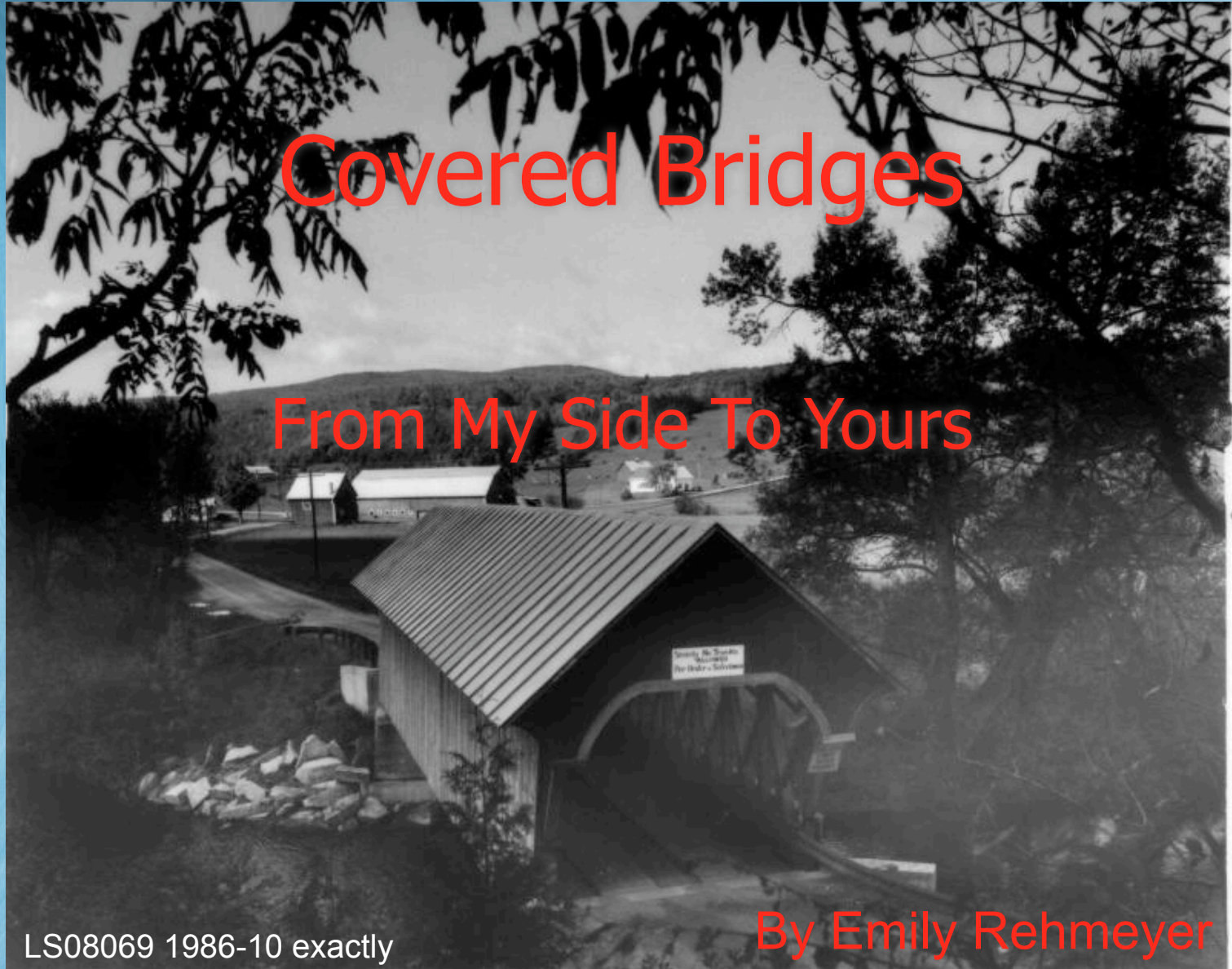


Covered Bridges

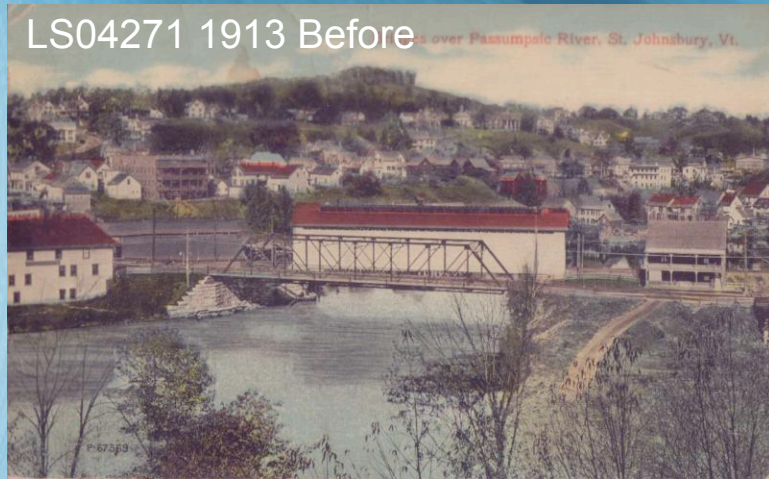
From My Side To Yours

LS08069 1986-10 exactly

By Emily Rehmeyer



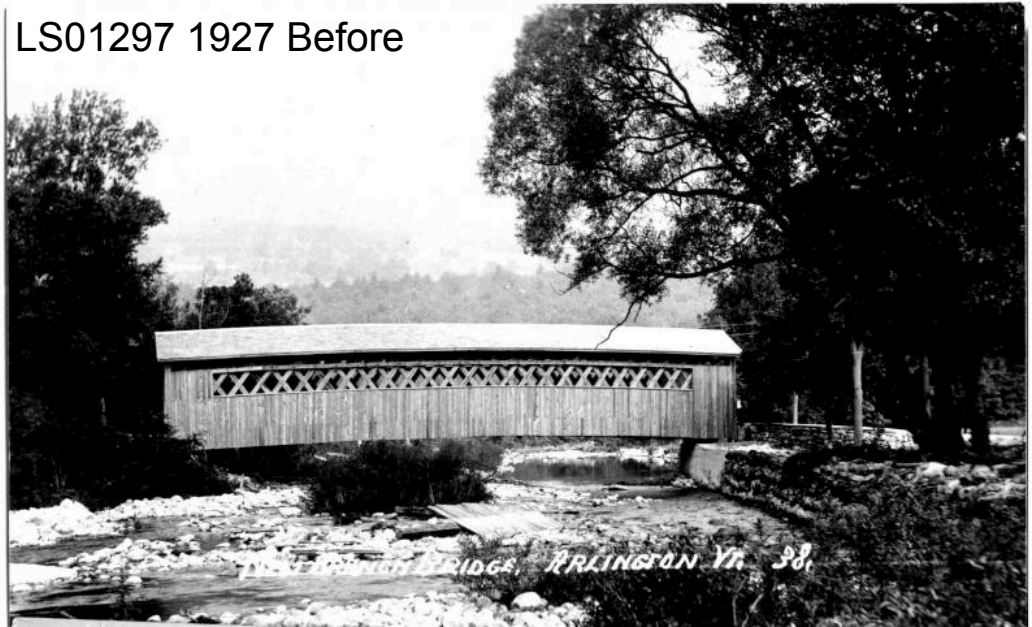
Understanding Old Photos



From this picture, we can gather a lot of information like how the river used to look, the type of bridge, etc.

Old postcards can tell us a lot about how Vermont used to look.

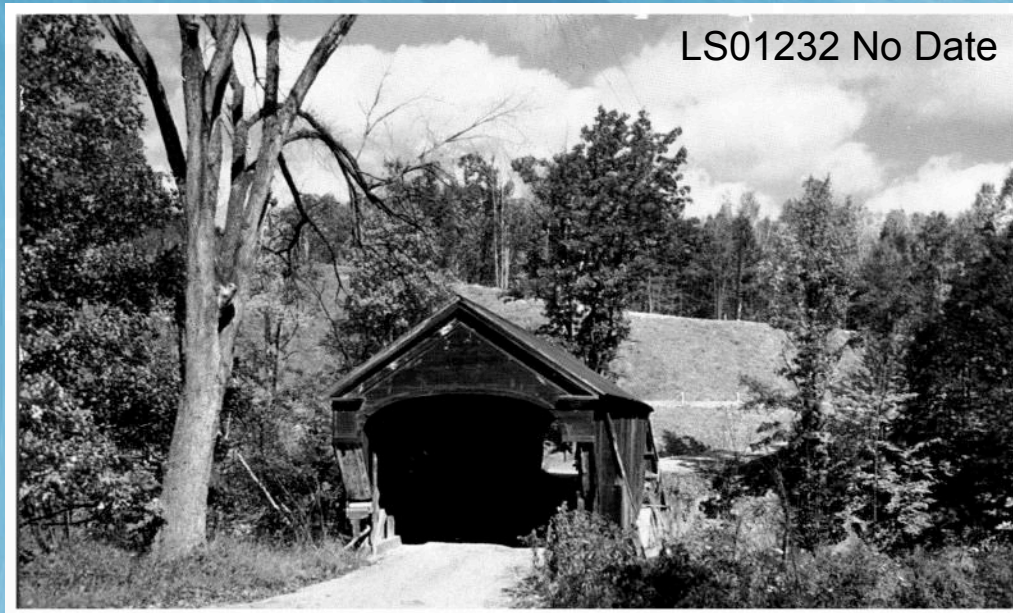
LS01297 1927 Before



And remember, just because a photo is old, doesn't make it any less interesting than a new one!

Why bother covering a bridge?

Covered bridges are made mostly out of wood. When wood gets wet and then dries, and gets wet again, etc., it speeds up the process of deterioration.



A timber bridge exposed to these conditions will be lucky to function for 10 years. Thus, the only purpose for covering a bridge is **to protect the wood structure underneath.**

Uses

LS04027 1900 Before



Covered bridges were used mainly for **river crossings**.

They were used by both the **railroad** and in the **road system**.

LS07303 1901-05 exactly



Who used them?

People would walk across, ride **horses** across, drive horse-drawn **wagons** and **carts**...



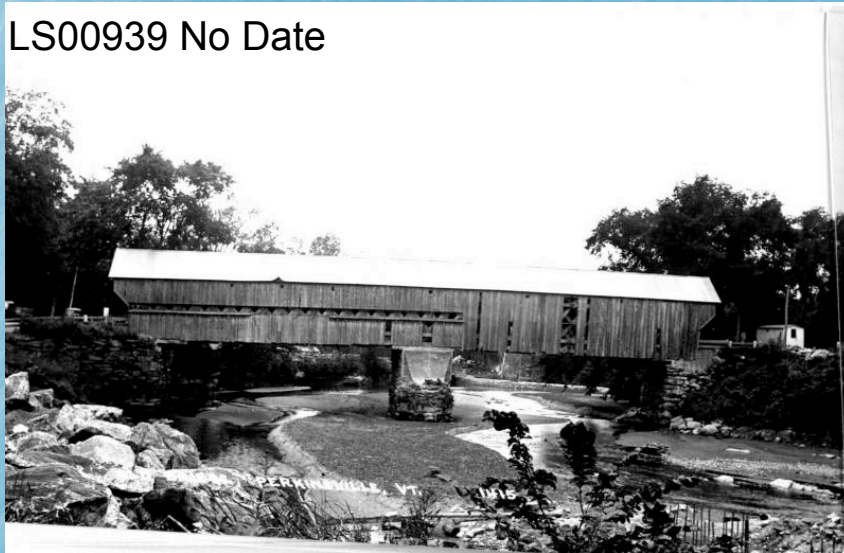
and once **cars** were invented, they used covered bridges too!

Length

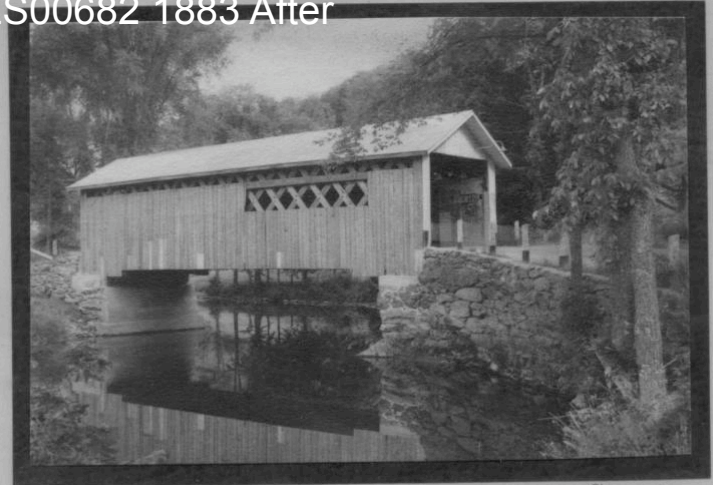
There are two types of length - **single-span** and **multiple-span**.

Single-span means that the bridge stretches from one side to the other without any supports in the river bed.

LS00939 No Date



LS00682 1883 After



Old Montgomery Bridge

Paul J. ...

Multiple-span uses one or more supports in the river bed. This particular photo shows a “double-span.”

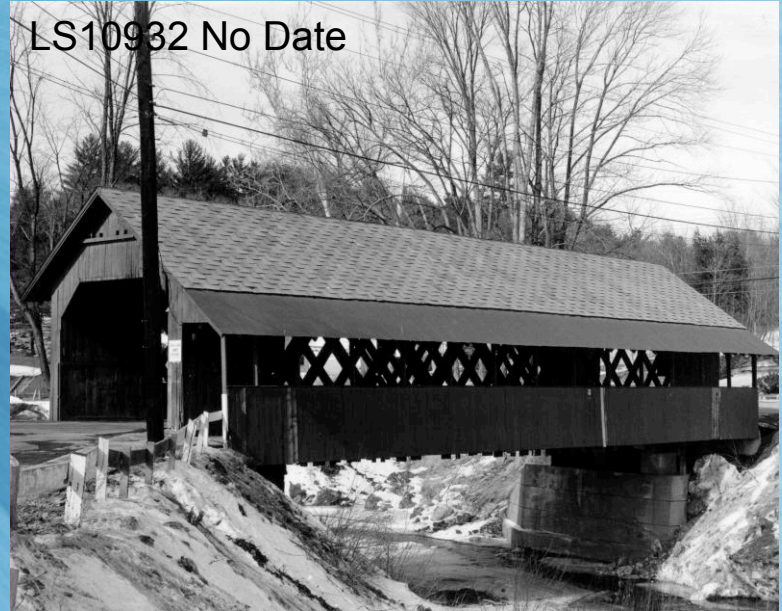
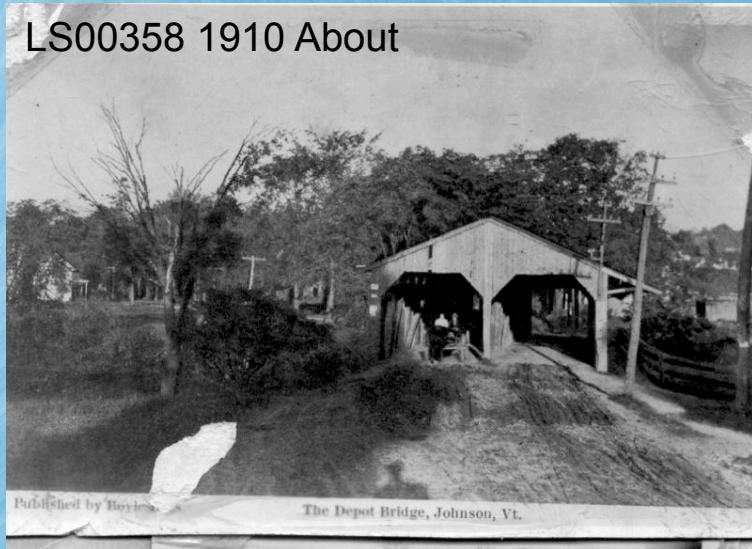
Width

The width of covered bridges ranges from **one lane**, **one lane with walkway**, and **two lane**.

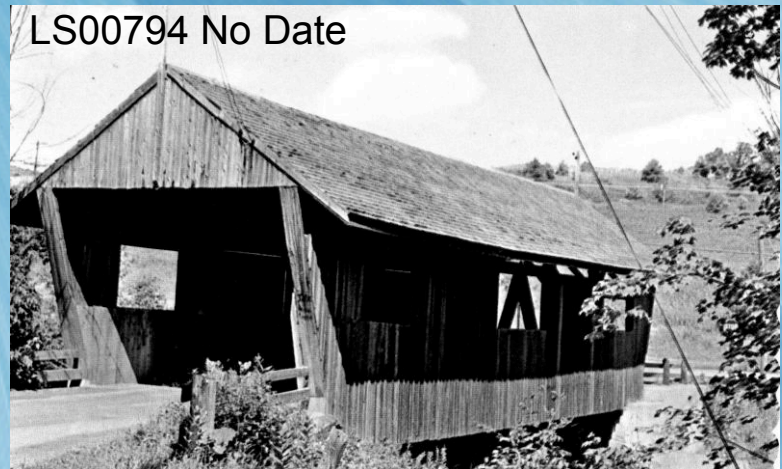
One Lane with Walkway

Two Lane

LS00358 1910 About



One Lane



Trusses

A “**truss**” is the framework that supports a bridge.



In this photo, the **truss** is all the crisscrossing and upright pieces of wood on the sides of the bridge. This particular truss is called a **Plank-lattice** truss.

Truss Identification

Before looking at the different types, it's important to note that you can't always tell what truss type a bridge has just from looking at images.

LS01013 1907-02-19 Before



We know that the bridge in this image is a covered bridge, but it's impossible to tell what kind of truss was used here.

There is a reason they are called "covered" bridges after all!

Truss Size

LS01057 1862 Exactly



The type of truss that gets used depends on how long the bridge must be.

Therefore, we can divide trusses into two categories- **short span trusses** and **long span trusses**. Note, however that long span trusses can also be used for short spans, though not vice versus.

Short Span Trusses

The short span trusses include the **Kingpost** and **Queenpost** varieties.



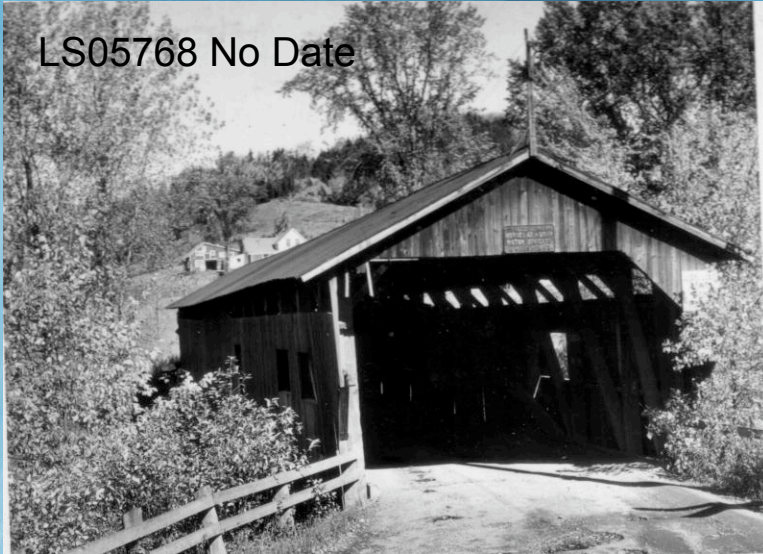
The **Kingpost** truss is identified by having one main upright post.



The **Queenpost** truss is the next step up. It has two main upright posts!

Long Span Trusses - Arches

LS05768 No Date



The **Burr-arch** truss has a pieced arch on the inner walls of the bridge (like part of a hexagon).

The **Haupt** truss is very similar to the Burr-arch except it's arch looks more like a part of a circle than a hexagon.

LS04269 1907 Before



One More Arched Truss

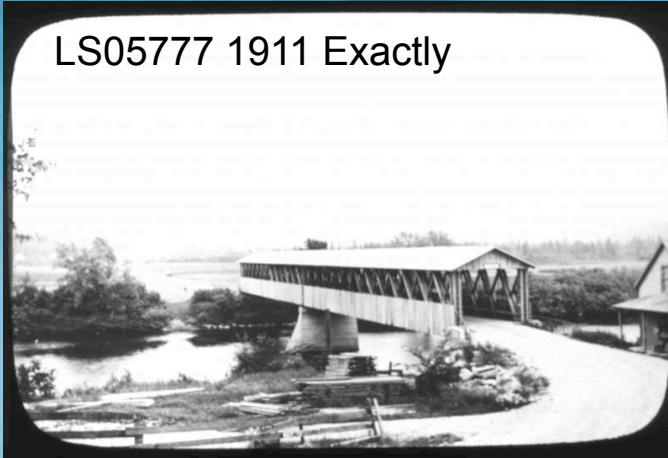
LS09595 1913 Exactly



This truss is the **Pratt** arch. This arch is smooth like a circle as well, but it is made from layers of planks, rather than just one big log.

Long Span Trusses - Crosses

LS05777 1911 Exactly



This is a **Howe** truss.

LS02176 1909 Exactly



This is a **Long** truss.

LS08069 1986-10 exactly

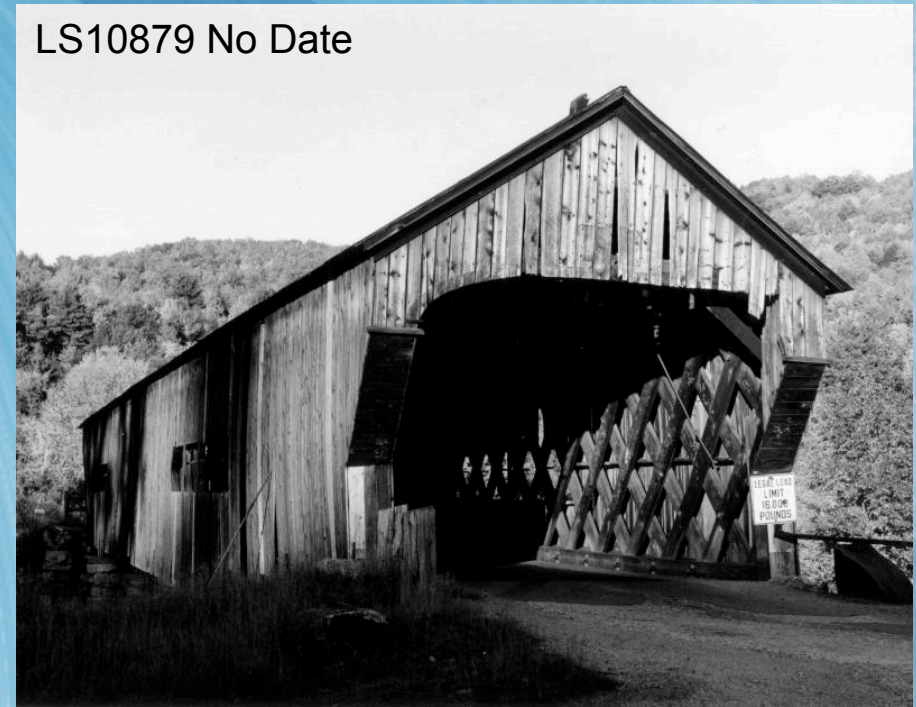


All these trusses form X's or crosses along their sides. They are very similar to each other, though they have slight variances.

This is a **Paddleford** truss.

Long Span Trusses - Crisscross

The is the last truss. It is called the **Plank-lattice** truss and is one of the most popular trusses in Vermont. The sides of this bridge form a distinctive crisscross pattern.



Now that we know the basics about covered bridges, let's take a look at the **history** of them!

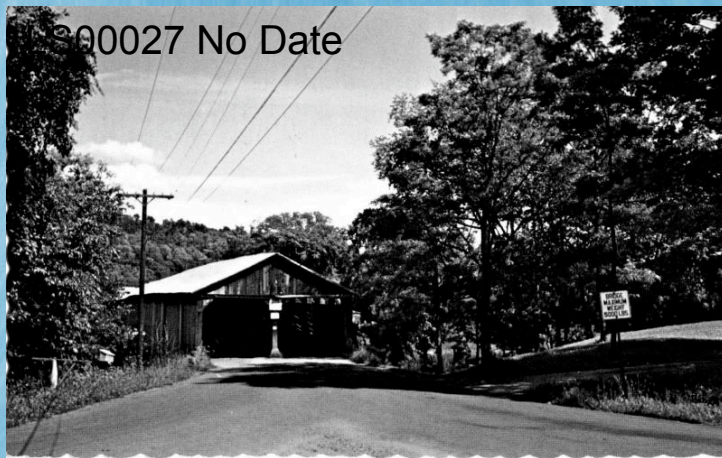
LS00669 No Date



Bay Bridge, St. Albans

Typical History of a Covered Bridge

The oldest covered bridge that is still standing is the Pulp Mill Bridge in Middlebury. It was built around 1820. This is when the earliest covered bridges started to appear.



Pulp Mill Bridge



Pulp Mill Bridge Today

Another old bridge...

LS00023 1935 About



LS00023_001 7/25/2000



The Cooley Bridge in Pittsford was built in 1849 and is still standing today! It has a Plank-lattice truss.

Old and New

Most bridges aren't as lucky to last as long and get replaced with newer, more modern bridges.

LS06648 1927 Before

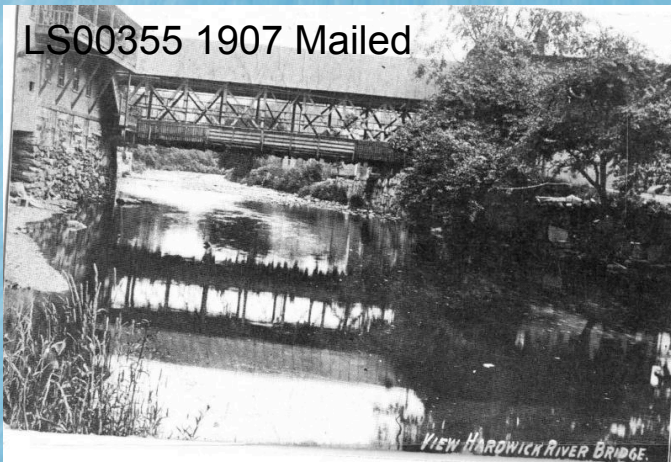


LS06648 1927 After



This bridge is in Lyndon.

LS00355 1907 Mailed



LS00355_001 7/12/2000



This bridge is in Hardwick.

They can become outdated, and something bigger is needed.

LS05788 1913 Exactly



This covered bridge is being replaced by a concrete bridge in Northfield.

Or nature can destroy them...

Bridge Destruction Done By Nature

LS04276 1927-11-04 Exactly



Fire can destroy covered bridges, especially since most covered bridges are made almost entirely from wood.

Ice jams are another natural occurrence that can destroy a covered bridge.

LS10312 1923-04-07 Exactly



By and large though, **floods** are the deadliest threat to covered bridges.

LS00208 1913 March



LS00218 1896



LS00219 1896



LS06651 1927 Exactly



Take this bridge for example...



The flood waters have almost claimed this bridge and it's barely holding on!

Unfortunately, the flood rose higher...



and some loose logs floating down river pushed it off it's foundation.

LS09568 1913 Exactly



It started to
float downriver!

Until it ran into
another bridge!

LS09592 1913 Exactly



After the flood went away...



The bridge was grounded and full of debris. This bridge won't be good for any crossings now!

The effect of floods can be drastic!

There were over **600** covered bridges in Vermont before the 1927 flood. Today, there are just over **100**.



LS04294 1927 Exactly

Despite the dangers...

Vermont has the highest concentration of covered bridges in the US, as well as being ranked 3rd for having the most!



Overall, though...

Covered bridges can be a lot of fun!

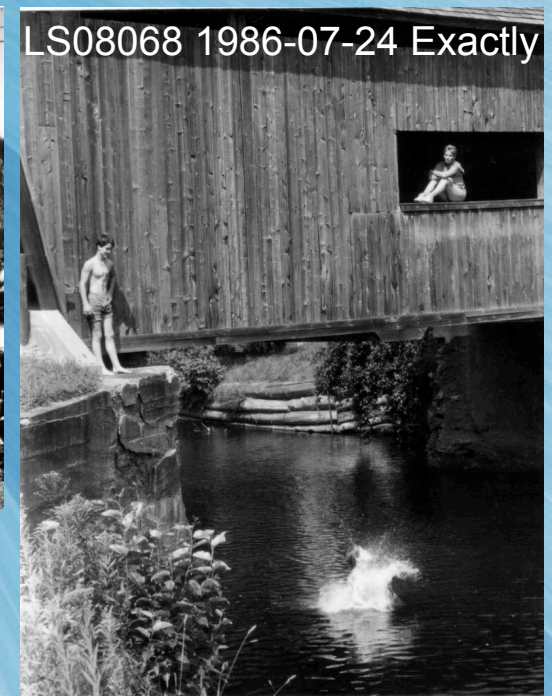
Fishing



Filming movies



Swimming and diving



Let's finish up with some...

Fun Facts!

Lowest - Lake Shore Bridge, Charlotte



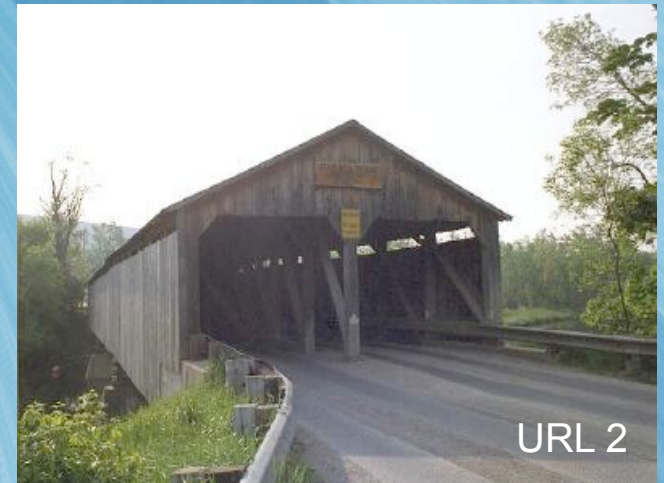
URL 2

Highest - Halpin Bridge, Middlebury 41'

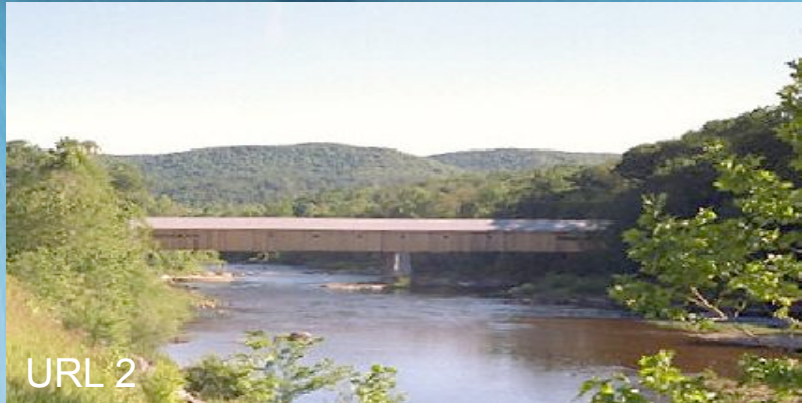


URL 2

Oldest - Pulp Mill Bridge, Middlebury 1820



URL 2



Longest Two-span - Dummerston Bridge, West Dummerston 267'

URL 2

Longest - Scotts Bridge, Townshend 276'



URL 2

Longest Single-span - Bartonville Bridge, Rockingham 151'



URL 2

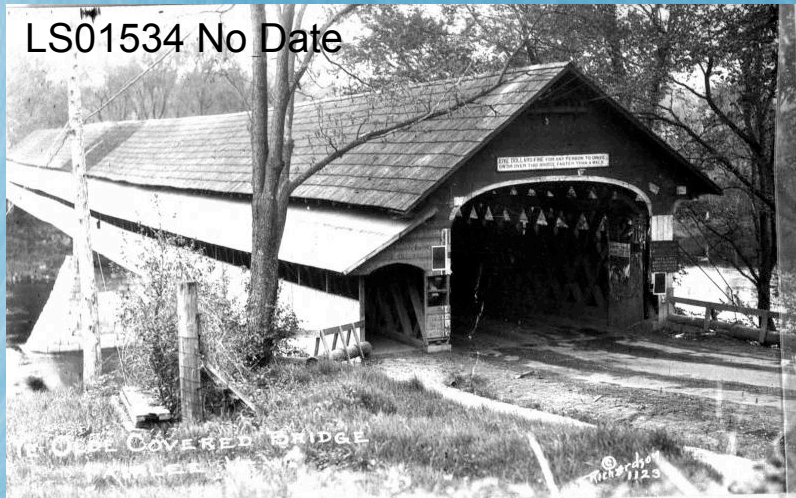
Widest - Maple Street Bridge,
Fairfax 17'



Narrowest - Hall Bridge,
Rockingham 12'

Wishing Bridges

It is said that covered bridges are good for wishing, and if you follow these steps, your wish is more likely to come true!



Make your wish before entering the bridge; lift your feet off the floor of your vehicle, take a deep breath, and say, “Bunny, bunny, bunny, bunny...” all the way through the bridge while thinking of your wish; then, upon coming out the other side, say "Rabbit!"

If you **wish** to know more, check out these books and websites...

More Info and Sources

URL 1 - <http://www.uvm.edu/coveredbridges/conference/2003.html>

URL 2 - <http://www.virtualvermont.com/coveredbridge/>

Landscape Change Program - <http://www.uvm.edu/perkins/landscape/>

Spanning Time, Vermont's Covered Bridges Joseph C. Nelson

Created by Emily Rehmeyer

January '06 for "Changing Face of Vermont Landscape" taught by

Paul Bierman