WOODEN COVERED SPANS

THE THEODORE BURR COVERED BRIDGE SOCIETY OF PENNSYLVANIA, INC.

VOLUME 40 - NUMBER 1 WINTER 2017

Kintersburg Bridge, PA-32-05

J. S. Fleming built this bridge across Crooked Creek in 1877 at a cost of $893. The 68 ft., single span crossing is one of only five Howe Truss covered bridges in the Commonwealth. It was named for Isaac Kinter, a local shopkeeper. Bypassed many years ago by a modern bridge, it is located off Tanoma Road on Musser Road in Rayne Township. One of four remaining covered bridges in Indiana County, PA, all are easily visited in one afternoon tour.

- Photo by Thomas E. Walczak, September 25, 2016

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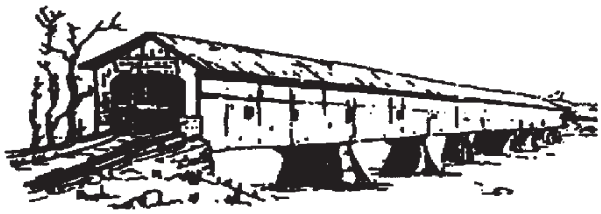

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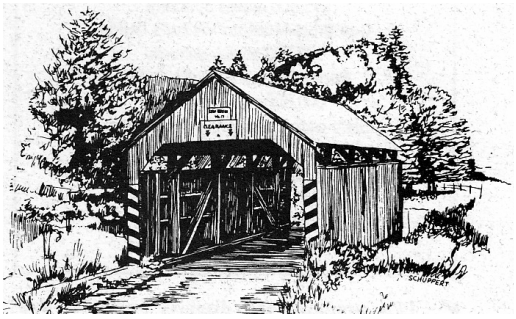
Please send your copy to the editor with a check made payable to: *Theodore Burr Covered Bridge Society of Pennsylvania, Inc.*

Membership in the Theodore Burr Covered Bridge Society of PA, Inc. is $15.00 for an individual and $20.00 for a couple. Our membership year runs from October 1st through September 30th. Send dues to Treasurer, Robert J. Kuether (address above).



The Old Covered Bridge
By Charles Clevenger
New Boston, Ohio

A dusty dirt road meanders the ridge,
Then curves downhill
To an old covered bridge.
Where I, in my youth,
Spent hours at play;
Oh, I remember—'tho it were yesterday.

There, hearts of love, I carved on its beams,
'Twas only yesterday- or so it seems.
'Tho years have passed, and I've grown old,
Youthful memories begin to unfold.

The ancient planks on its well-worn floor
Hold volumes of history and secrets galore.
Lovers paused here for a moment of bliss,
While no one was lookin' to steal a kiss.

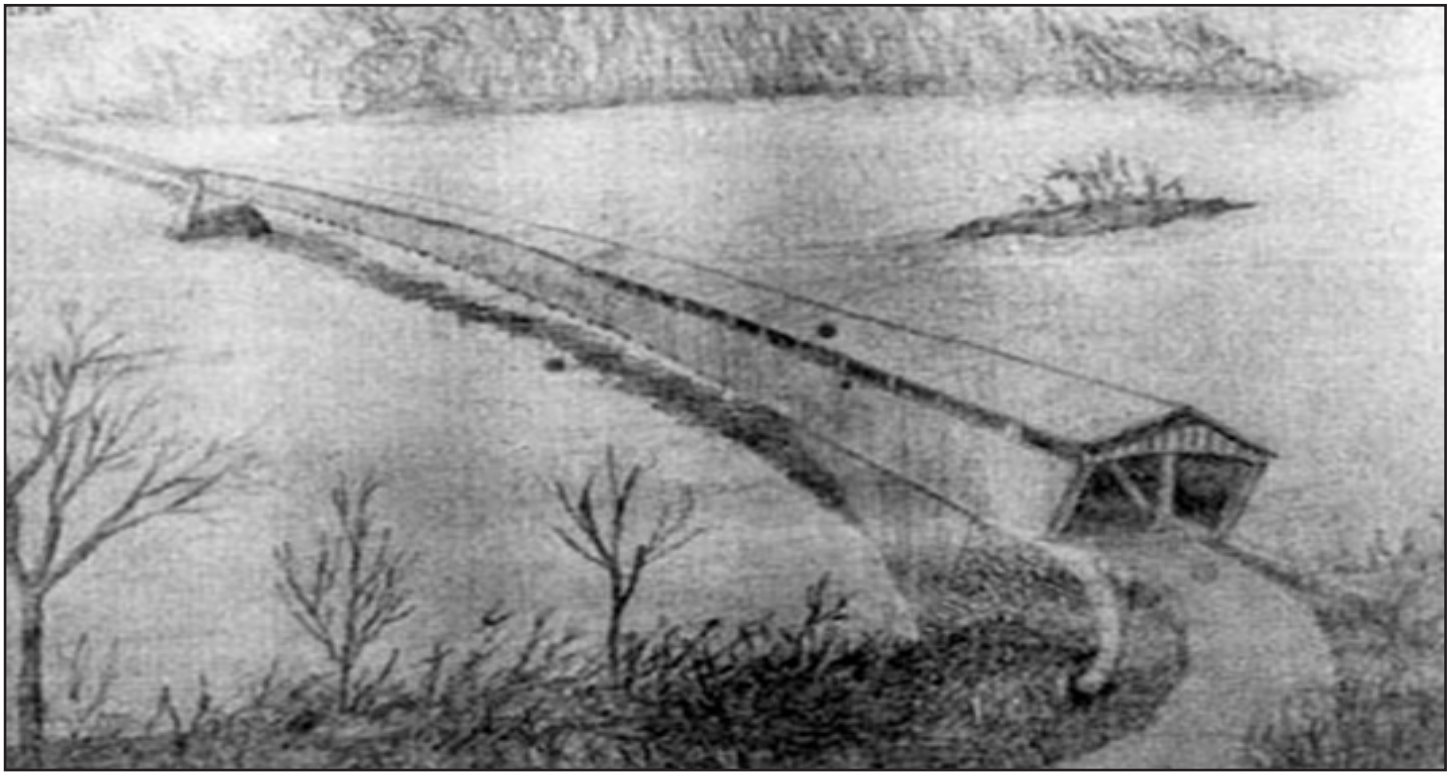
Emblazoned with bold graffiti art,
Initials enclosed
In a crudely drawn heart,
Etchings of love for all to see,
How feelings of youth mold our destiny.

"Henry loves Gretchen" is painted in red,
And boldly in blue, "Susie loves Fred".
Initials carved on a hand-hewn plank
Recall memories of youth when
"Betty loves Frank".

The old covered bridge has endured the years;
It suffers neglect, but sheds no tears.
'Tho storms have lashed its weather-scarred sides;
Like an old warrior, it steadfastly abides.

Theodore Burr's
McCall's Ferry Covered Bridge

By Fred J. Moll



This is a drawing of McCall's Ferry Covered Bridge showing the record breaking 360 foot long span in the foreground and the "shorter" 247 foot long span in the background.

Theodore Burr was contracted to build a bridge over the Susquehanna River between Lancaster and York Counties 2 miles northwest of Holtwood, Pennsylvania. The Susquehanna River, nearly a mile wide and shallow at most areas, narrows considerably at this point and the water becomes rapid moving and is about 100 feet deep. This was one of the most dangerous and challenging areas to build a bridge. The water on the York side of the river was not quite as deep and it was possible to build one pier to support the entire 607 foot long bridge. The pier and two abutments were started in early October of 1813 and were finished in late October of 1813. However the wooden superstructure proved to be a challenge and would take over one year to build. The bridge would not be completed until 1815. The fame to glory of the bridge was that the span on the Lancaster side of the river was the longest single span arched covered bridge ever built with a clear span of 360 feet 4 inches. The span on the York side of the river had a length of 247 feet. The width of the bridge was 32 feet in the clear. The arch timbers were to be assembled on floats, moved into location, and hoisted into position using capstans. However in December of 1814 the river froze before Burr and his crew could float the giant arches into position on the Lancaster side of the river. Several weeks later Burr decided to split the arches in half and move the two sections from floats to skids and slide the timber over the ice into position. During January and February of 1815 Burr hired local farmers to help his men to move these timbers into position on the ice and then lift them into position on the abutments and pier using capstans and plenty of rope. Some days there were anywhere from a hand full of men to one hundred men working on the bridge. By the first of February the arches were in place and the rest of the bridge was passable by December of 1815. In Burr's own words "this is the greatest arch in the world".

The following is an actual account by Theodore Burr of how he built the giant arch of McFall's Ferry Covered Bridge. This is part of a letter written by Theodore Burr to Reuben Field on February 26, 1815. Even though this is a condensed version, it is still a rather lengthy account of how the bridge was built and the difficulties Burr had to overcome. It is not often that we get a firsthand account of the building of a covered bridge by the bridge builder himself.

"It will be most difficult to convey to you by description, the process by which we finally succeeded

in surmounting the almost unconquerable difficulties opposed to its erection, not only by nature, but by all the elements combined.

In the first place, we raised it (the arch) on floats lying in the water, ranged along the shore nearly a quarter of a mile below the abutment. The floats were placed at proper distances, with their ends to the shore, and on each of them were raised two bents or frames, varying in height to correspond with the curve of the arch. This made sixteen bents, on which the grand and enormous structure was raised, amidst tremendous storms and tempests, accompanied with floods and whirls and the bursting of waters. The scene at times was truly terrific.

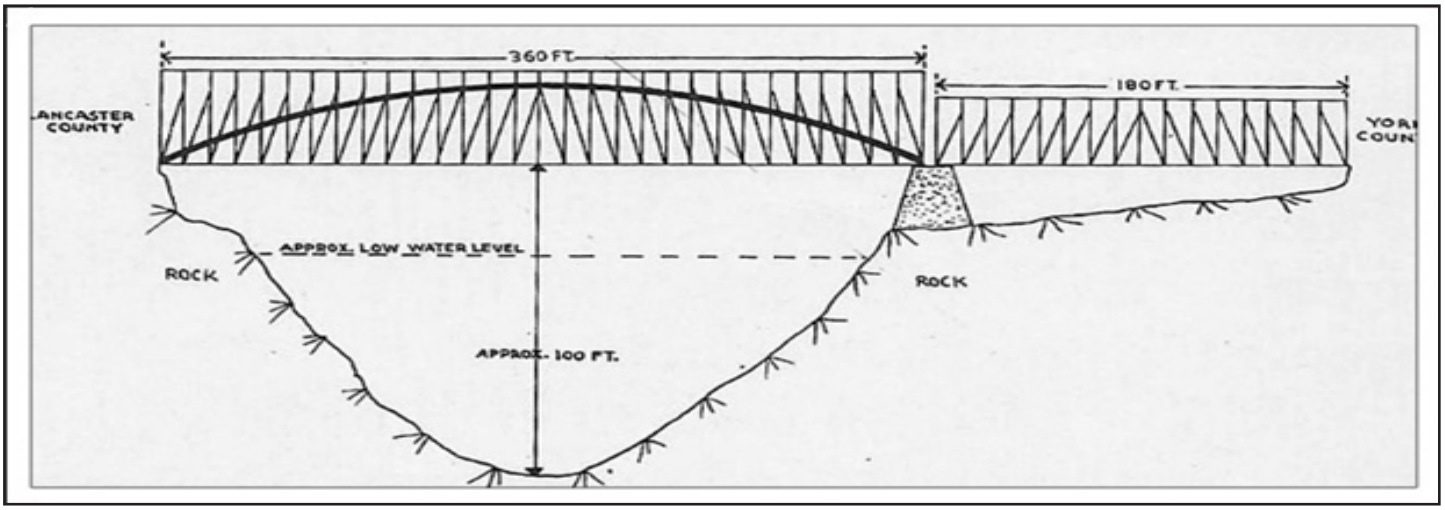
It took $1,500.00 worth of ropes to stay the works against the flood and storms that we often had to contend with; and you must understand the storms and wind are much more frequent and tremendous at this place, than almost any other, owing to the great height of the mountains which closely border the river on each side. From the time we commenced till we got the arch on the floats was ten weeks.

The arch stood length-ways up and down the river, along the shore of the uneven points and projections of rocks, which kept us in jeopardy, in consequence of the rising and falling of the water. On the 7th of December we had the whole in readiness to move up to the abutment, and on the same day the anchor-ice began to run a little. The next (day), which was the day we had fixed upon to move the arch to its place, the ice ran in still greater quantities. The ice continued to run during the 9th, 10th, and 11th, and pressed so hard against the floats that it raised up the outer ends of some two feet, others three feet; some less and some not at all; so that the scaffolding began to stand in all directions, the braces breaking and bursting out the spikes and bolts and the arch careening heavy towards the shore, touching only here and there upon the timbers which supported it; but as yet it had sustained no injuries. The only chance of saving it now depended on the ice either becoming strong enough to support it, or gradually melting away so as to go off easy, without tearing the whole with it. I determined upon trying it on the ice, and on the 12th we fixed our capstan on the ice, and fastened ropes to it and to the arch to sustain it from falling.

From this time till Christmas, we could do but little, in consequence of a thaw which took all the ice out of the river except about half a mile that first stopped; which we also expected would go, but it did not, soon after the weather became severe and having a mountain of ice upon us, the average height of which, for about a mile above and below us, was ten feet above the surface of the water at the shores. It did not, however, affect our works so much as might have been expected. The outer ends of the floats had settled down about a foot by the thaw; but this hove them up something worse than they were at first. At the same time, the whole body of ice moved down, from twenty-five to thirty feet, which bore so hard against the floats, that they pressed so hard against the rocks, that it broke and mashed more than half of them to pieces. Still the arch remained unhurt and the scaffolding stood beyond expectations.

On the 28th we commenced leveling the ice, in order to take the scaffolding and arch off the floats onto it. I had 18 men employed at the business and I presume on an average they were in, up to their arms, forty times each in one day. On the 29th, we began to bridge a space of about fifty feet from the floats, which was soft, in order to move the arch sideways to where the ice was stronger. It took us from the 29th to the 8th of January to prepare one-half of the arch for moving. This was Sunday, and by evening we had eight capstans, with each a double fold tackle fast to it, and with assistance of about fifty citizens of the vicinity we made a move of four feet.

On the morning of the 9th we four-folded all capstans, except one, and moved the one-half of the



This drawing of McCall's Ferry Covered Bridge gives us somewhat of a feeling of how deep, narrow, and dangerous the Susquehanna River was at this point.

arch off sideways, forty-six feet, on to the runners one hundred and eighty feet long. On the 10th we fixed the cross-runners, upon which we moved it sideways, onto the runners that extended lengthways with the arch, and confined all tight together. On the 12th in the forenoon it rained, in the afternoon we leveled the ice for a road before it would freeze again. The 13th we moved the arch seventy-seven feet, the weather soft. The 14th we made some rollers, the weather still soft but snowing. The 15th had but a few hands and move the arch fifty feet. The 16th we introduced the rollers everywhere, and moved the arch 217 feet in three hours. The 17th made a move upwards of 300 feet, the 18th and 19th got up the one-half of the arch.

We now commence upon the other half which we fitted and got up in eight days. Now we wheeled to the right and left, one-half of the arch to the abutment, and the other half to the pier; fitted the buts to their places; cut off the scaffold-posts at the bottom some more, some less, from one to twelve inches so as to bring the whole arch to its perfect height and curve, and then untied to center. On Monday, the 30th, about 9 o'clock at night, we had the arch everywhere keyed up, and on Tuesday morning it stood of itself. Along the middle way of the arch the scaffolding had fallen away six or seven inches; but less and less towards the abutment and pier. To have an idea of the cause of this, you must understand, that there is a regular ebbing and flowing in the river in this place, once in twenty-four hours, of from two to four feet, which has a proportionate effect on the ice, causing it to rise and fall from fifteen inches to two feet, which at the same time is continually working itself downstream, slowly and imperceptibly to the eye.

On Tuesday morning as I observed, the arch supported itself. We examined every part of it, drove some keys, and made everything tight as possible. In the afternoon we began to cut away the scaffolding, and got down two-thirds of it before dark; then stopped an hour for refreshment, and before we began again, had two large fires made, on each side, about sixty feet from the abutment or shore. We then set to cutting down the remaining part of the scaffolding, which was completed about half past eight o'clock. The whole now exhibited the grandest spectacle I ever saw. Aided by the light of the fires, we could plainly see the shore, and the arch rising from the abutment and extending itself west out of sight. It was a joyful moment to my brave fellows; and you may well suppose they gave way to the impulse, in loud and repeated hurras. The next day was set apart as a day of rejoicing.

What is perhaps remarkable, is the fact that although liquor was handled in great abundance there were but two persons during the whole time that were the least intoxicated. And what is still more remarkable, there was but one man that was injured; that was Augustus Sloughton. He fell fifty-four feet, hit on the braces twice, then into the water. He, in a few days, was again at work; and no other person hurt.

On the whole we were from the 1st of October till the 1st of February, in doing what might have been done in four weeks of steady weather, without floods."

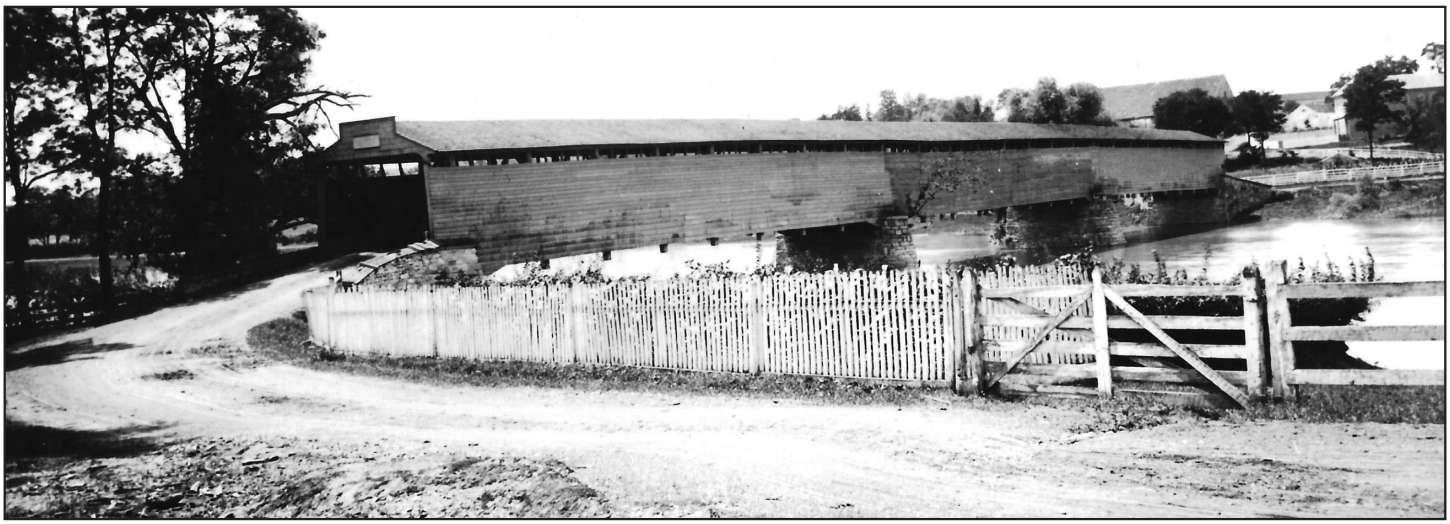
During bad weather Burr had fought every obstacle that Mother Nature could throw at him and he had succeeded. He had built the greatest arch in the world. However three years later, on March 3, 1818, Mother Nature was to take back the greatest arch when the bridge was destroyed by an ice jam. Unfortunately Burr had taken most of his payment of the building of the bridge in bridge stock which was now worthless. Burr not only lost his bridge, but he had lost all the money and time he invested in building the bridge. He had been counting on money from the bridge stock to help get him out of debt.

(To be continued in the next issue)

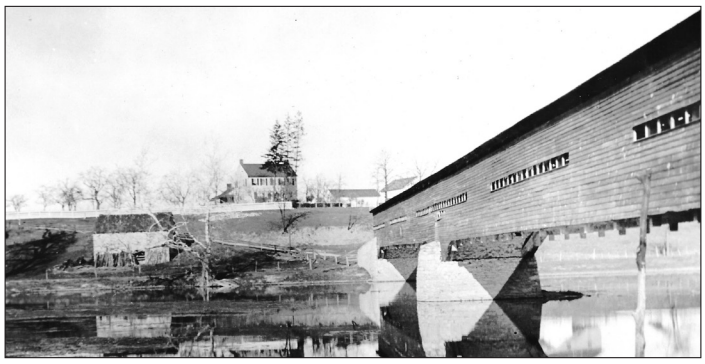
This is a photograph of Michael Reed's model of Theodore Burr's McCall's Ferry Bridge. The model is 1/48th scale and has a length of 12 feet, 6 inches. So far Michael has recorded 370 hours in the construction of the bridge and 150 hours in the construction of the abutments and pier.

A Pictorial Tribute to some former Pennsylvania Covered Bridges

Photos from the collection of Thomas E. Walczak

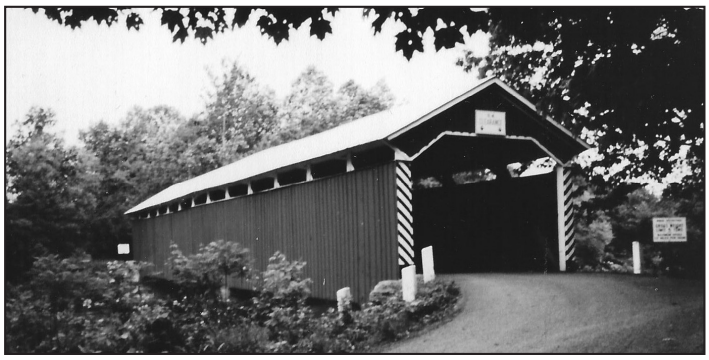


Hustons Bridge was also known as Fisher's Bridge or Bucher's Bridge. The bridge was built in 1824 by Jacob Bishop for $5,350. It was a 3-span, 329 ft. long bridge across Conodoguinet Creek. It was located northwest of Hogestown on present day SR 0114 in Silver Springs Township, Cumberland County. The bridge burned down in 1938.

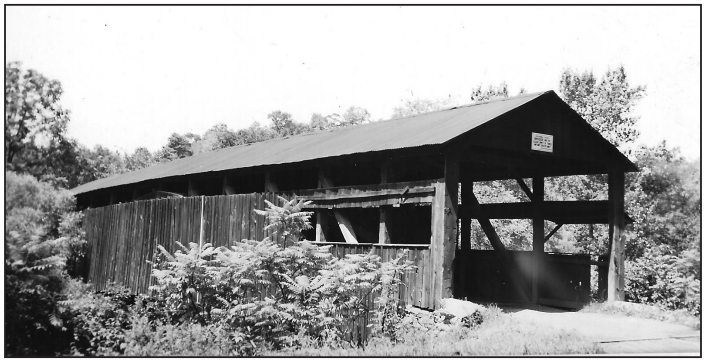


Orr's Bridge was a 2-span, Burr truss bridge also across Conodoguinet Creek in Cumberland County. It was 337 ft. in length and built by John Finley in 1855 for $4,973. It was located west of Camp Hill on Orr's Bridge Road, T-618. It was replaced by a concrete bridge in 1957 and dismantled in 1959.

Not much information is known about Wilkinson's Bridge in Northumberland County. It was located at Kneass on T-377 in Jackson Township. This photograph taken on September 23, 1936 shows the stepped wingwalls leading up to the bridge portals.



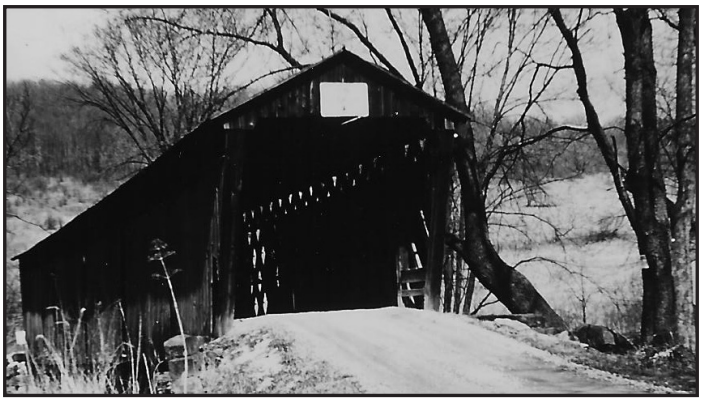
Hunter Station Bridge, PA-49-03, was a handsome Northumberland County span. It was a one-span, 105 ft. Burr Arch Truss across Mahanoy Creek. It was located east of Hunter on T-405 off Rt. 225. Built by Peter Keefer in 1869, it was lost in Tropical Storm Agnes in June 1972.



Stauffer Bridge, PA-19-19, was another victim of Tropical Storm Agnes in June 1972. The 116 ft. Burr Truss span crossed Little Fishing Creek. It was located on T-519 between Mt. Pleasant and Hemlock, Townships

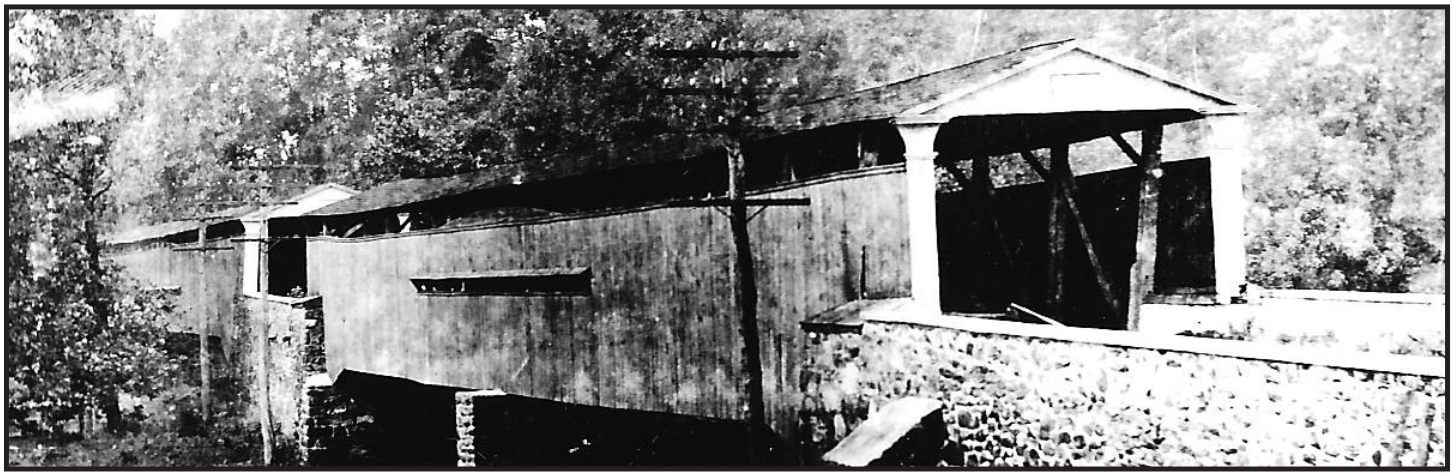
Naugle Bridge spanned Buffalo Creek with a 150 ft., Burr Arch truss. It was built in 1876 by Peter Kiefer of Sunbury, PA, who was credited with building many covered bridges in Union and Snyder Counties. It was located northwest of Lewisburg, PA in Union County in the area known as Dale's Ridge. Unfortunately, it was torn down in 1955.

Bernheisel Bridge was also known as Hoover's Bridge. It was a 2-span, 195 ft. Burr Arch truss span across Conodoguinet Creek. It was located in Middlesex Township, Cumberland County, on present day Bernheisel Bridge Road, T-574. It was built in 1869 by John Gutshall for $2885.59. It replaced an 1843 bridge built on the same site. The above shown bridge was replaced in 1959 by a steel and concrete bridge.

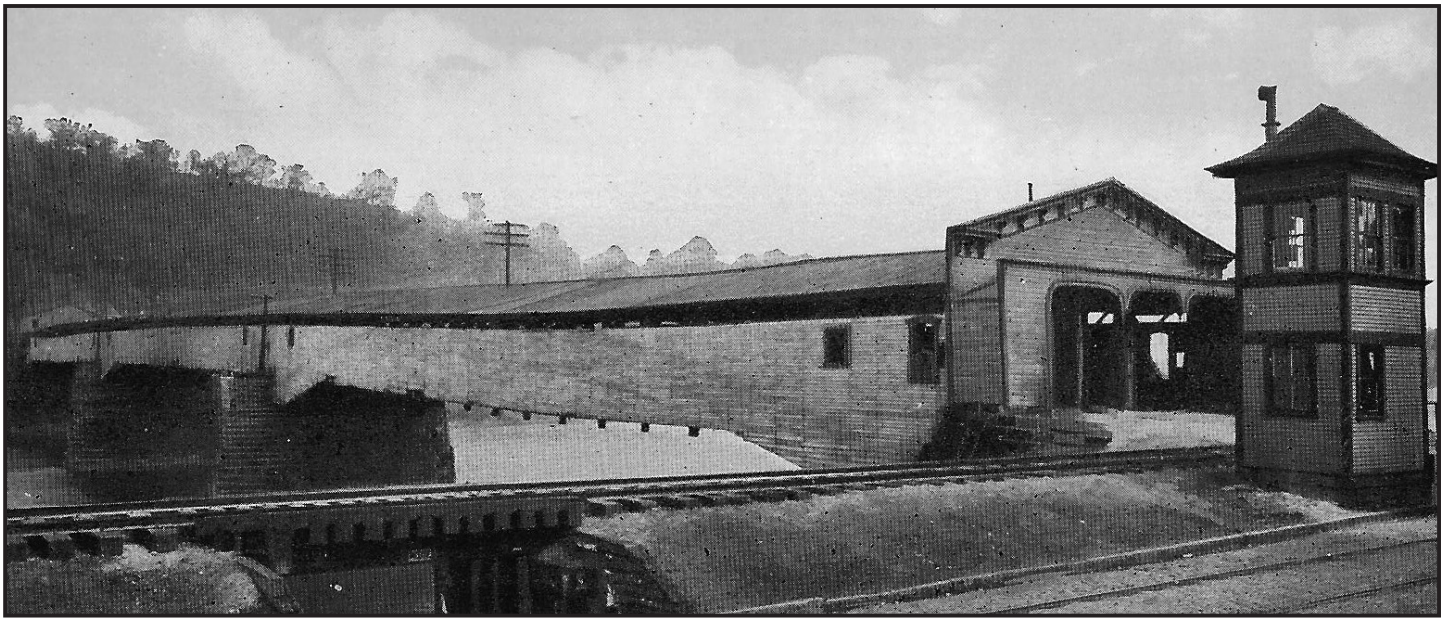


Hoover or Toad Hollow Bridge, PA-32-02, was located on LR 32177 South of Smicksburg in West Mahoning Township, Indiana County. The bridge was a Town Lattice truss 112 ft. in length across Little Mahoning Creek. Built in 1881, it was replaced in 1960. This photograph was taken by Thomas Sutter in March 1959.

Trent Bridge spanned Laurel Hill Creak on LR 54049, Copper Kettle Highway, in Middle Creek Township, Somerset County. It had a 12 ft. 0 inches clearance height and was about 80 ft. in length. The Burr truss span was replaced in the late 1950's or early 1960's.

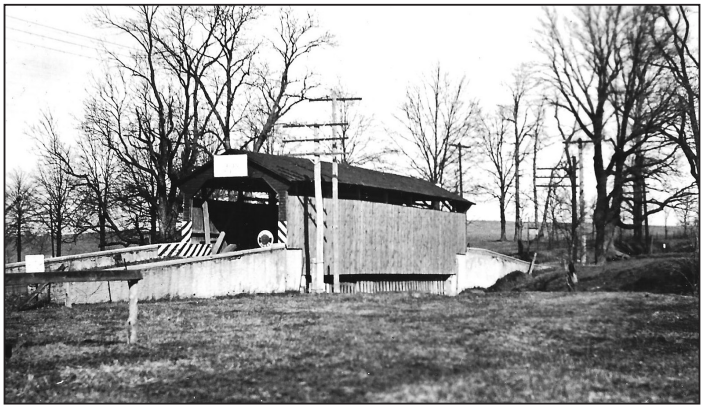


Pyle's Twin Bridges crossed Brandywine Creek about 2 miles south of Chadds Ford. William Gamble and Nathan Y. Jester were awarded contracts to build the bridges. Construction began in December 1854 for the first bridge which cost $5,490. It was a span of 180 ft. and had an overall length of 192 ft. The second bridge was a "flood" bridge and did not cross the main channel of the creek. Construction on the second bridge was begun in August 1855 for a sum of $5,290. It was a span of 140 ft. Both bridges were of Burr Arch construction. On April 1, 1856, a storm damaged the nearly completed second bridge which resulted in a third contract of $1,360 to repair the damaged bridge. The bridges were closed in 1924 as they had become unsafe for automobile and truck traffic. In 1926, a cement bridge replaced the covered bridges at a cost of $119,500.



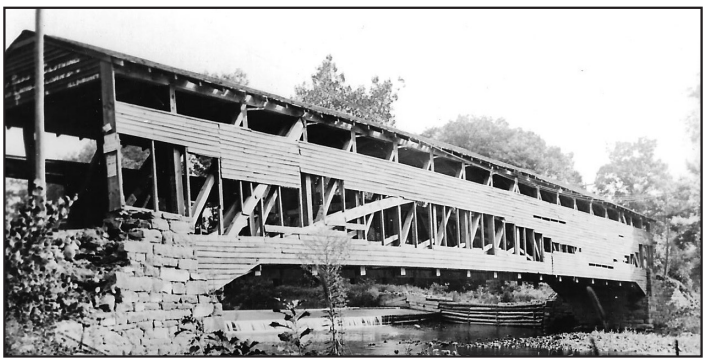
This wooden covered bridge spanned the Monongahela River between Bridgeport and West Brownsville, PA. An intercounty bridge, it connected Fayette and Washington Counties. The Monongahela Bridge Company was incorporated on March 16, 1830 with a stock of $44,000. The contract price to build the bridge was $32,000 with an additional $5,000 expenditure for the approaches. It was opened for traffic on October 14, 1833. It was a 3-span, 630 ft. long structure with 2 lanes for traffic and a center pedestrian walkway between the two travel lanes. It was a toll bridge for its entire existence until it was torn down in 1910.

Tustin's Bridge was located across Pickering Creek about 2 ½ miles west of Charlestown Village on Clover Mill Road just off SR 113 in West Pikeland Township, Chester County. It was built in 1855 by Robert Russell for the sum of $1,604. It had a clear span of 84 ft. with an overall length of 100 ft. It was replaced in 1938 by a steel girder bridge.

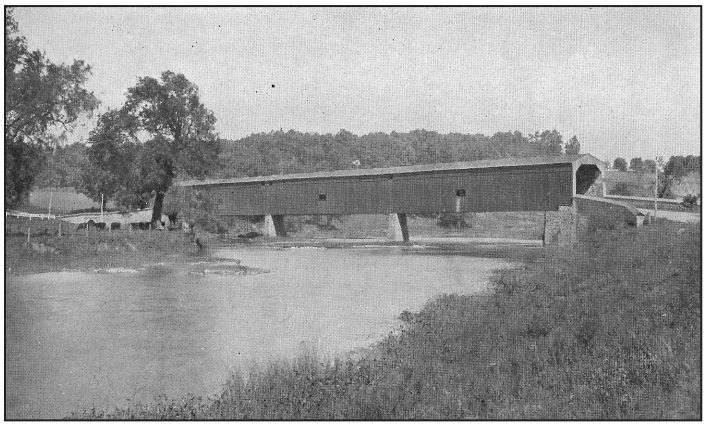


Wilson Buffington of Unionville built Westtown Bridge in 1831 at a cost of $2,300. It was approximately 63 ft. in length and spanned Chester Creek. It was found on Street Road, currently SR 926 in Westtown Township, Chester County. A modern concrete bridge replaced the covered bridge in 1937.

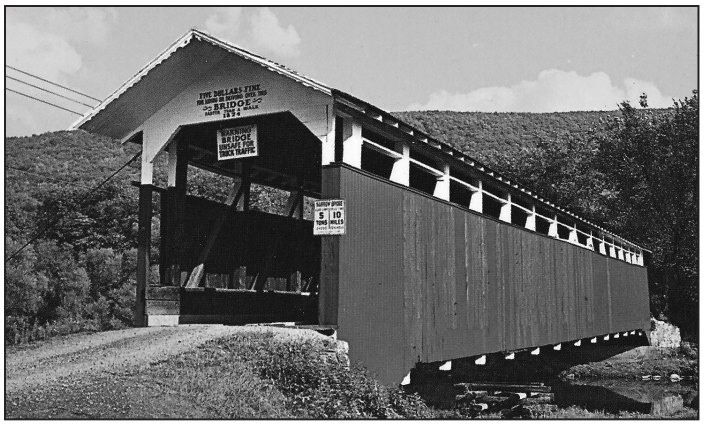
Shaw's Bridge crossed the East Branch of Brandywine Creek at the site known as Buffington's Ford in Chester County. It was built in 1862 by Nathan Y. Jester at a cost of $2,130. It was about 100 ft. in length and lasted until 1953 when it was burned by vandals.



Price Bridge crossed Muncy Creek at Shady Nook Park near Hughesville in Lycoming County. The bridge was located near the junction of SR 405 and US 220. The missing side-boards reveals that it was of Burr Arch truss construction.



The stately Castle Valley Bridge was a 3-span Town Lattice truss across Neshaminy Creek in Bucks County. It was located near Edison in Doylestown Township, Built in 1835, the 483 ft. long bridge was demolished in 1930.



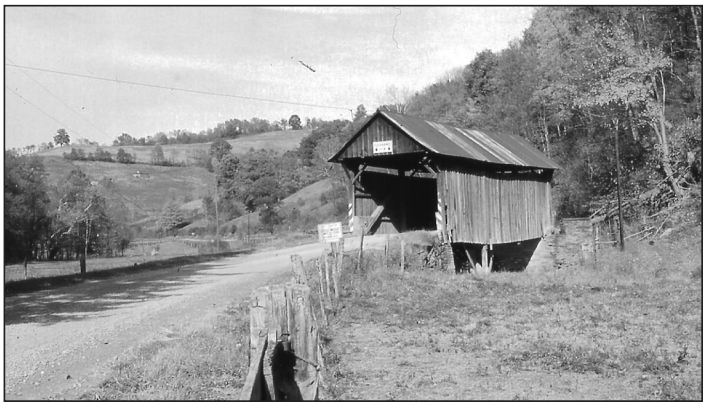
Fuoss Mill Bridge, PA-07-01, was Blair County's last covered bridge. Built in 1874, this 131 ft. Burr Arch truss bridge crossed the Little Juniata River. It was located off Rt. 220 about 3 ½ miles west of Tyrone, PA. Sadly, it was burned on February 26, 1967.

Shermansdale Bridge crossed Sherman's Creek, west of SR 74 at Shermansdale in Carroll Township, Perry County. The bridge was a one span, Burr Arch truss, 174 ft. in length. It is not known when it was built but it collapsed in 1945.

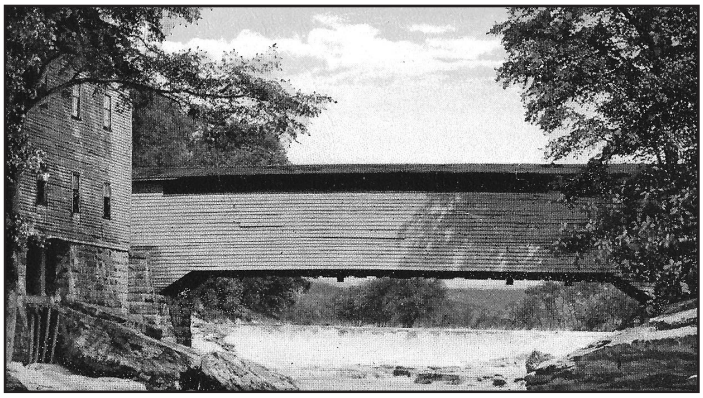
Upper Humbert Bridge, PA-56-04, shown photographed here on December 10, 1961, spanned Laurel Hill Creek. Built in 1891, it was located northeast of Ursina in Lower Turkeyfoot Township. The 120 ft. Burr Arch span was burned in 1969.

Shown here in September 1969, Dimmsville Bridge, PA-34-02, was built in 1902 and crossed Cocolamus Creek. It was located just north of Dimmsville, Juniata County, off PA 235 on SR 2017. Bypassed many years ago by a modern steel and concrete bridge, the covered bridge after being retired from active service and closed to all traffic, was turned over to private ownership and allowed to deteriorate. Recent efforts to preserve it were unsuccessful without the cooperation of the landowners and support of the general public. Sadly, the 109 ft. Burr Arch span recently collapsed on April 11, 2017.

John Stoneroads Mill or Jacob Mann's Mill Bridge, PA-36-17, was one of those increasingly rare covered bridge and mill combinations. The three-story stone gristmill was built in 1779 and the covered bridge was built much later in 1868 by reknowned Lancaster County covered bridge builder, Elias McMellen. The bridge was a 65 ft. long, Modified Kingpost truss and cost $1700. It spanned Little Conestoga Creek between Lancaster and Manor Townships on School House Road, T-595, Lancaster County. The gristmill was on the Manor Township side of the township boundry line. Unfortunately, the covered bridge was lost during Tropical Storm Agnes on June 22, 1972.

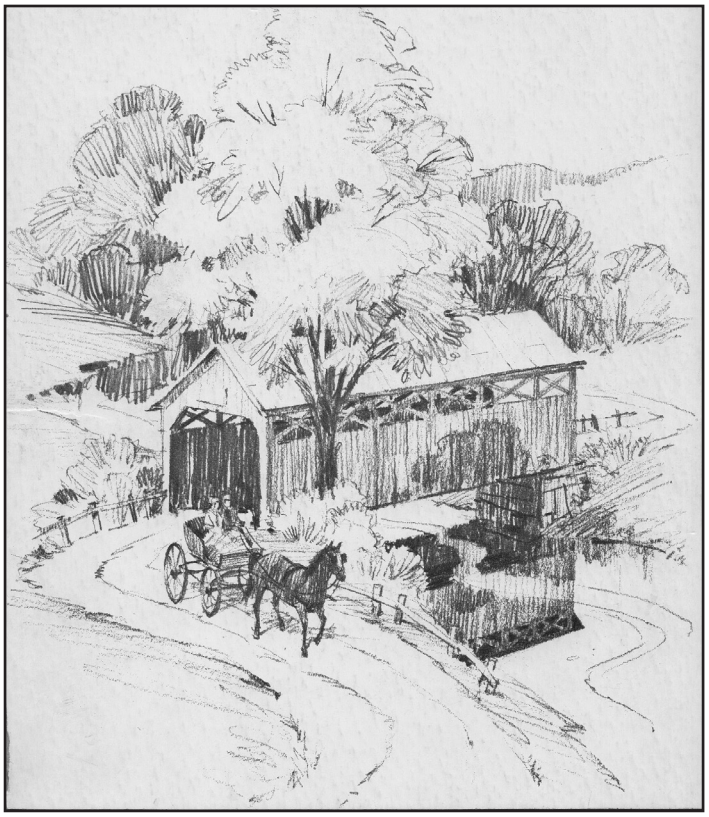


Pethel Bridge, PA-30-08, was built in 1882 across Randolph Run in Greene County. The 51 ft. rural span was a Queenpost truss. It was located on LR 30015 between Wayne and Perry Townships.



Kennedy's Mill Bridge was located across Slippery Rock Creek in Lawrence County near Rose Point, PA. It was approximately 90 ft. in length and was a Burr Arch truss. It was built in 1849.

Watrous Bridge crossed the west Branch of Pine Creek at Watrous off Rt. 6, east of Galeton, PA in Tioga County. Built in 1859, the 100 ft. Burr Arch truss span was replaced in 1937.



The Old Covered Bridge at the Willows
By C. Ernest Walker, September, 1954

Townspeople assembled, considered the motion
To build a Roofed Bridge at School Four o'er the Creek.
The old hall throbbed in the ensuing commotion
As friend and foe, pro and con, were permitted to speak.

"A permanent bridge is our only solution
Crude make-shifts collapse when the river is high."
Cries of "Tight money, so we must use caution,
We'll build you your bridge in the Sweet Bye and Bye."

Its foes' voices were strong, but their arguments weak
"A good enough log bridge my stout woods crew will build"
"We need no forrin' wood whittler to bridge Willow Creek."
And with promise of Bankruptcy, the Town Hall was filled.

But the motion was carried to build a Roofed Bridge
With solid abutments to withstand the flood's peak,
Substantial construction from main chords to ridge—
How well they suceeded, -- Now let the Bridge speak.

"I span the white water 'tween great granite abutments,
For ten decades the wild floods have raged 'neath my floor,
From above rain and snow, -- all of Nature's stern elements
Have thrashed at my sides, -- e'en the hurricane's roar.

My frame was precision-cut from the nation's first forests;
My builder's allowance for error was – nil
My only adornment was my now ruined arched portal –
'Twas a load of knotty bull-pine careening to the mill.

From mud-plastered nests in my rafters, doubtful eyes of birds viewed my billings,
My only bright spot of splendor – the colorful circus sheet,
As wide eyes stared at wild tiger – the graceful acrobat's swings
Vied methodical tread of oxen – the more spirited horse's shod beat.

Flint's Powders, Kendall's Spavin Cure, Knight's Opedildoc,
Liver Pills, and what's good for axles that whine,
Linaments, Horse-shoes, Cough Syrup, Elixir of Burdock.
Walk your horse or pay a two dollar fine.

With lunch box slung over his shoulder, the boy on his homeward way,
Swinging from timber to timber, disdaining to walk on my floor,
Returning – cut in bold hieroglyphics those initials you see here today,
That boy, with his shout to the echo, -- is he happier now than of yore?

My memory hovers over the wee lass in the pink pinafore
Who cried when her pail of berries overturned in the dusty road.
Now back to the scenes of her childhood; the memories of Old School Four,
With merry peals of laughter, she tells of the episode.

In the brightening hours of daylight, trout rise to flies from the foam;
In the full warm sun of noon-day, new mown hay scents the wafting air-flow;
In the lengthening shadows of evening, man and beast plod wearily home:
In the sharp angled shadows of moonlight, proud lovers stroll to and fro.

So in my gathering twilight, my clearance by truck-drivers flaunted,
Nerves rave at my rattly planking, my sign a low limit of weight;
Though by some I'm not wanted, I'm still staunch and undaunted;
I quote my friends, -- 'They also serve who only stand and wait.' "

Taken from Covered Bridge Ramblings in New England by C. Ernest Walker, 1959,
Submitted by Jim Smedley.

Helping to Preserve the PAST for the PRESENT and FUTURE!

We have been involved in the preservation of over 20 historic covered bridge projects in PA over the years. As a member, we are proud to support the **Theodore Burr Covered Bridge Society of PA.**

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