Effects of the Ice Trade Development in 19th Century Transatlantic America

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First "domestic" uses of ice date back thousands of years when grape juice was poured over snow to make a cooling treat for hot weathers. The concept of storing snow underground was a frequently observed approach for means of preservation. However the incorporation of ice into daily domestic and medicinal uses, across a variety of landscapes and climates is a relatively recent development. Ice consumption as we know it today is a mere shadow of a once complex and multifaceted industry, which not only developed ice harvesting technology which eventually led to domestic refrigeration, but also helped reshape the social and agricultural landscape of 19th century Transatlantic America.

Early Days of Ice Use

In its early days of mass consumption, ice use was restricted according to climate and geographic compatibility. In Vertie Knapp's analysis *The Natural Ice Industry of Philadelphia in the Nineteenth Century*, the author notes Philadelphia as one of the earliest locations to start adapting ice into consumer culture. The conducive climate for freezing during winter time, provided traders in Philadelphia with an opportunity to harvest ice and store it in the ice houses for comparatively warmer periods:

> In Philadelphia six or seven families shared an icehouse in the 1790s. This was a brick-lined cell in the ground that was filled in winter, by the families using the icehouse, with about 1,200 cubic feet of ice. They began using the ice in May, removing what they needed daily and placing meat in the cell to keep it cool. The ice lasted throughout the hot weather (Knapp 415).

The public began using ice in order to keep produce and dairy cool while it was delivered to the market and distributed to the consumers' homes. For a society, which predominantly used methods of salting and pickling food in order to prolong its edibility, introduction of ice as a mass cultural commodity started presenting opportunities for fresh food consumption therefore leading to changes in dietary habits. Philadelphia reflected the evolution sparked by the adoption of ice throughout the rest of the states that had suitable environments for ice harvesting.

Beginnings of Transatlantic Ice Trade

In the beginning of the 19th century, an ambitious young man by the name of Frederick Tudor had the idea to capitalize on ice harvesting and trade in regions with much hotter climates. A Massachusetts native, Tudor observed the demands rising within the public for forms of refrigeration.

Tudor had an idea to capitalize on trading ice in locations that have never had access to ice before. Initially ridiculed by most of his peers, Tudor had to finance the endeavor independently. His plan was to cut sufficient amount of ice and transport it via a ship to locations in the tropics.

Tudor's first attempt occurred in 1806 and to many people's surprise, turned out to be physically tangible. On February 10th, *Boston Gazette* ran the following blurb, which didn't sugarcoat the public's disposition towards Tudor's plan:

> No joke. A vessel with a cargo of 80 tons of ice has cleared out form this port for Martinique. We hope this will not prove to be slippery situation (Weighman, 37).

With the help of his brother William, Frederick was able to acquire monopoly concession rights for selling ice in Martinique. Since no captain would agree to carry the melting cargo on board with the fear of sinking, once the weight and the mass of ice blocks would change, Frederick bought a ship on his own and outfitted the lower compartments to the best of his abilities in order to insulate the ice. He used the same techniques as the ones that were already in use for constructing icehouses in order to prolong the product's life span.

He made his first delivery to Martinique with most of the ice intact, however he failed to make any profit. What Tudor didn't consider prior to his arrival in the tropics was that he would not have a suitable storage space that would insulate the ice after it was shipped. So while the ice sold, most of the purchases made by the locals were based in the novelty of a new product, not in the value of its functionality, since the people living in the tropical climates had never seen or utilized ice prior to this. In the first two days Tudor sold $50 worth, charging sixteen cents per pound (Weightman 38). As he would shortly realize, Frederick Tudor faced the challenge of not only getting the ice to hot climates but also creating a market for a new product.

Ice Houses

As mentioned before icehouses were a fairly familiar concept going back as early as 1790s. However given the new circumstances Tudor aimed to perfect it in order to achieve longevity of storage. Gavin Weightman details Tudor's experimentation in *The Frozen Water Trade*. According to Weightman, Tudor decided to experiment with insulators that were available in bulk at cheaper prices. Tudor had immediate access to charcoal and spongy peat, which were both being used as fuel at the time, making them into the top two choices:

> To determine which might be a better insulator, he took two large wooden casks, put pulverized charcoal in one and peat in the other, filled them with ice and put the lid on. Forty days later when he opened the casks, the ice had melted in both of them– this was between mid-June and the end of July– but the meltwater was warm in the barrel insulated with charcoal and cool in the peat barrel. He carried out the experiment again, opening the casks sooner and found that some ice remained in the peat barrel whereas it had all melted in the charcoal barrel. Peat, although the poorer fuel, was the better insulator. (Weightman, 48).

Tudor would continue to perfect ice harvesting and storage process with the help of the most imaginative minds in the field that barely even existed, but before that he faced a number of financial and circumstantial misfortunes.

The War of 1812 hindered his new trade model, but Frederick Tudor was finally able to resume the shipment of ice following generous donations from

interested parties that saw the potential in ice trade. At this point Tudor's focus had shifted to Cuba. In 1815, while still quite heavily in debt from his prior unprofitable attempts with the ice trade, Frederick Tudor was able to borrow enough money to finance a new ship and a construction of a suitable icehouse in Havana.

As Tudor would eventually become successful in ice transport and trade, many would mimic him, leading to a boom in ice trade and consumption across America. This would lead to several close encounters for Tudor with his demise, as he struggled to maintain monopoly over the ice trade industry. Richard Cummings quotes Tudor's diary in his anthology on the ice harvesting industry *The American Ice Harvest*. The passage is of Tudor's reaction to an "interferer" (a competitor in Savannah):

> "This Interferer will get about $5.00 in all for what must have cost him at least $100… This business in mine. I commenced this new business [the depot in Savannah], and I have a right to rejoice in the ill-success attending others who would profit by my discovery without allowing me the credit of teaching them." (Cummings, 15).

It is clearly evident that, after seeing the success Frederick Tudor achieved, many realized the potential of ice trade. It was a commodity that was cheap to acquire as the frozen lake water belonged to no man and required no payment. The overall reason that Tudor was able to survive the vultures who hoped to profit of his "discovery" was because he was able to do it better than the rest of them. But that was not due just to Tudor's own brilliance and innovation, it was due to the company that he kept. Tudor would find his strongest ally in the young Nathaniel Wyeth, who would become responsible for the most efficient developments in the ice harvesting process. But before discussing the innovations in the harvesting process, it is important to observe the evolution of the storage methods.

The information available regarding icehouses in Transatlantic America, suggests one fact without a doubt. The ice preservation methods boomed in the middle of the 19th century, circa 1850s. A number of the domestic journals and newspapers from the period are riddled with the information about how to construct icehouses. Journals such as The *Christian Recorder* and *Godey's Lady's Book* both provided their own instructions for their readers on how to best construct a suitable space for ice storage.

The November 22, 1862 article in *The Christian Recorder*, on how to build an icehouse opened with the following:

> Since publishing the following mode of constructing our own **ice** house two years since, we have received numerous applications for a copy of the paper containing it, and by others that we would republish it. To republish is the best we can do. The success of the house has more than met our expectations, which were confident. When well packed there is comparatively no waste.

The demand for information was clearly strong enough for the public to take notice and request it. Judging from the tone of the article, the demand was also high enough for the publishers to feel the need to reprint it. The actual instructions for the icehouse structure seem pretty simple and straightforward. The article proceeds to describe the process as following:

> We built our own house, twenty feet square, all above ground, enclosing the same with tongue and groove plank - one and a quarter inch thick - with battened joints. Next inward of this we placed another partition six inches distant, of undressed boards nailed on horizontally. Within this was placed another partition of dressed boards, tongued and grooved, and placed also horizontally. The latter space or chamber was packed with spent tan, charcoal dust, and rice chaff, in equal parts. This we are satisfied is the best arrangement for the protection of **ice** from the exterior heat of summer. However heated the outer surface may become, it will not communicate that heat through the air chamber to the contiguous chamber filled with packing. Besides, the space packed is constantly chilled by is contiguity to the large body of **ice** within. In our own structure we carried the inner ceiling to and under the rafters, so as to create an air space under the roof. In this, however, were left ventilating openings, so as to avoid the accumulation of heated air. The sides of the ice should have a packing of saw-dust, shavings or straw, closely pressed next to the ceiling, and well covered on the top when filled.

The most important detail provided by the above article however is the author's focus on the minute aspects that one considers in order to make the storage process more successful. The author of the instructions states: "*In our own structure we carried the inner ceiling to and under the rafters, so as to create an air space under the roof. In this, however, were left ventilating openings, so as to avoid the accumulation of heated air."* This structure, while still simple, is causing the users to think of the process in more scientific ways. It also should be noted that unlike Tudor's approach, this article recommends the use of sawdust and shavings, which implies people's awareness to a number of alternative methods.

Which leads to the *Godey's Lady's Book's* article on icehouses. In March 1855 *Godey's Lady's Book* published an article on Chinese icehouses. As this article predates the one by *The Christian Recorder*, the tone of the writer sounds more like an advertisement for the icehouses instead of an instructional guide for an interested/demanding readership. The article begins with the statement:

> "Did you ever, reader, whist panting under the hear of July, and felling yourself listless and useless from its influence, wonder how you could have though the cold of winter disagreeable, and long for some of its ice-cold water to sip at? No doubt you have, and so thousands do every summer. Now, there is no great reason why iced water, and iced or at least well-cooled butter, instead of the oily mass we often get, and iced other things, should not be much more common than they are.

The description above rings far too familiar for anyone who has ever watched an infomercial. Yet it is hard to see this in any other light. Judging from the date of the article, such a promotion for a product seems more than logical. The same article proceeds to identify the residents of villages, rather than cities as the target audience for the "Chinese Icehouse." The article points out that the import of ice to the cities at such a large scale, makes it a more affordable commodity, however the same is not true in the villages where only the wealthy can afford to obtain ice since the wealthy are the only ones who can afford the construction of ice houses where it can be kept for longer periods of time. The issue makes perfect sense due to the way that cities differ form villages. In the cities, where the population is densely packed together, keeping an ice house is a lucrative form of

business since it can serve as the distribution point where average citizens can buy ice and even have it delivered by carts and wagons to their homes. The same can't stand true in the villages, as the population is widely dispersed and relies on farming for livelihood. For an average sized farm that relies on agriculture as the primary source of income, an icehouse is not an investment worth a large sum of money since it will not stand to profit the farmer as much as it will a salesman in a city setting. So, in order to counter the inaccessibility of the product that is becoming so wide spread the article offers a DIY version of what appears to have become an elaborate industrial construction. The article also gives a particularly good insight into how wide span the icehouse use is throughout U.S. in 1850s:

> In cities, it is true the preservation of ice, and its importation on a large scale, render it now obtainable at comparatively little expanse; but in the country such a thing is unknown, except in the establishments of persons of persons of wealth, who can afford to have icehouses constructed on a the present expensive plan.

This implies that while there is a demand for ice, in the 1850s ownership of an icehouse is limited to the wealthy, but there is a movement to make icehouse ownership a standard within the masses.

The Icehouse is described as the "Chinese Icehouse" because it is claiming to be drawing on a technique developed by the Chinese, who frequently use the icehouses to preserve fish. "To them ice is not only a luxury, it is almost a necessity," states the writer. The fact that the focus is on a Chinese way of constructing an icehouse shows that the public of the era is seeking technological improvements and advancements in a newly emerged trade that has gained incomparable value, not only financially but socially as well. The article is looking to a culture, which the author argues to be superior in its use of "refrigeration" for food preservation.

Ownership of Ice and Social effects of Ice Consumption

The discussion that is at the heart of *Godey's Lady's Book's* article on icehouses, is about the necessity of icehouses for domestic use. However as mentioned above the lack of widespread use due to financial inaccessibility suggests that in its early days, ice was very much a novel product that was struggling to establish a wider consumer base. It was around the 1850s that ice use and consumptions became a prominent part of domesticity that was not only limited to the eastern seaboard but thanks to, Tudor's now somewhat estranged technical mastermind "partner," Nathaniel Wyeth, was ready to spread to the west coast via railroad. So, while Frederick Tudor may freely reserve the credit for introducing ice trade as a valuable business, Wyeth is the man truly responsible for ending the free-for-all ice harvesting endeavors and turning the ice trading industry corporate by pioneering ownership requirements over pond water territory in 1841 (Cummings, 42). While Nathaniel Wyeth as an individual was not the most successful businessman, he was part of the reason that the ice trade became a national and shortly after a worldwide industry. The rapid spread of ice trading as an industry in the 1840s, consequently led to a much wider consumption of it by the public in the 1850s.

In accordance with the demand for ice that can be seen in the *Godey's Lady's Book's* article on icehouses, published in 1855, is the emergence of a new product patented by James Stimpson of Baltimore in 1854. The new product was called a double-walled pitcher. Following some improvements over the rest of the decade, the double-walled pitcher would become the triple-walled ice water pitcher, used

strictly to serve ice water. The design of the pitcher ability to maintain the water cool by keeping the warm air out with the help of a "Layman's Patent Double Valve":

> That pitchers were marketed at a cost ranging from $8 to $150 indicates that manufacturers were responding to a demand that cut across socio-economic boundaries. Judging from surviving examples with histories of ownership and vintage photographs of interiors, however, the great bulk of these pitchers appear to have been sold to middle-class customers." (Venable, 41).

The evolution of the pitcher closely reflects the timeline as well as the fate of the ice trading industry. Judging from the material evidence the industry was at its highest and most lucrative from the 1860s all the way to the early 1890s.

As early as 1857, the newspapers began to buzz with advertisements ice cream parlors and saloons. A woman by the name of Henrietta Hall put the following advertisement in the *Delaware County American* on June 17, 1857:

> *ICE CREAM! ICE CREAM!! - This luxury, as well Water Ice, Raspberries, Refreshments, &c., can be had at the Saloon of the subscriber, back of the Court House Square, in Media. Parties and families will be supplied at the shortest notice*.

The above is a single example of the hundreds of similar advertisements that appeared in the same time period. The general public was no longer just using the ice as a storage product but instead it was being valued for its culinary, as well as commercial value. The supply of ice was clearly steady enough to prompt the establishment of ice cream saloons, essentially creating a whole new type of business, reshaping the ice trading industry into a more complex system. It was no longer just about the transport of ice to hot climates for the use in food preservation. Those who harvested ice, transported fresh produce along with the ice, supplied butchers and grocers with cooling agents, offered city residents with means of better food preservation and by making ice cream into a widespread trend, they created a whole new socializing environment for people to mingle and spend time at.

It appears that Henrietta Hall, was not merely one of the many ice parlor operators, she was also an ideal example of fierce businesswoman. Twelve years after the advertisement captioned above, she ran a second ad with the *Delaware County American*. The ad read as follows:

> Mrs. Henrietta Hall, at her residence in East Media, at the corner of Front Street and the Providence road, has again commenced the manufacture of ice cream, and will furnish it to families or at her residence. Her make of this now almost indispensable summer luxury, is far superior to any other in this vicinity, and we so commend it to all who prefer getting what they call for instead of the milky trash served in too many instances at other establishments.

The above advertisement is unique in that it gives insight into a number of social and business issues at hand in 1869. First and foremost emphasis must be made on the word choice of the advertisement "*has again commenced the manufacture of ice cream,"* it suggests that the Mrs. Hall's ice cream parlor is a reoccurring endeavor and the fact that it is held at her residence implies the it is a seasonal business that can operate from her home as was the case with most ice cream parlors. The service

also includes an option for home delivery/service making the attendance at the ice cream parlor optional. The fact that there was a market for home deliveries may imply that the ice cream making process was time consuming and most likely not worth the time for smaller households, unlike businesses that profited off that very fact. The advertisement also describes ice cream as *"now almost indispensible summer luxury"* giving a hint regarding its popularity. However the most crucial point made in the advertisement is Mrs. Halls claim to her ice cream being superior to all others. The ad goes as far as to refer to the competitors as the *"milky trash."* That very description implies the level of competition present in the industry at its height. Ice had clearly become a lucrative asset to many people, to the point at which competition for the customer base got extremely heated due to the fact that the public was given a larger variety of options then before.

Hydropathy: The Golden Age of the Ice Industry

Early 1860s was when ice trade and consumption closed the gap between being a novelty item and being a household necessity. People started to view ice utilization as not just necessary. It had become so significant that it led to the unofficial social and cultural movement of *hydropathy* (Venable 42). The public began to believe in the healing powers of ice-cold water. Doctors started seeing the medicinal value of ice in surgical procedures. *Provincial Freeman* published a piece on July 12th, 1856, which described one of the earliest references to ice use in medicine. According to the article, Dr. Wolcott of Utica, following a suggestion from a French journal, was using ice as a pain reliever during surgery. He observed a much lesser loss of blood and minimal pain in the patient after removing a tumor from a man's leg. He even went as far as to recommend ice over chloroform in surgical procedures, due to the fact that it was less risky and reacted better when coming in contact with blood.

Dr. Wolcott's pro-ice arguments were clearly based in legitimate scientific observations. Which is why it is no surprise that *The Charleston Mercury* published a concerned piece on March 20th, 1862, regarding the Confederate States' supply of ice in Charleston. The article discusses the hospitals need for ice in order to assist Civil War soldiers wounded in battle. The article urged for the military to control the ice supply to keep various hotels, ice cream saloons, and soda water fountains, from "exhausting the present supply, and depriving the poor suffering fevered soldier of this most indispensable necessary" in the coming summer months.

However, as medical benefits of the new product came to light, so did many theories regarding its other potential values. Most of these theories were not based in scientific research and were far more exemplary of the poorly calculated conclusions created by the crowd mentality. There were a number of not so reasonable claims that emerged regarding ice's healing properties.

According to an article published in 1853 by *The National Era*, ice "pills," which essentially were crushed bits of ice, could cure *Cholera Morbus*. *Cholera Morbus* referred to a non-epidemic form of *Cholera* as well as other forms of gastrointestinal issues. According to *The Domestic Encyclopedia: or, A dictionary of facts and useful knowledge chiefly applicable to rural and domestic economy* by Anthony F. M. Willich published in 1821, it was a common disease in United States in the summer months. According to Willich, a bad diet, excessive drinking and exposure to "night air while being thinly covered" were the leading causes (Willich 451). In his version of the treatment M.D. Willich recommended a number of herbal remedies and warmth that could contribute to cleansing the patient's system. His treatment was hardly similar to the treatment offered over 30 years later by the

new ice obsessed culture via *The National Era* article. It is hard to judge how legitimate the research, which went into the article was but concluding from the overall tone of the piece, the author appears to be basing his claims in speculation. "Rather than any observation of it of late years during which I have had little to do with general practice, I have come to the conclusion that the remedy for it is ice," states the author. The author doesn't proceed to provide any scientific evidence, experimental proof or research to support such claims, he simply advises the readers to swallow pills of ice aiming for them to apply directly to the affected area of the stomach.

The National Era was not the only publication to have had such blind faith in ice as the all-curing remedy. Both Godey's Lady's Book and the infamous Catherine Beecher endorsed the product. In *The New Housekeeper's Manual*, Beecher claimed:

> The impression common in this country, that warm drinks, especially in winter, are more healthful than cold, is not warranted by any experience, not by the laws of the physical system. At dinner, cold drinks are universal, and no one dreams them injurious. It is only at the other two meals that they are supposed to be hurtful" (Beecher, 144-145).

Strangely, the popular opinion often differentiated between ice and ice water as the remedies. In an April 1865 article, *Godey's Lady's Book* argued that ice water can be fatal and could sometimes cause sudden death. It claimed that ice could be taken freely due to its ability to promptly subdue external and internal inflammation "by application of ice or ice-water because it is converted into steam, and rapidly conveys away the extra heat, and also diminishes the quantity of blood in the vessels of the part."

Fall of the Ice Harvesting Empire

The greatest irony in the century long history of ice trade lies in its demise. A commodity that the world didn't even know was essential to a healthier agricultural existence, led to a series of technological and business improvements that reshaped the transatlantic American landscape.

Paradoxically, the technological advancements that were always an essential part of the ice harvesting industry, would be the leading cause behind its ultimate downfall. Frederick Tudor was the first to pioneer marine transport of ice as well as improve different methods of insulation. He was closely followed by Nathaniel Wyeth, who perfected large scale harvesting techniques, by coming up with ways and utensils to cut ice in more perfect rectangular shapes in order to maximize the storage capabilities. He also had a hand in rail transportation that breached the trading gap between Atlantic and Pacific coasts. As the industry spread, James Stimpson came up with the triple walled ice water pitcher allowing a deeper domestic incorporation of ice into people's daily lives. So as the larger population became more adamant about domesticating ice consumption, it should not come as a surprise that the need for technological improvement, driven by human necessity, soon overshadowed and even negated the industry that sparked such a drastic need in the first place.

As people became more and more dependant on ice for everyday necessities, the manual production of ice appeared less sufficient. The market went through an interesting change in supply and demand. First there was little to no demand for ice in most of the regions, especially the one's that had never been exposed to ice

before. After the multitude became more accustomed to the product, realizing its value, the demand and supply evened out one another producing a prosperous outcome. However after the demand overshadowed the supply, the product producers failed to adapt.

In the 1880s, the American public annually consumed 10 million tons of ice. Returning to the comparison between ice trade and the ice water pitcher, this utensil was in high demand through most of the second half of the 19th century, just like natural ice, however it virtually stopped production due to lack of demand in the 1895 (Venable 41). This coincided with the making of widespread technological improvements in artificial refrigeration, minimizing the need for natural ice harvesting, making the natural ice industry practically obsolete.

The most interesting bit of information regarding artificial refrigeration can be found in Thomas Moore's Essay *A Description of the Newly Invented Machine Called the Refrigerator.* In the essay Moore somewhat subtly credits himself for coming up with the term *Refrigerator*. He goes on to describe a fairly intricate structure that used aluminum and wood for construction. Judging from his description of the structure, it bore more of a resemblance to an icebox, rather than an actual artificial icemaker. The point of interest regarding his research is not how successful his structure was, but the fact that he published the essay on his research in 1803, at the very dawn of the ice trading business.

Through most of the century there are minor hints and attempts at alternative forms of refrigeration. It is clear that that public was aware of the value of ice and was seeking more convenient ways of utilization. In 1863 *The Christian Recorder* ran a piece from the Scientific American on more practical refrigeration methods. The article described how evaporation was able to have a cooling effect on the surrounding objects and could be applied to refrigeration. The article also recommends a mixture of chemicals for refrigeration:

> The following is a list of mixtures which may be useful to our readers:- First, - Muriate of ammonia, 5 parts; nitrate of potash 5 parts; Water, 16 parts. In such a mixture as this the thermometer sinks 40 degrees. Second- Nitrate of ammonia, 1 part; water, 1 part. The thermometer sinks 46 degrees. Third- Sulphate of soda, 5 parts; dilute sulphuric acid, 4 parts. The thermometer falls 47 degrees. With the use of **ice** or snow, other mixtures may be made, in which the thermometer will fall 50 deg. below zero.

Hardly a perfect recipe, considering the toxic qualities of *Muriate of ammonia*, nonetheless reached a significant audience. In 1860 Ferdinand Carré was able to patent the use of vaporized ammonia in a steam-powered apparatus, which produced cooling effects. He figured out that he could recycle the ammonia gas in the process as well, minimizing the production cost on the machine (Weightman 223).

So the question remains, if there was a machine in the 1860s that could produce artificial ice why were natural ice harvesting companies able to stay in power for another 40 some years? According to Weightman, the artificial ice production could not catch on due to the amount of technical difficulties it still faced. There were numbers of reports constantly emerging about exploding ice machines and leaks that contaminated the ice with oil. There was also an issue of price. Many believed that the manufacturing of the artificial icemakers was far too expensive and not worth the effort in comparison to the established natural ice harvesting costs.

This would change towards the end of the century as milder winters minimized the crop and the harvesting companies would have to go to further extremes to edge out the competition. Ice harvesting was at this point a nationwide industry. So when scarcity occurred a number of natural ice harvesting companies had to consolidate their efforts to stay afloat. Under Charles S. Morse, a Consolidated Ice Company was created. He was soon dubbed the "New York Ice King." This however led to a fairly monopolized natural ice industry causing a hike in prices. As a commodity that was essential to the public, this caused enough of a concern that *The New York Times* decided to investigate. The investigation concluded with a massive scandal, exposing officials and political figures as being involved in Morse's corrupt dealings, for which he was sent to jail. The industry started its slow collapse shortly after. More and more people began switching to artificial ice manufacturing, starting with the manufacturers in the food trade. Eventually, following more inadequate winters, the water supplies began to be repurposed for electrical industries and making them no longer suitable in ice form for food consumption, since the water lost its purity and became somewhat contaminated.

Weightman further argues that as the public's disposition towards the industry changed as well, as they no longer saw natural ice quite so essential in comparison with the artificial ice production that was swiftly picking up steam and becoming more affordable, thus a century long reign of the natural ice harvesting industry came to end.

Conclusion

The biggest irony lies in that nowadays few are aware that the natural ice trade even existed, let alone had such a great impact on Transatlantic America. Ice harvesting industry will remain a unique example because in many ways it resembles the way products are developed today. It created a market for a product that people did not know they needed. It altered the public's diet by giving people across the country an opportunity to consume fresh food. It established a new type of business in the form of ice cream saloons that gave homeowners, especially in metropolitan areas, a new source of income. By becoming as widespread as it did, it provided improvements in medicinal practices. Not to mention the fact that after catching on as a lucrative industry across most of the country, ice harvesting employed thousands of people.

In some ways ice harvesting is one of the very first examples of mechanization taking over a man's work, considering that machines for artificial ice production replaced manual labor leaving hundreds of people unemployed.

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