers were housed. A total of 69 individuals were counted in June 1900 at Horseshoe. of which 64 listed occupations. The five that did not list occupations were the wife, mother, and father of the superintendent, the mother of one of the railroad section-bosses, and the young daughter of a female servant.

In addition to many day laborers and household servants, censuses taken in 1900 and 1905 listed a variety of specialized occupations at Horseshoe, including machinist, electrician, carpenter, plumber, mason, blacksmith, engineer, gardener, forester, and tinsmith. The place of birth of these mostly male workers was roughly evenly split between native born and foreign born, with New York the overwhelming place of birth of native born at 38% of the total. The next single largest group was from French Canada at 22%. Combining French and English Canada raises the Canadian numbers to 30%. The complete range of places of birth in descending order included New York, French Canada, Ireland, English Canada,

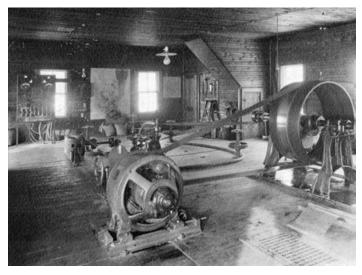


Figure 20. Interior of Upper Dam powerhouse showing hydropower generators, circa 1910. Courtesy of private collection.

Vermont, Maine, Scotland, Michigan, and Germany. The family of A.A. Low was not enumerated at Horseshoe in the 1900 and 1905 census, but instead at their home in Brooklyn.

Mills and Dams

Although maple sugaring was the primary focus of activity, the industrial landscape of the Horse Shoe Forestry Company also featured a collection of mills for turning both hardwood and softwood trees logged on Low's preserve into finished dimensional lumber, clapboards, and staves for barrels. It is unclear exactly when the different lumber mills at Maple Valley, Pine Pond, and Horseshoe settlement were built by the Horse Shoe Forestry Company. Surprisingly, our research found no historical references to any of the mills at Horseshoe prior to 1902, which is not to say they were not in place and in operation. The layout of the Horseshoe settlement along the lakeshore, with the sawmill at the center of the activity area, suggests that mill was in place from an early date in the timeline of Horseshoe development, probably 1899 (Figure 9). Likewise, the layout and location of Low's Maple Valley and Grasse River Railroads suggest they were built in 1899 in part to access the Maple Valley and Pine Pond mill sites.

By the end of 1901, the first phase of establishing the Horseshoe preserve and industrial landscape was complete, with a focus on establishing the camp at Lake Marian, building a settlement and farm at Horseshoe Lake, extending a railroad network

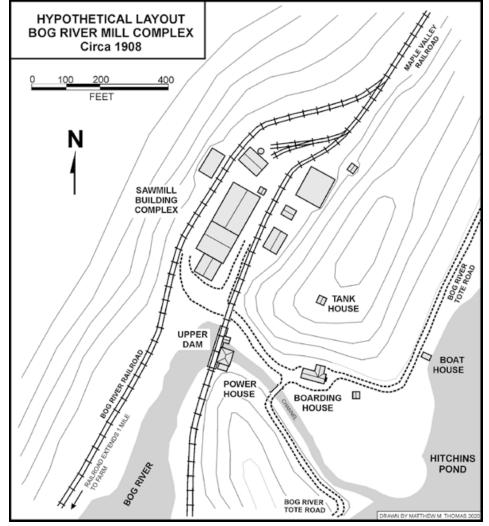


Figure 21. Hypothetical layout of the Bog River Mill complex and Upper Dam, circa 1908. Map based on a compilation and interpretation of information from historic maps and photographs. Drawn by Matthew M. Thomas.

through his forest, bringing the maple sugaring operation online, and constructing a series of mill sites for processing wood products. The second phase of construction began in 1903 and focused on establishing the Upper Dam, developing hydropower on the Bog River, and constructing Bog River Mill where the Bog River enters Hitchins Pond and where the Bog River Tote Road crossed the Bog River (Figures 19 and 20). Construction of the Upper Dam and mill complex began with a one-mile extension of the Maple Valley branch of Low's private railroad. Research has yet to document any industrial or residential structures in this vicinity of the Bog River or Hitchins Pond prior to 1903; however, there was an old dam and fjord-like crossing for the Bog River Tote Road at the narrows of the Bog River. The Bog River Mill was predominantly a hardwood mill with an assemblage of electrified buildings housing a range of saws, milling equipment, wood kiln, and lumber storage (Figure 21).⁴⁷ With the establishment of this mill, A.A. Low used the naming of the Bog River Mill as a distinct brand, unique from his other mills, painting it on the side of flat cars and a log loading crane (Figure 22).⁴⁸

Extension of the rail line to the Bog River permitted Low to erect a concrete hydropower dam to generate power for the adjacent mill and Camp Marian via a power line stretched through the forest. A power house enclosing two electric generators straddled the dam over the Bog River (Figure 18). Construction of the dam subsequently raised the water level of the Bog River, flooding lands for many miles behind the dam, including Mud Lake at the head of the Bog River, creating the early stages of what is now known as Low's Lake. Following the construction of the mill. the tracks, called the Bog River Railroad by Low, were extended westward for an additional two miles along the north shore of

the Bog River. The Bog River Railroad terminated at an area of flat expanses of land east and south of Hornet Pond developed and used by A.A. Low as a farming area and log loading site.⁴⁹

Today, this area is home to the Sabattis Scout Camp. Another branch of the Maple Valley Railroad was extended westerly across the dam following the esker along the south shore of the Bog River. This branch on the south shore extended at least one mile beyond the dam and at least as far as a pair of cisterns enclosing two developed springs. Workers at the Bog River Mill were housed in a simple two-anda-half-story boarding house built alongside the Bog River Tote Road and the spillway channel connecting the dam and Hitchins Pond (see Figure 21). The boarding house served as the core of the future lodge at Hitchins Pond that was later expanded and



Figure 22. Log loader from the Horse Shoe Forestry Company's Bog River Mill mounted on a railroad flat bed. Courtesy of the Piercefield Museum.



Figure 23. Lower Dam shortly after completion looking west from below the dam and showing locomotive on rail atop dam. Image taken from Ambursen Hydraulic Company Album for 1906.

improved by A.A. Low, Jr. in the 1920s for use as the Low family's second summer camp.

The third and final phase of construction during the A.A. Low era began in 1905 and ended in 1907 with the building of the 250-foot-long Lower Dam across the Bog River. A one-mile-long railroad spur extended from near the shore of Horseshoe Lake southward off Low's private Wake Robin Railroad to reach the dam site on the Bog River (Figure 2). It was there, following their patented design, that the Ambursen Hydraulic Construction Company of Boston, originally out of Watertown, New York, built a "hollow" reinforced concrete dam and powerhouse for the hydroelectric generation and sale of power. More than simply a hydropower and water control

structure, this dam also provided passage across the Bog River for a spur of Low's private railroad (Figure 23).⁵¹

Beyond cutting timber, making maple syrup and maple sugar, and packaging a selection of fruit products, the Horse Shoe Forestry Company also dabbled with the idea of bottling natural spring water. Heavy glass bottles embossed with "Adirondack Mt's Virgin Forest Springs" and "Virgin Forest Water Co., Virgin Forest Springs, Horse Shoe, St. Lawrence Co. N.Y." were designed and manufactured for Low. Despite what has been written about Low's Virgin Forest Spring Water, not a great deal is actually known about the bottled water operation.52 For example, there are no known advertisements for its sale or newspaper accounts from the time referring to the bottling of water at Horseshoe. The five intact examples of the bottles known to exist are made from both clear and amber glass, and these may only be prototypes that were never used. The source of the bottled water is believed to be a pair of springs located a short distance south of the Upper Dam and Hitchins Pond. Still visible to this day are the two "cisterns" Low installed to contain and control the surface flow of the water from these springs. One cistern was built using vertically driven steel pilings and the other with wooden staves, each about 12 feet in diameter. The ground containing the cisterns is now a flooded beaver pond but was dry during Low's time. Armand Vaillancourt, a former caretaker for Low family properties, reported in 1969 that the springs were "located about fifty feet below the level of the rail-road tracks; a long conveyor was built to carry the water to the track level. It was a huge structure. We cut it up a few years ago for scrap metal." Vaillancourt's description matches the location of the two cisterns still visible today.53 Considering that construction of the mill infrastructure and residential buildings at and around the Upper Dam were not in place until after Low's Maple Valley Railroad was extended to that point in 1903, it seems likely that any activity associated with the spring water bottling also must date to 1903 and after. In fact, A.A. Low's patent specific to the design of the spring water bottle was not submitted until March 1904, despite the bottles displaying embossed text of "PAT'D JULY 3, 1900" and "DEC. 8, 1903." These dates also apply to Low's patents for design features for capping and sealing glass bottles under pressure.



Figure 24. Three examples of Horse Shoe Forestry Company embossed glass jars and bottles with company name and logo used for packaging maple syrup, maple sugar, and fruit products made at Horseshoe. Courtesy of Matthew M. Thomas.

Despite having installed four different mill sites at Horseshoe, according to his son George Cabot Ward Low, A.A. Low was "not a lumberman," implying that while A.A. Low was equipped to process logs, he was not heavily engaged in harvesting timber on his lands. A.A. Low in fact didn't run his own logging crews, choosing instead to contract the harvest of timber on his lands with notable local loggers like Dana Bissell.⁵⁴ George C. W. Low further noted that the Maple Valley Mill operated "unsuccessfully" in its attempts to manufacture staves, barrel heads, and clapboards, that the mills at Horseshoe were never commercially successful, and were used more to meet the immediate needs of A.A. Low and his Horse Shoe Forestry Company activities.⁵⁵ Low never seemed to be especially concerned with the lack of financial success or return on his investments for his endeavorsat Horseshoe. With his considerable wealth, he had the means to do things his way, for his own reasons, using his own, sometimes unconventional and formal methods. As a sign of his formality, he was known for branding and trademarking his forest products and using such terms and logos in advertising and on his unique packaging of those products. The Horse Shoe Forestry Company glass

jars and bottles embossed with the company logo and name, akin to an Adirondacks family crest, are popular collector's items to this day (Figure 24).

Horseshoe and Fire

Fire was a constant threat at Horseshoe and the Low estate, both small fires in the community and larger wildfires in the forest, some of which were known to smolder for years in the areas of thick duff and peat. In May 1903, extensive wildfires in the northern Adirondacks destroyed over one million acres of forest. At Horseshoe, A.A. Low estimated that 100,000 trees were damaged that year, among them many of the best maple trees for sap production. Low filed a claim with the NYC Railroad for damages caused by their trains in setting these fires in 1903, accepting a settlement of \$21,500 in 1904.⁵⁶

Structural fires were a real threat at Horseshoe as well. For example, in 1905 the powerhouse in the Horseshoe settlement adjacent to the railroad caught fire, damaging the depot and the mill.57 Another fire in 1910 destroyed the boarding house, office, ice house, store, and post office, causing \$10,000 in damages and the loss of valuable papers and company records.58 However, it was the forest fires of September and October 1908 that caused the greatest irreparable harm to Low's forests. Ignited by sparks and flying embers emitted from the unprotected smoke stacks and fireboxes of steam locomotives, the fires of 1908 were arguably the worst fires ever experienced in the Adirondacks, leaving behind a scorched wasteland of burned forest. In the case of the nearby village of Long Lake West, an entire town was destroyed, including some buildings owned by Low. Amazingly, the structures in the developed areas of Low's estate, namely Horseshoe settlement, Camp Marian, Bog River Mill, Maple Valley, Grasse River and Wake Robin sugar houses, and the mill at Pine Pond appear to all have been spared or saved, in part because of Low's frequent use of metal roofing. The same could not be said for the forests surrounding these sites. The extent of the destruction around Horseshoe was described by The Malone Farmer as "appalling," and that "several of the prettiest stretches of woodland country in the Adirondacks have been destroyed. Nearly all of Mr. Low's famous sugar woods were burned, and the beautiful shores of Lake Marian were destroyed."59

The devastating effects of the 1903 and 1908 fires on the sugarbushes at Horseshoe and, in turn, the Horse Shoe Forestry Company maple operation cannot be overstated. Had the damage merely been to the syrup plants, railroads, mills and the buildings of the settlement, recovery and reconstruction could have been possible. After all, A.A. Low was an incredibly wealthy man, and he most certainly had the means to rebuild. Unfortunately, the damage to the mature maple forest that was the lifeblood of the maple syrup operations was overwhelming. It would take many human generations for such a hardwood forest to re-establish, if at all. Most of the workers employed by the Horse Shoe Company moved on to other work in the region. Low was understandably upset with the degree of destruction caused by the fires, by the "extent of their ravages" 60 both to his own lands and to the region. Low attempted to salvage some of his infrastructure and put it to use in late 1908 with the addition of an electricity powered, 10-barrel stone grist mill. The mill produced a variety of wheat and corn flour, cereal, meal, oats, cracked corn, and animal feeds. These products were used to feed workers and animals at Horseshoe as well as being offered for wider sale in the fall of 1909.61

Even before the 1908 fire, Low had begun to divest some parts of his milling infrastructure. In the spring of 1908, Low advertised the sale of barely used stave saws and joiners, indicating that some of his mills and their equipment saw little activity.62 Following the destructive effects of the 1908 fire, all of Low's forest related industries ceased operation and were sold. The greatest sale of Low's equipment from the Bog River Mill and the mill at the Horseshoe settlement went to George Sykes' Emporium Lumber Company in 1910. Emporium was establishing a new mill town a few miles north at Conifer, and per their sale agreement, Emporium was the recipient of "all the machinery, fixtures, and appliances in and belonging to the Bog River saw mill, planing mill and wood mill, near Horse Shoe, St. Lawrence County, N.Y."63 Even most of the maple sugaring equipment such as the large sap evaporators, tanks, and sap pails and covers were sold and reused at new homes in the area.⁶⁴ Liquidation of Horse Shoe Forestry Company infrastructure continued into 1912, disposing of additional components of the forestry, milling, and maple sugaring operations, such as buildings, rolling stock, locomotives, and even the metal rails.65

In response to the extensive damage to the forest resources of Low's thousands of acres, A.A. Low filed a lawsuit in 1910 against the NYC Railroad, seeking compensation of \$430,000. The case slogged through months of discovery and requests for documents and evidence by the judge. During that time, A.A. Low's health was declining as he suffered from the effects of bladder cancer. In the fall of 1912, he elected to undergo surgery, but sadly the operation was unsuccessful, and A.A. Low died at St. John's hospital in Brooklyn, New York on September 25, never seeing the case go to trial. A.A. Low's widow Marian Low assumed the role and duties of plaintiff in the case, ensuring that it went to trial. The following spring the case was heard on May 5, 1913 in the Supreme Court of St. Lawrence County, in Canton, New York.

Judgment was found in favor of the estate of A.A. Low and Marian Low with an award of \$90,000 in damages, plus the plaintiff's associated costs. The NYC Railroad appealed the case, but the Appellate Court unanimously ruled in favor of Marian Low and affirmed the earlier judgment of \$90,000 for negligence and damages by fire to the Lows' lands.⁶⁶

With the death of A.A. Low and the conclusion of the court case for damages from the 1908 fire, the story closes on this first part of the history of the Horse Shoe Forestry Company and the lands around Horseshoe Lake and the Bog River. Part two of this article traces what became of A.A. Low's private estate and industrial landscape he created. Look for part two in a forthcoming edition of *The Quarterly* journal of the St. Lawrence County Historical Association. •

Matthew M. Thomas

Born and raised in Minnesota, Matt Thomas came to research the A.A. Low story from his interest in the history of the maple syrup industry. Using his university and professional training in archaeology and history (B.A., M.A., Ph.D.), he has found a calling to gather and share the details and stories of maple syrup makers of the northern United States and adjacent Canada. Initially, planning to focus his research on the maple syrup operation of A.A. Low and the Horseshoe Forestry Company, Matt quickly learned there was much more to discover and write about in the landscape and history of the Horseshoe Lake area.

In doing so, Matt was fortunate to find a formidable and dedicated research partner in Mary Kunzler-Larmann. Matt has compiled

a substantial collection of their Horseshoe area research efforts in his recently published book *A Sugarbush Like None Other: Adirondack Maple Syrup and the Horse Shoe Forestry Company*, available at eBay and select locations in the Adirondack region.

Matt can be reached at **maplesyruphistory@gmail.com** and through his website **www.maplesyruphistory.com**.

Mary Kunzler-Larmann

From age four, Mary Kunzler-Larmann was a woods-wanderer in the Catskills and later the Adirondack Mountains. After attending Syracuse University where she obtained a B.S. in Communications and a corporate management career, she became an adventure guide, trekking the Canadian Barren Lands, the High Arctic, and Mongolia. Mary's mantra is, "If I hadn't gone there, I wouldn't have been there."

Now she is back in the Adirondacks where she has been exploring the Beaver River and Bog River basins for many years, most recently "drilling down" into the details of the story of A.A. Low and the Horse Shoe Forestry Company. She and Matthew Thomas met in 2018 after he began researching the Horseshoe Maple Story. Mary and Matt's research at Horseshoe continues and they welcome contacts with individuals that may have stories and information to share related to the history of Horseshoe.

Mary can be reached at mk-l@juno.com.

Endnotes

1 The term "south woods of the wilderness in St. Lawrence County" comes from S.N. and D.G. Beers 1865 New Topographical Atlas of St. Lawrence County and refers to the uniqueness of the wild and sparsely settled nature of that corner of St. Lawrence County.

- 2 In part one and part two of this article, there are two men named Abbot Augustus Low at the center of the story. A.A. Low the elder (1844-1912) is the focus of part one and his son A.A. Low, Jr. (1889-1963) is prominent in part two. For the purposes of clarity and keeping the men separate, A.A. Low the elder will simply be referred to as A.A. Low, whereas his son will be referred to as A.A. Low, Jr.
- 3 F. Mark Clark, "The Low Dynasty," The Quarterly 19, no. 1, St. Lawrence County Historical Association, (January 1974): 9-15; Howard Dean, "The Low Dynasty and Horseshoe, N.Y.," Antique Bottle & Glass Collector 27, no. 4 (Aug. 2010), 32-35; Andy Flynn, "Horse Shoe Lake has an interesting history," Lake Placid News, 25 March 2005, 15; Bill Gove, "Horse Shoe Forestry Company Railroad," Logging Railroads of the Adirondacks (Syracuse, NY: Syracuse University Press, 2006), 101-105; Michael Wilson, "The Uses of Bog River's Ruins," Adirondack Journal of Environmental studies (Fall/Winter 1995); Michael Clement, "Horseshoe Lake: A Place of Innovation," Tupper Lake, Adirondacks, USA Blog. 24 February 2016. www.tupperlake.com/blog/2016/02/horseshoe-lake-placeinnovation; Anonymous, "A.A. Low's Empire," Adirondack Journal (2017); Michael Kudish, "Horse Shoe Forestry Company and Its Wake Robin and Maple Valley Railroads- Maps 45-1 through 45-4 36-19, and 36-58," Where Did the Tracks Go in the Central Adirondacks? Mountain Railroads of New York State: Volume 2 (Fleischmanns, NY: Purple Mountain Press, 2007), 460-467; Barbara McMartin, The Privately Owned Adirondacks (Canada Lake, NY: Lakeview Press, 2004); William C. Frenette, Transitions: Notes on a Proud Past with Attention to Future Annals (Tupper Lake, NY: Tupper Lake Free Press, 2014).
- 4 John Taibi, Silver Rails Through the Heart of the Park (Gates Mills, OH: New York Central System Historical Society, 2019); Matthew M. Thomas, A Sugarbush Like None Other: Adirondack Maple Syrup and the Horseshoe Forestry Company (Vallejo, CA: Maple History Press, 2020).
- 5 Clark, Low Dynasty.
- 6 The names of some places in the story have changed over time. The earliest maps for the area showing the body of water that became the center of A.A. Low's estate date to the 1850s and label this water body as Horseshoe Lake. Maps from the 1860s have the name morphing into Horseshoe Pond. By the early 1900s and at the first issuance of the Tupper Lake 7.5 minute topographic quadrangle by the USGS, the place was being referred to as Horseshoe Lake, which has held to today. The NYC railroad station and associated settlement officially used the name Horseshoe Lake, then Horse Shoe, and later Horseshoe, before the station was completely renamed to American Legion in 1947. We have used the names and spellings in use during the period the Horse Shoe Forestry Company was in operation. However, throughout its history, the Horse Shoe Forestry Company was always spelled as two words. For this article, the two-word "Horse Shoe" will be used when referring to the company, preserving the intended wording of A.A. Low. For this article, the station, settlement, and lake will be spelled with the single word "Horseshoe" to reflect the current vernacular and, where possible, to distinguish between reference to the place versus the company. In referring to the Grasse River sugar house and private railroad, we use the spelling of Grasse River with an "e" at the end of Grass, although A.A. Low spelled it both with and without the "e." Where place names have changed, such as Long Lake West to Sabattis, Silver Lake to Lake Marian, or Camp Marian to Camp Otterbrook, we have tried to use the toponym that was in use during the time period that is being described or discussed.
- 7 William Gillman Low, Some Recollections for His Children and Grandchildren (New York: G.P. Putnam's Sons, 1909), 69-70.
- 8 Diary of Abbot Augustus Low for 1874, Collections of the Adirondack Experience; Letters from A.A. Low to Mr. Puffer, 1869,

- 1871, Collections of the Adirondack Experience; William Gilman Low, Some Recollections for His Children and Grandchildren (G.P. Putnam's Sons: New York, 1909).
- 9 Lee Manchester, Annals of the Deserted Village: Key 20th Century Studies of an Emblematic Village (Makebelieve Publishing, 2010), 447-448.
- 10 "Abbot A. Low Made Inventions His Hobby," *The Brooklyn Daily Eagle*, 18 January 1914, 3.
- 11 The Malone Farmer, 1 February 1905, 3; "Wealth in the Adirondacks," Middlebury Register, 13 September 1901, 6; Robert Furman, Brooklyn Heights: The Rise, Fall and Rebirth of America's First Suburb (Charleston, SC: The History Press, 2015), 105.
- 12 *Brooklyn Daily Eagle,* 28, October 1888, 4; Brooklyn Life, 29 July 1899, 10.
- 13 "Abbot Augustus Low Obituary," Fifty-Fifth Annual Report of the Corporation of the Chamber of Commerce of the State of New York (1912); "Abbot A. Low Made Inventions His Hobby," 3.
- 14 Robert Furman, *Brooklyn Heights: The Rise, Fall and Rebirth of America's First Suburb* (Charleston, SC: The History Press, 2015), 386.
- 15 "Abbot A. Low Made Inventions His Hobby," 3.; Tom Hughes, "A Patent Genius," *Adirondack Life*, (May-June 1990), 36-41.
- 16 Taibi, Silver Rails Through the Heart of the Park; Annual Report for the Commissioner of Patents for the Year 1900 (Washington, D.C.: Government Printing Office) 1901, xi; https://www.upcounsel.com/thomas-edison-patents.
- 17 "Abbot A. Low Made Inventions His Hobby," 3.
- 18 Ibid.
- 19 The New York Central and Hudson River Railroad began its life as the Mohawk and Malone Railway Company when Dr. William Seward Webb built the line through the Adirondacks in 1892. The railroad was soon after leased and then sold to the New York Central and Hudson River Railroad where it became the Adirondack Division of the New York Central and Hudson River Railroad. For simplicity's sake, for this article we refer to the railroad as the New York Central and Hudson River Railroad even during its first couple years when it was technically the Mohawk and Malone Railroad.
- 20 Over the years, the names and configurations of the townships in St. Lawrence County have changed. For example, what was Oakham became Colton and what was Atherton became Piercefield.
- 21 Sandy Creek News, 18 December 1889, 8; "A Big Lumber Deal," St. Lawrence Republican, 24 February 1897, 7; Plattsburgh Daily Press, 16 March 1898.
- 22 "Camps in the Wilderness," *The Argus*, 18 July 1886, 4; *Chateaugay Record and Franklin County Democrat*, 31 January 1902, 1.
- 23 Seneca Ray Stoddard, The Adirondacks: Illustrated, 22nd Edition (Glen Falls, NY: Seneca Ray Stoddard, 1892), 109-G; Seneca Ray Stoddard, Adirondack Wilderness map (1893); E.A. Merritt, Map of the Racket River between Stark's Falls and Tupper Lake (1896); Franklin B. Hough, Map of the County of St. Lawrence (Albany, NY: R.H. Pease, 1853); see companion photo to Figure 4 of Horse Shoe Pond station in the collections of the Adirondack Experience Catalog No. p076002. This photo is also reproduced in Taibi, Silver Rails Through the Heart of the Park, 393; James A. Conners and James W. Sewall, Surveyed and Explored During the Winter of 1912 and 1913 For the Estate of A.A. Low (Old Town, ME: Conners and Sewall ,1913) on file at the Adirondack Experience; James A Sewall, A Map of a Portion of the A.A. Low Estate Lands 1912-1913, on file in the Potsdam Office of the New York State Department of Environmental Conservation; "A Trip in the Woods," Herkimer Democrat, 9 May 1894, 1.
- 24 "A Trip in the Woods", 1.
- 25 "A Big Lumber Deal," *St. Lawrence Republican,* 24 February 1897. 7.
- 26 Mary Kunzler-Larmann and John Taibi have conducted extensive deed research tracing the land purchase history of A.A. Low in St. Lawrence and Hamilton Counties. The results of their research are reproduced in John Taibi's *Silver Rails Through the Heart of the Park*, 591-594.
- 27 Brooklyn Life, 7 November 1896, 10.

- 28 A macadam road was a kind of gravel road with various layers and sizes of crushed rock put in place to build a stable subsurface and finer gravel and stone dust placed on top to form a flat smooth pavement.
- 29 Utica Semi-Weekly Herald, 13 April 1897, 4; "A Stone Castle Club House," *The Ogdensburg Journal*, 16 April 1897, 2; "A.A. Low's Improvements," *New York Times*, 27 June 1897, 20.
- 30 "Millionaire's Pleasure Farm," *New York Times*, 28 July 1901, 31. 31 "Millionaire A Postmaster," *New York Herald*, 22 January 1898, 11; *Plattsburgh Daily Press*, 3 May 1898, 4.
- 32 "Augustus A. Low's St. Lawrence County Park," *Elizabethtown Post*, 14 February 1901.
- 33 "PEOPLE ex rel. Low v. WILSON et al., Assessors," New York Supplement, vol. 98 New York State Reporter, vol. 132 (West Publishing Company, St. Paul,1906); "A.A. Low's St. Lawrence County Park," *Elizabethtown Post*, 21 April 1904, 4; Kudish, *Where Did the Tracks Go*?, 460.
- 34 "Millionaire's Pleasure Farm," New York Times, 28 July 1901, magazine supplement, 15; Herkimer Democrat, 25 July 1894; The World, 26 June 1898, 21; Norwood News, 30 December 1902. See Taibi, Silver Rails Through the Heart of the Park, 393-394 for additional discussion on the timing and possible modeling of the new Horseshoe station after the Long Island Railroad's Garden City Station.
- 35 Burlington Clipper, 27 May 1899, 5; The Landmark, February 16, 1900, p 3; "50,000 Maple Trees: The Largest Sugarbush in the World is Located at Horseshoe, St. Lawrence Co., N.Y.," The Norwood News, 6 March 1900, 8.
- 36 This marble floor was described in numerous newspaper accounts and is clearly visible in photographs of the interior of the Maple Valley sugarhouse (see Figure 15). Today, the location of the Maple Valley sugarhouse is still identified by the remains of the foundation and concrete floor that are preserved in place in the woods. The marble has long since been removed.
- 37 Thomas, A Sugarbush Like None Other, chapter 8.
- 38 "Wants Assessment Reduced," Commercial Advertiser (Potsdam), 29 April 1903, 5.
- 39 Recollections of Ashley Perkins, n.d., MS 68-22, box 2, file XYZ, misc. notes, etc. Adirondack Experience.
- 40 "Millionaire's Pleasure Farm," New York Times, 28 July 1901, magazine supplement 15. In 1902, the Adams Dry Goods Company of New York City advertised the sale of jams and jellies from the Horse Shoe Forestry Company, noting that they had purchased the entire output of the cranberry and raspberry jam, crab apple and chokecherry jelly, and crab apple butter. "Adams Dry Goods Co.," The Sun (Brooklyn), 2 November 1902, 16.
- 41 Contract between Dana Bissell, Bramon Bissell, and Abbot Augustus Low for the sale and logging of timber from lands owned by A.A. Low, January 4, 1907. From the files of the Potsdam office of the New York State Department of Environmental Conservation.
- 42 Telegram from A.A. Low to Moira, NY, ordering goods like a barrel of cranberries and cider apples to be delivered to Horseshoe. October 6, 1900. Collections of the Adirondack Experience.
- 43 "Adams Dry Goods Co.," *The New York Times*, 2 November 1902. 15.
- 44 "Only 2,000 Trees Tapped," Norwood News, 21 April 1903, 8.
- 45 A.A. Low obtained United States Trademarks number 35,349 through 35,355 granted in September and October 1900. *Official Gazette of the United States Patent Office*, Vol. 93, No. 5 (October 30, 1900), 935-936.
- 46 Twelfth Census of the United States, Schedule No. 1 Population, Town of Atherton, St. Lawrence County, State of New York, Sheet No. 9.
- 47 The Bog River Mill was initially used for sawing hardwood timber killed by wildfires in the spring of 1903. *The Malone Farmer*, 21 October 1903.
- 48 Map Showing Southeasterly Part of Township No. 2 (Oakham) and Southwesterly Part of Township No. 3 (Atherton) St. Lawrence Co., Property of A.A. Low, 1897, T.E. Ehrehart, Surveyor. Collections of the Potsdam Office of the Department of Environmental Conservation; Letter of Agreement between A.A. Low and Emporium Lumber Company, December 30, 1910. Emporium

Lumber Company Collections of the Adirondack Experience. Also cited in Peter C. Welsh's Jacks, Jobbers and Kings: Logging the Adirondacks 1851-1950 (Utica, NY: North Country Books, Inc., 1995), 36-37; Appeal Book –Marian Low, Individually and as the Sole Executrix of the Last Will and Testament of A. Augustus Low, deceased vs. New York Central and Hudson River Railroad Company, Court of Appeals, State of New York (Saratoga Springs, NY: The Saratoga Book and Job Print, 1914), 152.

- 49 In a contract between A.A. Low and the Bissell Logging Company, it was stated that the Bissells had the right to pile logs "... at the terminus of the Bog River Railroad near the farm." Contract between Dana Bissell, Bramon Bissell, and Abbot Augustus Low for the sale and logging of timber from lands owned by A.A. Low, January 4, 1907. From the files of the Potsdam office of the New York State Department of Environmental Conservation.
- 50 Malone Farmer, 26 July 1905, 1; Malone Farmer, 14 February 1906, 1.
- 51 "A Combination Dam and Bridge," Engineering News 59, no 15 (1908), 385.
- 52 Taibi, Silver Rails, 606-625; 2019; Clark 1974; Laura Rice, "Let's Eat: Adirondack Spring Water," Adirondack Almanac, June 22, 2010 (www.adirondackalmanac.com/2010/06/lets-eat-adirondackspring-water.html; Howard Dean, "The Low Dynasty," 32-35; "Low Square bottles and Jars," Beach Packaging and Design, January 16, 2014 (http://beachpackagingdesign.com/boxvox/low-square-bottles-and-jars).
- 53 Letter from Armand Vaillancourt to Marcia Smith, Librarian at the Museum on Blue Mountain Lake, March 7, 1969. Collections of the Adirondack Experience.
- 54 Contract between Dana Bissell, Bramon Bissell, and Abbot Augustus Low for the sale and logging of timber from lands owned by A.A. Low, January 4, 1907. From the files of the Potsdam office of the New York State Department of Environmental Conservation.
- 55 Appeal Book, 193-194.
- 56 "Adirondack Forest Fires Burn over 1,000,000 Acres," New York Times, 24 May 1903, 32.
- 57 "\$20,000 Fire at Horseshoe," *The Brooklyn Daily Eagle*, 23 March 1905, 6.
- 58 "\$10,000 Fire at Horseshoe," *Ogdensburg Journal*, 2 March 1910, 5.
- 59 The Malone Farmer, 4 November 1908, 5; "Long Lake West Burned," Courier and Freeman, 30 September 1908, 1.
- 60 A.A. Low to P.A. Harrington, Superintendent of the New York Central & Hudson River Railroad, October 29, 1908. Collections of the Adirondack Experience.
- 61 *The Northwestern Miller*, vol 75 (1908), 396; Letters from Horse Shoe Forestry Company to Seth Low, October 5, 1909, and October 21, 1909. Collections of the Adirondack Experience.
- 62 National Coopers Journal, April (1908); "Machinery for Sale," The Barrel and Box, February 1908, 52.
- 63 Letter of Agreement between A.A. Low and Emporium Lumber Company, December 30, 1910.
- 64 We know that at least one evaporator from Horseshoe was sold to the Girard family in the nearby town of Griffin and used for many years in the sugar house of their family sugarbush. Girard, Ouida, *Griffin: Ghost Town in the Adirondacks: and other tales* (Published by Ouida Girard, 1980), 43-45; Thomas, *Sugarbush Like None Other*, 175.
- 65 Tupper Lake Herald, 22 November 1912, 8.

66 "Abbot Augustus Low Dead," *Brooklyn Daily Eagle*, 25 September 1912; "Mulcts Railroad \$90,000 – Jury Blames New York Central for Adirondack Fires," *New York Tribune*, 13 May 1913, 2; "Bench and Bar," *Commercial Advertiser*, 13 May 1913, 1; A. Augustus Low vs. The New York Central and Hudson River Railroad Company and Marian Low, Individually and as the Sole Executrix of the Last Will and Testament of A. Augustus Low, deceased vs. New York Central and Hudson River Railroad Company. St. Lawrence County, NY. Judgment rendered May 13, 1913; The New York Supplement, vol. 147, New York State Reporter, containing the Decisions of the Supreme and Lower Courts of Record of New York States, May 11-July 6, 1914 (St. Paul, MN: West Publishing, 1914), 1123; Reports of Cases Decided in the Court of Appeals of the State of New York, vol 218. Banks and Brothers, 1916.