History on the Charles: The Story of Captain's Island and its Powder Magazine

by Nina S. Cohen and Marilyn Wellons

with introduction by Charles Sullivan,
Executive Director of the Cambridge Historical Commission

Max Moore Architecture's rendering of the Powder Magazine "as it could be."

Introduction

The Magazine Beach powder magazine is one of Cambridge's hidden treasures. By far the oldest building in the Charles River Reservation, its origins and original purpose are a mystery to most. Even Magazine Street – a street named after a periodical? – seems nonsensical to the uninitiated.

In 2010, the Cambridgeport Neighborhood Association (CNA) resolved to resurrect the 1818 powder magazine from neglect. Community activist Cathie Zusy convinced the Cambridge City Council to appropriate $25,000 of Community Preservation Act funds for an historic structures report (HSR), and pressed the Massachusetts Department of Conservation and Recreation (DCR) to match the city's grant two for one. With $75,000 in hand, DCR commissioned a study that revealed the history of the magazine and cleared the path toward its restoration. The Neighborhood Association's next objective is restoration of the surrounding park itself. Given their track record to date, success on that front cannot be far away.

Great credit must also be given to Nina S. Cohen and Marilyn Wellons, two Cambridge researchers whose diligent inquiry illuminated the obscure history of both the building and the site. Bill Finch of Finch & Rose, historic preservation consultants, filled in the broader picture by exploring powder magazine construction around the U.S., and the firm of Clark & Green Architecture prepared an exemplary HSR that will guide all future work on the building. It will soon be available on the DCR website. Nina S. Cohen's essay about the magazine is excerpted from the HSR.

Resurrection of the Magazine Beach powder magazine is truly a community effort.

Charles M. Sullivan
Cambridge Historical Commission
June 7, 2013

To purchase this booklet, contact Cathie Zusy at cathzusy@gmail.com
All profits will go towards efforts to stabilize the powder magazine.

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Cover Photos: Postcard, *Captains Island or Magazine Beach, Cambridge, Mass.*, postmarked September 29, 1906. Gift of Mrs. Paul R. Lawrence. Courtesy of the Cambridge Historical Commission.

Detail of *Plan of Cambridgeport Parish*, by Peter Tufts, Jr., surveyor and power magazine keeper, 1824. Courtesy of the Cambridge Historical Commission.

Photograph of *The Old Magazine*, 1892. Courtesy of the Cambridge Room, Cambridge Public Library.

Captain's Island & The Powder Magazine

In 1630, Captain's Island may have looked much as Witch Island in Ipswich, MA does today. Photograph copyright and courtesy of Dorothy Kerper Monnelly.

The history of Captain's Island and its powder magazine is long, complicated, and, in important parts, obscure. A complete account is impossible here. What does follow is a sketch of the site's history from 1630 to 1818, when this high ground on northern shore of the Charles River became the site of a powder magazine built by the Commonwealth of Massachusetts. After 1818, the story becomes much clearer. It tells how what was an island at high tide in a wide bay has become a small hill overlooking the freshwater lake that is today's Charles, and how what was a substantial magazine, designed to store public and private powder and to contain any explosion from accident or war, has become an unused granite shell with a leaking roof. Such an understanding could help guide future interpretation of this public asset.

Geology and Archaeology

Earthquakes and glaciers shaped the land around Boston, creating a basin. As the glaciers melted, valleys flooded and the sea rose, creating swamps and marsh along the shore and the region's rivers. Native American settlements were seasonal, with camps in the forest and by the marshes for hunting, fishing and gathering shellfish, and by fields for growing corn and other crops.

Massachusetts Bay Company 1629-1684

Protestants, primarily English, who wanted an established church purified of Anglican "popery," formed the Massachusetts Bay Company. King James I chartered it, as he did other private ventures. The Company set out to establish a godly community where religion and civil government would be happily congruent, a shining example to the world. In the years leading to actual civil war in 1642, thousands of people, impelled by the economic and political forces that led to it, left England and moved to the colony. For several decades after its founding, distance protected this beacon from turmoil at home. By 1640, tens of thousands lived in what is now New England, both within the bounds of the Charter and beyond it.

The settlers claimed exclusive possession of lands and deprived the resident Native Americans of their use. War with the Pequot (1636-37) and then the Wampanoag (1675-78) followed. So while the first settlers found the Indians friendly, they soon kept watch against attack. In historian Adam J. Hirsch's words, "[h]ad a fleet of menacing canoes appeared off the coast of Boston at any moment in the seventeenth century, a flurry of signal rockets and musket shots would have alerted the other settlements of impending attack."

To deal with threats from Indians, the encroachments of competing European powers' colonies, with threat of attack by those powers' navies or privateers (private naval contractors), or from marauding pirates, the Company hired two professional soldiers, Captains Daniel Patrick and John Underhill, whose Dutch wives immigrated with them. These captains were to oversee the location and building of fortifications, identify lookouts and set watches, drill the militia, and command troops. The government paid them with cash, grants in kind (such as household equipment), and grants of land. Once parcel of land on the Charles River was granted to Captain Patrick and became known as Captain's Island.

Like other colonists, Patrick and Underhill were English veterans of the Dutch wars of independence against Catholic Spain. As members of the Prince of Orange's guard, both were probably products of his military school and expert in Dutch military innovations. In America, the two trained and drilled all men in their respective districts between the ages of 16 and 60 weekly, except during harvest. As the number of trained men increased and settlements proliferated, each new village cleared a common, built a meeting house, and formed a militia company, whose members elected its captain. The captain drilled his men on the common. Gunpowder was usually stored in the meeting house.

A powder industry sufficient to supply the colony's needs never developed, even though prospects were initially encouraging. In 1675, during war against the Wampanoag, a royal officer sent by King Charles II to Boston enthusiastically reported that

> [at] Dorchester . . . is a powder mill, in good repair, well wrought. There is in the country great quantities of saltpetre, especially upon the islands where fowl frequent and in swamps where pigeons roost. The powder is as good and strong as the best English powder.

It is possible royal governors thereafter may have restricted growth of the industry, since the Crown gained control and revenue from its import. One hundred years later, military gunpowder was a scarce commodity and the immediate cause of the battles of Lexington and Concord in April, 1775. During the ensuing Revolution, gunpowder shipped from France allowed the Americans' victory at Saratoga in 1777.

Captain Patrick

Daniel Patrick, the first Captain of the Cambridge militia, seems to have specialized in communications: marking channels for safe passage in the bays, choosing lookouts, and setting and interpreting signals. Between 1630 and 1644, he lived and worked in Cambridge, Watertown, and Ipswich, Massachusetts and in Norwalk and Greenwich, Connecticut. Massachusetts Governor John Winthrop recorded that during the Pequot War, Captain Patrick arrived in his boat after a battle was won. The troops, under the command of Captain Underhill, had burned an entire Indian village.

Captain Patrick's personal history is obscure. His name may be a *nom de guerre*, a seventeenth-century practice among soldiers who were not gentlemen. Massachusetts Governor Winthrop described him as "coarse." Like Daniel in the Bible, he would have survived the fiery furnace (of battle) and could tell the king what the encrypted writing on the wall meant. If he were also known as Dan Patrick, it could indicate his skill in setting dans, buoys that signal or mark channels. Marking a safe channel through or around the marshes and along the coast would have been important for ordinary transportation as well as for ships that docked at the colony's landings. In the early colonial era, most travel was along waterways, since there were few roads. Captain Patrick owned islands in Cambridge, Massachusetts and in Norwalk and Greenwich, Connecticut with important sight lines. His Connecticut islands had views to the Dutch settlements in New Amsterdam.

In Cambridge, the Captain owned a house and lot in town and additional acres of upland and marsh: Captain's Island. Successor captains of the Cambridge militia through the 17th century are recorded as owning the same amount of upland and marsh. A 1919 plan shows Captain's Island in 1700 with a landing and causeway that connected to the "Bridleway" and from there to the "Highway" to Cambridge (what is now Harvard Square). In 1705 Judge Samuel Sewall recorded a trip to Cambridge by boat:

> [1705] July, 4. Com[m]encement Day [at Harvard College]. I go by Water, with Neighbour Deming, Green, Judd. Sail'd pleasantly till came about the Capts Island, then the wind and Tide being against us, we went ashore and got over the Marsh to the Upland; and so into the Rode and comfortably to Town. . . . Came home in a Calash with Col. Hutchinson and Mr. Penhallow: In the Boat with Mr. C. Mather, Mr. Bridge. "

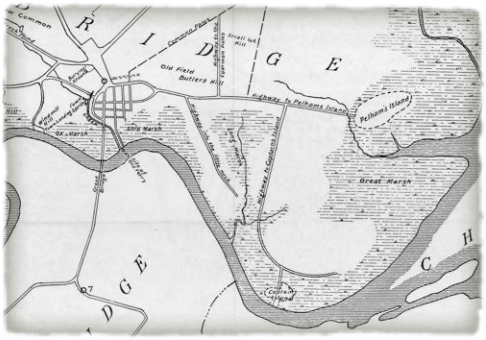
Land's Use and Disposition

A watchman on Captain's Island may have used a spyglass like this one. Engraving of man with telescope, 1624. Adriaen van de Venne, "Emblemata of Zinnewerck." Courtesy of Wikepedia.

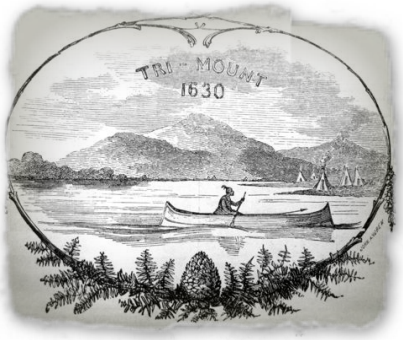
It is almost certain the Captain's office in Cambridge included a watchpost at Captain's Island.

Until the nineteenth century, the island had views across the bay to the Boston Common and "Trimont," the three hills that defined early Boston: Mount Vernon, Beacon Hill, and Pemberton Hill. The site also afforded vistas across the low-lying Boston Neck to the colony's primary fortification at Castle Island and even to the harbor approach. Telescopes, developed by Dutch spectacle makers from possibly Spanish invention, were in use by 1630. They would have allowed signaling between these places and Cambridge. The site's association with captains continued from the 1630s, through the revocation of the Charter (1681-84), the reorganization of the militia, and government by royal appointees (1685-86 to 1775).

When war returned to Massachusetts Bay in 1775, the site would have been part of a Cambridge lookout system that extended from Prospect Hill in today's Somerville to



Detail from a "Plan Showing Cambridge Highways as Existing in the Year 1700, compiled by H. L. Hastings, 1919." It shows the "Highway to Captain's Island" and the "Road to the Oyster Banks. Courtesy of Cambridge Historical Society.



This 19th-century image re-imagines Boston's Tri-Mont and system of water transportation as they were in 1630, when the colonists arrived in Massachu-setts Bay. "Tri-Mont, 1630," from Gleason's Pictorial Drawing Room Companion, Boston, 1850.

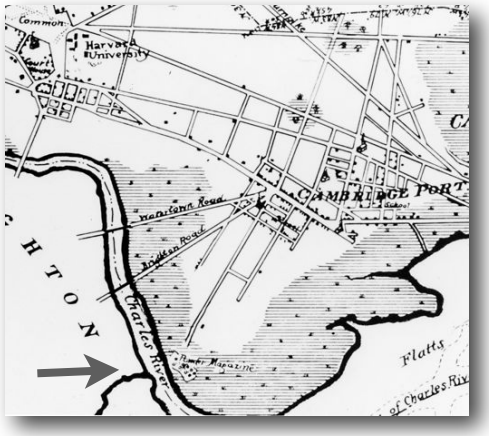
a series of fortifications along the Charles River, including Fort Brookline, at Sewall's Point (the location of today's Citgo sign in Kenmore Square). As a lookout post, it seems unlikely Captain's Island would have been fortified itself. An 1844 map of Brookline shows an "Old Fort" just upriver from today's BU Bridge, almost opposite Captain's Island. A map of Cambridge in 1866 shows another "Old Fort" at the edge of marsh near the Watertown line, close to a road to Watertown Center, with views to Cambridge and Captain's Island.

All three sites, apparently unfortified in 1775, suggest a system of communication The fort in Brookline would have been able to receive signals or written messages from Fort Brookline that could then have been relayed to General Washington's headquarters in Cambridge via Captain's Island. The Watertown site would have been able to relay messages by horseback to Watertown and other upriver settlements.

Even if it was unfortified, Captain's Island's name and its military associations seem to have been important to veterans of the Revolutionary War. Sometime in the eighteenth century Captain's Island became the property of Charles Ward Apthorp, a wealthy Loyalist and oldest son of Charles Apthorp. The elder Apthorp had been an extremely rich and powerful "placeman" — a well-connected royal appointee, able to profit from his position as Paymaster of the Forces for all British land and naval forces based in Boston. How the younger Apthorp came to own Captain's island is not known. The Apthorp family had caused scandal and resentment in Boston and Cambridge when acquiring land in the 1760s. At the time of the confiscated property's sale in 1782, at auction, it was a Tory's island surrounded by abutters whose names were those of the earliest settlers.

At that auction, Revolutionary War veterans Joseph Hosmer and Samuel Thatcher—both militia captains in April, 1775—sold the confiscated property to William Whittemore. He was grandson of Captain Samuel Whittemore, a veteran of wars in North America when Charles Apthorp had been paymaster. Returning to war again in April 1775, the eighty year-old Captain was the oldest known combatant in the American Revolution. In 2005, Massachusetts proclaimed him the State Hero. Possibly with his grandfather witnessing the sale, William bought Captain's Island for £7 16 shillings. These many years later, it is difficult not to see the transaction as confirming the site's military associations and a straightening of history's record.

In 1802, William Whittemore sold Captain's Island to another distinguished descendant of the early settlers, Francis Dana. He had been Massachusetts delegate to the Continental Congress and signer of the Articles of Confederation. A relative, Thomas Dana, Jr., is said to have participated in the Boston Tea Party. In 1818, Francis Dana's heirs sold the property to the Commonwealth of Massachusetts for construction of the powder magazine, thus continuing its public purpose and importance for the Commonwealth's defense.



When it was built in 1818, the powder magazine was a half-mile from settlement. Detail from 1830 "Plan of Cambridge" by John G. Hale. Courtesy of the Cambridge Historical Commission.

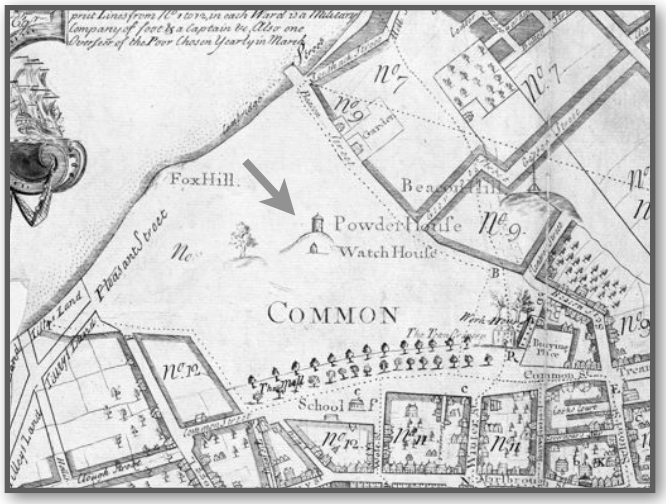
Location of the Powder Magazine

> …the Island combines so many advantages over every other place in this vicinity both as to security and convenience, that I am decidedly of opinion the Commonwealth had better purchase it even at this unreasonable price, than erect a Magazine on any other place…
>
> Amasa Davis, Quarter Master General, 1817

In early 1816, Peter Tufts, Jr., keeper of the Public Powder House in Charlestown, applied to the Quarter Master General of the Commonwealth for a new building since "the Powder House in Charlestown is not sufficient to store what powder that is necessary that it should be. I have frequently had to store some powder in private building for want of room…."

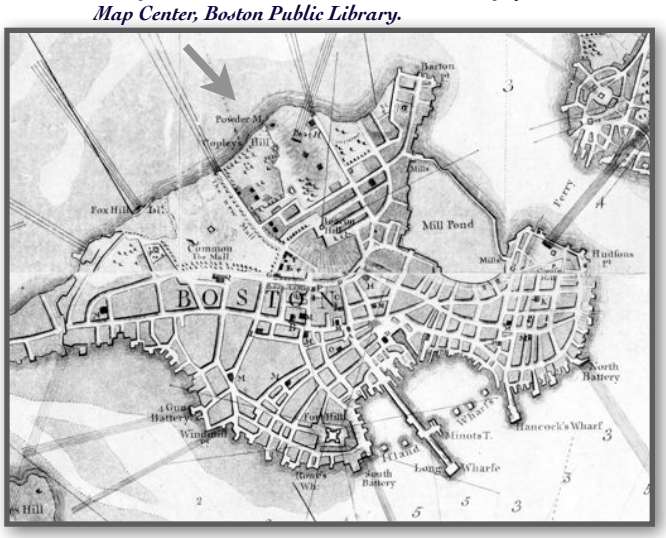
Captain's Island in Cambridge, with its remote location and accessibility to the Charles River, proved the ideal place. Powder houses had customarily been built far from settlement in case of explosions. As development spread toward these structures, replacements were built even farther away. Captain's Island's magazine – the latest in a succession of Boston's powder storage facilities – followed this pattern.

Boston's first magazine for public and private powder had been built on the Common in approximately 1707. Two replacements were built, one at the base of Beacon Hill near the West Boston Bridge in 1773 and the other in Watertown. By 1802, settlement had grown so much that the Commonwealth planned two new magazines "out of Boston." Only the first was actually constructed (at Pine Island in Roxbury). The second, at an unnamed site was deemed too expensive. Charlestown's powder house, built ca. 1704 as a grist mill, was adapted by the Province of Massachusetts as a powder house in 1747 and then used in the



Boston's first public powder house was built on the Boston Common in 1707. Detail from "A New Plan of ye great town of Boston in New England in America," 1743. William Price, Author and Publisher. Courtesy of the Leventhal Map Center, Boston Public Library.

A powder magazine, (arrow) was built at the base of Beacon Hill in 1773 after neighbors complained about its predecessor. Detail from "A Plan of Boston in New England with its environs," 1777, Henry Pelham, Author and Publisher. Courtesy of the Leventhal Map Center, Boston Public Library.



Revolutionary War by the American army. Its use as a state facility continued after the war. The Captain's Island magazine, constructed by October 1818, replaced the Charlestown powder house. The latter still stands in Powder House Square in what is now Somerville.

Virtually all Massachusetts communities had powder storage facilities. The earliest colonists were required to keep communal supplies of arms for militia members who were unable to provide their own. Following its incorporation, the Commonwealth of Massachusetts – pursuant to the 1792 law establishing a national militia – required every town to keep a specific amount of powder and arms on hand and to submit annual accounts of their inventories. The requisite quantities for each town were determined by a ratio of ammunition to men eligible to serve in the militia. Failure to maintain the necessary inventory resulted in fines.

As for the housing of such supplies, the law specified only that the ammunition should be "deposited in some suitable and convenient place within said town or district." Archived magazine returns from 1811 show that communities stored their powder in a variety of places. While many towns built discrete powder houses, at least an equal number kept their powder in the local meeting house, as in earlier times. Other towns stored their powder in hearse houses, stores, and in private homes.

Powder Rules

Gunpowder's volatility and the need for careful regulation were well known. Reports of explosions in magazines and factories appeared regularly in newspapers. Boston's first public magazine was built, in fact, at the urging of "several merchants and others" concerned about such explosions.

Laws were enacted – and frequently revised – regulating where and how much powder could be stored, and by whom. Upon the building of the first magazine in 1707, the legislature required all powder coming through Boston's port be stored there. Shopkeepers could keep fifty pounds for sale. Further regulations were passed in 1715 on discovery that people were still keeping powder in private homes and warehouses, and moreover, were throwing "squibs, serpents and rockets" and other fireworks in the streets. Penalties of varying amounts were charged: one half of the monies went to the informer; the other to the town poor. The parents or masters of children and servants aged twelve and older who were caught throwing squibs and other fireworks were fined. If they did not pay, the offenders themselves would have to sit in stocks or a cage, or be imprisoned for a maximum of twenty-four hours. Milder punishment held for children and servants under age twelve: their superiors were only required to pay a fine.

The first gunpowder laws for Cambridge passed in 1809, when a powder house was first planned. People could keep up to fifty pounds of powder in buildings other than the powder house but were required to store it in brass, copper or tin containers. Violators of these rules would forfeit the powder and pay a fine equal to the value of the amount confiscated. As in Boston one hundred years earlier, one half of the fine would go to the informer, the other to the town poor. It is notable, though, that in 1816, Boston passed a law limiting the amount of gunpowder that anyone in town could keep – including individuals, public servants, and military personnel – to just five pounds.

Laws that regulated the licensing of powder sellers and the transport of powder also passed in Boston and later, in Cambridge. As always, powder handlers could not wear nails or buckles on their shoes.

SUGARS, SILKS, &c.
GUN POWDER; WHALE OIL; HATS, STOVES, &c.—*P. P. F. DEGRAND*, No. 68½, State-street, has for sale,
500 casks Dupont's Powder, of superior quality; a lot for shipping daily expected, and now for sale on good terms; a constant supply kept on hand of Dupont's best qualities,
20 tons Whale Oil, a selected lot, of the first quality,
50 cases Hats, at $2 50 each, for shipping—a constant supply from Guerin's South-Boston Factory, always on hand, of various prices and fashions.—Hats made to order, from $2 50, upwards, by wholesale.
100 Cast Iron Stoves, from the Melville furnace, elegant patterns, and will be sold very reasonably.
20 tons Swedes Iron,
9 pipes Tenerifle Wine,
63 bags Island Cocoa,
70 bbls. Cream Tarter,
24 bales Liquorice Root,
3 cases Gum Copal,
1 do. do. Myrrh,
2 bales Peruvian Bark,
1 do. Mallows Flowers,
7 do. Sarsaparilla,
1 case Elixir Scorbutic,
11 bbls. Rocoa,
4 cases elegant French Paper Hangings,
2 boxes fine Lake,
Boxes and hampers Medoc Claret, superior quality,
Do. Bordeaux Claret,
12 demijohns Lime Juice and Tamarind Syrup,
10 bags India Cotton,
Whole, half and qr. boxes Cigars,
9 cases French Kid and leather Gloves,
2 do. green Taffetas, for umbrellas, 1st quality,
1 do. French Crapes, No. 36, assorted colours,
1 do. low priced Fans,
2 do. Cambrics,
2 do. black and green Sewing Silk,
Silk Cloth, for vests and pantaloons,
Black Gallons, No. 1½,

Gunpowder was sold alongside household sundries. Boston Daily Advertiser, August 28, 1817. Courtesy of America's Historical Newspapers.

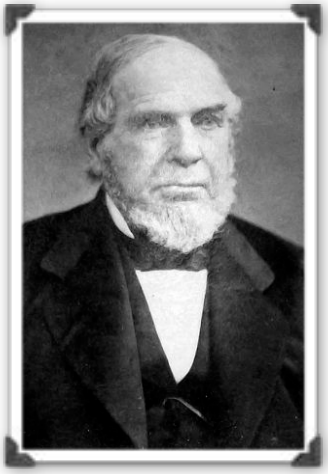
Powder-toting carts had to be covered with leather or canvas and soft material underneath to minimize friction. Boston's 1816 law required carts to be marked in capital letters "APPROVED POWDER CARRIAGE," and some sellers touted their powder carts as such. The vehicles could travel only on designated roads when transporting powder. In Cambridge, two or more carts traveling together had to maintain a specified distance between them and from any nearby dwellings.

AMMUNITION Store, No. 9, Market square, over Mr. Tho's. Holt's.
ELIJAH WITHINGTON, informs his friends and the public, that he has the care of an Ammunition Store, as Agent, where he has for sale, Gunpowder of the first quality, wholesale and retail. *Also*, Muskets and Fowling Pieces—Patent Shot of all sizes—Musket and Pistol Bullets—Buck Shot—Musket and Pistol Flints—Wires and Brushes—Powder Horns—Powder Flasks—Bird Bags and Shot Pouches—Bullets, Buck Shot and Fish Lead, cast at short notice, and Powder transported with an approved Powder Cart. Every favour suitably acknowledged. eTtf may 8.

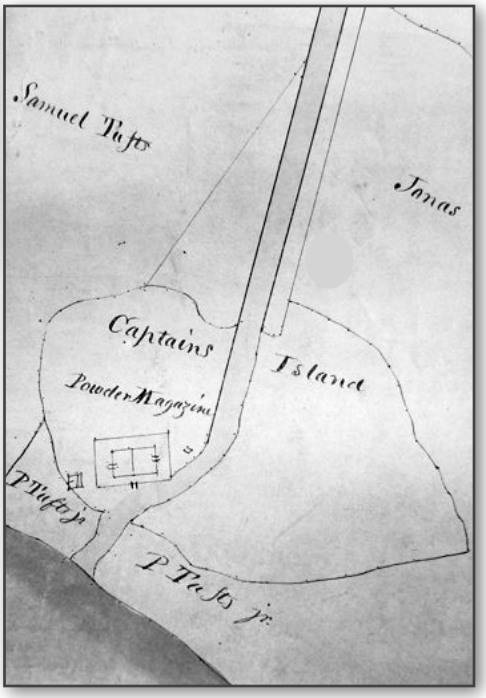
Powder was transported only in an approved powder cart. Boston Daily Advertiser, May 21, 1817. Courtesy of America's Historical Newspapers.

Captain's Island Keeper Duties Powder Storage and Delivery Fees

Peter Tufts, Jr. and his son Charles were the sole keepers of the Cambridge magazine. Peter was also a surveyor. Before moving from Charlestown to Cambridgeport to assume his duties, he surveyed and did "laying out work at" Captain's Island. Peter was appointed Keeper and Inspector of Gun-Powder on August 28, 1818. Charles became keeper on February 15, 1826, ten months after his father died. He retained the position until the magazine was decommissioned. Both were members of the Amicable Lodge of Masons in Cambridge. Peter was "a zealous member," while Charles was secretary for almost fifty years. Charles's portrait hangs on a wall at the Masonic Lodge in North Cambridge.



Charles Tufts was Captain's Island's magazine keeper for over 35 years. Courtesy of Keith MacKinnon, Amicable Lodge of Masons, Cambridge, MA.



Detail of Captain's Island from copy of Plan of Cambridgeport Parish, 1824, by Peter Tufts, Jr., surveyor and powder magazine keeper. Note that Magazine Street extended to the Powder Magazine, that a wall surrounding the magazine provided extra security, and that the keeper had a house, well or privy close by. Courtesy of Cambridge Historical Commission.

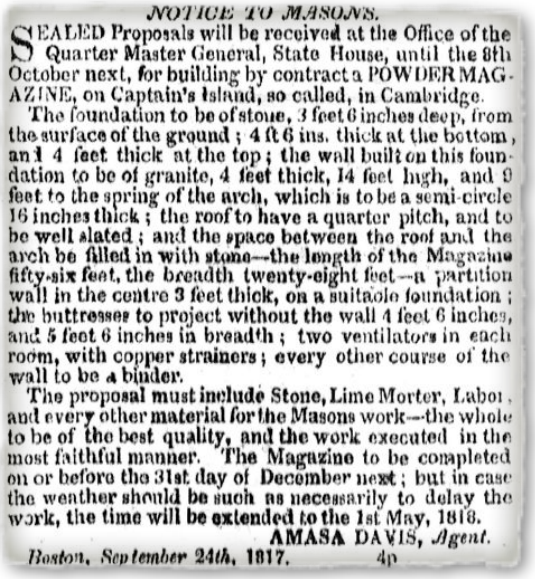
The Governor's Council passed many regulations to ensure the safety and quality of the stored gunpowder. Upon his appointment, Charles was explicitly instructed to keep track of the age of the powder and deliver the oldest first, "noting the time when, for what use, and to whom delivered." He was required to record the kind of powder and its manufacturer and to turn it upside down once a month to avoid deterioration. Charles could not substitute one person's powder for another's without their written consent. He also could not open or divide casks of powder at the magazines, nor allow any powder, including his own, to be retailed there. Entering the magazines with a lighted candle or wearing shoes with nails or steel buckles were forbidden. The keepers had to be available to perform these duties from sunrise to sunset, six days a week.

The keepers were also required to submit semiannual accounts to the Commonwealth detailing the stock of powder and fees collected. Private powder storage and delivery fees had been set in 1702, before the building of the first Boston powder house. The fees in 1801 and 1809 were twenty cents per one hundred-pound barrel on receipt; ten cents per one hundred pounds monthly for storage after the initial month; and twenty-five cents for each delivery, with lower fees for smaller casks. In 1837, the fees were lowered to encourage the storage of larger amounts of powder.

In addition to reporting on inventory, the keepers were required to take oaths and post bonds to ensure their integrity. The Committee on Military Affairs, however, reported in 1821 that the Pine Island magazine's keeper had not submitted his accounts, and that moreover, Peter had reported only annually and had not given his oath. Soon after Peter's death in 1825, the Adjutant General cited carelessness in handling the powder and casks with iron hoops and nails. He asked that the keeper report directly to the Quarter Master General, just as arsenals for the military and public laboratories did, instead of to the Governor and Council. By 1837, Charles addressed his accounts to the Adjutant/Quarter Master General.

Building Expenses

Economics were a perennial concern in Captain's Island development and operation. Though various accounts have put the magazine's cost at $6,500, its expenses actually totaled approximately $11,020. This sum included the $650 that the Commonwealth reluctantly negotiated with Francis Dana for the land. Some evidence indicates, however, that the expenses were comparable to those of other regional powder magazines. In 1818, the United States Congress allotted $15,000 for a magazine near Philadelphia and $20,000 for a much larger one in Baton Rouge.



NOTICE TO MASONS.

SEALED Proposals will be received at the Office of the Quarter Master General, State House, until the 8th October next, for building by contract a POWDER MAGAZINE, on Captain's Island, so called, in Cambridge.

The foundation to be of stone, 3 feet 6 inches deep, from the surface of the ground; 4 ft 6 ins. thick at the bottom, and 4 feet thick at the top; the wall built on this foundation to be of granite, 4 feet thick, 14 feet high, and 9 feet to the spring of the arch, which is to be a semi-circle 16 inches thick; the roof to have a quarter pitch, and to be well slated; and the space between the roof and the arch be filled in with stone—the length of the Magazine fifty-six feet, the breadth twenty-eight feet—a partition wall in the centre 3 feet thick, on a suitable foundation; the buttresses to project without the wall 4 feet 6 inches, and 5 feet 6 inches in breadth; two ventilators in each room, with copper strainers; every other course of the wall to be a binder.

The proposal must include Stone, Lime Morter, Labor, and every other material for the Masons work—the whole to be of the best quality, and the work executed in the most faithful manner. The Magazine to be completed on or before the 31st day of December next; but in case the weather should be such as necessarily to delay the work, the time will be extended to the 1st May, 1818.

AMASA DAVIS, *Agent.*

Boston, September 24th, 1817. 4p

From the Columbian Centinel, Sept. 24, 1817. Courtesy of America's Historical Newspapers.

Keeper Remuneration

If the keeper's work could be dangerous, it was also lucrative. Although the Commonwealth had passed a law in 1801 granting it the right to set keepers' wages, the state had, in fact, allowed keepers to hold onto all the collected fees as long as they used the money to make repairs. Such was the case with Peter. After the Roxbury magazine keeper died in 1824, Peter proposed that he also manage that magazine under the same arrangement. He was duly appointed as its keeper in November 1824. As keeper of the two facilities, Peter might have earned $1,200 a year in gross fees. After subtracting repairs averaging $400 per year, his net income could have been as much as $800. In that same period, farm workers only earned about $108 annually, including board; non-farm labor about $233; carpenters about $435; and workers in manufacturing jobs between $248 and $311.

As lucrative as it was, the keeper's position reflected a balancing act between public and private partnerships. The Commonwealth became afraid that the keeper might retain all the fees and refrain from doing repairs. In such a case, the state would have been responsible for making up any shortfall in funds needed for repairs, many which might have worsened from neglect.

After Peter's death, the Adjutant General and the Council – having received many applications from candidates proposing how to keep the magazines in good repair – seized the opportunity to set a flat salary. Charles Tufts was paid a fixed $700 yearly when he took over the duties at both magazines in 1826. Repairs were to be authorized separately by the Commonwealth. His salary was reduced to $400 after the Roxbury magazine closed in 1841. On January 1, 1843, a new agreement stipulated that his compensation would consist only of the fees that he charged from storing private gunpowder. He still took care of state powder and ammunition, however, and was responsible for repairs to the magazine. By 1863, Charles was reportedly leasing a portion of the magazine from the state for $150 per annum. His remuneration remained the same.

Magazine Structure and Repairs

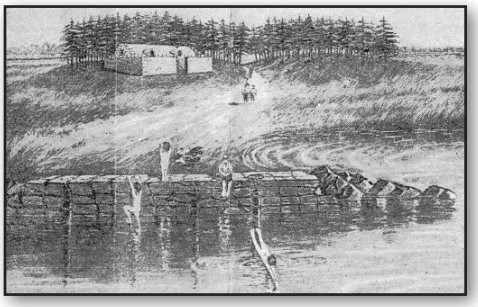
Just who produced the magazine's specifications is unknown, and no plans have been found as of this writing. However, specifications in the "Notice to Masons" for proposals to build the magazine, along with records of materials and contractors, provide some understanding of the building's exterior and interior. Paul Revere & Son supplied the copper for the powder magazine, as they did for many other state structures. The building apparently had glass windows, as two entries appeared for setting glass, and later, for mending a sash. A painted carpet, characteristic of the period, covered the floor. A small house was built near the magazine, probably for the keeper. Arsonists burned it down in 1855. In addition, a well was dug and a stone and wood wharf constructed.

Several extant accounts document the magazine's deterioration. In 1863, the state reported that:

> ….The wall surrounding the magazine is much decayed…. The copper covering of one of the doors has been stripped off. One of the lightning rods has fallen and large trees have grown up and now overhang the building…

Ruins of the powder magazine in the 1890's. From the Old Cambridge Photographic Club Collection. Courtesy of Cambridge Historical Society.

In that year the Master of Ordnance also reported boys climbing up the magazine walls and throwing rocks at the roof. In 1923, a newspaper feature described the roof's collapse fifty years earlier. A group of small boys had broken down the door and – at first awed and then galvanized by opportunity – extracted the copper nails securing the arched roof, floor, and woodwork to sell for scrap. The feature's writer, thirteen years old in 1880, had been one of the marauders.



Drawing of the powder magazine and the wharf just south of it. Originally published in The Boston Sunday Post, May 20, 1923, with a reminiscence about the vandalism of the magazine by young boys. This drawing is by one of those boys. Courtesy of Historic New England.

An 1890 newspaper reported that the walls were standing in good condition, and that the magazine:

> …for the last dozen years has gradually become defaced by boys, but this year it has been nearly demolished…" and the brick wall had "been torn down and the bricks used for building….

The Civil War Era

For one or possibly two brief periods during the Civil War, the state moved a supply of gunpowder from the magazine to the Cambridge Arsenal on Garden Street, where it was guarded by Harvard cadets. The magazine itself was guarded round-the-clock by the Independent Corps of Cadets. A guard duty report from May 24, 1861 noted that the Governor and Quarter Master General visited Captain's Island to examine the magazine and cadet quarters.

Around this time, residential development was reaching towards the river. In 1863, Cambridgeport and some Longwood area residents submitted three separate petitions to the Commonwealth requesting the magazine's closure, citing the danger to nearby homes. A few months later, the Commonwealth determined the fate of the magazine in a single resolve: it prohibited public powder from being kept at the magazine; authorized necessary repairs to the structure and surrounding wall; resolved to ascertain the building and land's value for sale; and find a site for a new magazine.

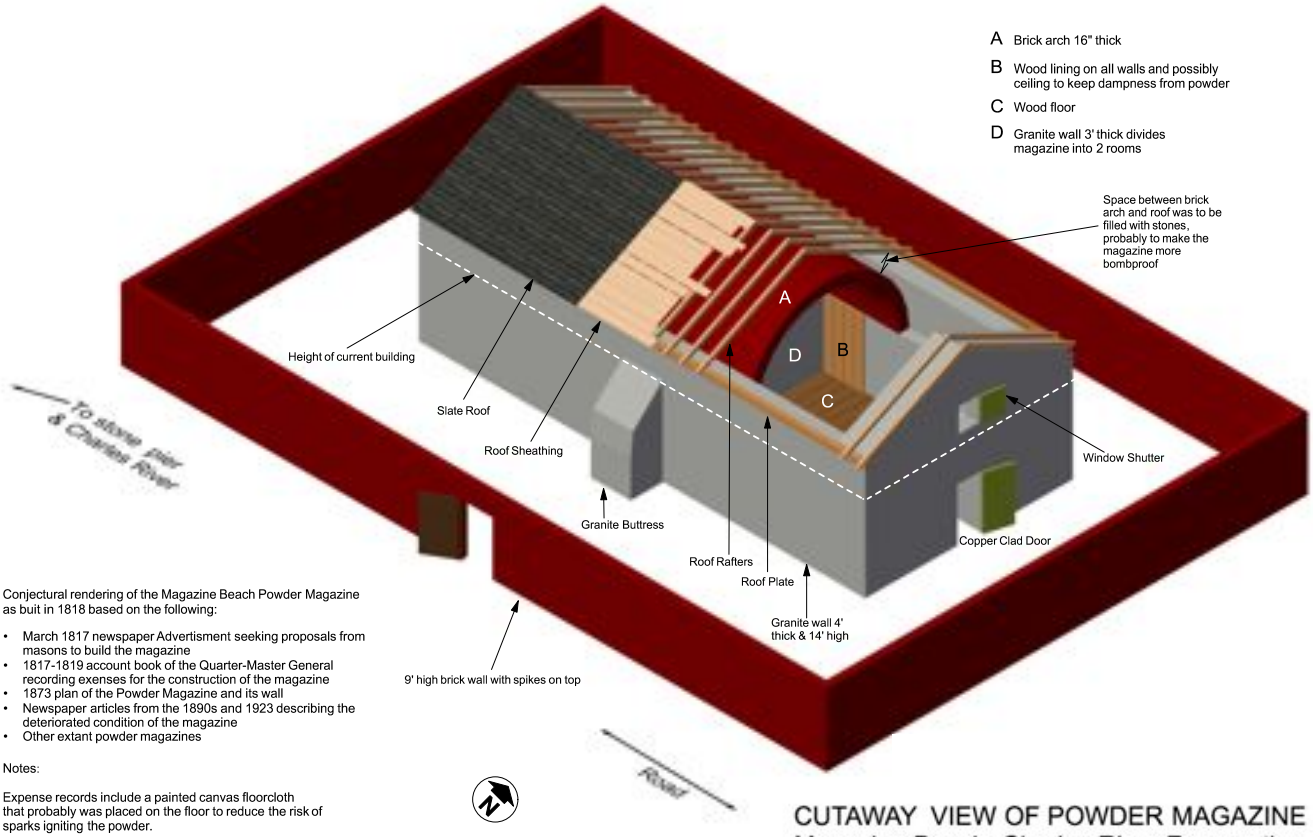
Though it is uncertain if the repairs were made, a new magazine was never built. Shortly after, the Cambridge City Council referred a powder dealer's application to sell and store powder in Cambridge to the Fire Department. No records have been found of the outcome. The state, however, continued to keep ammunition at the magazine through the end of the decade, and passed a resolve to sell the structure in 1871. They sold it to a private individual in 1882.

After the Civil War

In the course of the nineteenth century, the magazine's value for storage of both state and private powder declined. Firearms had become more efficient, reducing demand for powder. The magazine stored powder for the Massachusetts militia, not federal forces. The state's military need, except for training, diminished: the War of 1812 had decided the Massachusetts border with Canada even before the magazine's construction. All of the battles in the Mexican and Civil Wars were far from Boston and fought by the U.S. Army, supplied by federal magazines. Similarly, the U.S. Navy defended the coast, and the British ruled the seas. Privateers, including New England's, were outlawed and pirates defeated, so merchant ships no longer needed to be armed. Private military demand disappeared.

After the war, industrialization and urbanization accelerated, drastically changing the countryside and river. Growing cities in the Charles River watershed filled in the marshes and cleared more woods for homes and factories, built more mills and milldams, more bridges for roads and railroads, and coal- and gas-fired plants. Habitat disappeared, and demand for powder for hunting dropped accordingly. The magazine did not accept private powder after 1863.

An 1866 map shows the river on the cusp of its transformation. The "Old Fort" toward Watertown is still visible, upriver from Gerry's Landing. Most of today's bridges are shown, as are the former Cambridge Gas Works at the foot of Ash Street and The Riverside Press between Western Avenue and River Street.



Conjectural rendering of the Magazine Beach Powder Magazine as buit in 1818 based on the following:

- March 1817 newspaper Advertisment seeking proposals from masons to build the magazine
- 1817-1819 account book of the Quarter-Master General recording exenses for the construction of the magazine
- 1873 plan of the Powder Magazine and its wall
- Newspaper articles from the 1890s and 1923 describing the deteriorated condition of the magazine
- Other extant powder magazines

Notes:

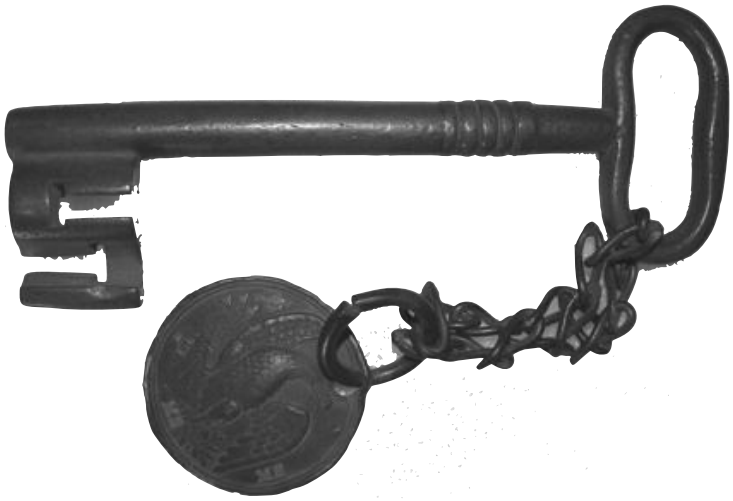
Expense records include a painted canvas floorcloth that probably was placed on the floor to reduce the risk of sparks igniting the powder.

Placement of window is based on other magazines.

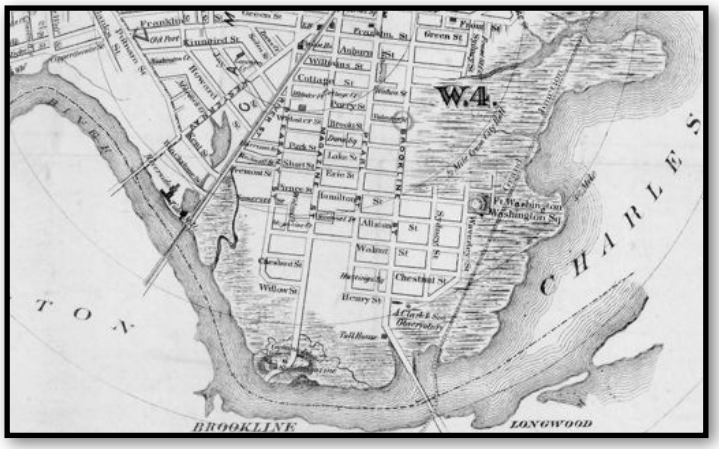
A similar door and window was present at the other end of the magazine.

CUTAWAY VIEW OF POWDER MAGAZINE
Magazine Beach, Charles River Reservation
Cambridgeport, Massachusetts

Prepared by: Finch & Rose Preservation Consulatants / Clark & Green Architecture
for the Massachusetts Department of Conservation and Recreation
March, 2013



Key to powder magazine. Courtesy of Commonwealth of Massachusetts Art Commission.



Cambridgeport and the Captain's Island in 1866. The powder magazine's wharf, main structure, and outbuildings are shown in some detail. "Map of Cambridge, Mass," prepared by W. A. Mason, Surveyor; published by Dean Dudley, Boston, 1866.

With such major changes in the landscape and some fears about the urban working class, the need to preserve or create open space for public use became glaringly obvious. Private clubs and enterprises organized outdoor recreation, and cities moved to create public parks.

Riverside's 1894 National Champion Intermediate Eight Crew. Photo courtesy of the Riverside Boat Club.

Industries on the Charles included the Riverside Press in Cambridge, whose Irish-immigrant workers founded the Riverside Boat Club in 1869. Rowers from the club won the National Championship for quads in 1913. Press owner Henry Houghton allowed the club to use a building on the property. In 1891 the club moved to its own boathouse on land next to the Press. In 1912 it moved again, to its present site just upriver from Captain's Island, on what were mud flats.

Across the river in Allston, speculators built a trotting track in 1864. It reached the height of popularity in the 1880s—at which time the site was sold to owners of the Grand Junction line and became the Beacon Park Yards. These freight yards (closed in 2013) served many industries, including the Brookline Gas Company, whose gas storage tanks are visible in this 1906 photo.

Bathers at Magazine Beach, 1906. Note the wharf, plant, and gas holders of the Brookline Gas Co., with the River Street Bridge on the extreme right. Coal was brought in by barge and heated in sealed retorts to drive off the gas. The gas was stored in the iron tanks. Description courtesy of Charles Sullivan. Photo, gift of Walter L. Colburn. Courtesy of Cambridge Historical Commission.

As early as 1850, the Brookline draw-bridge, predecessor of the BU Bridge (1929), crossed the river within view of Captain's Island. By 1876, that view included the Grand Junction rail line on the southern shore and, ten years later, the rail's bridge that passed under the drawbridge. This bridge is still used for commercial rail traffic and by the MBTA. Which work obliterated remains of the Old Fort in Brookline is not known. The neglected and vandalized powder magazine fell into ruin.

Urban Parks

By the end of the nineteenth century, tides could no longer move waste from slaughterhouses, factories, and urban populations through the dammed and constricted Charles River to Boston Harbor. The river had become, in the words of a Riverside oarsman quoted by Richard Garver and Kate Sullivan, a "dark, dank ditch."

Increasingly after the Civil War, revulsion at urban conditions and a need for pleasant vistas and good air inspired the urban parks movement. Pioneer landscape architect Charles Eliot (1859-1897) is the father of the Charles River Reservation. He was, as described by historian Keith N. Morgan, a "landscape flâneur, a constant but attentive wanderer, and a connoisseur of landscape forms." Eliot imagined the river transformed for the benefit of all and understood how to achieve it. When he joined Frederick Law Olmsted to create the firm of Olmsted, Olmsted & Eliot, he brought his plans with him, but did not live to see their realization in the twentieth century.

In Massachusetts, prosperity following the Union victory and the region's industrial-ization allowed the creation of a re-formed landscape along the Charles. This new park provided rambles along the shore and in fields and copses—bits of a much-tamed wild—and promenades, and lookouts with views across the river's sheet of water—and modern facilities for bathing in it. In Cambridge, this led first to the creation of Magazine Beach and the decayed magazine's conversion to a bath house.

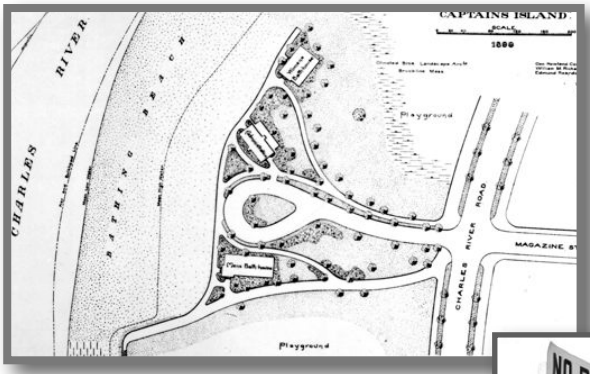
Captain's Island bathing beach, "Views in Cambridge, Massachusetts," 1902. Courtesy of the Cambridge Historical Commission.

Conversion to Bath House

Captain's Island had been a swimming spot for some time before becoming a municipal beach. A bather had perished in 1851. Later – but before the beach opened – a "small floating bath" for swimming was set in the river. Fire destroyed it in April of 1899. Captain's Island was also, for better or worse, a public gathering place. The 1863 Resolve to remove the magazine, for example, cited "convivial boating parties" disembarking on the Island, and an 1865 newspaper article recommended it as a walking destination, but for the presence of rowdies.

Though the City of Cambridge considered buying Captain's Island as early as 1863, it was not until 1889 that the city was ready to act. A hearing had been held that year to consider the petition of a local resident, who advocated for "park and play grounds for the young," citing the new water park on the Boston side of the Charles as an example. Cambridge took the land by eminent domain in January 1894 for a public park – part of the taking the entire riverfront from Craigie Bridge to Gerry's Landing. The City then engaged the Olmsted Brothers to draw up plans for landscaping and a new bath house.

Guided by the Olmsted plan, the City first filled in the marsh surrounding the island and graded the beach. They also removed the old granite wharf and cut the landing down to the grade of the beach.



Detail from drawing, Charles River Parkway, Section D, 1899, City of Cambridge, Park Commission. Drawn by the Olmsted Brothers. The only part implemented was site grading and the conversion of the magazine shell into a bathhouse.

The City deemed the Olmsteds' $30,000 1899 plan for the new bath house too expensive that same year. Instead, it authorized the firm to design a plan to convert the magazine into a bath house for men and boys at a cost of $1,500. The City removed parts of the two upper courses of masonry, put windows in, took out the partition, enlarged the entrances, installed a shingle hip roof and hard pine floors, and built one hundred thirty-six lockers, also of pine. Two iron voting booths accommodated women and girls. Other beach amenities included arc lights in the river for light, an iron diving board, and a bath house telephone. Electric streetcars on Pearl Street carried bathers to the beach. In 1900 the City installed a drinking fountain and a retaining wall and steps in front of the bath house. In 1901, two "shower baths" were set up at the magazine.

The city spent $3000 to renovate the "Stone House" in 1918. Renovations consisted of "new toilets, shower baths and locker…," and included construction of additional changing rooms nearby. In 1921 the city conveyed the entire Charles River park system to the Metropolitan District Commission. The MDC permanently closed the Charles River to swimming at the beginning of the 1949 season because of pollution. By then, sewage from all sources in the watershed had overwhelmed whatever ability the 1910 dam had to flush it out when the dam was opened. And the harbor itself was polluted. In 1954, the Commission renovated the stone bath house into a garage and office, which gradually fell into disuse.

In 1949 all Charles River beaches were closed for swimming. Courtesy of the Boston Globe Library

Conclusion

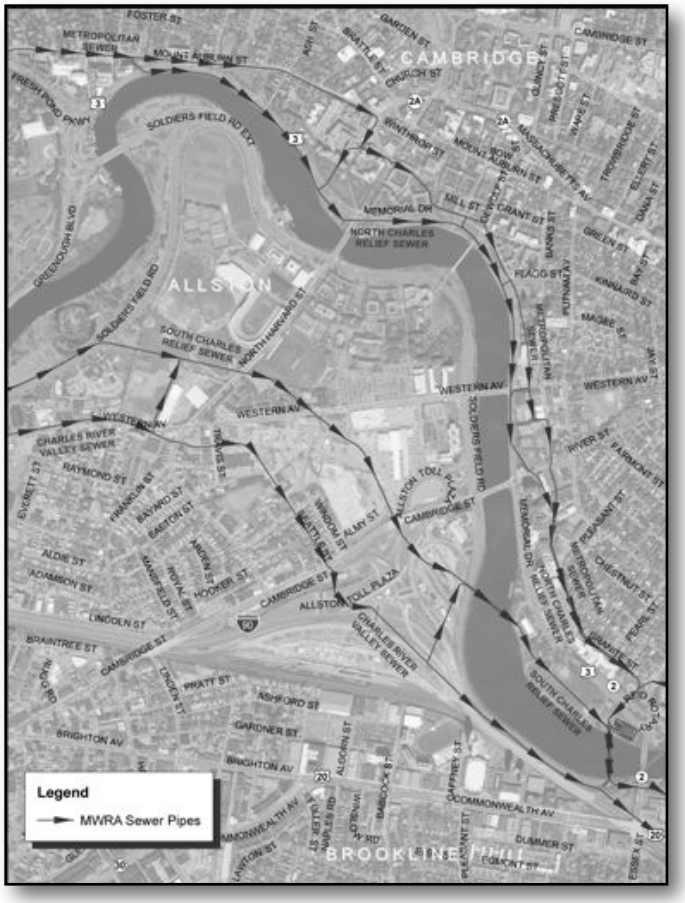
The urban parks movement inspired creation of the Charles River Reservation. It aimed to preserve the riverfront and bordering lands so that city dwellers could restore their minds and bodies. While pressures that led to its creation remain, it has largely succeeded. “Pleasure craft” have replaced commercial vessels. The rail line and bridge, the elevated extension of the Massachusetts Turnpike, and Storrow and Memorial Drives (“for pleasure vehicles only”) can seem pleasantly distant when standing on Captain’s Island.

The movement’s success can also be seen in the city dwellers’ defense of their homes and this park in 1972, when protestors forced the cancellation of the planned interstate highway, the Inner Belt, I-695. It would have crossed the river in a vast interchange here and connected the Turnpike with I-95, destroying Magazine Beach park and every neighborhood in its path. A nearby mural commemorates the victory.

This mural, across from Magazine Beach (at 727 Memorial Drive), celebrates Cambridgeport citizens' mobilization and victory over government plans to build an interstate through the neighborhood. “Beat the Belt,” by Bernard LaCasse, 1980. Photo by Mary Holbrow.

Pollution closed the river to swimming. It has taken a federal court order to force compliance with the Clean Water Act of 1972, establishment of the Massachusetts Water Resources Authority in 1985, and $200 million from rate payers to return the river to a semblance of health. But it has been done.

Storm water and sanitary sewers in the watershed are now separated. At Magazine Beach, waste from south of the Charles crosses, under the river, in two 60” pipes. Underground, between the river and the DCR swimming pool, they join the pipe from the north.



A hidden massive sewer system underpins the Charles River Reservation, allowing realization of Charles Eliot’s vision. "MWRA Map 1 Overview," September, 2012. Courtesy of the Massachusetts Water Resources Authority.

From there, an enormous, 7’ 4” x 9’ 9” pipe takes it under the fields at Magazine Beach to the MWRA’s Cottage Farm plant abutting the BU Bridge. And from that point the sewage is pumped under the river and out to Deer Island in Boston harbor, where it is treated and the effluent discharged by a deep pipe extending 9.5 miles into Massachusetts Bay.

Even in the magazine’s twilight and demise, and as the river was polluted and then cleaned, people sought out Captain’s Island, singly or in groups. Like others before them, they wanted air and views of river and sky, sightings of plants and animals, and those convivial parties. No longer an island, this has officially been a public space for recreation continuously since 1894. It has provided refreshment and re-creation of the spirit through contact with the natural world. Its perspective remains critically important. It is time now to revive the magazine and the island once again.