

ABSTRACT

Title of Final Project:

THE WORLD IN AN OYSTER: THE
ARCHITECTURE AND CULTURAL
LANDSCAPE OF CANTON'S CANNING
INDUSTRY

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Preservation, 2024

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Canton, a neighborhood in southeast Baltimore listed on the National Register of Historic Places, is the former center of the food-canning industry that once dominated the economy in the city and in the state of Maryland. Canning was developed in France in the early 19th century and spread to America shortly thereafter, but it did not achieve widespread commercial success until the decades after the Civil War, when technical advancements made canning on an industrial scale possible. Baltimore canneries combined several natural features, including the Chesapeake Bay's large oyster population and rich surrounding farmlands, with an influx of new immigrants from central and eastern Europe to create an industrial district that was the leading producer of canned foods in the late 19th and early 20th centuries. Much as the canneries were designed architecturally to optimize their natural and commercial settings, the entire neighborhood of

Canton came to be oriented, physically and socially, around the canneries, as a working-class neighborhood bound by ethnicity, language, religion, and occupation. Canning's physical impact extended even beyond Baltimore to the Eastern Shore communities impacted by the increased demand for oysters, as sudden profits led to profound changes in the oystering industry that had long been the domain of rural watermen.

Advances in technology like refrigeration and trucking largely obviated the need for Canton's canneries in their designed form, and all of the firms along Boston Street closed down in the mid-20th century. Following a period of economic stagnation, redevelopment starting in the 1980s transformed Canton into a trendy, gentrified residential neighborhood by the turn of the century. Historic preservation had some success in retaining the area's architectural fabric, but all of the former canneries have been demolished and largely replaced with apartment complexes and condominiums. The ways in which preservation handled, or perhaps failed to handle, this transition to modernity raise profound questions about the limits of preservation, especially in a maritime industrial context where the structures in question no longer support the prevailing economic impetus. Ultimately, new residents are drawn to Canton for both waterfront access and its historic associations, but when the forces that shaped the neighborhood have changed so dramatically, it is unclear what, exactly, has been preserved.

THE WORLD IN AN OYSTER:
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INDUSTRY

by

Christopher Hutter

Final project submitted to the Faculty of the Historic Preservation Program of the University of
Maryland, College Park in partial fulfillment of the requirements for the degree of Master of
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On March 26, 2024, at approximately 1:28 AM, the Sri Lanka-bound container ship *Dali* crashed into one of the piers of the Francis Scott Key Bridge that spanned the Patapsco River. The ship was leaving the Port of Baltimore when it suffered a complete electrical failure. Eight construction workers who were repairing potholes on the bridge fell into the water when several spans collapsed. Two were pulled from the water immediately and survived, but the remaining six men perished, their bodies recovered in the following weeks. They were:

Alejandro Hernández Fuentes, 35, originally from Mexico
Dorlian Ronial Castillo Cabrera, 26, originally from Guatemala
Maynor Yasir Suazo-Sandoval, 38, originally from Honduras
Carlos Hernández, 24, originally from Mexico
Miguel Ángel Luna González, 49, originally from El Salvador
José Mynor López, 35, originally from Guatemala.

This paper is dedicated in their memory, and in honor of all who continue to risk their lives on the water for the benefit of humanity.

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Introduction

The Neolithic Revolution, which archaeologists believe took place roughly 10-12,000 years ago, saw humanity begin to domesticate livestock and practice agriculture, forming sedentary communities and leaving behind the nomadic hunter-gatherer lifestyle that had previously been the only option for survival. Next to such a momentous shift, the introduction of canning in the early 19th century may seem positively banal; in truth, however, the decision to encapsulate foodstuffs in a soldered cylinder of tin may well have been the most momentous gastronomical advancement since mankind first put a seed in the dirt. Food could now journey far beyond its source, and a new industry of packing and food preservation was born. Canning would quickly move beyond its European origins and find a new home in America, where it would be centered in Baltimore, Maryland.

This report focuses on the southeast Baltimore neighborhood of Canton, a waterfront community which had one of the highest concentrations of canneries during the industry's peak period in the late 19th and early 20th centuries. This working-class neighborhood attracted many new immigrants to the city, especially Polish and other eastern European arrivals, and the entire community was centered around the canning industry—physically, architecturally, economically, and socially. Technological advancements and economic realities forced the last canneries to close in the mid-20th century, and the neighborhood entered a period of urban decay almost as profound as the startling recovery and economic upturn that came with the new century. Today, Canton is once again a vibrant hub of activity in Baltimore, but the waterfront canneries that once made it famous have long since been demolished, that precious harbor access now reserved for private marinas and expensive condos. New migrants continue to pour into the neighborhood,

but instead of working-class Europeans, they are mainly white-collar young professionals and their families, drawn to employment at Johns Hopkins Hospital and other prestigious institutions.

Canton in the 21st century feels unsure of its character. The area's historical associations and remaining ambience are undoubtedly part of what draws more and more new arrivals. This new infusion of life, however, has hastened the destruction of the material fabric that gives it that historical feeling. The loss of Canton's canneries and a lack of any meaningful interpretation of them at present is a terrible blow for the city, but it must also be admitted that preservation falters when the ways of life that produced the buildings—the industries and economic realities—no longer function as they once did. Canton's failures, like its successes, were opportunistic, intrinsically tied to geographic, economic, and demographic forces that can only be fully understood in context. How preservation approaches future attempts at saving industrial waterfronts will be decided on a case-by-case basis, but there are some lessons to be learned here that can be applied elsewhere.

The multiple facets of this project are examined in turn in its various sections. The first section will give brief overviews of the history of canning's development and the Canton neighborhood, explaining the factors that led to the industry being so concentrated in Canton. Next, an architectural assessment of the canneries will follow patterns in their construction and explain how they maximized both their natural positions and workforces. Any significant changes that occurred in cannery construction and layout will be noted. Following the architectural assessment will be an examination of the broader cultural landscape impacted by the canning industry, touching on worker housing, related businesses, and the other buildings and infrastructure in Canton that were impacted by canneries. The concluding section will reflect on the neighborhood's redevelopment, preservation successes and failures, and greater problems

associated with industrial and waterfront preservation that continue to affect Baltimore and other port cities in the 21st century.

I. Historical Background

“Commerce surrounds her with its surf.”
-Herman Melville, *Moby-Dick, or: The Whale*

Canton is a neighborhood near the eastern edge of Baltimore city, sitting on the north bank of the Patapsco River. Its boundaries are typically identified as: Eastern Avenue and Patterson Park to the north; Conkling Street to the east; Boston Street and the waterfront to the south; and Chester Street to the west. These are the boundaries set by the National Historic District documentation and also observed by the state of Maryland and city of Baltimore, but they were only formally decided in the latter half of the 20th century, and there is a certain amount of overlap with other neighborhoods when discussing historical development. A peninsula called Lazaretto Point stretches southward from the southeast corner of the neighborhood; although not considered a part of Canton proper, the area’s industries were closely tied to Canton’s development, and it is sometimes referred to as the “Canton Industrial Area.” It is surrounded by neighborhoods with similar characteristics, such as Brewers Hill, Highlandtown, and especially Fells Point directly to the west, with an equally rich maritime heritage.

Canton is synonymous with commerce and industry—literally: its name is an anglicization of the Chinese port city of Guangzhou, where Irish-born merchant John O’Donnell claimed to be the first American to do business. When he established his own plantation just outside the city limits of Baltimore in the late 18th century, O’Donnell named it after the far-flung harbor that made him his fortune. The 1790 census counted O’Donnell as living in Baltimore

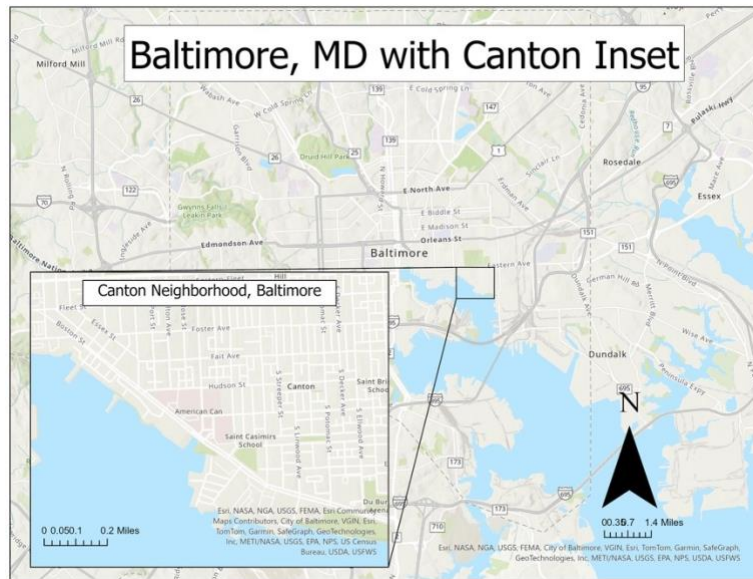


Figure 1: A map of Baltimore, MD, showing an inset map of Canton. Made by author using ArcGIS software.

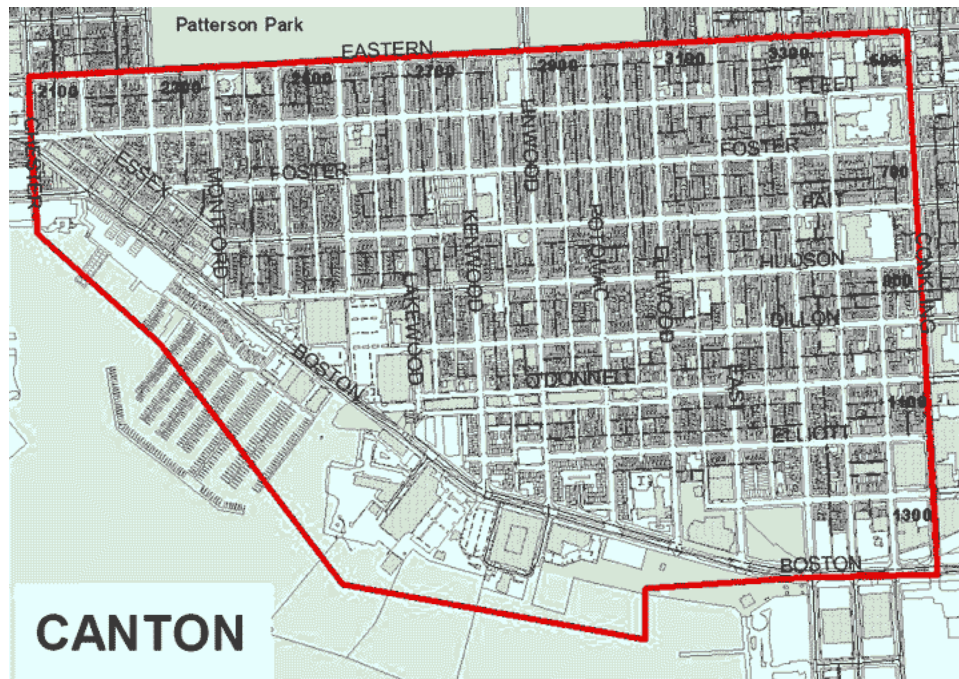


Figure 2: Map of Canton neighborhood showing boundaries outlined in red, according to the National Register of Historic Places. Source: Baltimore Commission for Historical and Architectural Preservation (CHAP).

County, with 10 white persons 16 or older and 36 enslaved persons for the 2,000 acre property. He died in 1805 as one of the richest men in the country.¹

Baltimore City voted to expand in 1816 and annexed part of Canton, making East Avenue the city's eastern boundary until it once again expanded to its present dimensions in 1918. In 1828, John's son Columbus O'Donnell journeyed to New York City to convince the industrialist Peter Cooper to invest in the area. Cooper was interested in the budding Baltimore and Ohio Railroad, and he agreed to put money down, predicting accurately that the country's first functioning rail line would make the city a hub of commerce. The Canton Company was incorporated by an act of the General Assembly in early 1829 for the purposes of developing the area both within and outside the city limits.² The company's goals were broad, and the enabling legislation was vaguely worded; at times, charges were levied to the effect that the company had no real purpose except to drive up the value of its stock and real estate through speculation.³ Nevertheless, developments were made, and the area boasted numerous industries by the mid-19th century, with wharves, shipyards, copper and iron plants, and breweries lining the waterfront blocks. A railroad track running down Boston Street was part of the Philadelphia, Wilmington, and Baltimore line, connecting the western markets served by the Baltimore and Ohio to the eastern markets in Pennsylvania and Delaware while providing a prime conduit by which the area's goods could reach buyers. The trains carried passengers as well: Frederick Bailey, an enslaved man working in the Fells Point shipyards, gained passage on the train going through Canton using a friend's "free papers" that allowed Black sailors to move freely in slave states.

¹ Norman G. Rukert, *Historic Canton: Baltimore's Industrial Heartland and its People* (Baltimore: Bodine & Associates, Inc., 1978), 12-16.

² Rukert, 19-22.

³ Rukert, 23.

He reached freedom and settled in Massachusetts, where he changed his last name to Douglass, the name by which he would become known as one of America's greatest abolitionists, orators, and writers.⁴

Canton at the time of the Civil War had the clear beginnings of an industrial center, but it would take developments in multiple unrelated areas during and immediately after the war to fully allow the neighborhood to earn its status as the canning capital of America. One of the greatest leaps forward was in canning technology itself, which had made remarkable progress since it was first displayed to the world roughly 50 years earlier.

A Brief History of Canning

Ever since the Neolithic Revolution saw humans begin to grow edible plants and domesticate livestock, the next most pressing gastronomical concern has been to safely store and preserve foodstuffs. Methods of smoking, pickling, and freezing foods were practiced by many societies, but for a large part of human history, perishable foods would spoil soon after they were produced. This was largely accepted as the natural order of things until the reign of Napoleon Bonaparte, a man unaccustomed to accepting any natural order. The newly crowned Emperor of France had begun a series of wars against his European neighbors; noting the trouble of keeping all of his soldiers fed with healthy rations, he supposedly remarked that “an army marches on its stomach,” although why he produced this particular *bon*



Figure 3: Nicolas Appert, by Édouard Foucaud.

⁴ Tom Chalkley, “The Railroad to Freedom,” historical marker erected by Friends of President Street Station, History Committee of the Canton Community Association, and Baltimore National Heritage Area, 2021.

mot in English is inexplicable. Napoleon offered a reward to whoever could come up with a method of keeping food safely preserved for long periods of time, and his gauntlet was picked up by one Nicolas Appert, a cook with experience in pickling. After several years of trial and error, Appert hit upon a method of vacuum-sealing foodstuffs in glass jars with corks and tar, then submerging the containers in boiling water for various lengths of time, depending on the type of food. Napoleon rewarded Appert in 1809 with the princely sum of 12,000 francs, and the new process quickly spread to England, and then America. One of the major innovations made by the British was in replacing Appert's glass jars with tin canisters, which were both cheaper and sturdier. This was the form in which canning crossed the Atlantic, and the first commercial cannery in the United States opened in New York in 1822.⁵

Canneries sprang up in Baltimore, as in most other major cities, beginning in the 1820s, but it would not be until after the Civil War that the industry truly hit its stride. Several interrelated reasons appear for this. The first is that canners did not necessarily know why or how Appert's process worked; it would be a half-century before another Frenchman, Louis Pasteur, was able to demonstrate that heat killed the microorganisms that caused spoilage, while hermetic sealing prevented them from re-infecting food. Businesses could follow Appert's advice, but they could not understand why one batch failed where another succeeded, and so had no way of correcting any mistakes except through costly trial and error. Businesses who hit on a winning method jealously guarded their secrets, so that much time and effort was spent searching for the same sets of rules over and over again. Finally, canning in the antebellum era was an

⁵ Ed Kee, *Saving Our Harvest: The Story of the Mid-Atlantic Region's Canning and Freezing Industry* (Baltimore: CTI Publications, Inc., 2006), 5-8.

arduous process. Food was sealed in cans that were placed in boiling water for hours at a time.

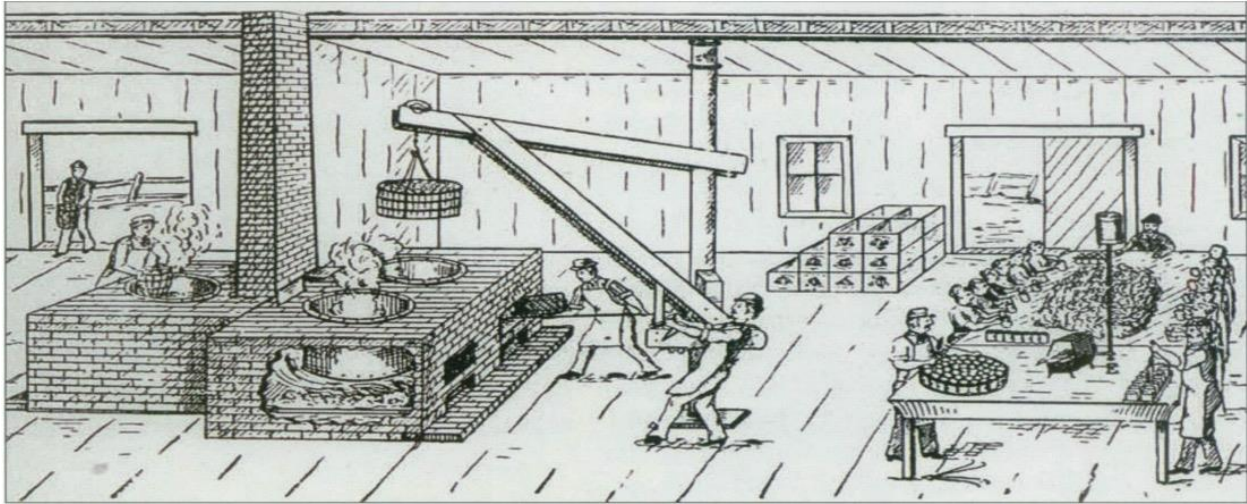


Figure 4: An early Baltimore cannery, c. 1850. Taken from an A.K. Robins Co. advertisement featured in *The Canning Trade*, 1946.

Steam built up in the cans, sometimes causing them to explode in the fire. Even if they survived the steam, the foods may not have been cooked through uniformly, and undercooked foods would ferment, swell, and explode. These were referred to as “swells,” “springs,” and “busts,” and they were a common and draining business expense.⁶

Industrialization opened the door for greater development and growth in the canning industry everywhere, not just in Baltimore. Canning would expand geographically in the early 20th century, taking advantage of natural resources everywhere, from the orchards of California to salmon in the Gulf of Alaska. While the agriculture of the Chesapeake Bay watershed allowed Maryland produce to keep up with its competitors, the end of the 19th century was marked by an aggressive surge in cultivating the resource that had allowed Maryland to first stake its claim in canning: the humble oyster.

⁶ Kee, 12-13.

Consider the Oyster

Edible oysters have been found for thousands of years in the waters surrounding every continent except for Antarctica. Their name comes from the ancient Greek ὄστρεον (*ostreon*), and is almost identical to ὀστέον (*osteon*), which is the Greek word for bone. Ancient Romans cultivated oysters since at least the 1st century BCE, and Galen, the famous Greco-Roman physician, proclaimed them an aphrodisiac; the slogan “eat oysters, love longer,” continues to be popular in the present day despite a lack of evidence supporting it.⁷ Great numbers grew off of the Brittany coast in France and in the Thames River estuary in England, which Roman occupiers exported back to Italy in large quantities. Charles Dickens wrote that “poverty and oysters always seem to go together,”⁸ so it is perhaps fitting that he described the miserly Ebenezer Scrooge as “secret, and self-contained, and solitary as an oyster.”⁹ Lewis Carroll described a walrus and carpenter hoodwinking a spat of young oysters and eating every one, as the tusked pinnipeds are sometimes wont to do. In European culture particularly, the oyster came to express yonic connotations,¹⁰ and a number of Dutch paintings in particular came to associate the mollusk with sensuality.¹¹

Crassostrea virginica, the eastern or Chesapeake oyster, has at least as storied a history as its European counterpart. Shell middens, which are essentially large trash heaps comprising mainly discarded oyster shells, are plentiful archaeological resources on the east coast of North America. Dutch explorers in what became New York City found dozens of middens that had

⁷ Ralph Eshelman, “Oyster Fisheries of the United States: A Part of the Maritime Heritage of the United States National Historic Landmark Theme Context Study” (unpublished manuscript, last updated 2001), PDF scan of physical copy held by UConn library, 3-5.

⁸ Charles Dickens, *The Pickwick Papers*, chap. XXII, <https://www.victorianlondon.org/etexts/dickens/pickwick-0022.shtml>

⁹ Charles Dickens, *A Christmas Carol*, chap. 1, <https://www.gutenberg.org/files/46/46-h/46-h.htm>

¹⁰ Drew Smith, *Oyster: A Gastronomic History (With Recipes)* (New York: Abrams, 2015), 78-80. Smith also claims that Boticelli’s *Birth of Venus* is meant to depict the Roman goddess of love on an oyster shell, not a scallop shell, but I cannot find any evidence to support this.

¹¹ Mark Kurlansky, *The Big Oyster: History on the Half Shell* (New York: Ballantine Books, 2006), 31-32.



Figure 5: The Walrus and the Carpenter. Original illustration by John Tenniel from *Through the Looking-Glass, and What Alice Found There* by Lewis Carroll, 1871.



Figure 6: The Oyster Eater (Dutch: Het oestereetstertje) by Jan Steen, 1658-1660.

been built up by the local Lenape people. The oldest midden on the Atlantic coast, at Dobbs Ferry on the Hudson River, was carbon-dated to about 6950 BCE, which is several millennia before the Lenape claim to have arrived in the area.¹² Native Americans of the Chesapeake Bay region were no less appreciative: the very first party of Europeans who came ashore with John Smith at Cape Henry, Virginia, stumbled upon a recently abandoned campsite where the locals “had beene newly a roasting Oysters,” which were “very large and delicate in taste,” and “lay on the ground as thicke as stones.”¹³

The eastern oyster can only survive in brackish water held in estuaries, of which the Chesapeake Bay is the largest in the United States. They are sequentially hermaphroditic, changing their gender from male to female and back again with no clear schedule. In order to mate, male oysters will release sperm and female oysters will release eggs into the water; those that meet to form viable embryos and survive will eventually settle on the bottom to form what is called a spat of young oysters. The mating period typically runs through spring and summer, so laws forbade oysters being harvested in months that contain an ‘r’—that is, May through August—in order to allow the population to rebuild. Oyster spats can only attach to a solid floor, such as rock, wood, or even plastic debris, and once they have successfully attached, they will remain sedentary for the rest of their lives. Most of the Bay’s deeper areas have silty, sandy, or muddy floors, making them too soft for oysters; they are far more plentiful in the shallower waters where rivers run into the Bay.¹⁴

¹² Kurlansky, 15.

¹³ George Percy, “Observations gathered out of a Discourse of the Plantation of the Southerne Colonie in Virginia,” in *Hakluytus posthumus, or, Purchas his Pilgrimes*, compiled by Samuel Purchas (London: H. Fetherston, 1625), 1686, <https://www.loc.gov/item/06002669/>

¹⁴ John R. Wennersten, *The Oyster Wars of the Chesapeake Bay* (Centreville, MD: Tidewater Publishers, 1981), 5.

There are two principal methods of collecting oysters: tonging and dredging. Tonging requires using a pair of oyster tongs, which resemble a claw that can open and close at the end of a long pole. A tonger lowers his tool into the water over what he hopes is a productive bed and tries to catch a clawful of oysters, which he must then pull back up into his boat. This process is laborious and uncertain, as the tonger cannot see deep enough into the water to judge his success, but it is a manageable task with a small boat that can be piloted by only two people. The watermen of the Bay's Eastern Shore were, and largely still are, tongers, independent fishermen who rely on themselves and their own strength for their catches. Dredging, in contrast, is a far more involved affair. The dredge is essentially a large bucket connected to a ship by a chain. The ship casts its dredge into the water, letting it hit the bottom and drag along the oyster beds as the



Figure 7: Mine Oyster—Dredging-Boat in the Chesapeake. Cartoon published in Harper's Weekly, March 16, 1872, by William Ludwell Sheppard.

boat crosses over.

When it has made a pass, the crew winches the dredges back up, empties them on deck, and then turns back around to make another pass. Boats typically had two dredges, and two to four men were required to operate each winch, so dredging required

larger crews and larger boats than tonging. It was primarily an industrial affair, and most oyster packers in Baltimore operated at least one dredge boat in the Bay.¹⁵

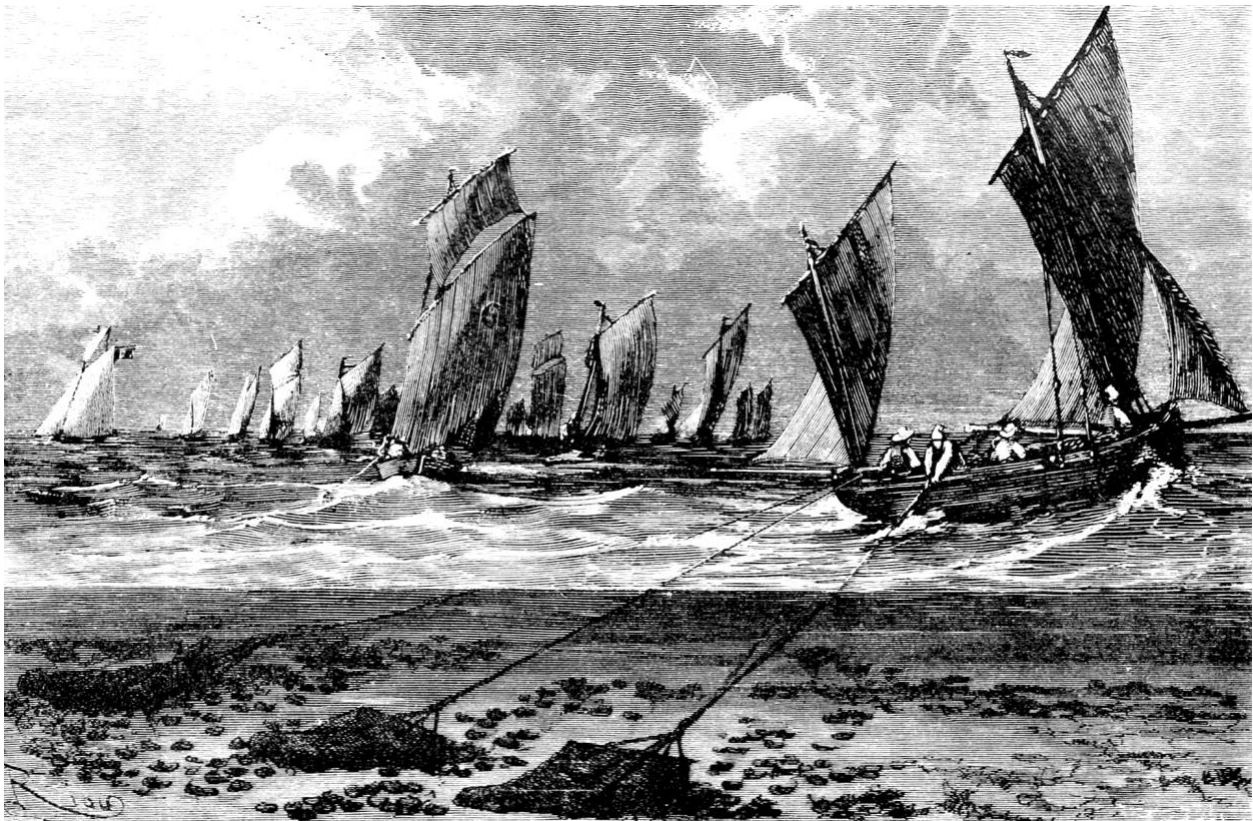


Figure 8: Vessels dredging for oysters. Artist unknown; from Samuel Lockwood, “The Natural History of the Oyster,” *Popular Science* vol. 6 (Nov. 1874).

The eastern oyster has fallen far from its height of popularity that it once enjoyed, both as food and as a symbol of Baltimore. Its overthrow by the Chesapeake blue crab is nearly complete: Maryland announced its “state crustacean” in 1989, but has no “state mollusk.”¹⁶ Crisfield in Somerset County was only officially named in 1872 for the businessman who

¹⁵ Bradford Botwick and Debra A. McClane, “Landscapes of Resistance: A View of the Nineteenth-Century Chesapeake Bay Oyster Fishery,” *Historical Archaeology* 39, no. 3 (2005): 95-97, <https://www.jstor.org/stable/25617272>

¹⁶ Maryland State Archives, “Maryland State Crustacean—Blue Crab,” Maryland Manual On-Line, last updated March 11, 2022, <https://msa.maryland.gov/msa/mdmanual/01glance/html/symbols/crab.html>. Connecticut, Virginia, and Mississippi have all designated the Eastern Oyster as their official state shell.

financed a railroad to reach the town's rich oyster trade from the Tangier and Pocomoke sounds; today, however, the town literally built on land reclaimed by discarded oyster shells instead celebrates an annual Hard Shell Crab Derby.¹⁷ When no less a worthy eminence than H.L. Mencken referred to the Chesapeake as an "immense protein factory," he had the oyster primarily in mind. Mencken continued in his reverie:

The largest genuine Maryland oyster—the veritable bivalve of the Chesapeake, still to be had at oyster roasts down the river and at street stands along the wharves—is as large as your open hand. A magnificent, matchless reptile! Hard to swallow? Dangerous? Perhaps to the novice, the dastard. But to the veteran of the raw bar, the man of trained and lusty esophagus, a thing of prolonged and kaleidoscopic flavors, a slow slipping saturnalia, a delirium of joy!¹⁸

The Bay's oyster-harvesting totals reached their peak in the 1884-85 season, with 15 million bushels of oysters raised from the briny depths. Numbers would only go down from there: slightly fewer than 10 million bushels were harvested in 1889, a decrease of a third in less than a decade. The main culprit was dredging, which not only overfished the supply of oysters, but also killed and dislodged many that it did not catch and scraped away the hard surface on which the oyster bar formed.¹⁹ Other contributing factors include pollution worsening the Bay's water quality, the appearance of parasites referred to as MSX and Dermo,²⁰ and global warming, which pushes more salt water into the oceans, raising the salinity of the Bay and making areas

¹⁷ William W. Warner, *Beautiful Swimmers* (Boston: Little, Brown & Company, 1976): 275-287.

¹⁸ Lydia Woolever, "The Mighty Oyster," *Baltimore Magazine*, October 2021, <https://www.baltimoremagazine.com/section/fooddrink/the-mighty-oyster-marylands-weird-wonderful-seafood-makes-major-comeback/>

¹⁹ Susan Brait, *Chesapeake Gold: Man and Oyster on the Bay* (Lexington, KY: The University Press of Kentucky, 1990): 38-39.

²⁰ B.J. Rothschild et al., "Decline of the Chesapeake Bay Oyster Population: A Century of Habitat Destruction and Overfishing," *Marine Ecology Progress Series* 111, no. ½ (August 11, 1994): 29-30, <https://www.jstor.org/stable/24847607>

uninhabitable for oysters.²¹ Current estimates put the Chesapeake Bay population of *C. virginica* at less than 1% of its total prior to European colonization.²²

Rise to Dominance

Baltimore at the turn of the 19th century had already established itself as a center of the oyster trade, with nearly every tavern and bar serving oysters, and several businesses that packed shucked, raw oysters on ice and shipped them out. The city's ties to the fast-expanding Midwest via the National Road and, after 1829, the Baltimore & Ohio Railroad were crucial for opening this market. Abraham Lincoln hosted parties for supporters in Springfield, Illinois, during his 1842 campaign for the House of Representatives, serving raw oysters that had been shipped on ice from the Chesapeake.²³ The first Baltimorean to try his hand at canned and cooked oysters was one Edward Wright, originally from Kent County. An 1836 advertisement for his products is the first known ad for Baltimore oysters. Wright hit upon something big, but his success proved to be his own undoing; he guarded his processes from everyone, including family and

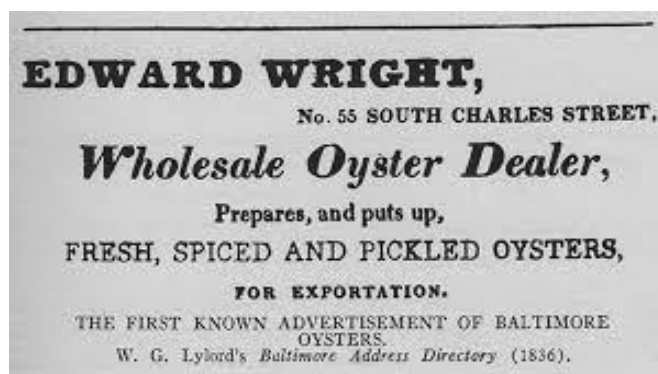


Figure 9: First known advertisement for Baltimore oysters, Edward Wright.

employees, to the point that he was forced to do most of the canning himself, and he worked himself into an early grave.²⁴ It was Abiather Field, originally from Massachusetts, who instead founded the first lasting oyster canning operation in

²¹ "Climate Change is Already Affecting Chesapeake Bay Fisheries," NOAA Fisheries (website), last updated December 12, 2022, <https://www.fisheries.noaa.gov/feature-story/climate-change-already-affecting-chesapeake-bay-fisheries>

²² Michael J. Wilberg et al., "Overfishing, Disease, Habitat Loss, and Potential Extirpation of Oysters in Upper Chesapeake Bay," *Marine Ecology Progress Series* 436 (August 31, 2011): 131-132, <https://www.jstor.org/stable/24875491>

²³ Kee, 10.

²⁴ Ibid.

Baltimore. Field marketed his canned oysters as “cove oysters” to distinguish them from the raw product, a name that became standard throughout the industry. The most likely reason is that Field’s packinghouse was located on a Cove Street—possibly modern-day Fremont Avenue—but the exact reason behind the name is unclear.²⁵

The 1860 Baltimore City Directory lists 24 individuals and businesses under as either “oyster dealers” or purveyors of “hermetically sealed fruits, etc.,” many of them under both headings. The number of packers first reached triple digits in 1872 with 104 listed, achieved a high of 125 listings in 1895, and fell slowly but steadily in the following decades.²⁶ Many firms only existed for a season or two and quickly went bust, allowing another entrepreneur to quickly move into their offices and packinghouses. The main reasons for this explosion in numbers following the Civil War have been briefly mentioned already: better technology for canning and can-making; the legalization of sail-powered dredging and the subsequent boom in the number of bushels harvested annually; the growing development of Canton as the natural center of the canning industry; and an increase in immigration from Europe, including a large number of Polish workers who settled in Canton.

In 1874, brothers Andrew K. and Mark O. Shriver were partners in the packing firm of Thomas J. Myer, developed the closed steam-kettle retort cooker.²⁷ Previously, hermetically sealed containers had been cooked in open pots, and issues ranged from undercooking to steam explosions and post-cooking “busts.” Isaac Solomon in 1861 had hit upon putting calcium chloride in the water to speed up the cooking process, which did remarkably lower the time needed for cooking, but he and others who knew exactly how to use the chemical jealously

²⁵ Kee, 10-11.

²⁶ Jane Sears, *Baltimore’s Packing and Canning Industry* (Charleston: self-published, 2015): 57-58.

²⁷ Kee, 33-34.

guarded their expertise.²⁸ These “processors” were seen as petty tyrants by many cannery owners, but business was impossible without them. The Shriver brothers, in contrast, patented and sold their invention, moving the cooking process into the realm of industry standards and cutting out the processors altogether.

Essentially, their kettle system kept steam pressure constant both inside and outside the cans while they were being cooked, ensuring that a difference in pressure didn’t cause cans to

explode during the cooking process. They were also able to keep temperatures constant inside the kettle, which allowed for more uniform cooking and greatly cut down on the number of busts canneries suffered. Other technological advances during this time included machines that cut corn off the cob more quickly and efficiently, filled cans with tomatoes, and harvested peas from their pods with less labor.²⁹ Canned food prior to the Civil War was still largely seen as a luxury item, but technological advances made it cheaper at the same time as massive numbers of troops were discovering the necessity of having healthy food on the march. Canned food was not originally part of military rations, but soldiers could and frequently did buy canned goods to supplement their diets. They had become standard rations for the Union Army by the war’s end, and Capt. Thomas Wilson of the U.S. Army Commissary Corps wrote a report shortly after the

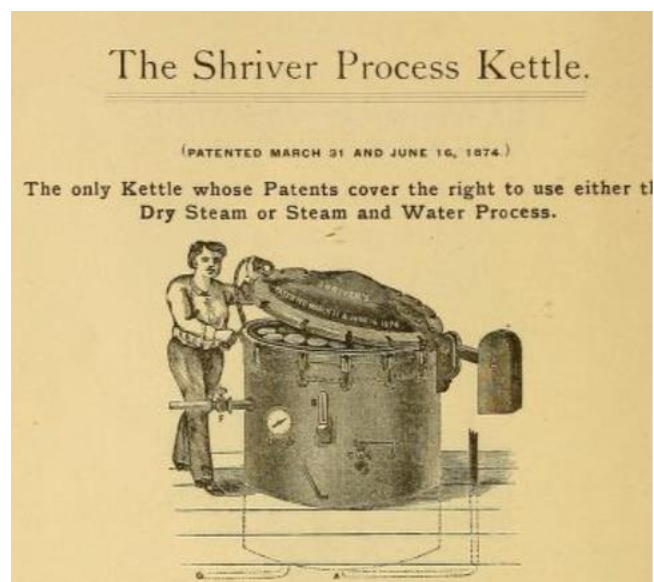


Figure 10: Advertisement for the Shriver Process Kettle, from the Warfield Manufacturing Co.’s Reference Book, 1889.

²⁸ Kee, 16.

²⁹ Kee, 33-40.

war recommending that canned goods remain an Army staple.³⁰ Can-making was also making leaps forward, with the innovation of the “sanitary can” in 1897 that could be mechanically folded over itself to create a tight seam, thus only needing to be soldered shut on the outside.³¹ All of these innovations worked off of each other, and they all combined to make the canning industry more uniform, standardized, and productive, thereby driving up demand for canned goods worldwide.

Oyster tonging before the Civil War was largely a subsistence affair for watermen in small Eastern Shore communities. It required only a small boat and a crew as small as two, along with a working knowledge of the many inlets and coves of the Chesapeake. The standard of living in these rural communities might be considered poor by modern standards, but the famously independent watermen clung to their ways as both a livelihood and a culture.³² This was undoubtedly an important reason for why Maryland outlawed oyster dredging in its waters in 1820, and limited oystering to state natives. There was ample reason to be cautious: the oyster beds of Cape Cod had been depleted as early as 1775, and the beds of Long Island Sound suffered a similar fate, especially after the introduction of steam-powered dredging. Northeastern oyster barons imported Chesapeake oysters to artificially resupply their waters, but many decided to simply go to the source; the laws limiting out-of-staters from oystering caused many firms to make Baltimore their base of operations.³³

Maryland repealed the laws on dredging in 1865, but only allowed dredges to be sail-powered, and to operate in waters 15 feet or deeper. Lawmakers may have meant for this to be a

³⁰ Kee, 15-16.

³¹ Jane Busch, “An Introduction to the Tin Can,” *Historical Archaeology* 15, no. 1 (1981): 97-98, <https://www.jstor.org/stable/25615391>

³² Bostwick and McClane, 98-100.

³³ Wennersten, 13-14.

controlled compromise that struck a balance between allowing for progress while protecting tradition, but they failed miserably. Dredgers quickly realized that the deeper parts of the Bay had soft bottoms of sand and mud which allowed for much fewer oyster beds than the rocky shallows reserved for tongers, and began moving into the smaller watermen's territories almost immediately.³⁴ Maryland quickly commissioned the Oyster Police Force, also called the Oyster Navy, in 1868, but these lawmen were often hard-pressed to stop the better-armed and more numerous oyster pirates. The oyster boom also reignited the never-settled debate over the maritime boundary between Maryland and Virginia, with both states claiming valuable oyster grounds like the Pocomoke Sound and Tangier Island. Violence erupted on the Bay between dredgers and tongers, between dredgers and the Oyster Navy, and between Maryland and Virginia watermen. While the idea of "Oyster Wars" might seem quaint, even humorous, in the 21st century, the brutal killings between watermen would seem to be more appropriate in a

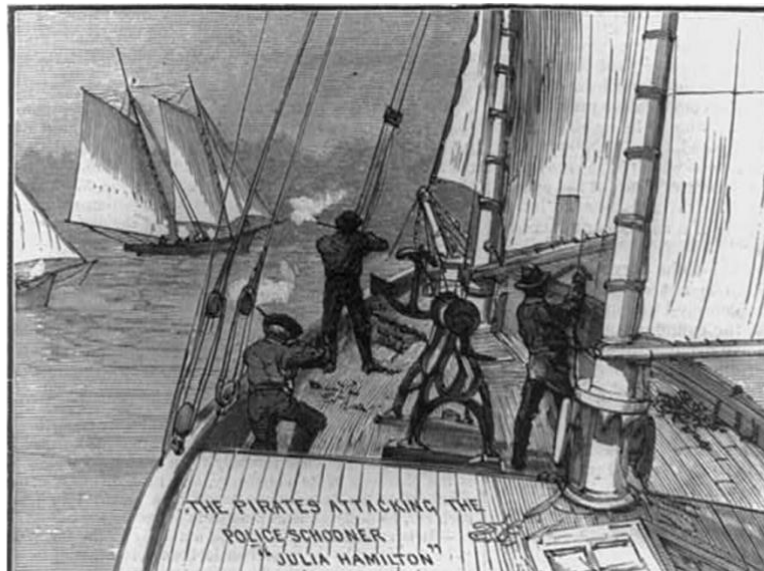


Figure 11: "The Pirates Attacking the Police Schooner 'Julia Hamilton'." Drawing by Schell and Hogan, Harper's Weekly, March 1, 1884.

³⁴ Brait, 37-38.

history of Wild West shootouts or urban mafia wars than among the bucolic countryside of the Eastern Shore. It was a testament to the outlandish profits that a successful dredging captain could earn in the late 19th century that it pushed them to risk their lives so recklessly.

While industrial expansion engulfed Canton immediately following the Civil War, businesses quickly recognized a new problem: there were not enough workers to fill the roles needed. The president of the Canton Company, Charles J. Baker, embarked on a tour of Europe to convince workers to emigrate to America. He found greatest success with Polish and Irish workers, who began arriving in Baltimore in large numbers starting in 1872.³⁵ Encouraging immigration was common amongst industrialists of the time, and precedent existed in Canton. The Baltimore Copper Smelting Company had encouraged a sizable community of Welsh smelters to emigrate in the 1850s, and had constructed worker housing immediately across from the refinery that would become known as “Copper Row,” all of which has now been demolished.³⁶ The first Poles only arrived in Baltimore in 1868, and quickly settled in neighboring Fells Point. More families arrived steadily over the next decade to form a small but vibrant Polish community.³⁷ The community began moving east into Canton and especially into the oystering and packing industries, until nearly two-thirds of all canning employees were “Bohemian,” a term widely applied to most eastern Europeans, including Czechs, Poles, and Ukrainians. Many of these peoples had been squeezed between expanding empires in Europe,

³⁵ Rukert, 31.

³⁶ Rukert, 25-26.

³⁷ Thomas L. Hollowak, “A Winter’s Tale on the Chesapeake: The Hardships Endured by Polish Oyster Dredgers Before the First World War,” *Polish American Studies* 75, no. 1 (Spring 2018): 43, <https://www.jstor.org/stable/10.5406/poliamerstud.75.1.0041>

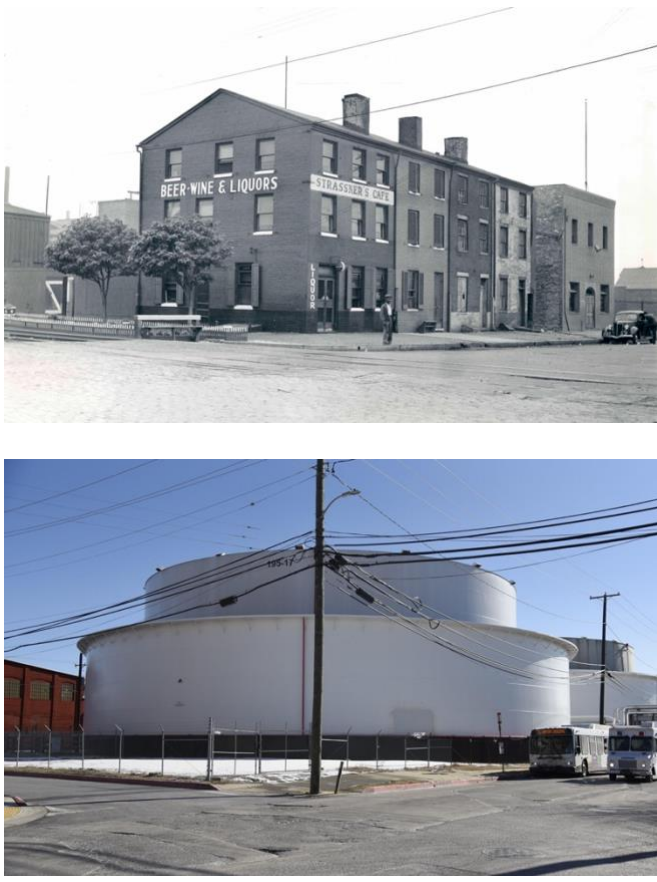


Figure 12: Images of “Copper Row,” homes constructed originally for Welsh copper smelters, 1600 block South Clinton Street, 1940 (top) and 2018 (bottom). Baltimore Sun.



Figure 13: Allegory of the first partition of Poland, with Catherine the Great of Russia (left), Joseph II of Austria and Frederick the Great of Prussia (right) arguing over the division of Polish territory. Noël Le Mire, after Jean-Michel Moreau.

and fiercely protected their own ethnic enclaves in America. Poland itself had been partitioned by Prussia, Russia, and Austria-Hungary, and did not exist as an independent state from the end of the 18th century until 1918.³⁸

Work in Canton was a family affair. Men were largely employed in maritime occupations such as oystering and fishing, but also as stevedores, porters, and in the other manufacturing interests. A quick perusal of occupations listed in the 1880 census includes the generic “laborer,” along with “tinner,” “plasterer,” “bottler,” “mariner,” and the increasingly common “works in oyster house.” Women were especially prevalent in the hard labor of preparing foods for canning throughout the industry, and they often brought their entire families of children with them. This was partly a matter of safety, as they could not leave large groups of small children to fend for themselves at home during 12-hour shifts, but children were also crucial to the labor market. They could easily do the menial tasks of capping strawberries and hulling peas, and the income they brought in was necessary for their family. Far from bemoaning the conditions of child labor they oversaw, cannery owners were proud to be doing their civic duty. Thomas Kensett declared to a meeting of the Baltimore Oyster Packer’s Association in 1869 that:

Were it not for the shucking of oysters, many children, from twelve to fifteen years of age, would spend much of their time in the streets and around the wharves and docks, being trained up to immorality and crime, and preparing to fill our jails and workhouses. Now they are actively and usefully employed, earning from twenty-five cents to a dollar and twenty cents a day.³⁹

Although today it would be easier to label such paternalism as exploitation, it was considered the *noblesse oblige* of the Gilded Age. There is even evidence to suggest that ties between industry and workers were stronger in Canton, creating a lower population turnover in the decades

³⁸ Kee, 23-24.

³⁹ Kee, 17.

between the Civil War and World War II than what existed in most other American cities.⁴⁰ The combination of technological advances, a growing but relatively sedentary workforce, and flush supplies meant a boom for Canton's canning businesses that would not be matched, much less abate, until several decades into the 20th century.

The *1889 Directory of Processors* counted a total of 387 canneries in Maryland. This was the most in any state, more than double the next-highest number of 152 in Maine. 42 were located in Baltimore alone; if the city were substituted for the entire state, it would have ranked 9th overall. California, the modern center of a good deal of American agricultural production, counted only 50 canneries in 1889.⁴¹ This was most likely not due to any lack of farmers willing to work the soil, but rather due to the difficulties in transporting heavy machinery to the Pacific shores, forcing a long expedition around the Tierra del Fuego before railroads expanded their capacity. California would claim its title to producing the most canned goods in the nation in the 1920s, but the years between the Civil War and World War I saw Maryland claim a truly outsized role in canned goods production relative to its acreage. This success would have been impossible without the humble but mighty Eastern Oyster, and the enterprising canners who laid out their businesses to take raw oysters from the Bay, pass them through their canneries, and deliver them out the other side preserved in tin and ready to be sold around the country and the world.

⁴⁰ D. Randall Beirne, "Residential Growth and Stability in the Baltimore Industrial Community of Canton During the Late Nineteenth Century," *Maryland Historical Magazine* 74, no. 1 (Spring 1979): 39, <https://mdhs.msa.maryland.gov/pages/Viewer.aspx?speccol=5881&Series=1&Item=294>

⁴¹ Kee, 23.

II. Architectural Analysis

“I’ve almost got one of them ready to swear that the docks are actually near the water.”
-The Wire, “Undertow,” written by Ed Burns

Introduction and Methodology

Canton’s canneries were built from a need to combine human invention with the natural resources available to them—in this case, access to water. Much like how an estuary or marshland is not just a junction between land and water, but is a crucial ecosystem in and of itself, Baltimore’s industrial waterfront at the turn of the 20th century had a unique vernacular architecture that could only exist to meet the needs of its inhabitants. Technological advances in the decades since canning’s dominance have obviated many of those needs, and as a result, the vast majority of buildings that represented this relationship between two worlds have been demolished. Understanding these buildings is not as simple as knowing that seafood packing plants work best next to the water, however; there were also many processes at play based on the movements of people, technology, and the all-important product that justified the buildings’ existence. Canneries were both situated and laid out for specific purposes in ways that fully ingrained them into the larger cultural landscape.

Almost no cannery buildings that operated in the 19th century remain standing, and those that do have been largely repurposed and remodeled. Photography focusing on the interiors of canneries was not common until the 1930s and 40s, by which point great changes had taken place in the industry. Understanding how canneries operated in the late 19th century, especially in their relationship between work processes and the natural environment, is therefore difficult, but is not impossible. Several resources exist that can give the 21st century observer greater insight into how these buildings worked. First, and perhaps most importantly, are the maps created by the Sanborn Fire Insurance Company. The first Sanborn map of Baltimore was released in 1890,

and others followed at regular intervals. These maps provide detailed aerial depictions of canneries, including the names of businesses, building outlines, number of stories, building materials, and crucially, the functions performed in various rooms. Sanborn maps make it possible to visualize how the various functions of canneries related to each other architecturally, making them an invaluable resource for this investigation. Illustrations in magazines and advertisements from the late 19th century can also be useful, although they did sometimes take artistic licenses. The Phillips Packing Company's official business envelopes, for instance, showed a sprawling complex that looked to have covered several hundred acres in Dorchester County, but the illustrator apparently presented all of the company's dispersed properties in one single location.⁴² Many companies undoubtedly wanted to represent themselves accurately in illustrations, as they were using the only widely available pictorial medium of the time to draw in customers, especially if there were competitors nearby that could confuse newcomers.

Photographs became more common in the 20th century, and could be used in both promotional materials and independent publications. One source of cannery photography comes from the work of Lewis Wickes Hine, a sociologist and crusader against child labor. He photographed conditions for children working in many different industries, including canning and packing houses in Maryland, in order to draw attention to the harsh and dangerous conditions that many of them faced. Hine himself was frequently in danger for his exposure of industrial evils, and had to adopt many different disguises in order to gain access to these areas. His efforts eventually led to the passage of the Fair Labor Standards Act of 1938, which, among other things, outlawed child labor, two years before his death at the age of 66.⁴³ Other

⁴² R. Lee Burton, Jr., *Canneries of the Eastern Shore* (Centreville, MD: Tidewater Publishers, 1986), 81.

⁴³ Anthony T. Troncale, "About Lewis Wickes Hine," The New York Public Library (website), accessed May 4, 2024,

photographs usually focused on the exterior of buildings, and give insight into how form and function intertwined in canneries' layouts relative to their positions on the water and in urban settings.

Contemporary descriptions of canneries without visual aids are more abstract, and are often found in more technical publications. These can describe machinery, building sizes, and estimated numbers of workers needed, along with overhead costs and budgeting, and were usually found in writing intended for industry professionals or entrepreneurs looking to enter the business. Although often dry reading, they can sometimes explain how business needs were served by architecture and layout in ways that would be invisible to modern investigators.

The final source of documentation comes from modern (late 20th century and onward) historical and preservation literature. These are unfortunately lacking in a great many details that would be relative to this investigation, and point to countless lost opportunities to gain a better understanding of industrial architecture before it was lost forever. Much of the writing focuses on trends that shaped the industry overall, while ignoring the day-to-day operations of the buildings. No layout maps or floor plans for the interiors of Baltimore canneries have been found in the research that went into this report. Plans for two other Maryland canneries—the J.C. Lore Oyster House in Solomons, which is a National Historic Landmark, and the Warren Denton & Co. cannery on Broomes Island—exist in their respective documentation. These will share insights that are no doubt applicable to some degree to Baltimore canneries, but they obviously lack the urban element that defines this investigation. A small but vital amount of preservation documentation relating to canneries and packing houses exists. Among these is Dr. Ralph Eshelman's National Register of Historic Properties (NRHP) multiple property documentation

form on oyster fisheries in the United States, although, like the rest of the Maritime Heritage Context Study of which it is a part, the completed nomination has never been officially published by the NPS. The SHPO offices of Virginia, Maryland, and Pennsylvania, along with the NTHP, launched a collaborative project in 2021 called the Chesapeake Mapping Initiative, which seeks to document sites related to the history of African American watermen on the Chesapeake Bay. Substantial but uneven progress has been made: while Virginia's Department of Historic Resources has already published a MPD detailing its findings, albeit one that only focuses on a smaller collection of counties in the watershed than intended, Maryland has yet to exit the survey phase as of early 2024.⁴⁴ Like the documentation of Maryland's eastern shore canneries, Virginia's MPD includes useful insights that relate to this project, but they still require a level of abstraction. None of these sources on their own gives a complete overview of canning's physical imprint, but, when combined, they allow the diligent researcher to piece together a coherent picture.

Geographic Position and General Layout

Picturing the architectural landscape in the early days of canning's boom immediately after the Civil War is difficult. Urban photography was still in its infancy. Sanborn maps for Baltimore first appeared in 1890, by which point the oyster industry was already in decline following its peak season in 1884-85. Nevertheless, several general conclusions can be drawn from the existing data.

Baltimore's earliest canneries were built in the blocks surrounding the Basin, now known as the Inner Harbor, capitalizing on the location of both easy water access and the center of commerce. 21 businesses specializing in "hermetically sealed fruits, etc." have their addresses

⁴⁴ "Chesapeake Mapping Initiative," National Trust for Historic Preservation, accessed April 15, 2024, <https://savingplaces.org/chesapeake-mapping>

listed in Woods' 1860 directory, but only one of them—the firm of Rowe, Mahoney, & Co.—was constructed east of Central Avenue. Three canneries each were located on McElderry's Wharf, now Pier 5, and West Falls Avenue, and one was built on the Light Street wharf when that street was still on the waterfront. The vast majority of the others are clustered within a few blocks of the downtown area.⁴⁵ It is also worth noting that cannery offices could sometimes be geographically separate from the canning buildings themselves; the directory makes no indication of this, but the distinction is sometimes noted in advertisements for the individual canneries. This report will largely assume that directory addresses include both business offices and canning operations unless otherwise specified, while admitting that such an assumption may be incorrect.

Direct waterfront access was clearly not necessary for canneries to operate, but it was an advantage, and real estate with a built-in wharf was at a premium. Canning firms competed not just with each other, but with all businesses in Baltimore that relied on water transport—which, in the 19th century, was all of them. The Canton docks were home to copper and steel smelters, oil importers, machine works, salt sellers, ice makers, cotton warehouses, grain elevators, and chemical plants, the latter being a euphemism that largely meant guano importers. Guano, or, to be less obtuse, bird shit, was harvested from rocky outcroppings in the oceans that served as roosts and nesting areas before being transported back to the mainland. Prior to the invention of artificial ammonia in the early 20th century, guano was the world's most prolific fertilizers, and Baltimore was one of the country's largest importers.⁴⁶ Even the most ardent preservationist and

⁴⁵ *Woods' Baltimore City Directory, 1860*, 487, <https://archive.org/details/woodsbaltimececi1860balt/mode/2up>

⁴⁶ Pete Leshner, "A Load of Guano: Baltimore and the Fertilizer Trade in the Nineteenth Century," *Northern Mariner/Le Marin du Nord* 18, nos. 3-4 (July-October 2008), 121-128, https://www.cnrs-scrn.org/northern_mariner/vol18/tnm_18_3-4_121-128.pdf

seafood lover will no doubt be relieved that these two industries no longer rub shoulders on the waterfront.

Some reassurance for smaller firms boxed out of dock access was that canning had an intensely boom-and-bust market model. One bad season for oysters or crops could ruin a packing house, and companies

frequently sprouted up only to flare out of existence in one or

two years. Even companies that survived from one season

to the next would frequently change locations, as each year

brought new economic realities to the business

landscape that forced

readjustments. When a

company went under in Canton,

its cannery building would remain standing, and ownership of the land on which it was built

would usually revert to the Canton Company, who likely would not have to wait long for another entrepreneur looking to claim the still-usable facilities. Firms on the waterfront tended to be

more stable than their inland competitors, due to their having steadier access to materials, but very little was certain in the cutthroat climate.

Early canneries tended to be long buildings. Even though they could take up several consecutive addresses on one city block, their length could make them look much narrower. The



Figure 14: 1890 Sanborn Map of Baltimore, showing 2200 block of Boston Street, containing packinghouses of J. Ludington & Co. and D. E. Foote, along with a vacant cannery whose ownership has reverted to the Canton Company.

buildings discussed herein fronted on a street, such as Boston Street, but stretched out into the harbor, literally connecting and bridging water and land. This was an ingenious solution to real estate pressures that gave canneries much more interior space and allowed for far more firms to have waterfront access than would have been possible otherwise. Perhaps most notably, this design also funneled work processes into an essentially straight line that took in foodstuffs at one end and converted them to a market-ready finished product as they passed through. All 19th century industries relied on the water to some degree, but none was as transformative or as situational as canning. The industry's progression in the 20th century saw many of these firms absorb competitors on either side and expand laterally, but the process still operated in a linear manner. The following architectural descriptions will thus proceed along the path that raw materials would take in the canning process. While most humans would approach the cannery from land, this "oyster's-eye view" will start after just leaving the water, albeit without the experience of being steamed and shucked. This is the path for which canneries were designed, and it is the best way to understand how they functioned by combining architecture and landscape.



Figure 15: Sanborn map depictions of the Gibbs Preserving Co. building on Boston Street in 1890, 1902, and 1914, showing its expansion over time. While the company grew along the waterfront, it never fundamentally changed its orientation between water and rail.

Docks

The water was the source of oysters and the mode of entry for all produce, so canneries naturally established themselves as close to the edge as they possibly could, often extending themselves out over the water to meet their catch as it came. Baltimore possesses a natural harbor that makes an excellent port for ocean-going vessels, but the craft that would be docking at Canton's packing houses were usually much smaller and suited for the Bay. Chesapeake oystermen for much of the 19th century conducted their tonging on simple dugout canoes made from several logs joined together. The pungy, a two-masted craft, first appeared on the Bay in the 1840s and came to be the favorite of dredgers, who required larger ships for crew and cargo. They were not the easiest to maneuver, however, and by the latter half of the 19th century pungies were largely replaced by the smaller and more agile bugeye schooners. Bugeyes were still double-masted vessels, but falling oyster yields forced dredgers to tighten their budgets in the 1890s, and the single-masted skipjack became the oystering vessel of choice that is still in use on the Bay in the 21st century. All of these dredging vessels would dock at oyster canneries to

unload their catches directly, and several canneries owned their vessels directly. Independent tongers rarely made the trip up to Baltimore, and instead usually relied on buy-boats to transport their hauls. These vessels could be converted from any of the craft previously mentioned, and they functioned as middlemen in the oyster fisheries, paying small tongers for their catches and then delivering the oysters to canneries for a profit. All of these vessels needed space to dock in the harbor.

Docks could be equipped with hoists to lift cargo out of the boats, and sometimes had wheeled carts on tracks to help transport the mollusks inside, but more often than not the work of emptying the holds was done by hand. Transportation worked both ways, however, and the piers



Figure 16: Unloading oysters from merchant boat and wheeling them into shucking room, oyster house, Baltimore, Md., U.S.A. Keystone View Co., c. 1905. Library of Congress.

were also the last stopping point of detritus from the canneries. Oyster shells, tomato skins, corn cobs, pea hulls, and all other manner of food scraps were simply tossed from the dock into the water at the end of the day. Oyster shells would just as likely be saved to be crushed up to make lime mortar and fertilizer, as they can help balance pH values in soil. This would lead to piles of oyster shells that grew as the season wore on, until they could tower nearly as tall as the

buildings surrounding them. Oyster shells could just as easily end up in the water, either accidentally or on purpose. Avalon Island, located just off the east coast of Tilghman Island in Talbot County, was created entirely by the Tilghman Packing Co.'s discarded oyster shells—so many of them, in fact, that the company was able to move its facilities to the reclaimed island.⁴⁷ Oyster shells are also still used in aquaculture to provide anchor points for spats to grow underwater. Most fruit and vegetable scrap was much less useful and simply became flotsam.

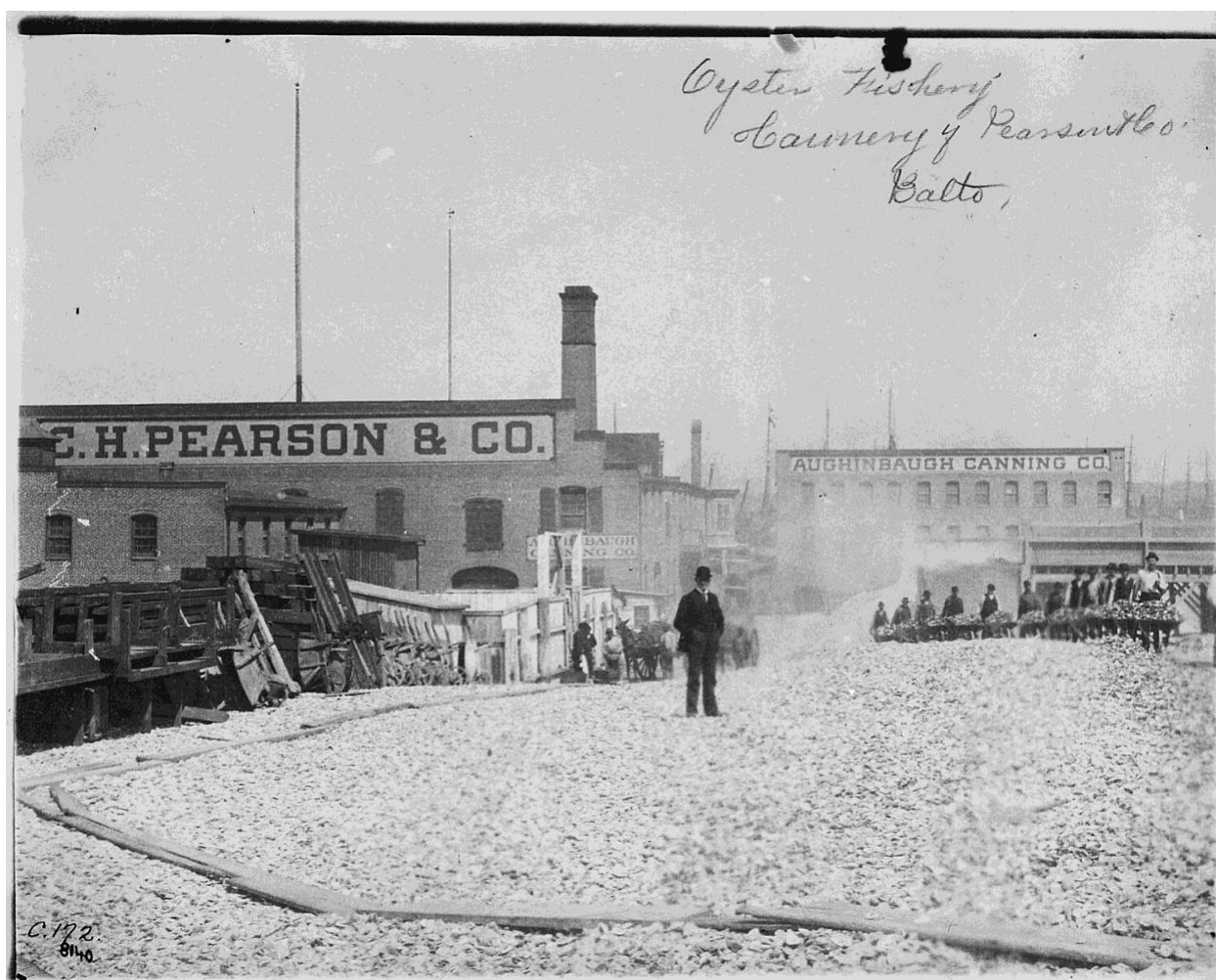


Figure 17: A man stands in front of the Pearson and Aughinbaugh canneries, on a dock piled high with discarded oyster shells. A line of people with wheelbarrows full of more shells is behind him. c. 1890, Office of the Commissioner of Fish and Fisheries.

⁴⁷ Margaret Enloe Vivian, "Tilghman Packing Company and the Transformation of Landscape on Avalon Island," *Weather Gauge* 36, no. 1 (Spring 2000), 12, <https://www.mytocca.org/wp-content/uploads/2020/01/CBMM-Tilghman-Packing-Company.pdf>

Many small communities noted their rivers and creeks running red in the summer months from the numbers of tomato skins dumped into them.

The 1890 Sanborn map shows a large number of piers and wharfs simply resting on piles and presumably open to the air. They were merely conduits for raw materials, and not part of the canning process itself. Time, however, started to see cannery processes extend along the wharf to make more use of the area. Sometimes the shucking area would move out onto the pier, presumably to add space for machinery and storage inside the building proper. The 1902 map shows various frame constructions, usually either open-air shed structures or fully walled rooms, sometimes with tin siding or corrugated iron roofs. These were almost all uniformly one-story structures, but the Gibbs Packing Company on Boston Street had already constructed a two-story enclosed structure on its wharf in 1902. The first floor was used for oyster shucking, and the second was a storage area. Why this unique arrangement was chosen is unclear. If canned goods were being stored, it possibly indicates a transportation route by water for the finished products; however, the building still has a specially designated storage area for canned goods in the section

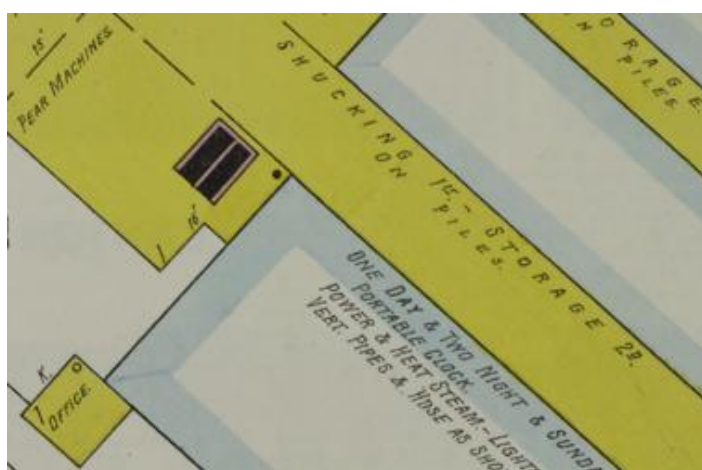


Figure 18: Gibbs Preserving Co., 1902 Sanborn Map, showing two-story pier structure, as well as “pear machine.”

closest to the street, perhaps implying that the second level is storing something else, such as tools and machine parts. Gibbs appears to have abandoned this double-storied wharf by 1914, while also diversifying the jobs performed on the docks: the company’s three wharfs are labelled as “repairing shed,” “receiving shed,” and “catsup bottling and packing.”

an operation that appears to have taken place entirely under an open-air wooden roof. Other companies had given their wharf structures iron cladding or concrete flooring by this time. This layout appears to have stayed much the same for the duration of the piers' existence.

Steaming

Oysters have an adductor muscle that keeps their shells closed tight to protect them from predators. The raw oyster shucker's job is to slide a blade between the shells and move it around until they find that muscle and sever it, allowing them to open the shell. An enterprising canner discovered that steaming the raw oysters prior to shucking kills them, removing the difficult need of finding the muscle and cutting it. It quickly became common practice to steam freshly arrived oysters upon arrival, allowing them to be shucked much more quickly. One observer noted the racial and sexual discrepancies present, commenting that raw oyster shucking was largely accomplished by Black men, whereas steamed oysters that would be canned and cooked were mainly shucked by white women and children, most likely the Polish laborers in Canton. The reasons for such a divide probably go beyond gendered ideas about physical strength, but they are outside the scope of this discussion.

Steaming was apparently done in "steam boxes," which at least one manufacturer constructed to be essentially large troughs that oysters passed through on wheeled carts. The steamed oysters could then be wheeled out the other side into the shucking room. Sanborn maps indicate that most canneries had either designated steam rooms, which were between the wharves and shucking rooms, or freestanding steam boxes that were typically still kept outside of the main canning building. A photograph from 1899 shows the interior of a steam room with multiple tracks on the floor for oyster carts; although the cannery is not named, it was located in Baltimore, and similar setups could likely be found in many canneries.

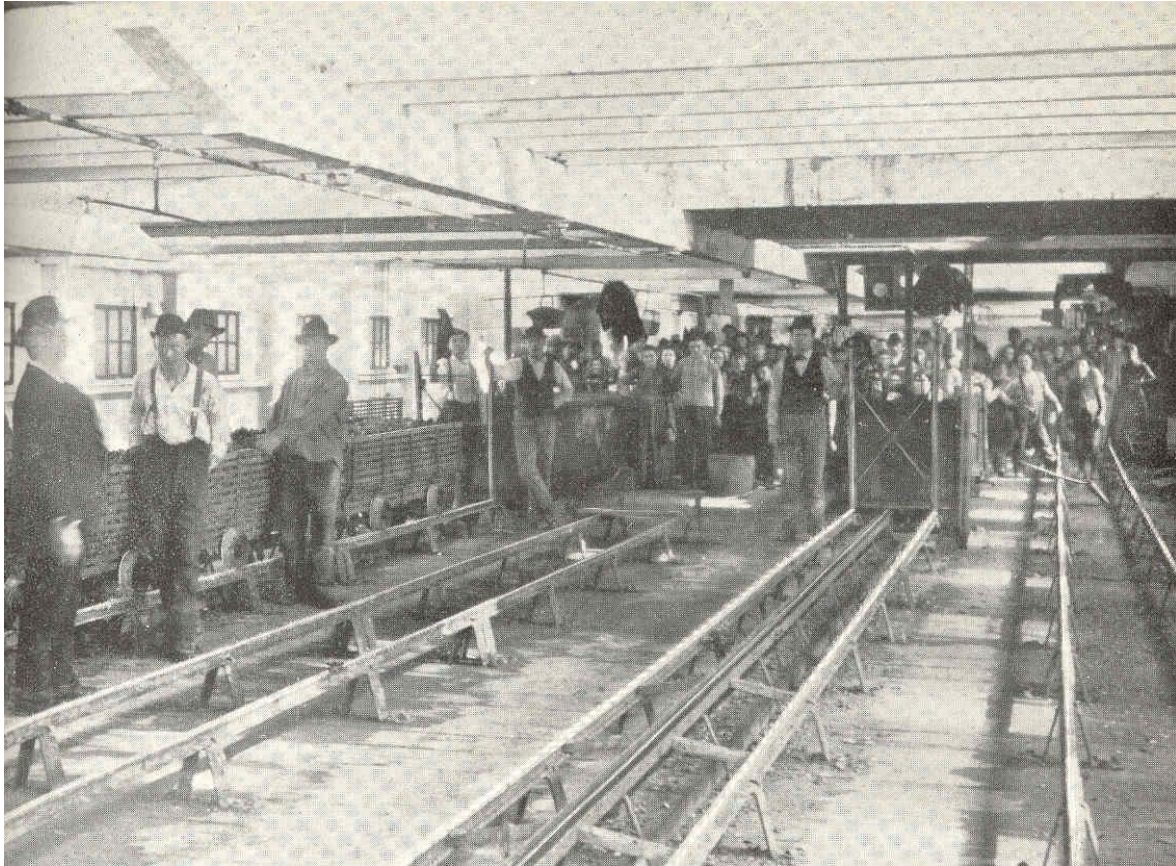


Figure 19: Interior View of Baltimore Oyster-Canning House, Showing Arrangement of Steam-Boxes, Carts, Tracks, etc. Photo by Charles H. Stevenson. Published by Government Printing Office, 1899.

Shucking Rooms

Mechanization streamlined many parts of the industrial process, but the actual preparation of food for the cooking process remained the most labor-intensive part of canning. Oysters had to be shucked from their shells before they could be canned and heated. This was the major task from September to April, but the same rooms were put to use in the summer to ready produce. Workers would peel tomatoes, hull peas, cut corn off the cob, cap strawberries, and pit peaches. Mechanized processes could ease the load, but never fully replaced human labor.

Shucking rooms were typically long and low, rarely higher than one story. Although this made them much harder to see from the street, it would not be difficult to imagine them dominating the approach for mariners bringing their wares to the docks. Aerial views, like those

provided by Sanborn maps, show these rooms to be the largest single areas within canneries by ground coverage. Sanborn maps also indicate that, in earlier canneries, this would be the first brick building reached as materials passed through the system, but as time went on the shucking process was moved outdoors and onto the docks, as discussed previously. Giving the shuckers enough light to see what they were doing was of utmost importance, and this was included in their designs. The rooms typically had not only large windows on the walls, but also large skylights in the roof to let in as much light as possible. This may have also been motivation for moving the operations to open-air pavilions. Some women who worked in the canneries during the Great Depression in the 1930s and 1940s remembered the packing areas as being wooden frame constructions. Several also remembered that the packing areas were “open to the street,” although it is unclear if that is meant to be an architectural descriptor. The Baltimore Museum of Industry states that many shucking areas were open to the elements, which was especially harsh as the oyster-shucking season lasted through the winter, but photographs confirm that a decent number were enclosed.

Shucking rooms were dominated by a long table or tables that stretched the length of the area. All of the shuckers would stand around the table, the raw material would be dumped in the middle, and they would begin working. Oyster shells and other scraps would be simply dropped at their feet, to be cleaned out at the end of the day. Some photographic evidence exists to suggest that oysters which had been steamed in their carts continued on in those carts to be shucked. Many firms had dividers on the table that created a station for each shucker, only slightly wider than was necessary to stand in. This may have been believed to make it easier for shuckers to keep their own productivity separate from others'. Workers were tasked with filling a



Figure 20: Women shucking oysters, Baltimore. Keystone View Co., c. 1905. Library of Congress.



Figure 21: Oyster-Shucking Room, Baltimore, Maryland. Charles H. Stevenson, Government Printing Office, 1899.

pail with shucked oysters, and were paid by the pail. When it was full, they would take it to the processing room, where a worker would receive a company token for each pail filled. Those tokens would then be cashed out at the end of the day, although in some canneries they may have functioned as scrip that could only be exchanged in a company store.

The shucking room and processing, or canning, room were typically separated by a wall. It was common for there to be only a small window between the two rooms, through which shuckers passed their full pails and received their tokens. This single point of contact undoubtedly made it simpler to control the flow of tokens and materials, keeping the flow of each running smoothly. It also quite literally divided the areas of labor between shucking and the actual canning process. Shuckers in Canton, as has been discussed, were overwhelmingly women and young children, manual laborers who required little experience and barely any English to do their jobs. Cannery workers were almost uniformly men, although many younger boys were included. The irony of this gender gap, of course, is that the shuckers' work was at least as physically intense as any other employees', but the labor's relegation to the women's domain meant that the very necessary labor that made canning possible was devalued intensely by men in the industry. When one woman remembered how, as a young girl in the 1920s, she had joined her grandmother on a summer expedition to an Eastern Shore farm for six weeks of husking corn, she noted in passing how "very few men went in for this kind of work."⁴⁸

The presence of multiple generations in one place, combining both employment and childcare, led to shucking rooms as places that could blur the lines between work and home. Many observers noted something along the lines of the anonymous pamphleteer who wrote how

⁴⁸ Regina E. Butka, "I Remember...Summer Work in the Shore Corn Country," *Baltimore Sun*, September 17, 1961, <https://www.proquest.com/docview/540250246/2BB86F4E4FD04109PQ/79?accountid=14696&sourcetype=Historical%20Newspapers>

“there can be no more interesting sight” than to see “a mother, with her entire family—the baby rolled in a blanket, asleep, tucked away on some convenient box, while she, with her boys and girls, are at work to procure the means with which to support their home.”⁴⁹ Another description of Polish women in the shucking rooms noted that, while they were working, they also “taught the catechism, disciplined their children, and socialized as if in the family kitchen.” The author argued that this familiarity actually gave the working women a level of control and authority over the operations, as they asserted domestic prerogatives to keep their children away from machinery they deemed unsafe, or to keep a pace that allowed for time to check in with their family.⁵⁰ This permeable membrane extended outside of the factory, as most employees did not keep a set schedule but were instead summoned by the factory’s whistle. Each cannery had a unique whistle, and when employees heard it, they had 15 minutes to gather up their families and make the short walk to the waterfront.⁵¹ The need to be immediately available due to the perishability of food being canned meant that “there [were] no ‘hours of labor’ about the packing house in busy season,” as employees had to assume a constant vigilance for when they might be summoned.⁵² The invasion of employees’ private domestic spheres by the demands of their workplace was made possible by a lopsided imbalance of power, to be certain, but the bleeding between work and home allowed for subtle acts of resistance as women worked to maintain familial bonds that would otherwise have been largely severed by demands on their time and energy.

⁴⁹ Warfield Manufacturing Co., *Reference Book* (Baltimore: Warfield, 1889), 7, <https://archive.org/details/referencebookint00warf/page/6/mode/2up>

⁵⁰ Roderick N. Ryon, “Baltimore Workers and Industrial Decision-Making, 1890-1917,” *Journal of Southern History* 51, no. 4 (November 1985): 570, <https://www.jstor.org/stable/2209515>

⁵¹ Kee, 24.

⁵² Warfield, 7.

Processing and Packing Rooms

The rooms where the prepared products were turned into actual canned goods was typically smaller than the shucking rooms, and had much more machinery. Chief in importance were the kettles used for actually cooking the food in the cans. The earliest canneries were not technologically advanced: they had large pots of boiling water that were heated over open flames without any covering. A pulley system hung from the ceiling was typically used to lower pallets of cans into, and raise them out of, the water. The Shriver brothers' steam-kettle retort of 1874 was a boon that not only granted increased productivity, but also spared workers from far more injuries and burns caused by bursting cans.

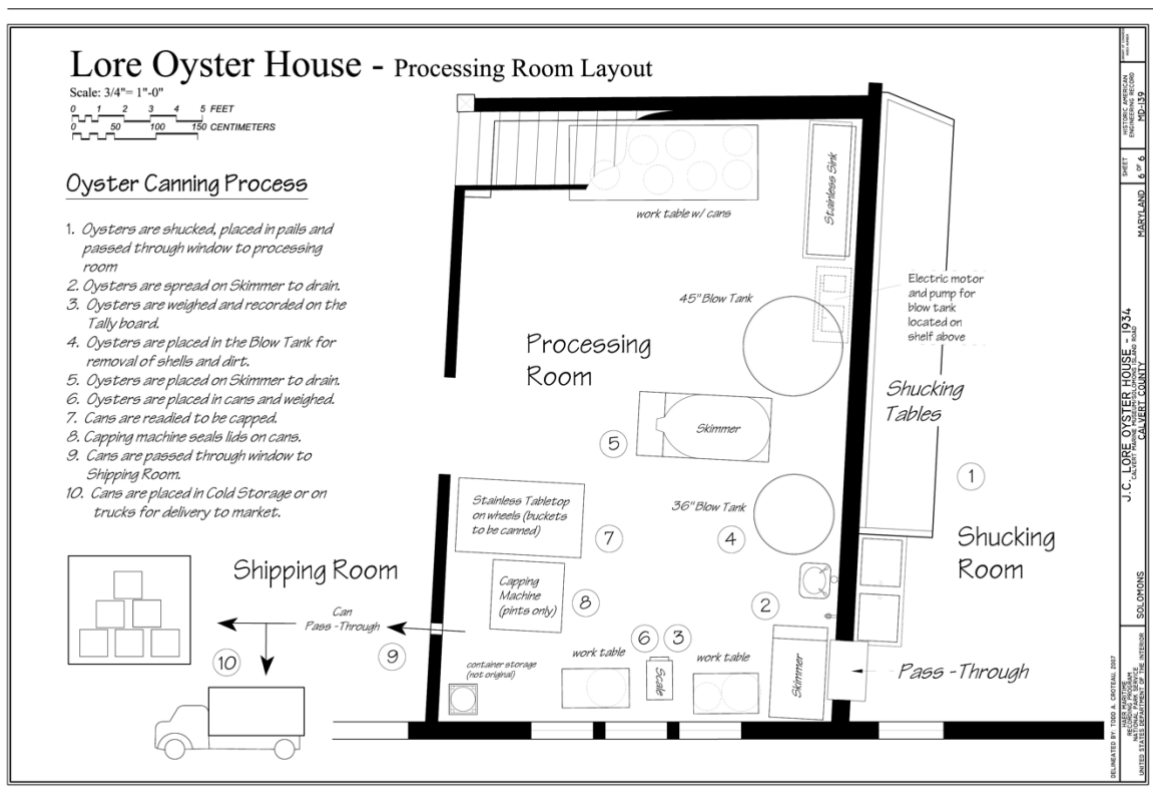


Figure 22: Floor plan of the processing room in the J.C. Lore Oyster House, Solomons, MD. Historic American Engineering Record.

Documentation of the J.C. Lore Oyster House from the Historic American Engineering Record lays out a process that was very likely repeated, with slight modifications, in many

Baltimore canneries. Shucked oysters from the shucking room would be drained and weighed. They would then be cleaned off in a “blow tank” to remove any pieces of shell or dirt, then weighed again; it is unknown when the leap was made from hand-cleaning to mechanized cleaning. After another round of draining, the oysters were placed in cans and weighed again. J.C. Lore apparently dealt largely in raw oysters, as the process jumps directly from canning to being placed in cold storage to ready them for transportation. Cove oysters would have to be cooked first. In either case, the can of raw oysters first needed to be “capped,” that is, have a lid put on it and hermetically sealed. Capping was originally done by skilled tradesmen, who, much like processors, closely guarded their trade secrets and contracted to canning houses independently. Cappers were among the first cannery employees to organize, and went so far as to boycott firms that used the first automatic cappers and even destroyed machinery to protect their livelihoods. Capping machines finally became reliable by the late 1880s, however, and cappers were soon also rendered irrelevant as a profession.⁵³

There is some degree of confusion caused by Sanborn maps’ depiction of separate rooms for “processing” and “packing.” Several canneries are labelled as having their “processing rooms” situated between their shucking and packing rooms, implying that the order of canning operations goes from shucking to processing to packing. This seems to be out of step with the uniformly described process of cans being filled with raw materials—i.e., packed—before being cooked, or processed. This problem stems from assuming a definition of the very vague word “process,” based off of the title given to those who had special knowledge of how long to cook the cans—the processors. This definition is supported by a contemporary 1890 account of the canning industry as a whole, which refers specifically to both “open-bath” and “closed-top”

⁵³ Kee, 22.

processes, as well as “process tank[s]” in which such processing would presumably take place.⁵⁴ The packing room most likely existed as a separate entity for the purpose of either raw oysters or some other uncooked produce, although almost all fruits and vegetables had to be cooked to some degree; the main foods that were packed raw were seafood, and Baltimore canneries dealt with very little besides oysters. Another possibility is that, rather than the cans themselves, larger boxes and cartons were packed with full cans to ready them for transport. The ambiguity of the terms, and the looseness with which they were sometimes applied by outside observers, leads to the possibility that a “packing room” meant something different in each facility where it was used.

Can-Making

Most canneries immediately after the Civil War had their own can-making operations. Cans had to be made by hand, from a single plate of sheet metal bent into a cylinder and soldered shut. The top and bottom of the can were cut separately and also soldered on. The most common construction in the 19th century was the “hole and cap” can, in which the top of the can had an inch-wide hole through which it was filled with food. A “cap” with a small vent for steam was then soldered into the hole; at a certain point in processing, the vent was sealed with a drop of solder.⁵⁵ Cappers, discussed previously, were also typically early can-makers, and contracted with can-making companies to jointly offer their services to canneries.⁵⁶ Can-makers typically had their work stations arranged around the walls to get the most light from windows.⁵⁷ The

⁵⁴ Ernest F. Schwaab, *The Secrets of Canning: A Complete Exposition of the Theory and Art of the Canning Industry* (Baltimore: The Johns Hopkins Press, 1990), 28-30, https://www.survivorlibrary.com/library/the_secrets_of_canning-1890.pdf.

⁵⁵ Busch, 96.

⁵⁶ Kee, 22.

⁵⁷ Edward F. Keuchel, “Master of the Art of Canning: Baltimore, 1860-1900,” *Maryland Historical Magazine* 67, no. 4 (Winter 1972): 357, https://msa.maryland.gov/megafile/msa/speccol/sc5800/sc5881/000001/000000/000268/pdf/msa_sc_5881_1_268.pdf

1890 Sanborn map shows that Martin Wagner & Co., of 2315 Boston Street, had a can-making factory on the 4th floor, the top of their street-facing office building. The A. Booth Packing Co., which had one of the year's largest complexes at the corner of Wolfe and Boston, had a can factory on the third floor of one of their buildings, once again at the top. Neither of these have indications that skylights were on their roofs, but it was clear that can-makers needed an area where they would not have their light blocked by higher buildings. E.B. Mallory & Co., at Wolfe and Thames in Fells Point, had the largest building devoted to can-making: a four-story structure that used separate floors for manual and mechanical work.

Making cans in-house made a certain business sense, but as mechanization improved and canneries expanded their outputs, they simply could not keep up with their own demand. A number of smaller can-making firms already operated in 1890, but by 1902 the main producer was the American Can Company. It not only inhabited a factory on the corner of Hudson and Boston, it had also taken over can-making productions in two of the largest packinghouses, Gibbs and Booth. The 1914 map shows American grown to its largest extent, and several firms had completely outsourced their can-making, but in-house production was still being practiced by some places along the waterfront. One of the more unique sites was the Boyle company, on Wolfe Street between Lancaster and Thames. It appeared to be two related companies in one complex: the Boyle Can Co., a four-story brick building, was devoted to manufacturing cans, while the attached John Boyle Packing Co. was housed in a frame structure that extended into the water on piles. The packing company was much smaller than the can manufacturing operations, and the Sanborn map specifies that oysters and fruit were only packed "in season," a seemingly redundant qualifier that is present on no other cannery. The Boyle buildings may be the only instance where the canning operations seem incidental to the can-making business.

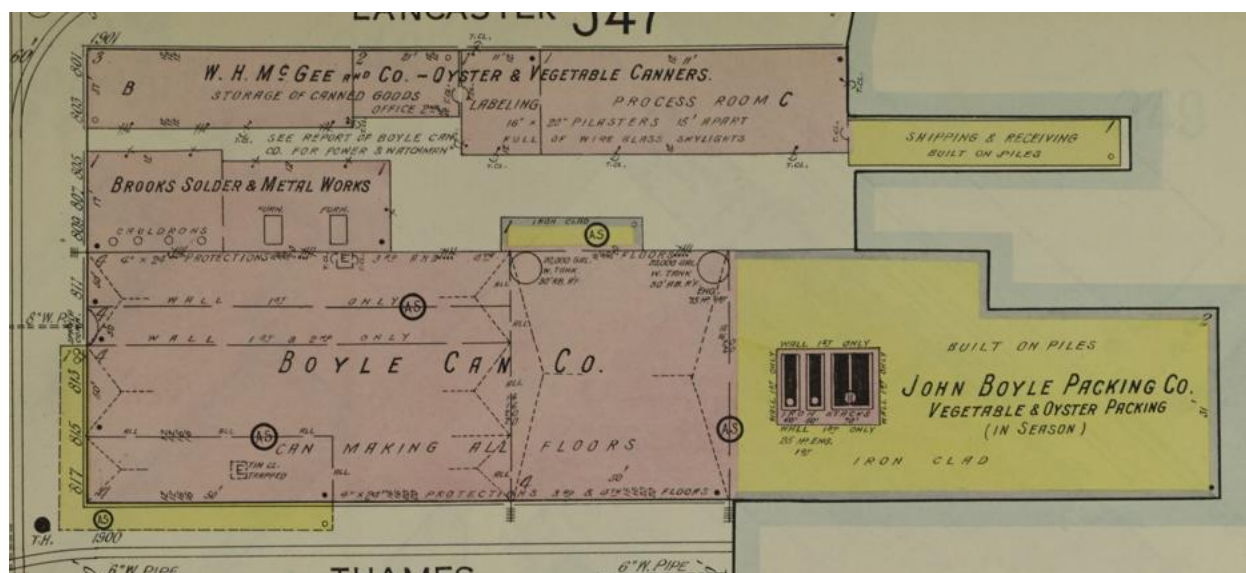


Figure 23: 1914 Sanborn map showing the Boyle Can Co., Thames St. wharf.

Final Steps

The street-fronting facades of canneries were often the tallest parts of the buildings, as well as the least organized according to any common plan. They typically contained a hodge-podge of spaces and functions, including offices, storage areas, and places for can-making, labeling, and boxing up cans for shipment.

The exterior facades of the front office buildings were often tall and wide, but usually devoid of much ornamentation. Large windows to let in light were common, and doors were also usually large to allow for people and machinery to pass through. The front buildings were almost always constructed of brick, and would usually have the company's name painted near the top. This was typical for many buildings in the district, and faded paint bearing long-gone names is still a frequent enough sight on Canton's older structures.

After cans were filled, sealed, and left for a certain amount of time to see if any were swells or busts, they were ready to be shipped to buyers. The last crucial step was to properly affix the product's label to the can. Labelling done in canneries was most likely done by pasting

on paper labels, which were printed on large sheets that had to be cut by employees. Other methods included either embossing the cans themselves or metal labels that were soldered on to the cans, handpainting, and stenciling. Metal lithography was developed later in the 19th century, and was not frequently applied to foodstuffs, in part because it damaged the integrity of the airtight seal. Decoration applied directly to the metal was most often done on cans of non-perishable items, especially tobacco tins.⁵⁸ As technology progressed, however, lithographed cans became popular, and are now considered something of a collector's item.⁵⁹ Advertising was not terribly different from today: labels tended to be bright and colorful to draw the eye, and often featured some form of logo or mascot to identify them, along with the brand name. Many also featured collector's cards that had more detailed artwork.

Label making could be done in-house, but there was a small number of firms who specialized in creating labels for various clients. These included printers, engravers, and lithographers, many of whom had clients in a variety of different industries. Cans that were engraved or lithographed would almost certainly have arrived at the cannery fully decorated, while paper labels would most likely arrive at canneries in large sheets that had to be cut and individually pasted onto the filled cans.

Offices and warehouse or storage areas were both typically in the building sections located closest to the street. When they were in the same building, offices were usually, but not always, above the storage areas. Detached offices often appear relatively small in Sanborn maps, suggesting that there was not a large number of staff; probably there was only the need to give room to the cannery manager and a clerk or two. Managers would typically leave the day-to-day

⁵⁸ Busch, 99.

⁵⁹ "Oyster Tin, Pride of the Chesapeake Brand," National Museum of American History website, https://americanhistory.si.edu/collections/nmah_1322186

operations to subordinates while they coordinated orders, payments, resource deliveries, and transportation. Very little literature focuses on any distinctive offices, and they were most likely purely functional.

Canneries needed large amounts of storage space for cans that were ready to be shipped. Boston Street canneries were propitiously situated with the harbor on one end through which to receive produce, and the Philadelphia, Wilmington, and Baltimore rail line on the other end to take filled cans to distant markets. Trains would stop several times a week to pick up carloads of filled cans that could be brought out from the storage areas just a few feet away from the tracks. The 20th century was several decades old before automobiles had become commonplace enough that trucking could replace rail carriers as a more convenient way to transport canned goods.

Oyster shells were periodically collected from shucking room floors, and many times were simply dumped into the water. Shells had many uses, however, and enterprising cannery owners often saved them and built special areas for keeping them. Burning oyster shells in a kiln and then mixing them with water created lime, a binding agent for mortar. Colonists in Spanish Florida and the southern British colonies then mixed that lime with water, sand, and more crushed-up shells to create tabby, a kind of concrete that was substituted for brick.⁶⁰ Crushed shells were also used for paving roads, in fertilizer, and even as chicken feed, as they provide an important source of calcium that strengthens eggshells.⁶¹ Several canneries had on-site kilns where shells were burned for lime. Others had designated wooden sheds for oyster storage where the shells could be piled. Some of the most enduring images of oyster canneries show piles of

⁶⁰ “Tabby Agregates,” JSTOR, accessed May 2, 2024, <https://www.jstor.org/stable/community.21746216>

⁶¹ “Feeding Your Chickens Oyster Shells,” Backyard Chickens (website), last updated March 2, 2022, <https://www.backyardchickens.com/articles/feeding-your-chickens-oyster-shells.77372/#:~:text=If%20you%20have%20chickens%20that,come%20from%20your%20chickens'%20bodies.>

shells that were simply thrown out in the cannery yard and allowed to grow over the season, often reaching several stories high by the spring.

Growth and Outliers

Not every cannery was built on the water. Those with harbor access tended to be the most successful, but a fair number of firms built further inland. These canneries were constrained in many ways by their environment, most often by having limited space for expansion. Thomas H. Aldrich maintained a cannery in a single-story frame structure from 1886 to 1896 at 16 North Liberty Street, several blocks northwest of the Inner Harbor at a time where the industry had shifted further east. That he managed to stay in business for a decade at that location is remarkable, but it appears that he was forced to move further from the water as his business slowly failed. The 1898 directory gives his address on Lexington Street, to the north, and in 1899 he was further north still on West Franklin Street before disappearing entirely from the record. Other inland canneries used verticality to compensate for limited horizontal space. Thomas Numsen's Light Street packinghouse was still operating in 1890 in a five-story building across from the Carrollton Hotel. Sanborn maps also specified that only Numsen's fruit-packing activities were located in the Light Street building, and the rest of his interests were spread across the city. The 1902 Sanborn map further details that only the third floor of the building was used for preparing jellies and jams. Numsen's office was only two blocks east of the origin of the Great Baltimore Fire of 1904 and was almost certainly destroyed in the blaze; although it was rebuilt, the 1914 Sanborn map shows it as a smaller building that purely served as an office and storage space, part of its ground area having been taken over by the General Electric Company.

Depleting oyster yields in the 20th century caused many smaller canneries to fail and disappear entirely, while those who had a foothold expanded both economically and physically. In 1890, the Gibbs Preserving Company was located at 2337 and 2339 Boston Street, on the

southern end, near Burke Street (now Montford Avenue). Success allowed it to grow and expand in the ensuing decades, until it occupied the addresses from 2303 to 2325 on Boston, nearly the entire block. J. Langrall and Bro., at the intersection of Aliceanna and Boston, expanded more modestly: while in 1890 they occupied 2111-2115 Aliceanna, neighboring the Canton Warehouse Company, they had expended by 1914 to occupy half of the warehouse to 2105 Aliceanna, while another packinghouse, D. E. Foote and Co., had commandeered the other half. Interestingly enough, wider expansion did little to alter canneries' production-line orientation of work stations. They remained fundamentally oriented toward the water for their economic survival, and no amount of success would change that fact.

The canning industry's orientation along the Boston Street waterfront fundamentally shaped Canton's development into a residential neighborhood. The chronology of buildings in the neighborhood can be roughly but steadily measured by proximity to water, with the oldest buildings closest to canneries and development spreading north and west in successive waves. All of the technological and architectural innovation was useless without the human labor required for the hard tasks of shucking oysters and preparing fruits and vegetables, and the employees who filled Canton's canneries needed nearby homes in which to sleep and live. They needed churches and schools, grocers and butchers, parks and libraries, and all of those would be developed as a direct result of the immigrant boom that accompanied canning's ascent. This greater cultural landscape is what this report will now investigate.



Figure 24: Oyster advertisements and labels for Baltimore brands. Dates unknown. National Endowment for the Humanities.

III. Cultural Landscape

*“Where e’er we go, we celebrate
The land that makes us refugees”*
-The Pogues, “Thousands are Sailing”
Lyrics by Philip Chevron

The rise of Canton’s canning industry had far greater repercussions than the growth of industrial buildings. Canning tied together the worlds of Eastern Shore watermen and laborers newly arrived from eastern Europe into an industry that traveled along every railroad track and shipping lane in the world. It is impossible to understand developments in the Canton neighborhood and throughout the Chesapeake Bay in the 19th and 20th centuries without recognizing how canneries exerted a gravitational pull on the greater cultural landscape.

New Arrivals

Polish immigration was central to Canton’s development from industrial wasteland to genuine neighborhood. European immigration to the area was common throughout the 19th century, and was often overseen and encouraged by industrialists looking for laborers and finding none in a young country that was still overwhelmingly rural. One of the first well-documented cases, mentioned previously, was the importation of Welsh workers by the Baltimore Copper Smelting Company in the 1850s. The copper refinery was located on the Lazaretto Point waterfront, just south of Boston Street, and rowhomes for employees were constructed just across Conkling Street. The so-called “Copper Row” remained into the 20th century, but has been entirely demolished. Land in Canton was of course owned by the Canton Company, which was anxious to profitably develop its real estate. Throughout the mid-19th century, increasing Irish and German immigration also poured into the area. A large proportion of German immigrants

came from the port city of Bremen, which sits on the River Weser just upstream from the North Sea; in 1867, B&O Railroad president John Work Garrett struck a deal with that city's North-German Lloyd Steamship Line, allowing passengers to buy a single ticket that would take them from Germany to Baltimore, and then continue along the rail line to farmlands in the Midwest. Garrett built a terminal for the steamship line at Locust Point, and ensured that train tracks led right to the water.⁶² Roughly 12,000 German immigrants arrived in Baltimore in 1868 alone, and a fair number of them opted to settle in the city.⁶³ Irish immigrants were also prominent in Canton at the time, having come to Baltimore in increasing numbers since the 1840s. St. Brigid's Church, at the corner of Hudson and Ellwood streets, was founded in 1854 and named for one of Ireland's patron saints. Its first resident priest, James Gibbons, was the newly ordained son of Irish immigrants who would go on to become the Archbishop of Baltimore and only the second American cardinal.⁶⁴

The Canton Company's 1872 odyssey to find new European labor eventually helped bring over a large number of Poles, who would become the most prominent ethnic demographic in cannery labor. Poland had been divided between Russia, Austria-Hungary, and Prussia in the late 18th century, and would not come to exist as an independent state until after World War I. Perhaps this is why the emigrants were especially cohesive when they came to Baltimore. In contrast to other European immigrants who largely came in waves of young men, Polish families typically came over as whole units, often including not just wives and children, but extended families as well. This relatively small but tight-knit Polonia first established itself in Fells Point,

⁶² Kee, 23.

⁶³ Mary Ellen Hayward and Charles Belfoure, *The Baltimore Rowhouse* (New York: Princeton Architectural Press, 1999): 51.

⁶⁴ Charles Belfoure, "St. Brigid's School and Convent," National Register of Historic Places Registration Form, 11-12, https://apps.mht.maryland.gov/Medusa/PDF/NR_PDFs/NR-1569.pdf



Figure 25: Original St. Casimir Church building, O'Donnell St., Canton; the current church building sits directly behind it. Taken from church website.

but moved steadily eastward into Canton as opportunities arose in the canneries. One way that can help track relative concentrations of Poles in Canton is through following the constructions of Polish churches in the area, with the reasonable assumption that ethnic churches will be located as conveniently as possible to the communities that they serve. The Polish community in Baltimore first worshipped in both German and Czech churches, but often felt boxed out of leadership roles and alienated without the use of their language. The first Polish-language Catholic parish in Baltimore was established in 1879, and the St. Stanislaus Kostka Church

had its first service in 1881 on the 700 block of South Ann Street in eastern Fells Point.⁶⁵ Other churches soon followed, including: the Holy Rosary Church at the corner of Eastern and Bethel in 1887, although a new building was constructed on Chester Street just north of Eastern Avenue in 1927; the Holy Cross Polish National Church on South Broadway; and St. Casimir Church on O'Donnell Street, originally a mission of St. Stanislaus erected in 1902 that gained independent status in 1904. The concentration of these buildings near the waterfront in eastern Fells Point and Canton provides strong indication that that area was the heart of Baltimore's Polonia. German-

⁶⁵ Thomas L. Hollowak, "The Development of St. Stanislaus Kostka Parish in Baltimore," *Polish American Studies* 49, no. 2 (Autumn 1992): 71-72, <https://www.jstor.org/stable/20148390>

speaking immigrants tended to cluster further north and east, erecting churches like the Sacred Heart of Jesus, which stands on Conkling Avenue between Fleet Street and Foster Avenue.⁶⁶

The growing numbers of Poles being served by the area's churches and working in its canneries all needed places to live. The Canton Company was happy to oblige, as it wished to both attract workers and see its property developed. The company leased its lots to builders, who quickly constructed rowhomes, usually in less than six months' time. The builders would sell the homes to families, making a profit for themselves, but the new owners would still have to pay a "ground rent" to the company that owned the land on which the house was built.⁶⁷ Many of these real estate transactions were financed by building-and-loan associations and mutual aid societies specifically formed to serve immigrant communities. Polish community members, for instance, formed the St. Stanislaus Kostka Benevolent Association in 1875 in order to provide its members with benefit pay when sickness or death affected a family's income.⁶⁸ The association would soon be a driving factor in the establishment of the independent St. Stanislaus Kostka Church. Building and loan associations also worked well considering the Canton Company's ground rent system: by only buying the house and not the land itself, working-class immigrants were able to receive much more affordable loans for homes than they would otherwise.⁶⁹ These self-funded and self-supporting ethnic communities were the glue that held neighborhoods together by providing both cultural and financial cohesiveness.

⁶⁶ John H. Foertschbeck, Sr., "Sacred Heart of Jesus Highlandtown," German Marylanders (website), March 17, 2013, <https://www.germanmarylanders.org/churches/sacred-heart-of-jesus-highlandtown>

⁶⁷ Mary Ellen Hayward and Charles Belfoure, *The Baltimore Rowhouse* (New York: Princeton Architectural Press, 1999), 107.

⁶⁸ Hollowak, "St. Stanislaus," 69-70.

⁶⁹ Hayward and Belfoure, 122-124.

The first rowhomes in Canton date from as early as the 1830s, but the neighborhood was filled in slowly and in piecemeal fashion over the course of the 19th century. The Sachse 1869

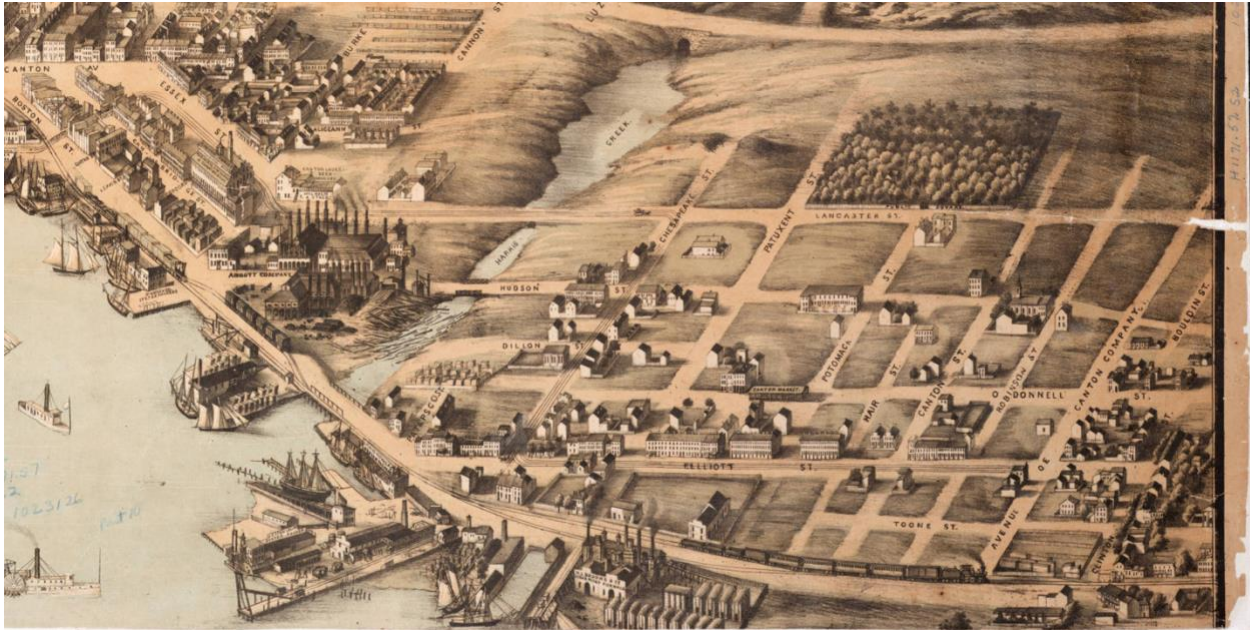


Figure 26: Detail from E. Sachse & Co.'s Bird's-Eye View of Baltimore, 1869, showing the relatively undeveloped Canton area with buildings clustered around the Boston Street waterfront. Digital Maryland collection.

map shows buildings only clustered around the Boston Street waterfront, with Harris Creek not yet filled in. Development would move slowly northward and eastward. The 1890 Sanborn map leaves much of what would today be considered the northern half of Canton still essentially empty; the 1902 map shows infill, but still does not cover several blocks east of Patterson Park, supposedly undeveloped land squeezed between Canton and the growing community of Highlandtown that was spreading west. The final developments in Canton's northeast corner were likely completed in the first decade of the 20th century, and the expansion would cause Baltimore to expand past East Avenue to its current boundaries shortly thereafter.

In developing city blocks, architects would commonly construct a range of housing types within the rowhome template, making larger and more expensive homes that fronted on the main streets and avenues while smaller and cheaper homes lined the secondary alleys. Newly arrived

immigrants would often squeeze into these alley houses as boarders with other families who spoke the same language. The houses lacked electricity in the 19th century, of course, but were also the last to be considered for running water in order to keep costs down for buyers. Many Poles who bought their first homes in Canton and Fells Point purchased one of these alley homes, often with the help of a loan from the Kosciuszko Savings and Loan Association.⁷⁰

While the workplace doubled as a place for reinforcing familial and cultural ties as discussed above, the social life of Canton was also built, to a great deal, around work. Families who worked shoulder to shoulder peeling tomatoes and shucking oysters also spoke the same languages, worshipped at the same churches, and formed a community together. The Canton Market, which stood on O'Donnell Street not far from St. Casimir Church, was an especially fruitful place for socialization. It was here that workers learned industry gossip—which canneries were hiring, which were firing, whether a new boss was better than an old one.⁷¹ The social fabric of Canton was built, to a great extent, on the shared identities that were brought together through cannery employment. The young girl who helped her grandmother can corn on the Eastern Shore remembered that neighborhood men who were “row bosses” were the liaisons between farms and neighbors who wanted extra work, organizing who would make the expedition in the summer.⁷² Polish women interviewed in the 1990s recalled how cannery bosses who needed employees during the Great Depression had gone from house to house in the neighborhood, simply knocking on doors.⁷³ These informal networks of employment and socialization relied much more on a sense of community that could only be fostered by the shared experiences and proximity of cannery life.

⁷⁰ Mary Ellen Hayward, *Baltimore's Alley Houses* (Baltimore: The Johns Hopkins University Press, 2008), 219-224.

⁷¹ Ryon, 570.

⁷² Butka.

⁷³ Alvarez, “Cannery Rows.”

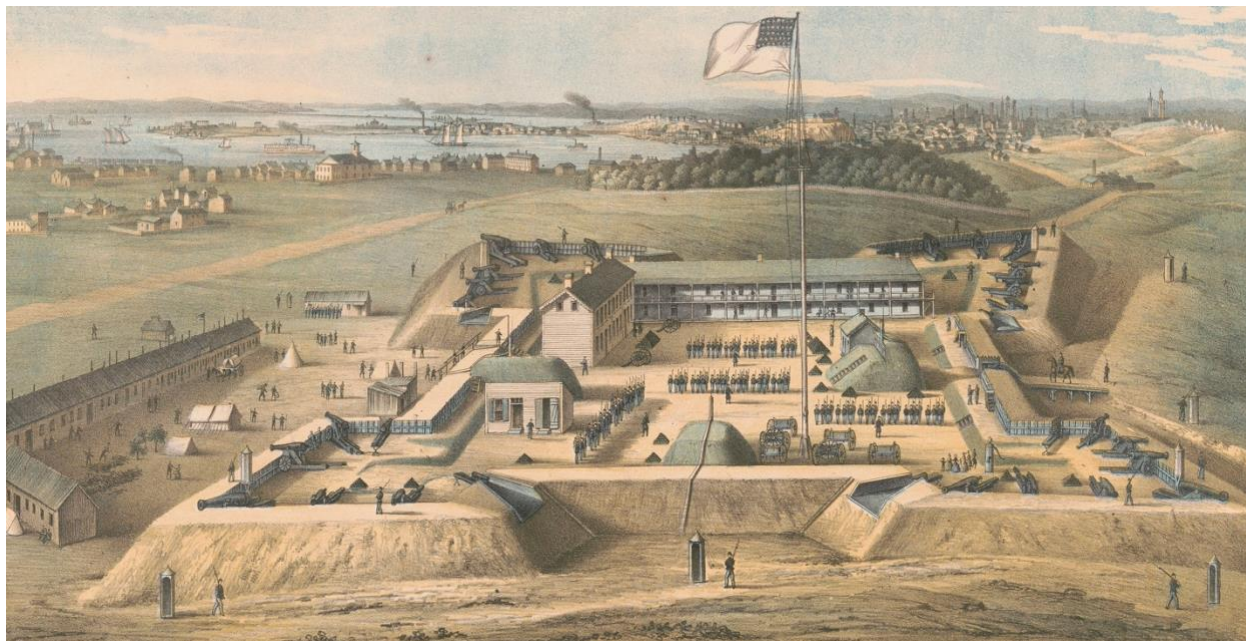


Figure 27: 1862 lithograph of Fort Marshall, now the present-day site of Sacred Heart of Jesus Church at Conkling and Fleet streets, looking west toward the Boston Street waterfront. Library of Congress.

The effect that the influx of immigrant workers into the canneries had on the surrounding cultural landscape is clearly seen through depictions of the area immediately after the Civil War. An 1862 lithograph made looking west from Fort Marshall, now the intersection of Fleet and Conkling streets, shows a still largely rural area with disconnected buildings hugging the waterfront. Buildings become more densely packed the closer they get to the northern half of Boston Street, but then spread out as they move south and west. Sachse's 1869 map shows a similar state of development: build-up along the water, mostly wilderness behind. Sachse also displays several canneries ringing the water, along with other businesses, and the industry had been present in the city for several decades. Two essential developments would occur in the early 1870s: the Canton Company toured Europe to entice immigrant workers, and the Shriver brothers patented their steam retort. An industry previously reliant on painstaking processes and specialized knowledge could now perform its tasks much more efficiently and cheaply, allowing more work to be done by more firms that would need the labor of the large numbers of

immigrants that would soon come streaming into the harbor. Comparing Canton's physical development in the 30 years before 1870 to its development in the 30 years after 1870 makes clear that an exponential increase took place in the neighborhood's ability to support industrial employment.

Related Industries

Canning was not the sole industry that existed in Canton, but many related industries added to the cultural landscape that was created by canning. Chief among these were can-making and box-making, which formed a symbiotic relationship with canneries by creating the vessels in which canned food was packed and shipped. Other related industries included labelers, machinery providers, and companies that sold oyster shells for various purposes. Finally, there were secondary related industries like lumber yards and ice-making plants that were not strictly related to canneries, but still supported them indirectly by providing materials for box construction or ice for shipping raw oysters.

Jane Sears' inventory of businesses related to the canning industry in Baltimore between 1840 and 1940 counts a total of 221 can-makers and 169 box-makers listed among various city directories and advertisements. Several of these listings are duplicates, as companies changed their names slightly over time, or new partners were brought into existing practices. Even considering these double countings, however, the numbers reveal two thriving industries that depended on canneries. One of the most significant canning-related businesses in Canton was the American Can Company. In 1895, the Chicago-based Norton Tin Can and Plate Company built a factory on the triangular plot of land where Henry Abbott's rolling mill once stood, on the inland side of Boston Street. Several buildings were added to the complex in the early decades of the 20th century. Norton was one of over 100 companies to join together and form the American Can Company conglomeration in 1901, and Norton's founder became the first president of American.

The plant employed around 800 people at its peak, and continued into the latter half of the 20th century, but was closed down after American merged with National Can Company in the 1980s. The complex sat empty for several years, and some of the buildings were eventually torn down due to deterioration, but the remaining structures were stabilized and adapted into restaurants and retail space. Tin cans were of interest to businesses other than canneries, and the breweries begun by German immigrants in Highlandtown and Brewers Hill were also very important clients for can-makers. Demand spread so far that Baltimore was producing more tin cans than any other city in the country by 1914 and serving a national market, for which the American Can Company was a central supplier.⁷⁴

Box making as an industry is tied to the earliest days of the American oyster trade. Raw shucked oysters would be packed in wooden boxes with ice or cold straw to keep them fresh as they were shipped by wagon, and later by train. The boxes themselves were returnable to the packing firms that sent them so that they could be cleaned and reused, and surviving boxes stamped with labels have also become collectors' items. Melting ice made the wood damp and seeped into the oysters themselves, however, rendering them unsanitary and leading the Department of Agriculture to ban the use of returnable oyster boxes in 1909. Oyster boxes thenceforward were made with separate containers for oysters and ice.⁷⁵ This added expense,

⁷⁴ Eleanor S. Bruchey, "The Development of Baltimore Business, 1880-1914: Part II," *Maryland Historical Magazine* 64, no. 2 (Summer 1969): 149,

<https://mdhs.msa.maryland.gov/pages/Viewer.aspx?speccol=5881&Series=1&Item=254>

⁷⁵ Eshelman, 35.

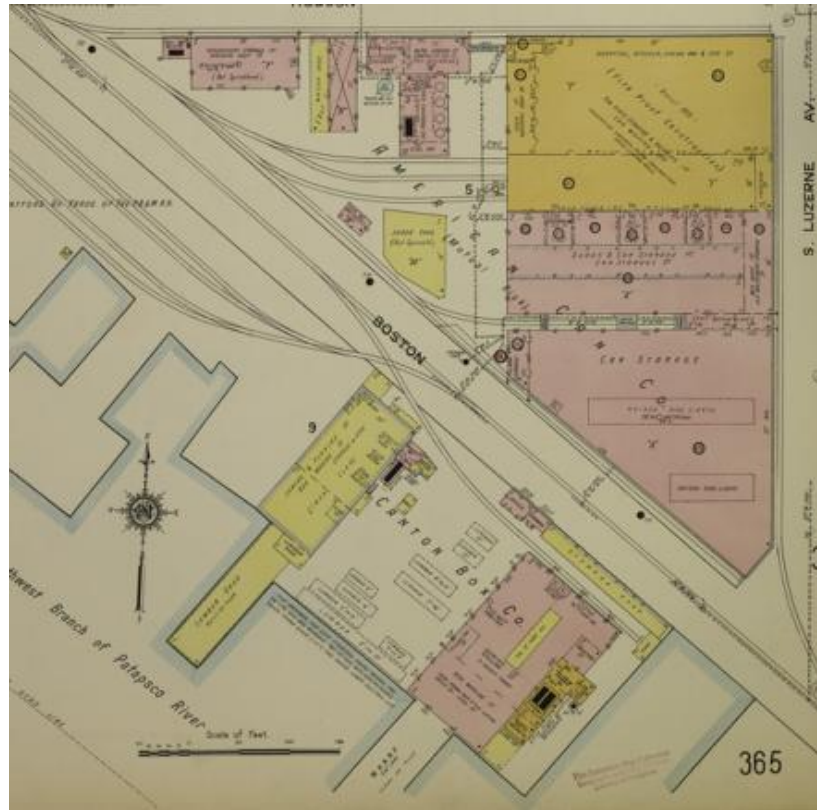


Figure 28: American Can Company complex (top) and Canton Box Company, 1914 Sanborn map. Library of Congress.



Figure 29: American Can Company main building, looking east from Boston Street. Historic American Engineering Record. Louise Taft and William Edmund Barrett, photographers. Taken at some point after 1968. Library of Congress.

combined with the ease of automated can-making, led to a decline in box-making firms in the 20th century, but several continued in Baltimore. George G. Tyler opened a box making mill on Boston Street in 1870, which is visible in the 1890 Sanborn map. This enterprise became the Canton Box Company in 1898, and was located at 2515 Boston Street, just south of the Norton/American complex, until 1923. Both the 1902 and 1914 Sanborn maps show a sizeable complex with two main buildings separated by a large central courtyard. Raw lumber would be brought into a shed that extended into the water on piles, where it could be stored until it was taken into a frame building directly behind it to be planed and sawed into boards. The boards were then stored in various piles in the yard, perhaps according to length, before they were taken into a brick building on the other side where they were used to make boxes. The 1902 map labels the first building's functions as planning and sawing, while the second building is the "box factory," but the 1914 map claims that boxes were made on the second floors of both buildings. Whatever their exact functions, these buildings employed a sizable number of local residents for a number of decades during Canton's canning heyday. While these firms undoubtedly employed a large number of Canton's Polish residents, they appear to count a good many German immigrants among their founders: company names like Ostendorf, Thiemeyer, Bierbower, Grueninger, and Radecke occur frequently in listings. Canton and the canning industry were not purely the domain of Polish immigrants, but were frequently part of a wider network of immigrants involved in a delicate balancing act of maintaining cultural identity while transcending national origins.

There were over 100 businesses between 1840 and 1940 that provided tools and machinery of various kinds to Canton's packinghouses. Some of these were general machine companies, like the Canner and Packer's Supply Co., which advertised itself as a "canning house

outfit.” Others were much more specialized. E. J. Codd, Co., provided foundry and boiler works; C. O. Daughtery and Bro. made dredges, although their 1890 location at 2129 Boston Street is only marked with the nondescript “blacksmith” in the corresponding Sanborn map. The Jervis clan—James, George, and two different Johns—owned a family business making oyster knives for shucking at 1102 Hall Alley, now Mince Alley in Little Italy, from 1893 to 1917. The Monitor Steam Generator Manufacturing Co. produced oyster steamers to make shucking easier, and Hugh Bolton and Co. made different colored lacquers for decorating cans. The efforts of the Automatic Shucker Co. apparently never bore fruit, as this outfit only advertised between 1908 and 1910 and evidently failed to revolutionize the oyster-shucking process; whatever successes it may or may not have had appear to have been lost to history. One of Canton’s largest machinery manufacturers was Edward W. Renneburg and Sons, founded in 1874 and occupying the 2600 block of Boston Street from 1911 to 1985.⁷⁶ The firm started its tenure in Canton by fabricating cannery machines, but soon broadened to produce industrial hardware for a number of industries. One of its furthest-reaching contributions was during

World War II, when it was ordered to build machines for processing fish oil that would then be



Figure 30: Advertisement for Renneburg & Sons Oyster Steam Box. *The Canning Trade*, February 26, 1917.

⁷⁶ “John N. Renneburg Sr., 93, Owned Machine Manufacturing Company,” *Baltimore Sun*, September 2, 2005, <https://www.baltimoresun.com/2005/09/02/john-n-renneburg-sr-93-owned-machine-manufacturing-company/>

made into glycerine for Allied munitions.⁷⁷ Decades later, remnants of Renneburg machines that processed Icelandic herring for oil were salvaged for the Herring Era Museum in Siglufjörður.⁷⁸

Numerous smaller industries maintained a hold in Canton and greater Baltimore due to the canning industry. Along with can-makers, there were at least 31 advertised “tanners” during Sears’ observed century, as well as 11 independent oyster measurers. There were 29 labelers, engravers, and lithographers who decorated tin cans, 19 firms that dealt in oyster shells for various purposes, and one “huckster,” David Martindale, who may have been a door-to-door peddler of fresh oysters. What cemented them all was their relation to the processing, packing, and canning firms that developed on the Boston street waterfront and radiated outwards to touch nearly every facet of industry and employment in the late 19th and early 20th centuries.

Goin’ Downy Ocean

The architectural and landscape impact of Canton’s canning industry spread far beyond the city of Baltimore. Small communities on the water’s edge of the Eastern Shore had relied on oyster tonging for sustenance and income for generations, following in the footsteps of Native Americans who had first harvested the shellfish with handmade rakes. The boom in oyster canning following the Civil War did not invent eastern oystering, but dredging and the subsequent armed conflicts between various factions of watermen irrevocably changed the formerly isolated communities. The Eastern shore also produced canneries of their own, some of which were outposts of Baltimore firms. One or two canneries could come to be the central defining businesses and largest employers in the small rural communities where they were located.

⁷⁷ Jacques Kelly, “In Wartime, Baltimore Toiled for Allied Cause,” *Baltimore Sun*, June 7, 1994, <https://www.baltimoresun.com/1994/06/07/in-wartime-baltimore-toiled-for-allied-cause/>

⁷⁸ Chris Bogan, “Grinding Away the Rust,” *Gastronomica* 4, no. 2 (May 2004): 51, <https://www.jstor.org/stable/10.1525/gfc.2004.4.2.51>

Oyster canning was centered in Baltimore, near the Chesapeake Bay's northern tip, but hydrology dictates that the richest oyster beds would be located in some of Maryland's southernmost counties; *C. virginica* needs a healthy mix of fresh and salt water in order to thrive, and the waters tend to have the best combination near the Bay's center. Small inlets like the Tangier and Pocomoke sounds were frequently crowded with small tonging craft. Hardy watermen dwelt in hamlets hugging the water like Crisfield, Oxford, Cambridge, and St. Michaels, or on the even more isolated small islands like Deal, Smith, and Bloodsworth. Living far from the centers of culture and government in Baltimore and Annapolis, the Eastern watermen were fiercely independent, hard-living, hard-drinking, and hard-fighting. They had a deep and intimate knowledge of the many snaking waterways that branched off of the Nanticoke, Wicomico, and Choptank rivers. Their communities were tight-knit, they distrusted outsiders, and were quick to push back against any oversight from state or federal authorities.⁷⁹

Black watermen were a large and distinctive presence on the Eastern Shore. Many of them born on one of the large plantations that made use of the region's rich soil. Harriet Tubman, the noted conductor on the Underground Railroad and spy for the Union Army, spent her early years on Edward Brodess's farm in Dorchester County,⁸⁰ while Frederick Douglass was born on the Wye House Farm in Talbot County, home to the Lloyds, the Eastern Shore's largest landowners and slaveholders.⁸¹ Enslaved Africans fished and tonged oysters both for their white owners and for themselves, sometimes earning income by selling what they caught. The physical separation from plantations and the degree of autonomy afforded them by being on the water was

⁷⁹ Wennersten, 13-36.

⁸⁰ Martha S. Jones, "Finding Traces of Harriet Tubman on Maryland's Eastern Shore," *New York Times*, June 21, 2022, <https://www.nytimes.com/2022/06/21/travel/harriet-tubman-maryland.html>

⁸¹ John Ydstie, "Plantation Dig Reveals Md. Town's Painful Past," *NPR*, October 20, 2007, <https://www.npr.org/2007/10/20/15383164/plantation-dig-reveals-md-towns-painful-past>

a rare privilege not afforded to those enslaved on inland plantations, and a great many mariners used their skills and knowledge of the coasts to make their escape toward freedom. Freedmen living on the water also made ample use of the Bay's bounty to feed themselves and gain income in an economy otherwise dominated by slave-powered agriculture.⁸² Most historical documentation regarding Black watermen comes from a 2023 multiple property documentation form prepared for northern Virginia counties, and while certain commonalities are obviously present between Virginia and Maryland, a good deal of scholarship is either currently being done or has yet to be started.

Commercial oystering fundamentally changed some Eastern Shore communities. The small town of Somers Cove in Somerset County was in a prime position to reap the benefits of oyster bars in nearby Tangier Sound, and former U.S. Congressman John Crisfield financed the extension of the Eastern Shore Railroad to the settlement in order to bring locals' catches to market. The town was renamed Crisfield in recognition of its benefactor, and it quickly grew into a center of the seafood trade.⁸³ The town's physical footprint expanded quickly into the water, as newcomers apparently bought lots that were still submerged and then raised them through oyster shell land reclamation. The structures built on these shell piles were ramshackle and often unsafe; fires swept through the town in 1883, 1912, and 1928, destroying many buildings each time.⁸⁴ Nevertheless, the fast money to be made until the mid-20th century ensured that residents would quickly rebuild, and the city had the most seafood packinghouses in Maryland outside of Baltimore in the early 20th century.

⁸² National Register of Historic Places Multiple Property Documentation Form, "Historic Resources Associated With African American Watermen of the Virginia Chesapeake Bay," National Park Service, March 2, 2023, 3-5.

⁸³ Wennersten, 16-18.

⁸⁴ National Register of Historic Places Registration Form, "Crisfield Historic District," National Park Service, May 1989, 8/3-8/5, https://apps.mht.maryland.gov/Medusa/PDF/NR_PDFs/NR-1058.pdf



Figure 31: Crisfield, MD. Early 20th century photograph. Crisfield Heritage Foundation.



Figure 32: Oyster shell piles in Crisfield, MD, c. 1891. National Archives.

A similar series of events affected many Eastern Shore communities in the late 19th and early 20th centuries. The town of Oxford, located on the Choptank River in Talbot County, described the post-Civil War oyster craze as “the nearest thing the town has ever seen to boom times.”⁸⁵ Cambridge, the seat of Dorchester County on the Choptank River and the home to the Phillips Packing Company, had its prosperity described as the direct result of Nicolas Appert’s breakthrough.⁸⁶ Very telling is the fact that many of these communities date their earliest colonial settlements from the 18th and even 17th centuries, but that the vast majority of surviving buildings found in them that give their historical character date to the decades between the Civil War and World War I that held the great oyster boom on the Chesapeake.

Oyster shells not only expanded the buildable land in towns like Crisfield; they also literally built several now-recognized islands, including Jersey Island just south of Crisfield and Avalon Island off the coast of Tilghman.⁸⁷⁸⁸ While both of those islands were home to packinghouses, they reveal an interesting dichotomy concerning the cultural landscape of the oyster industry. The MIHP documentation claims that Jersey Island packers were small-scale operations who made a point of settling on the reclaimed land to distance themselves, physically and psychologically, from the larger and more corporatized packinghouses in Crisfield proper. The documentation does not say much more about the cultural divide between these two areas, but it asserts that the major packers in Crisfield proper were “non-local individuals,”⁸⁹ and

⁸⁵ “Oysters and Oxford,” The Oxford Museum (website), accessed May 4, 2024, <https://www.oxfordmuseummd.org/oysters-and-oxford/>

⁸⁶ National Register of Historic Places, “Cambridge Historic District: Wards I and III,” National Park Service, 108, https://apps.mht.maryland.gov/Medusa/PDF/NR_PDFs/NR-1066.pdf

⁸⁷ Maryland Inventory of Historic Places, “Jersey Island Packing Houses,” Maryland Historical Trust, 15, <https://apps.mht.maryland.gov/Medusa/PDF/Somerset/S-304.pdf>

⁸⁸ Margaret Enloe Vivian, “Tilghman Packing Company and the Transformation of Landscape on Avalon Island,” *The Weather Gauge* 36, no. 1 (Spring 2000): 12, <https://www.mytocca.org/wp-content/uploads/2020/01/CBMM-Tilghman-Packing-Company.pdf>

⁸⁹ “Jersey Island Packing Houses,” 15.

another local history of the town bitterly blamed the overfishing and subsequent collapse of the seafood industry on “hordes of wealthy businessmen” with “unlimited capital,” who made their fortunes exploiting the Bay’s resources, only to leave Crisfield’s people to their fate when they had thoroughly drained its riches.⁹⁰ While there might be some revisionism in this assessment, it is true that wealthy entrepreneurs from New England and New York—Abiather Field, C.S. Maltby, and S.B. Platt among them—had relocated to Baltimore after the collapse of northern oyster populations. Evidently the success that visited these communities not only was not invested back into their communities, it also physically alienated local residents from their own waterfronts, the very source of their livelihoods and identities.

Conflict between regional identities even spread from the Oyster Wars to reach more official arguments over boundaries. The states of Maryland and Virginia had been disputing their exact maritime boundaries since colonial times, and had largely been reliant on a compact agreed upon in 1785 by representatives from two states at George Washington’s Mount Vernon plantation. Following the Civil War, the newfound market for oysters reignited this never-fully-settled debate. The direct source of conflict was the rich oyster beds in the Pocomoke and Tangier sounds, which Virginia largely claimed for itself. Much like the legal divisions drawn between dredging and tonging grounds, the paper boundaries were typically disrespected by Maryland dredgers, even though Virginia had instituted private oyster grounds and owners defended their property with force of arms. Virginia mariners also made no secret of their intrusions into what were undeniably Maryland waters, and the internecine conflict threatened to reignite war between the states. The boundary line that is recognized today was essentially decided upon in 1877, and awarded Virginia the greater portion of both sounds, but that hardly

⁹⁰ “History,” 30th Annual National Hard Crab Derby and Fair, August 27-September 4, 1977, pg. 8, pamphlet, Digital Maryland, <https://collections.digitalmaryland.org/digital/collection/socd/id/653/rec/10>

mattered to the oyster dredgers. Liberties continued to be taken on both sides until relations between Richmond and Annapolis were temporarily severed in 1894. No further alterations have been made to the boundary since the 19th century, but the dispute remains a fertile legal ground: the last argument to reach the Supreme Court did so in 2003, when a 7-2 ruling found for Virginia in its right to build an intake pipe extending into the Potomac River.⁹¹

A large part of Maryland's post-Civil War oyster boom was due to the 1865 legalization of dredging in state waters, which allowed shellfish to be gathered at a rate that supported large-scale industrial packing. Tongers had long supported the view that oyster beds were held in common and that all were free to access them, but this freedom relied on a responsibility the watermen felt to only gather what they needed. Commercial dredging obviously threatened this unspoken balance. It also revealed the paradox in the watermen's supposed communal living: the oyster beds were theoretically open to all, but watermen largely only considered that access to extend to their communities. Tonging was an all-encompassing identity in the eyes of the rural folk who came from generations of oystercatchers, and they greatly resented outsiders who came to profit off of their resources. Some dredgers may have been culled from the ranks of eastern watermen, but the vast majority were indeed outsiders. Canneries would often own boats and employ their own captains, who may have been merely paid a set wage, disinvesting them from any catch greater than what was necessary.⁹² Unlike the close-knit duos and small groups that crewed tonging boats, a dredge captain often had his crew gathered fresh for each voyage. The economic incentive—and fear of missing it—spurred captains to push their crews to extremes in

⁹¹ Linda Greenhouse, "Supreme Court Backs Virginia in Rift Over Potomac Water," *New York Times*, December 10, 2003, <https://www.nytimes.com/2003/12/10/us/supreme-court-backs-virginia-in-rift-over-potomac-water.html>

⁹² Bradford Botwick and Debra A. McClane, "Landscapes of Resistance: A View of the Nineteenth-Century Chesapeake Bay Oyster Fishery," *Historical Archaeology* 39, no. 3 (2005), 97, <https://www.jstor.org/stable/25617272>

the harsh Chesapeake winters, and the dredge boats' reputations for cruelty became legendary. Dredges originally hired out Black crews, many of whom had first learned the waters while enslaved or from their enslaved fathers. When the harsh treatment they suffered became known, however, Black watermen refused to sign on to dredges.⁹³ Captains then turned to less experienced crew, and frequently acquired them through underhanded means. Some had deals with innkeepers in Baltimore and other cities who would point drifters and vagabonds in the boats' direction with the promise of quick and easy money. Many had conspirators who would make a show of stealing the wages that the crew were supposed to be paid. The worst practice was that of shanghaiing, or essentially kidnapping men off of the docks to serve as crew. Groups of two or three would prowl the waterfront streets of Baltimore, usually looking for men walking alone at night. Many times, they would strike up conversations and get their victims drunk on drugged alcohol before spiriting them away to their craft docked nearby; at other times, they would simply beat an unsuspecting soul into semi-consciousness before dragging him onboard. The forcibly impressed crewmen were locked in the hold until the ship reached the open water, at which point they were released and informed of their fates: they could sail on the dredge boat for the span of the oyster season, or they could be put ashore far down the coast and walk back to Baltimore.⁹⁴

Shanghaiing agents specifically targeted immigrants and new arrivals whom they assumed had limited social ties in America. Polish and German men were frequent targets of this practice. There were claims made that dredge boat agents induced immigrants, some freshly off the boat, at ports like Philadelphia and as far north as New York to take a train to Baltimore for a

⁹³ Wennersten, 56.

⁹⁴ Thomas L. Hollowak, "A Winter's Tale on the Chesapeake: The Hardships Endured by Polish Oyster Dredgers Before the First World War," *Polish American Studies* 75, no. 1 (Spring 2018), 44-45, <https://www.jstor.org/stable/10.5406/poliamerstud.75.1.0041>

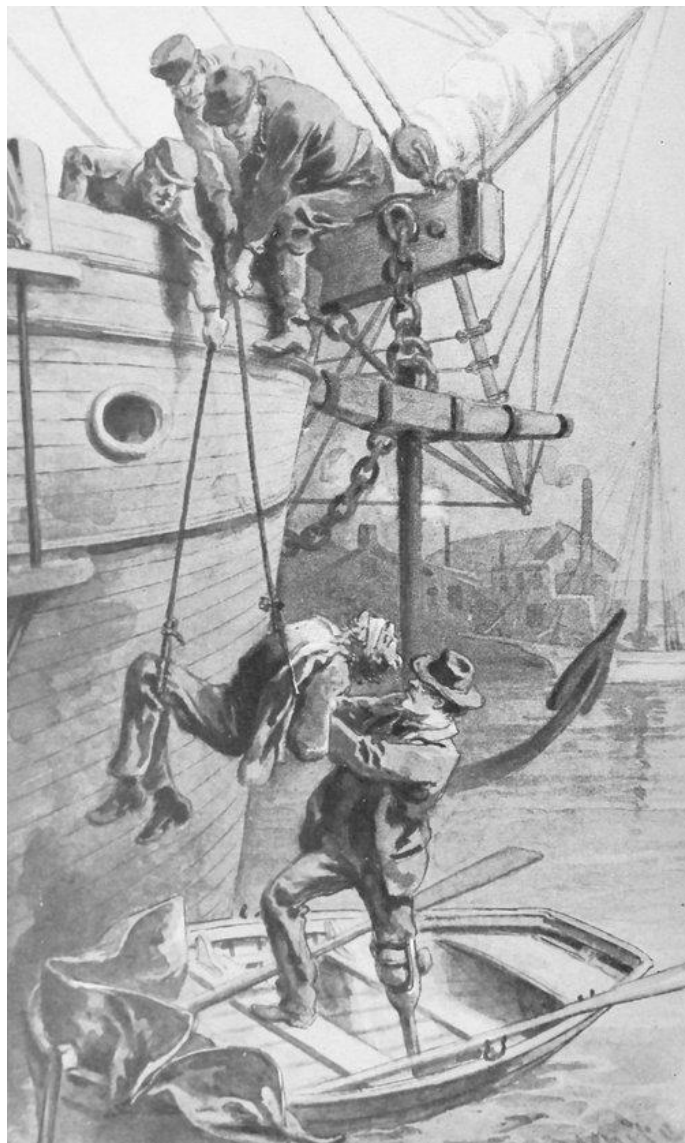


Figure 33: “Shanghai'd,” from *A Sailor in Spite of Himself* by Harry Castlemon, 1897. Project Gutenberg.

very misleading employment opportunity. The crews were not overly particular, however, and there are multiple reports of women complaining to the police, fearing the worst with reason, because their husbands had been gone for months on oyster boats without sending back any money.⁹⁵ Shanghaiing certainly occurred in other cities, but the oyster dredges of the Chesapeake made it so prevalent that a 1905 editorial in the *Philadelphia Inquirer* dubbed it “The Shame of Maryland.” Congress outlawed the practice in 1907, but it continued for several years. When the 15-year-old Jan Stowsko was found wandering around a

Canton rail yard in 1912, the lost and hysterical boy explained that he had

escaped after being lured into an empty freight car the night before outside of his home in Newark, New Jersey.⁹⁶

Even sailors who boarded dredge boats willingly were known to suffer cruel abuses. Men were forced into cramped and overcrowded quarters with rancid food and were frequently

⁹⁵ Hollowak, “A Winter’s Tale,” 50.

⁹⁶ *Ibid*, 45-46.

infested with lice and other vermin.⁹⁷ The heavy windlass handles used to haul the full dredges back up on board required between two and four men to work; if the dredge caught on anything under such pressure, the weighty handles could break off and go flying or start spinning backwards violently, which could maim or even kill crew members.⁹⁸ Vicious physical abuse from captains was common, and would increase as injuries and sickness made crew members less able to pull up dredges.⁹⁹ Tongers saw themselves as inherently tied to the landscape, the water, and their way of life, but dredging rested on dislocation and preying on those who seemed the most uprooted and untethered.

The Eastern Shore watermen were by no means pacifists, and tales abounded of their willingness to pick a fight over anything and with anyone.¹⁰⁰ Their failure to completely protect their tonging grounds from dredgers may well have come down to budgetary constraints rather than any lack of bloodlust. Many lived on the fringes of their small societies, and were typically regarded by communities as “shiftless rogues.”¹⁰¹ Their sense of identity as the genuine scions of the Eastern Shore may have only truly coalesced when they were faced with an invasion of outsiders. One way of understanding this is to claim that threats to economic well-being, and the implied reliance watermen would have on the landbound wage economy if they could no longer be viably independent, led them to mythologize their practical existence by turning it into a romantic one, making oyster tonging a “way of life.”¹⁰² This interpretation undoubtedly has some validity, but it has also been argued that economic and physical realities for watermen did indeed form the basis of an “occupational identity.” Specifically, researchers compared the settlement

⁹⁷ Ibid, 55.

⁹⁸ Ibid, 50-52.

⁹⁹ Ibid, 53-57.

¹⁰⁰ Wennersten, 20-22.

¹⁰¹ Wennersten, 33.

¹⁰² Brait, 34.

patterns on Bloodsworth Island, a marshy landmass in southern Dorchester County that was sparsely populated by isolated tonging homesteads, with the community on Holland Island just to the south that had a larger population that was more involved in dredging. Bloodsworth has a swampy interior, and the few patches of high land where tongers built their homes were only connected by rough paths, if at all. Landings were often individually built for each homestead, causing domestic and work spheres to bleed into each other.¹⁰³ The community on Holland Island, meanwhile, numbered slightly over 300 people at its peak around the turn of the 20th century, lived in houses clustered along main roads that also led to a church, a school, several general stores, and assorted other community fixtures.¹⁰⁴ This layout suggested a more cohesive community than existed among the tongers of Bloodsworth, but also one that, except for the bugeye craft moored at the communal landings, was less inherently tied to the processes of oystering. The Bloodsworth Island tongers fully embodied their occupational identities as members of a distinct job-as-lifestyle in a way that enabled them to retain their autonomy and identity, even if it was already purposefully anachronistic by the beginning of the 20th century. Taken in this light, watermen's opposition to private leasing of oyster beds may have gone beyond economic concerns and been a rebellion against another layer of bureaucracy and capitalistic private ownership. This follows the same pattern of Polish women socializing and teaching their children in the shucking rooms and smaller Crisfield canneries building on Jersey Island, of communities using the spatial layout of work to assert themselves, maintain social ties, and reclaim individuality in the face of dehumanizing industrial production.

¹⁰³ Botwick and McClane, 109.

¹⁰⁴ Botwick and McClane, 107-108.

IV. Preservation

“The smells of life and richness, of death and digestion, of decay and birth, burden the air.”
-John Steinbeck, *Cannery Row*

The writing was on the wall by the early 1890s: the Chesapeake Bay, the world’s largest single supplier of oysters, was running out of its native mollusk. Dredging not only overfished oysters, it also killed many others, dislodged others from the bar, and destroyed the hard surfaces on which reefs were built. Fewer oysters gave birth to fewer spats which had fewer places to safely nest. The areas set aside for hand-tonging were being constantly invaded by dredgers, and the Oyster Navy was undermanned and ill-equipped to properly enforce the state’s laws. One possible solution floated in several different iterations lay in leasing out private acres of the Bay to reseed with oysters, allowing only the leasing watermen to cultivate them; this was vehemently opposed by the tongers, who relied on the oyster reefs being common to all. They feared that they would be priced out of leasing by larger interests and would lose their main source of livelihood. While Annapolis politicians, Baltimore industrialists, and Eastern Shore watermen all bickered and fought, the oyster yield grew progressively worse each year. Improvements in refrigeration and transportation also led to a resurgence of the raw oyster market, as the product became much safer to transport, and many customers preferred the fresh taste to those cooked in cans. By 1936, the Lord-Mott Company was the only cannery still producing cove oysters in Baltimore.¹⁰⁵

The failure of the oyster canning business had a chain reaction effect on the rest of Canton’s industry. The majority of fruit packers based in the city did so because it was

¹⁰⁵ Kee, 163.

economical to use the buildings: oysters packed in the fall and winter, produce in late spring and early summer. With the loss of a viable oyster supply, it made greater sense to move the fruit packing operations further inland, closer to the farms where the produce was actually grown. This is what happened to the Gibbs Packing Company in 1957, when it was acquired by Coastal Foods, Inc., and had its operations moved to the Eastern Shore.¹⁰⁶ The tinplating and can-making companies were no longer needed if no food was being canned. Young people who might've worked in canneries they could walk to, like their parents before them, instead would have to search farther afield or leave the city entirely. Vacant buildings were either torn down or left to fall apart. The 1960s saw neighborhood residents forced to rally, along with Fells Point and Federal Hill, to keep their homes from the ignominious fate of being bulldozed for a highway that would run along Boston Street from Broadway to Dundalk.¹⁰⁷ Despite their successful efforts at stopping the road from being constructed, residents were still faced with the demolition of 300 homes along the waterfront in 1968. This sudden increase in real estate was a boon for developers, and no one smelled money like then-mayor William Donald Schaefer. "This could be Baltimore's Gold Coast," Schaefer told one of his developer friends about Canton. "You should build real nice townhouses."¹⁰⁸

Development did indeed come. Anchorage Towers, a 14-story condominium building at the former address of the Canton Box Co., 2515 Boston Street, was erected in 1982, shortly after Schaefer's much-lauded opening of the Harborplace complex at the Inner Harbor. More plans for

¹⁰⁶ "Coastal Gets Gibbs Factory," *Baltimore Sun*, July 20, 1957, <https://www.proquest.com/docview/536393809/97EC1D00B0FA44EAPQ/3?accountid=14696&sourcetype=Historical%20Newspapers>

¹⁰⁷ E. Evans Paull, *Stop the Road: Stories From the Trenches of Baltimore's Road Wars* (n.p.: Boyle & Dalton, 2022), introduction, <https://stop-the-road.com/the-book/introduction/>

¹⁰⁸ Tom Pelton and Kurt Streeter, "Industrial Heart of Baltimore Beats to a New Rhythm," *Baltimore Sun*, May 7, 2000, <https://www.proquest.com/docview/406458123/1676D7CC0E58420CPQ/1?accountid=14696&sourcetype=Newspapers>



Figure 34: A proposed highway that would have cut through Fells Point and Canton along Fleet and Boston streets. Baltimore Inner Harbor 2.0 Final Report.

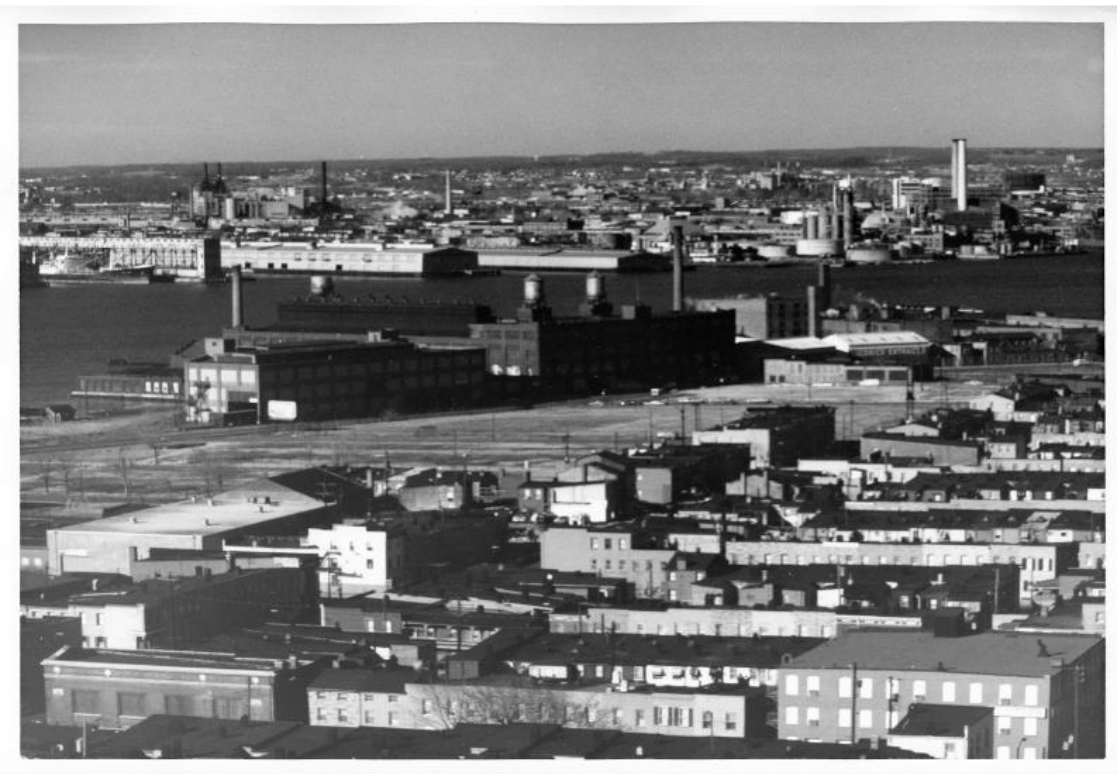


Figure 35: Aerial photograph showing area north of Boston Street where buildings were bulldozed for proposed highway. John Hoedak, February 1974. National Archives.

high-rises quickly followed, although they were stymied in part by community opposition to large-scale towers and plans to demolish several buildings, like the American Can Company's headquarters.¹⁰⁹ An uneasy peace between competing interests was finally brokered in the mid-1990s, as developers focused on building smaller-scale townhouses on former industrial lots and gutting and renovating existing homes. The resulting real estate boom brought young new professionals from outside the city and high-end shopping to the formerly working-class Polish enclave. The rise in overall wages and home values has continued into the 21st century: at least one study measured the 21224 ZIP code, which includes Canton, as the 16th-most gentrified in the country between 2000 and 2016, citing increases of over 100% in both home values and the number of residents with a bachelor's degree.¹¹⁰

Preservation Successes and Failures

Today, no canning building that employed hundreds on Boston Street remains standing. The only extant structure associated with the industry in the neighborhood is part of a former office building for the Gibbs Packing Company. The nondescript building bears no indication of its historical value, no plaque or marker, and would probably be found to lack nearly all integrity necessary for recording on the National Register of Historic Places. The only successful attempt at saving a cannery in the city as a whole came from converting the Platt and Co. building on Key Highway into the Baltimore Museum of Industry, which is clearly not a viable path for preserving a whole class of buildings. Related buildings in Canton have fared slightly better, most notably the American Can Co. complex at Boston and Hudson streets. One of the buildings

¹⁰⁹ Pelton and Streeter.

¹¹⁰ Balazs Szekely, "Downtown LA's 90014 Heads the List of Fastest-Gentrifying ZIPs Since the Turn of the Millennium," RentCafe, February 26, 2018, <https://www.rentcafe.com/blog/rental-market/real-estate-news/top-20-gentrified-zip-codes/>

in the complex was deemed structurally unsound and was demolished in the 1990s,¹¹¹ but several remaining buildings were able to be converted to office and retail space. Several other buildings were converted into apartment complexes, such as the Tindeco company building on Boston Street.

What could have saved Canton's canneries? Powerful forces were marshalled against them. Economic realities not only removed the buildings' former occupants, but they also drove many younger members of a once-vibrant neighborhood to build their futures elsewhere. This depopulation most likely encouraged developers' brazen clearing of 300 homes near the waterfront for the proposed highway in 1968. While the effort was eventually defeated, the destruction may have left lasting psychological damage by its assertion that the neighborhood was essentially moribund. The National Historic Preservation Act, passed in the same year, was in part inspired by just this sort of urban renewal; however, while Fells Point was listed on the NRHP in early 1969, Canton remained unrecognized until its nomination was finally approved in 1979. Mayor Schaefer was ready to move ahead with his redevelopment schemes by that point, and preservation was far less important to him than the economic decline caused by a decreasing population. Schaefer's development schemes could be controversial, but he had public support behind him, as exemplified when an *Esquire* magazine feature dubbed him "The Best Mayor in America" in 1984.¹¹² Perhaps all of these forces could have been surmounted: the community did, after all, rally to save most of the American Can Co. buildings. Even one cannery of the many that once lined Boston Street would have provided a possible method for interpreting this

¹¹¹ Edward Gunts, "Imperiled Buildings Have Friends," *Baltimore Sun*, July 25, 1996, <https://www.proquest.com/docview/2610255054/2BB86F4E4FD04109PQ/12?accountid=14696&sourcetype=Historical%20Newspapers>

¹¹² Richard Ben Cramer, "Can the Best Mayor Win?" *Esquire*, October 1984, 57.

vital part of the neighborhood's history. One of the biggest factors in the canneries' demise may have been that a large number of people weren't very sad to see them go.

"They're the good old days for the ones who never lived it," remembered Florence Plociennik. She was 71 years old in 1992, and recalling her days as a young girl working in the fruit and vegetable packing houses not far from her home in Canton. "I was making 25 cents an hour, but you had nothing because you came home and gave your mother everything you made." Helen Sadowski remembered her mother shucking oysters: "It was cold and they wore rags around their shoes to keep warm—all bundled up and all day shucking." The general consensus seemed to be that "those days are gone, and no one wants to live through them again."¹¹³ Other longtime residents agreed that the redevelopment boom of the 1990s was saving the neighborhood from ruin, and that its industrial buildings largely kept it tied to the past in the worst way. One resident who had joined the fight against the highway 30 years prior admitted that "all the banging and drilling is like music to my ears."¹¹⁴

Historic canneries may struggle to find an audience for their interpretive value, but the possibility exists for adaptive reuse. The Phillips Packing Company's Factory F in Cambridge, Dorchester County, sat vacant since its closure in 1962, until it was renovated in the 21st century as a mixed-use area for retail and office space.¹¹⁵ Several factors may have been in its favor that did not apply to Canton: first, many other buildings in the Phillips complex were demolished, leaving Factory F to stand in greater contrast to its surroundings.¹¹⁶ A glut of unused canneries on

¹¹³ Rafael Alvarez, "Cannery Rows," *Baltimore Sun*, February 16, 1992, <https://www.baltimoresun.com/1992/02/16/cannery-rows-up-and-down-the-streets-and-stoops-of-east-baltimore-depression-era-women-left-their-homes-for-the-packinghouses/>

¹¹⁴ Brenda J. Buote, "Canton all for changes that respect its past," *Baltimore Sun*, November 4, 1997, <https://www.proquest.com/docview/2754941048/F8452862719C4AB6PQ/6?accountid=14696&sourcetype=Historical%20Newspapers>

¹¹⁵ "The Vision," Packing House website, <https://www.thepackinghousecambridge.com/>

¹¹⁶ National Park Service, "Phillips Packing Company Plant F," National Register of Historic Places Nomination Form, September 2021, https://apps.mht.maryland.gov/Medusa/PDF/NR_PDFs/NR-1600.pdf

Canton's waterfront may have simply combined into one large eyesore, and left even those sympathetic to preservation with the unenviable task of deciding which one out of many was most representative and worthy of saving. Secondly, although Cambridge is the county seat of Dorchester County and is decently populated, it is still a relatively small town when compared to Baltimore. Both cities made similar transitions from industry to tourism regarding their waterfronts, but Cambridge had less historic building stock to spare and may have been more self-consciously aware of the needs of its heritage tourism sector. The relatively rural setting outside of Cambridge, compared to the suburbs of Baltimore, Howard, and Anne Arundel counties, may have also meant that the city suffered less acutely in its population decline than Canton after the industrial jobs disappeared. Younger Canton residents in the latter half of the 20th century may have seen far more economic opportunities relatively nearby, compared to their Eastern Shore contemporaries. In this way, the Phillips Cannery may have engendered more positive associations for residents than those living along Boston Street: an anchor to their past identity, rather than a dead weight dragging them down.

Rebranding, Identity, and Continuity

William Donald Schaefer died in 2011. The former mayor and governor had only left his last political office, as state comptroller, after losing re-election in 2006, in part due to feelings that the octogenarian politician was losing his touch. One of his more infamous episodes in his later years occurred when a female aide walked past him; he called her back, only to ask her to "walk away again."¹¹⁷ The man whose mayoral tenure had led to the loss of so many old Maryland institutions, from the Light Street packet ship depot to the Baltimore Colts, was

¹¹⁷ "The Hero of Baltimore," *Baltimore Sun*, April 19, 2011, <https://www.proquest.com/docview/862615581/30DBF8146FCD4ED9PQ/2?accountid=14696&sourcetype=Newsapers>

himself a relic of another time. His lauded Harborplace outlived him, but its days were numbered as well. The two 1980-built pavilions were acquired in 2022 by a local development firm, which announced in 2023 that the buildings would be razed as part of a proposed redevelopment that had the backing of Mayor Brandon Scott. The buildings had been like the proverbial white elephants for some time: after being bought in 2012, problems in attracting tenants and customers continued until a judge ordered the property into receivership in 2019. An appraisal in 2021 found that only 38% of available retail space was being occupied. Still, the plan to demolish the pavilions met with controversy. Jimmy Rouse, son of original architect James Rouse, complained that the buildings could still remain a central part of the Inner Harbor if they had followed his father's original plan in championing smaller, more local artisans and businesses. The redevelopment team agreed that Harborplace had strayed in losing its local character and becoming more cookie-cutter with national chains as clients, saying "[t]he last thing we need is another mall. Malls don't work."¹¹⁸

The debate over what should become of the Inner Harbor is slightly different from Canton's approach to preservation, but it reveals a dilemma that was clear in the arguments surrounding Canton's redevelopment. Both situations called for new construction was representative of the site's identity—an identity tightly bound to a deep history formed by piecemeal interconnection of various demographic, economic, social, and political forces over many years. The task of compressing those generations into a present physical manifestation is both a memorialization and a continuation of that history, marking the end of an era and the beginning of another for the same physical location. Much like how being tied to the water is

¹¹⁸ Dan Belson and Lorraine Mirabella, "Harborplace Pavilions in Baltimore Will Come Down as Part of Redevelopment, Firm Says," *Baltimore Sun*, October 2, 2023, <https://www.baltimoresun.com/2023/10/02/harborplace-pavilions-in-baltimore-will-come-down-as-part-of-redevelopment-firm-says/>

what allowed Canton's economy to prosper, its heritage would also be defined by physical realities.

When the Canton Company was being debated in 1828, a lone voice of dissent spoke out against it in the General Assembly. Charles Ridgely, the lord of Hampton and former governor of the state, apparently protested that the new construction would sully his view of the river.¹¹⁹ This story may be apocryphal, as Ridgely apparently suffered a "paralytic attack" in 1824 which kept him in poor health until his death in 1829, but it illustrates a familiar struggle over waterfront access.¹²⁰ What exactly compels human beings to appreciate a waterfront view over others remains as much of a mystery today as it ever was, but it must be accepted that a prime reason for settling close to the water is aesthetical. Given the original settling of the American colonies along the coast, and the preference many people had for sea travel to overland routes until the railroad developed to a practical extent, it is probable that many people prior to the 20th century living close to the water would be more familiar with boats than many people are today as a matter of necessity. George Washington's Mount Vernon estate famously faces towards a bend on the Potomac River, implying that water traffic was far more common and worthy of attention than anything on land. The place where aesthetics and practicality intersect is power: those like Washington and Ridgely, who observe the water and are observed from the water, know what is happening all around them, and convey their high status by a wide waterfront that they refuse to share, denying others that knowledge and power. This dynamic is still easily observable: in California, for instance, wealthy landowners buy up beachfront homes and restrict access, running afoul of state laws that keep all beaches public. Billionaire Vinod Khosla has been

¹¹⁹ Rukert, 20.

¹²⁰ Frank F. White, Jr., *The Governors of Maryland 1777-1970* (Annapolis: The Hall of Records Commission, 1970), 70-73, <https://msa.maryland.gov/megafile/msa/speccol/sc3500/sc3520/001400/001446/html/1446extbio.html>

struggling to keep people off of Martins Beach in San Mateo County, which is accessible only by a road that runs through his property. Khosla lost a case in 2018 when the U.S. Supreme Court refused to hear a challenge to the decision that he needed a permit to close off the road, but he returned to court in 2020 to argue once again that there was no legal right for the public to access the road itself. Khosla admitted that he had never even spent the night on the property.¹²¹

Khosla's case indicates that, at least for some people, the power conveyed by waterfront access and aesthetics—and by denying that access to others—transcends any and all practical concerns. The simple act of viewing the water from land is a status symbol. This is not subtext, but was indeed one of the stated reasons that Canton residents vehemently opposed building glass and steel high-rises along the waterfront in the early 1980s. The proposed Baltimore International Yachting Center would have run along the Boston St. waterfront and included a 22-story office building that many worried would essentially cut off the waterfront from the rest of the neighborhood.¹²² While many changes eventually came to the waterfront, the office building was never built. Furthermore, although the waterfront's real estate is almost entirely composed of apartment complexes and condominiums, a publicly accessible promenade runs the entire length of Canton along the water, from Chester Street to the beginning of Lazaretto Point.

Did cannery workers view their proximity to the water with the same reverence? Perhaps its association with their grueling work meant that many of them were never comfortable until they were several blocks inland. Waterfront access still had potent market value, but for different reasons than today. Cannery owners depended upon a working wharf right outside their

¹²¹ Nellie Bowles, "Every Generation Gets the Beach Villain it Deserves," *New York Times*, August 30, 2018, <https://www.nytimes.com/2018/08/30/technology/vinod-khosla-beach.html>

¹²² Edward Gunts, "High Rise Projects Raise Eyebrows in Canton," *Baltimore Sun*, August 9, 1987, <https://www.proquest.com/docview/1111912438/2BB86F4E4FD04109PQ/52?accountid=14696&sourcetype=Historical%20Newspapers>

packinghouses to ensure prompt delivery of fresh supplies. The Canton Company, knowing the value of this water route, kept the lots narrow in their earlier days, maximizing the number of rent-paying firms that could fit onto the Boston Street marina and producing the canneries' signature streamlined production process. Watermen, whether in buy-boats, dredge boats, or as independent oyster sellers, approached Canton from the water and relied on the firms waiting for their catches to meet them at the boundary between harbor and land. These watermen prized the water as a common ground, whether for oyster tonging or for freedom to choose to whom they would sell, while cannery owners sought to privatize water for dredging rights and to box out competition on the docks. Ironically, one of the best-preserved buildings from the canning industry is far from any view of the water. Tyrconnell, a Colonial Revival mansion located over the northern border in Baltimore County, is a palatial estate built on land originally owned by John O'Donnell. The current building was constructed in the early 20th century for John Sears Gibbs, Jr., after he took over the Gibbs Packing Company from his father in 1916.¹²³ Gibbs' 22-acre estate was located much closer to Charles Ridgely's Hampton than to the unsanitary, crowded packinghouse where working-class Baltimoreans and immigrants toiled to make his family's fortune. Evidently, it is as much of a privilege to view a waterfront one doesn't use, as it is to not view a waterfront one does use.

Waterfront significance in Canton has come full circle since Charles Ridgely complained about his view. After technological and economic changes removed the ties that kept canneries at their most prosperous on the water's edge, after the remnants of industry were largely torn down, the water's edge once again became a status symbol. Certainly it would be incorrect to say that industry no longer makes use of the water—the port of Baltimore, commercial oyster fisheries,

¹²³ Nancy Miller, "Tyrconnell," National Register of Historic Places Nomination Form, 1984, <https://npgallery.nps.gov/NRHP/GetAsset/a2a4b961-7a2e-42f9-8a70-6140448f2055>

and food canning companies are all still viable economic forces—but they have become detached from urban centers and are more commonly relegated to the outskirts of cities, or to otherwise rural areas. So, too, would it be wrong to claim that the Chesapeake no longer produces oysters, or that small-scale watermen no longer tong the beds, but as their economic impact has shrunk, the former working-class nature of the pursuit has come to be a sign of luxury. Watermen in the 1980s already noticed this phenomenon in the form of wealthier inhabitants from outside the Eastern Shore coming to tong oyster bars on the weekends: “God damn them weekenders[...]They work all week and then come out t’here taking away from people bustin’ their asses to make a livin’ at it.”¹²⁴ Instead of working oyster ships, the boats occupying Canton’s private marinas are all pleasure craft. Even the historic aesthetic of Canton itself, in its adapted brick warehouses and formstone rowhomes, speaks to a more privileged nostalgia for the past.

Nostalgia may be all that many new Canton residents require, even if that nostalgia is for a place and time that never existed for them. Many new arrivals, themselves uprooted from a familiar sense of space, may long to live somewhere that gives a sense of rootedness in history. Oyster tongers purposefully clung to hand-powered subsistence methods of gathering to assert their identities against creeping modernization, but longtime Canton residents professed no love for their younger years spent in the canneries; what divides them, besides personal preference? What separates either of them from new arrivals drawn to a historical aesthetic in Canton? There are always those immaterial qualities of feeling and association. Watermen on Bloodsworth Island valued the autonomy that tonging gave them, even if they could have made more money elsewhere; tonging was in some ways merely a means to an end, but it came to symbolize

¹²⁴ Brait, 26.

everything about their life that they cherished when put in contrast with dredging. The Polish women who packed fruits and vegetables during the Great Depression valued the autonomy that their work helped them achieve later in life through savings and pensions, but they felt very little benefit from their wages at the time beyond survival. A new arrival who moved to the area after redevelopment began in the 1980s might be for or against preserving cannery buildings, given the choice, but their frame of reference for the neighborhood and for what counts as “historical” would necessarily be different than what longtime residents felt.

A sense of historical ambience can be a powerful motivator for tourism and long-term settlement, especially if it gives some sense of a distinct visual or metaphysical identity. This sense of ambience need not be terribly deep in order to function. Richard Berman argues that a district’s historical ambience is “not necessarily tied to a specific recognized historic event,” and that it “points to the fact that it does not appear contemporary, no more, no less.”¹²⁵ Ambience is a knowledge and feeling that a place is non-contemporary that exists before personal experiences are formed and returns after those experiences have faded into memory. Newcomers to Canton might know the neighborhood’s boundaries, and might sense on some level that it differs in its feeling and association from Fells Point and Highlandtown, but each of those neighborhoods might have largely the same historical ambience compared to the downtown Inner Harbor; that is, distinctions that make each place unique are obscured until someone has enough experiences to notice subtle differences. What seems “historical” to someone who has only come to Canton after the great changes of the 20th century is therefore not necessarily the same as what is “historic,” but depends instead on what the average visitor brings to their observations. The presence of St. Casimir Church, with its annual pierogi sale, may be enough to give the average

¹²⁵ Richard W. Berman, *Assessing Urban Design: Historical Ambience on the Waterfront* (Lanham, MD: Lexington Books, 2006), 37-39.

visitor the sensation of the area's past association with Polish immigration—a tie back to a visit earlier than their own. This experience of ambience will necessarily be different from that of a person of eastern European descent, looking for traces of the once-thriving Polish community that exists as only a shadow of its former self.¹²⁶ The current state of preservation in Canton does not necessarily do a proper job of conveying the story of Canton's development and the influence of canning, but one cannot help but wonder how the presence of even a single cannery on Boston Street would change the overall historical ambience of the neighborhood.

The major factors that brought canneries to Canton and that drove them out were entirely practical considerations of transportation and money. Once what is practical is supplanted by something more practical, it becomes outmoded, and then a luxury item of nostalgia. This is not a terribly original observation, and is visible in everything from the prices of vinyl records to the trending cottagecore aesthetic, but it bears special consideration in the world of historic preservation. In an era where it is possible to carry one's job on a smartphone or laptop, what has become nostalgic for the middle- and upper-class worker is the situational, the tactile. Preservation did not create this commodification of the past, and it will not be preservation alone that keeps it from affecting historic districts; however, if preservation is to be a tool for protecting communities, then preservationists must understand how National Register listings do and do not prepare historic districts for the future.

¹²⁶ Cristina Maza, "Searching for Traces of Eastern Europe on a Walking Tour of Baltimore," *New East Digital Archive*, July 31, 2020, <https://www.new-east-archive.org/articles/show/12017/eastern-european-immigration-baltimore-walking-tour>

V. Conclusion

“Ain’t it hard just to live?”

-Nina Simone, “Baltimore”

Lyrics by Randy Newman

Baltimore has a reputation as a hard city, one that is arguably earned. Its well-known southern sympathies forced President-Elect Abraham Lincoln to sneak through its streets in the dead of night in order to safely attend his own inauguration in 1861, and riots erupted a few weeks later when crowds attacked a contingent of Union troops passing through the city to the front lines. Destructive riots would return in 1877, in 1968, and in 2015. It has become almost synonymous with the failed War on Drugs and the urban-suburban racial divide, themes that *Sun* reporter David Simon explored and inadvertently cemented in the general public’s imagination when he turned his decades of work into the TV shows *Homicide* and *The Wire*. The city continues to be plagued by corruption, violence, and disinvestment despite the best efforts of its most committed citizens.

Canton, despite its birth as a working-class industrial hub, might seem largely immune to this aura of despair and neglect that plagues the rest of the city. This is noted with some level of painful irony, as the neighborhood makes up a part of the city’s “white L” that stands out against the “black butterfly.” Baltimore’s remaining majority-white neighborhoods cluster along the north-south Jones Falls Expressway before heading east along the waterfront through Fells Point and Canton, and contain a disproportionate amount of the city’s highest income earners, as opposed to the majority-black neighborhoods spreading to the east and west.¹²⁷ A neighborhood where blue-collar immigrants once toiled for a multi-million-dollar industry that was on the

¹²⁷ Marceline White, “Baltimore: The Black Butterfly,” National Community Reinvestment Coalition, October 8, 2020, <https://ncrc.org/the-black-butterfly/>

cutting edge of technical progress is now largely home to white-collar workers; Harris Creek, which was once the home to the shipyard that built the *Constellation* and the iron plates that clad the *Monitor*, is now home to a different symbol of Baltimore's innovation, Professor Trash Wheel. O'Donnell Street keeps the name of the merchant who sailed in from Guangzhou, but the statue of John O'Donnell that once adorned the public square named for him has been taken down in consideration of the enslaved workers who sweat in his fields, their names unrecorded and unknown.

Change has come to Canton, but some of the spirit still remains, and is even being reborn. History seemed to repeat itself when, in the early 2010s, Mayor Stephanie Rawlings-Blake publicly invited Latinx and Hispanic immigrants to settle in the city, hoping to reverse decades of population loss; part of her strategy involved issuing an executive order that prohibited police and social services from asking about immigration status.¹²⁸ Those who have settled in southeast Baltimore have not only followed in the footsteps of the European immigrants who first built the neighborhoods and their industries, they have also helped preserve and maintain that earlier wave's accomplishments: the Sacred Heart of Jesus, founded in 1873 to serve Canton's German Catholic population on the former site of the Civil War-era Fort Marshall, is now almost entirely a Latinx congregation.¹²⁹ One prominent Baltimorean whose great-grandparents immigrated from Germany to Baltimore in the late 19th century was less than welcoming, however; then-comptroller William Donald Schaefer complained in 2004, "I don't want to adjust to another

¹²⁸ Carol Morello and Luz Lazo, "Baltimore Puts Out Welcome Mat for Immigrants, Hoping to Stop Population Decline," *Washington Post*, July 24, 2012, https://www.washingtonpost.com/local/baltimore-puts-out-welcome-mat-for-immigrants-hoping-to-stop-population-decline/2012/07/24/gJQA4WEk7W_story.html

¹²⁹ Ron Cassie, "City of Immigrants," *Baltimore Magazine*, February 2018, <https://www.baltimoremagazine.com/section/historypolitics/city-of-immigrants-the-people-who-built-baltimore/>

language. This is the United States. I think they ought to adjust to us,” after a Spanish-speaking cashier struggled to understand the former mayor’s McDonald’s order.¹³⁰

Sometime in the late 19th century, several prominent Baltimoreans began referring to their city as “the Liverpool of America.” They sought to draw comparisons between the two port cities’ recent industrialization and dependence on maritime commerce that had recently greatly increased their populations. Canton’s success obviously had a great deal to do with the city’s ability to tout its commercial capabilities. It is unclear what the people of Liverpool thought of this comparison. Today, the epithet will most likely provoke confusion, as most Americans in the 21st century most associate Liverpool in the United Kingdom with the city’s favorite sons, the Beatles, who gained international prominence nearly a century after the link was first made in print. The Beatles, whether in their suit-and-tie debut on the *Ed Sullivan Show* or in their flower-power psychedelic era, represent to many people the eternal optimism of the 1960s before political assassinations, continuing war in southeast Asia, and the Watergate break-in ushered in the paranoid and cynical 1970s. They might seem like the total antithesis of the gritty, urbane Baltimore, but the Liverpool in which the Fab Four grew up would likely be very recognizable to many denizens who have experienced Baltimore’s urban malaise. Lemmy Kilmister, frontman of genre-defining speed metal band Motörhead, perhaps put it best in his autobiography:

And the Beatles were hard men, too. Brian Epstein cleaned them up for mass consumption, but they were anything but sissies. They were from Liverpool, which is like Hamburg or Norfolk, Virginia—a hard, sea-farin’ town, all these dockers and sailors around all the time that’d beat the piss out of you if you so much as winked at them. Ringo’s from the Dingle, which is like the fucking Bronx.¹³¹

¹³⁰ Morello and Lazo.

¹³¹ Lemmy and Janiss Garza, *White Line Fever* (London: Simon & Schuster UK Ltd, 2002), Google Books, 28, <https://books.google.com/books?id=gyrI-4cXAj4C&q=beatles#v=onepage&q&f=false>

It seems like a strange comparison at first glance, but just like the Beatles' music gains much deeper context when juxtaposed against the harsh economic realities of their background, the rowhomes and waterfront of Canton can be appreciated on a far deeper level when it is understood how hard those cannery employees, who shucked oysters in the freezing winter for twelve hours each day, fought to make a community for themselves. It is not a pleasant history. It is very likely that most new residents would not be terribly interested in the details, whether salacious or mundane, of working-class cannery life. The canneries and their workers shaped the very buildings and layout of Canton, and left physical traces everywhere from Iceland to California. Though gone, they hover over the modern landscape like a ghostly palimpsest, never fully experienced, only glimpsed out of the corner of the eye, felt for a moment like a cool breeze blowing off of the water.

Bibliography

- Beirne, D. Randall. "Residential Growth and Stability in the Baltimore Industrial Community of Canton During the Late Nineteenth Century." *Maryland Historical Magazine* 74, no. 1 (March 1979): 39-51.
<https://mdhs.msa.maryland.gov/pages/Viewer.aspx?speccol=5881&Series=1&Item=294>
- Belfoure, Charles. "St. Brigid's School and Convent." National Register of Historic Places Registration Form. October 5, 2015.
https://apps.mht.maryland.gov/Medusa/PDF/NR_PDFs/NR-1569.pdf
- Berman, Richard W. *Assessing Urban Design: Historical Ambience on the Waterfront*. Lanham, MD: Lexington Books, 2006.
- Bogan, Chris. "Grinding Away the Rust: The Legacy of Iceland's Herring Oil and Meal Factories." *Gastronomica* 4, no. 2 (May 2004): 51-57.
<https://www.jstor.org/stable/10.1525/gfc.2004.4.2.51>
- Botwick, Bradford, and Debra A. McClane. "Landscapes of Resistance: A View of the Nineteenth-Century Chesapeake Bay Oyster Fishery." *Historical Archaeology* 39, no. 3 (2005): 94-112. <https://www.jstor.org/stable/25617272>
- Brait, Susan. *Chesapeake Gold: Man & Oyster on the Bay*. Lexington, KY: The University Press of Kentucky, 1990.
- Bruchey, Eleanor S. "The Development of Baltimore Business, Part II." *Maryland Historical Magazine* 64, no. 2 (Summer 1969): 144-160.
<https://mdhs.msa.maryland.gov/pages/Viewer.aspx?speccol=5881&Series=1&Item=254>
- Burton Jr., R. Lee. *Canneries of the Eastern Shore*. Centreville, MD: Tidewater Publishers, 1986.
- Busch, Jane. "An Introduction to the Tin Can." *Historical Archaeology* 15, no. 1 (1981): 95-104.
<https://www.jstor.org/stable/25615391>
- Eshelman, Ralph. "Oyster Fisheries of the United States: A Part of the Maritime Heritage of the United States National Historic Landmark Theme Context Study." National Register of Historic Places Multiple Property Documentation Form. Unpublished manuscript, last modified 2001. PDF scan of physical copy held by UConn Library.
- Hayward, Mary Ellen. *Baltimore's Alley Houses: Homes for Working People Since the 1780s*. Baltimore: The Johns Hopkins University Press, 2008.
- Hayward, Mary Ellen, and Charles Belfoure. *The Baltimore Rowhouse*. New York: Princeton Architectural Press, 1999.

- Hollowak, Thomas L. "A Winter's Tale on the Chesapeake: The Hardships Endured by Polish Oyster Dredgers Before the First World War." *Polish American Studies* 75, no. 1 (Spring 2018): 41-67. <https://doi.org/10.5406/poliamerstud.75.1.0041>
- Hollowak, Thomas L. "The Development of St. Stanislaus Kostka Parish in Baltimore." *Polish American Studies* 49, no. 2 (Autumn 1992): 61-73. <https://www.jstor.org/stable/20148390>
- Kee, Ed. *Saving Our Harvest: The Story of the Mid-Atlantic Region's Canning and Freezing Industry*. Baltimore: CTI Publications, Inc., 2006.
- Keuchel, Edward F. "Master of the Art of Canning: Baltimore, 1860-1900." *Maryland Historical Magazine* 67, no. 4 (Winter 1972): 351-362. https://msa.maryland.gov/megafile/msa/speccol/sc5800/sc5881/000001/000000/000268/pdf/msa_sc_5881_1_268.pdf
- Kurlansky, Mark. *The Big Oyster: History on the Half Shell*. New York: Ballantine Books, 2006.
- Lemmy and Janiss Garza. *White Line Fever*. London: Simon & Schuster UK Ltd, 2002. Google Books edition. <https://books.google.com/books?id=gyrI-4cXAj4C&q=beatles#v=onepage&q&f=false>
- Leshner, Pete. "A Load of Guano: Baltimore and the Fertilizer Trade in the Nineteenth Century." *Northern Mariner/Le Marin du Nord* 18, nos. 3-4 (July-October 2008): 121-128. https://www.cnrs-scrn.org/northern_mariner/vol18/tnm_18_3-4_121-128.pdf
- Maryland State Archives. "Maryland State Crustacean—Blue Crab." Maryland Manual On-Line. Last updated March 11, 2022. <https://msa.maryland.gov/msa/mdmanual/01glance/html/symbols/crab.html>.
- Maza, Cristina. "Searching for Traces of Eastern Europe on a Walking Tour of Baltimore." *New East Digital Archive*. July 31, 2020. <https://www.new-east-archive.org/articles/show/12017/eastern-european-immigration-baltimore-walking-tour>
- Paull, E. Evans. *Stop the Road: Stories From the Trenches of Baltimore's Road Wars*. N.p.: Boyle & Dalton, 2022. <https://stop-the-road.com/the-book/introduction/>
- Percy, George. "Observations gathered out of a Discourse of the Plantation of the Southerne Colonie in Virginia." In "English Plantations, Discoveries, Acts, and Occurents, in Virginia and Summer Ilands, since the Yeere 1606 till 1624," 1685-1690. Vol. 4 of *Hakluytus posthumus, or, Purchas his Pilgrimes*, compiled by Samuel Purchas. London: Henrie Fetherstone, 1625. <https://www.loc.gov/item/06002669/>
- Rothschild, B.J., J.S. Ault, P. Gouletquer, M. Héral. "Decline of the Chesapeake Bay Oyster Population: A Century of Habitat Destruction and Overfishing." *Marine Ecology Progressive Series* 111, no. ½ (August 11, 1994): 29-39. <https://www.jstor.org/stable/24847607>

- Rukert, Norman G. *Historic Canton: Baltimore's Industrial Heartland and its People*. Baltimore: Bodine & Associates, Inc., 1978.
- Ryon, Roderick N. "Baltimore Workers and Industrial Decision-Making, 1890-1917." *Journal of Southern History* 51, no. 4 (November 1985): 565-580.
<https://www.jstor.org/stable/2209515>
- Schwaab, Ernest F. *The Secrets of Canning: A Complete Exposition of the Theory and Art of the Canning Industry*. Baltimore: John Murphy & Co., 1890.
https://www.survivorlibrary.com/library/the_secrets_of_canning-1890.pdf
- Sears, Jane. *Baltimore's Packing and Canning Industry*. Charleston: self-published, 2015.
- Smith, Drew. *Oyster: A Gastronomic History (With Recipes)*. New York: Abrams, 2015.
- Szekely, Balazs. "Downtown LA's 90014 Heads the List of Fastest-Gentrifying ZIPs Since the Turn of the Millenium." RentCafe (web page). February 26, 2018.
<https://www.rentcafe.com/blog/rental-market/real-estate-news/top-20-gentrified-zip-codes/>
- Vivian, Margaret Enloe. "Tilghman Packing Company and the Transformation of Landscape on Avalon Island." *Weather Gauge* 36, no. 1 (Spring 2000): 12-23, 34.
<https://www.mytocca.org/wp-content/uploads/2020/01/CBMM-Tilghman-Packing-Company.pdf>
- Warfield Manufacturing Co. *Reference Book*. Baltimore, 1889.
- Warner, William W. *Beautiful Swimmers*. Boston: Little, Brown & Company, 1976.
- Wennersten, John R. *The Oyster Wars of the Chesapeake Bay*. Centreville, MD: Tidewater Publishers, 1981.
- White, Marceline. "Baltimore: The Black Butterfly." National Community Reinvestment Coalition. October 8, 2020. <https://ncrc.org/the-black-butterfly/>
- Wilberg, Michael J., Maude E. Livings, Jennifer S. Barkman, Brian T. Morris, Jason M. Robinson. "Overfishing, Disease, Habitat Loss, and Potential Extirpation of Oysters in Upper Chesapeake Bay." *Marine Ecology Progress Series* 433 (August 31, 2011): 131-144. <https://www.jstor.org/stable/24875491>
- Xie, Philip Feifan. *Industrial Heritage Tourism*. Bristol: Channel View Publications, 2015. Adobe Digital Edition.