

# **Merrimack River Bridges at Deer Island**

by Mike Harrold Industrial Survey Volunteer

Amesbury Carriage Museum Amesbury, MA

November 21, 2017

# Merrimack River Bridges at Deer Island featuring Amesbury-side bridges



Courtesy of Amesbury Carriage Museum Amesbury Public Library Location History Collection, Stereoviews



# Merrimack River Bridges at Deer Island

#### Photos from Amesbury Public Library Location History Collection, Stereoviews

The following shows stereopticon card photos of Deer Island bridges, both the chain bridge (1810-1909) from Deer Island to Newburyport, and the first two bridges built on the Amesbury side of the island. (The current Hines bridge dates from 2012.) Only a single photo is shown, rather than the stereopticon pair, since the purpose is to best present photo content and information. Later, non-stereopticon photos are also shown in order to present the succession of more modern bridges at this location.

Stereopticon cards were produced primarily during the 1880s (perhaps 1875-1895), which is reasonably supported by this grouping. A convenient dating point is the 1883 construction of an iron truss bridge to replace the original wood arch bridge on the Amesbury side of the island, that event being prominently represented in these photos. In fact, this series provides a most extensive and informative look at this group of bridges and their juxtaposition, this group being much less frequently photographed than the chain bridge and consequently much less familiar to us. Those photos will consequently be explored first, preceded by some scene-setting vistas that show how the Deer Island bridges are arranged. A prominent feature in getting oriented is Timothy Palmer's wood arch bridge (replaced in 1883), shown in a more common photo on the next page. That bridge can then be easily located in the vista on the following page, followed again by a second similar vista that shows the 1883 iron truss bridge.

Previous page, copper plate etching of Deer Island bridges by pioneer American etching artist, Dr. Leroy M. Yale Jr. of New York, dated August 25, 1882. From online listing by Rona Schneider Fine Prints



### Timothy Palmer's Wood Arch Bridge at Deer Island. Ca. 1875

Palmer built this bridge in 1792, then covered and shingled it in 1808. Here, looking from the Amesbury side toward Spofford House on the island. The lift bridge is just this side of the covered arch, its two hinged lift sections peaked where they meet in the middle. Bridge piers in the river are wood cribs filled with granite blocks.



Photo from: Structure (Magazine), Dr. Frank Griggs, June, 2013

### Vista from Above the Old Newburyport Water Works, ca. 1880

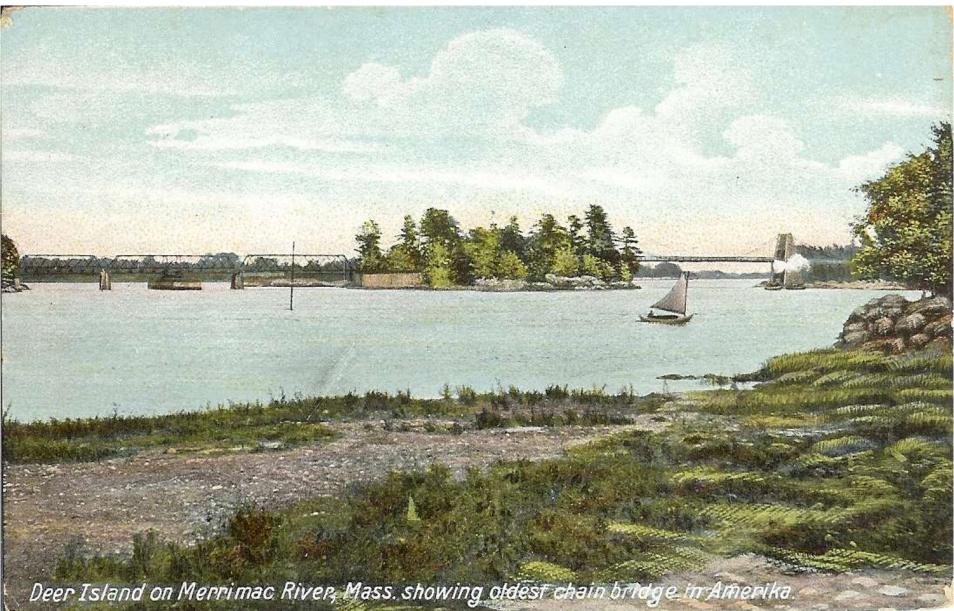


Period postcard

Looking downstream (east) with chain bridge right of Deer Island, on the Newburyport side. Left of the island is Timothy Palmer's covered wood arch bridge, which connects to the lift bridge on the Amesbury side



#### Shore Vista of New Iron Truss Swing Bridge, ca. 1890 new iron truss bridge left of island, with center span rotating atop a center support pier



Period postcard

#### The Road Across Deer Island, Between Bridges

Looking toward Newburyport at the chain bridge, from the center of Deer Island, it can be seen that the road curves sharply around Spofford House, rather than going straight across the island in its current configuration.

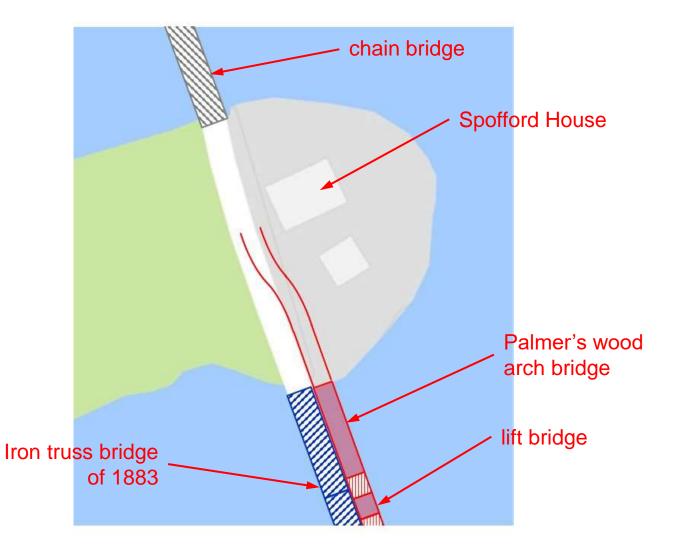


Courtesy Amesbury Public Library Location History Collection, Stereoviews

No attribution for this card

#### The Road Across Deer Island, Between Bridges

During the period of Timothy Palmer's wood arch bridge on the Amesbury side of the island, the road curved around Spofford House then straightened into the wood arch bridge. When that bridge was replaced, the new iron bridge was located beside the old bridge, on new stone piers, so that bridge service and horse trolley service were not interrupted.



### Timothy Palmer's Wood Arch Bridge at Deer Island. Ca. 1875

Similar to the previous photo of the covered arch, except that more of the near stationary bridge can be seen, which is the raised wood truss visible at far right. The lift bridge is in between.

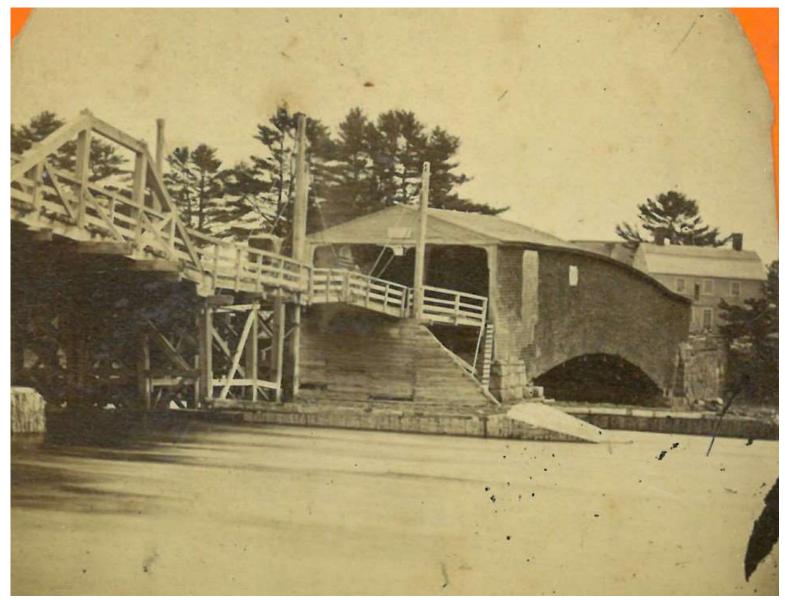


Courtesy Amesbury Public Library Location History Collection, Stereoviews

No attribution for this card

### Timothy Palmer's Wood Arch Bridge at Deer Island. Ca. 1875

Very much like the previous photo, except the other (upstream) side of the bridge.



Courtesy Amesbury Public Library Location History Collection, Stereoviews

Written on card: Photographed by H.P. Macintosh

## The Lift Section & Two Wood Truss Spans Over to Amesbury

Looking from covered arch to Amesbury shore. The two lift sections are immediately in front, with darker hinge lines crossing the roadway, and peaked center where lift sections meet. Rails for horse drawn trolleys run down both sides of roadway. The wood center truss is two trusses (two bridges) side-by-side. Toll house at right of road

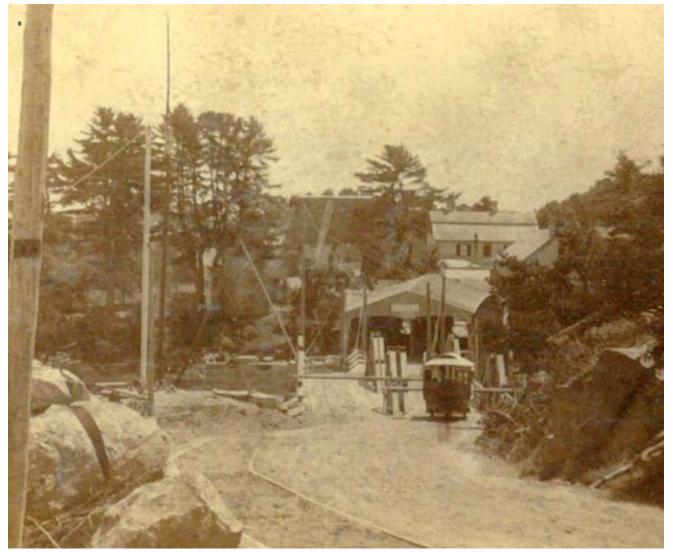


No attribution for this card

Courtesy Amesbury Public Library Location History Collection, Stereoviews

### Looking from Amesbury Shore Toward Spofford House, ca. 1880

A horse trolley is seen approaching the tollgate, facing the two wood truss stationary spans and Palmer's covered arch behind. The chain bridge tower is seen, left of Spofford House, and the covered arch bridge is clearly offset right of the current straight road.



Courtesy Amesbury Public Library Location History Collection, Stereoviews

Image attributed to F. W. Fowler

## Construction of the New Amesbury Side Granite Pier, ca. 1883

Looking from Deer Island to a small schooner delivering granite blocks (likely from Cape Ann) for the new granite pier on the Amesbury shore. Far left is the end of the old bridge. Its granite pier remains there today, abuting the new pier, but is in a seldom viewed location

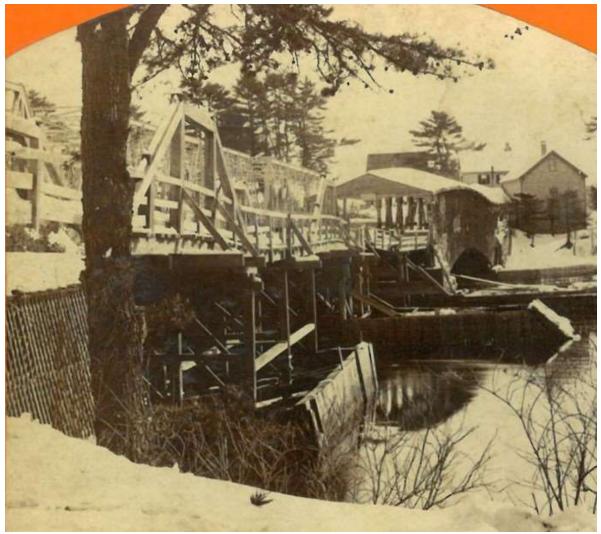


Courtesy Amesbury Public Library Location History Collection, Stereoviews

No attribution for this card

#### Looking from Amesbury Shore Toward Spofford House, ca. 1883

Looking toward Spofford house, past Palmer's covered arch. Some shingles and siding have been removed from the covered bridge, the beginning of its dismantling. Seen inside the covered bridge is a middle wood truss that divides the bridge into separate roadways. Tops of new iron trusses can just be seen left of the wood roadway.



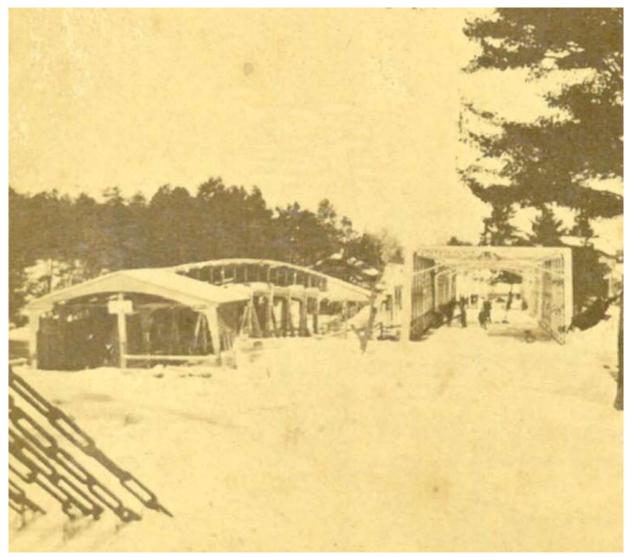
Courtesy Amesbury Public Library Location History Collection, Stereoviews

Image attributed to F. W. Fowler

## Looking from Deer Island Toward Amesbury Shore, ca. 1883

Looking from the center of Deer Island, in the left foreground are the six center chains of the chain bridge. The wood arch bridge is partially dismantled, and again visible is the center truss down the inside of the bridge. We are looking straight down through the new iron trusses.

Written on card: The "Best" Series Amesbury & Vicinity – New and old wooden bridge at Deer Island



Courtesy Amesbury Public Library Location History Collection, Stereoviews

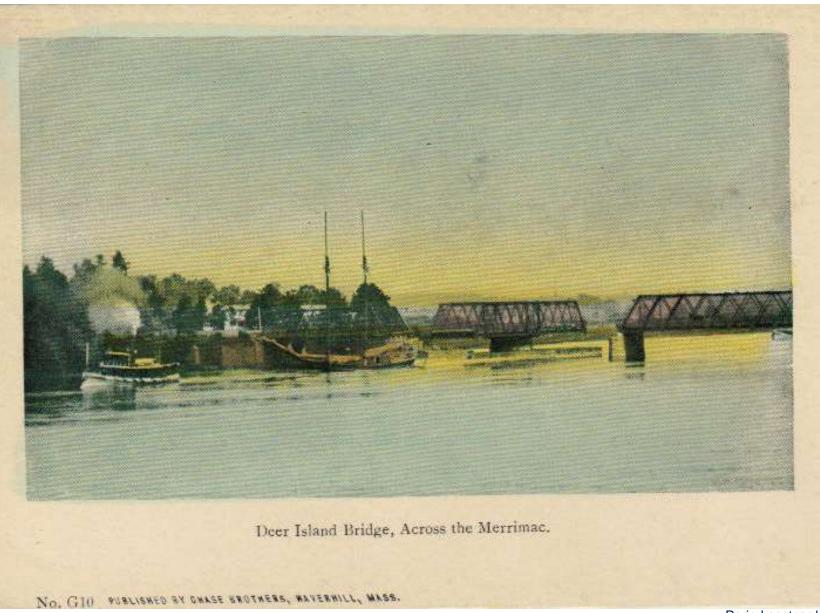
### Looking from Deer Island Toward Amesbury Shore, ca. 1883

Looking along the three new iron trusses and their granite piers. Remnants of the wood arch are just visible left of the first iron truss.

Courtesy Amesbury Public Library Location History Collection, Stereoviews

Written on card: The "Best" Series Amesbury & Vicinity – New iron bridge at Deer Island – Killiam Publisher

### New Iron Bridge with Swing Section Open for Boat Passage



Period postcard

### 1965 Fire of the Wood Deck on the Deer Island Iron Truss Bridge

The wood plank roadway caught fire and burned extensively in July of 1965, damaging the structural integrity of the ironwork..



Courtesy of Crazy as a Cool Fox - blogger

#### 1966 Deer Island Replacement Bridge

After the 1965 truss bridge deck fire, a replacement I-beam and concrete bridge was built on existing piers. It again had a center swing section, which was hand-cranked until being electrified in the 1980s. There were road gates next to the stop lights, the former swinging out across auto traffic lanes when the bridge was swung open for boat passage.



Courtesy of Mass.Gov Blog

#### 1966 Deer Island Hines Memorial Bridge

In 2006, the bridge was named in honor of Newburyport native and West Point graduate, Lt. Derek S. Hines, killed in Afghanistan on Sept. 1, 2005. In November, 2008, the swing section was knocked out of alignment by a barge carrying three National Grid transformers to Amesbury. Although temporarily re-opened, the bridge closed 2010-2012 for total rebuilding.



Courtesy of Crazy as a Cool Fox - blogger



#### 2012 Deer Island Replacement Bridge

The current Hines Memorial Bridge opened in August, 2012, when Steven and Sue Hines were the first to drive across. It is powered by dual electric motors and gears, for which there were some initial alignment and load-sharing control issues. There are vertical-lift road gates that reside on concrete outrigger pads, one seen at the far end, below which is the old granite block pier for the original 1792 bridge.

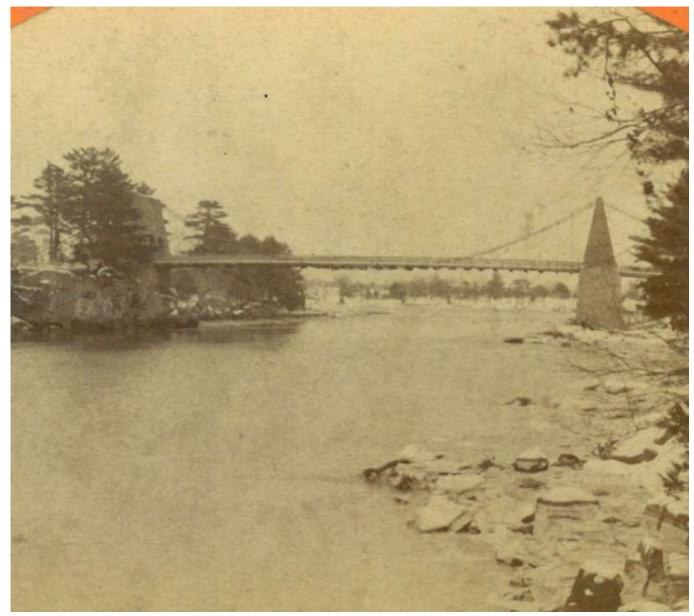


Courtesy of Mike Harrold

# The Chain Bridge

Stereopticon card images courtesy of Amesbury Public Library Location History Collection, Stereoviews

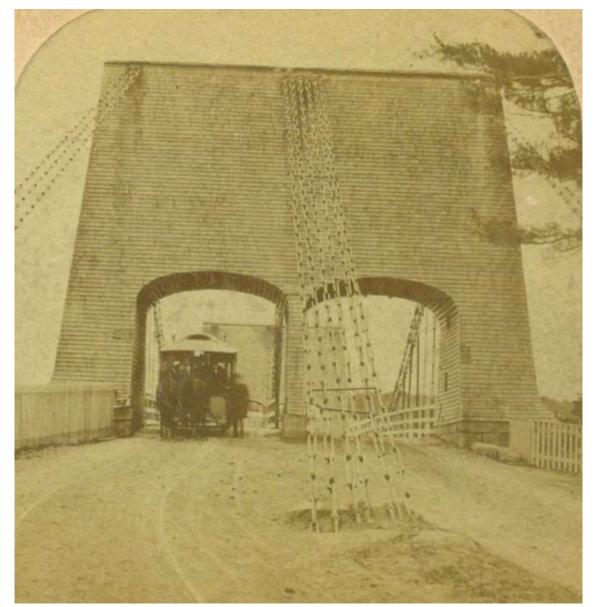
### Classic View Looking Downstream (East), ca. 1885



Courtesy Amesbury Public Library Location History Collection, Stereoviews

No attribution for this card

#### Looking Toward Newburyport from Deer Island ca. 1885 A two-horse trolley approaches Deer Island



Courtesy Amesbury Public Library Location History Collection, Stereoviews

Written on card: S. C. Reed, Artist. No. 4 Pleasant St, Newburyport, Mass.

#### Looking Upstream Along Deer Island Shore, ca. 1885 A Deer Island fisherman at low tide



Courtesy Amesbury Public Library Location History Collection, Stereoviews

Written on card: S. C. Reed, Artist. No. 4 Pleasant Street, Newburyport

# Looking From Deer Island Toward Newburyport, ca. 1885

The Newburyport pier at very low tide, and wood road span from pier to shore

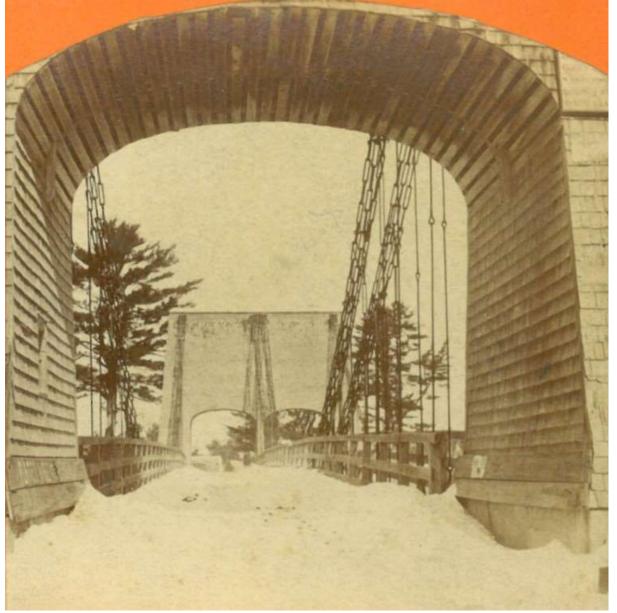


Courtesy Amesbury Public Library Location History Collection, Stereoviews

Written on card: Reed, Artist. Charter St, Newburyport, Mass.

## Looking Toward Deer Island From Newburyport, ca. 1885

The wood-lined and shingled archway, and hanger rods supporting roadway from the chains



Courtesy Amesbury Public Library Location History Collection, Stereoviews

Written on card: Photographed by F. W. Fowler – Salisbury, Mass.

## Looking Toward Deer Island From Newburyport, ca. 1885

Stone well in foreground at what is now #1 Spofford St.



Courtesy Amesbury Public Library Location History Collection, Stereoviews

No attribution for this card