



American Canals

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Terry K Woods 1937-2022

The canal community has lost another great researcher, writer and advocate in the death of Terry K Woods who died after a short battle with cancer. Terry was a guy who made deep dives into a subject, wanting to learn everything he could, see every historic or hidden site, make new discoveries. Then he went a step further to write it up, make a talk, teach a class, or testify when need; as to inform others so they could also learn and hopefully understand why it excited him so.

I really didn't know Terry personally. Like many of you, I really got to know Terry by way of his research and writing. For a number of years, Terry would email out a weekly Canal Comments column, which as Mike

Morthurst notes, were updated from over 256 newspaper columns he wrote back in the 1970s. These columns reflected Terry's own explorations and research, and interviews he had with other folks in the canal community. In his column of 18 February 1973, Terry offered a bit of personal insights and noted that as a child he fished with his grandfather in the old canal at Canal Fulton. When he returned home to Ohio as a young man in the early 1960s, he started to read Al Simpson's "Along the Towpath." He said that it was these columns that made him aware of (and maybe reawakened) his interest in the canals of Ohio. After Al's column ended, Terry decided to start his own and thus Canal Comments was born. Terry noted that over the years, Canal Comments appeared in six different small newspapers around Ohio. Many years later, Terry updated these as needed, added some additional comments, and then emailed them to anyone who wanted them.

I, along with other editors of American Canals, have used his Canal Comments as easy filler when we needed it,

but only after we killed off a few dozen extra commas, explanation points and CAPITAL letters. Lately I have been posting them to the ACS website and I will continue doing so for some time. In April 2021, I ran Terry's column about meeting Ronald Max Gard who was the Sandy and Beaver Canal expert. A bit later, Max's grandson read the column and said that he got to know Max a little better. I put him in touch with Terry and I hope that the two had a chance to talk.

After I heard about his illness I called and had a very brief conversation with Terry. He said that he would send along his resume and that I could do as I wished with it. I was greatly surprised by what he had accomplished in his



Terry speaks about the 6 Mile Dam before it was removed.

life. I hope that he and his family realize that canal researchers and historians will be learning from his study for years to come. For a historian it might be the best we can hope for.

Terry's first book, *TWENTY FIVE MILES TO NOWHERE*, the story of the Walhonding Canal, was published by the Roscoe Village Foundation in 1978. A greatly expanded version was published by the Roscoe Village Foundation in 1991. His *THE OHIO &*

ERIE CANAL, a Glossary of Terms, was published by the Kent State University Press in 1995. An expanded and updated version was published by the Kent State University Press in 2011. *THE OHIO & ERIE CANAL IN STARK COUNTY* was published by The Massillon Museum in 2003, and *OHIO'S GRAND CANAL, A Brief History of the Ohio & Erie Canal* was published by the Kent State University Press in 2008. Terry was also a

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For Canal Calendar items and news of local, state, and regional canal societies: Contact Michael Riley at mriley20@twcnny.rr.com

The objectives of the American Canal Society are to encourage the preservation, restoration, interpretation, and use of the historical navigation canals of the Americas; to save threatened canals; and to provide an exchange of canal information. Manuscripts and other correspondence consistent with these objectives are welcome.

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Gwynn Lock Clean Up

By Brian Coffield

One of the activities of the canal society that benefit Virginia's historic resources is cleaning up overgrown locks. On March 12, 2022, a group of volunteers met to take on Gwynn Lock near Eagle Rock, VA. This cleanup was scheduled and rescheduled several times due to weather, so Andrew Shaw, who was leading the effort, decided not to let yet another late winter storm stop this effort. Even though the fast-moving winter front kept the temperature below freezing and brought along strong winds, it was well attended with many volunteers, some of whom also brought along their children for a wintry overnight campout.

Gwynn Lock is part of the 3rd division of the James River & Kanawha Canal, which was to be built between Buchanan and Covington, Virginia. The third division was not completed, and the canal boat lock was never used. However, the lock was constructed in conjunction with a dam, and during construction of the dam, batteaux traveled to Covington and a separate lock was constructed to allow for their passage. This site is unique due to the two locks of different sizes right next to each other.

When the lock becomes overgrown with trees and brush, their removal is more than cosmetic. Large tree roots can move the stones and eventually cause significant damage. This is delicate work that must be performed by hand, with everything cut by chainsaw which is then passed down off the lock walls and brought by others to a woodchipper.

The work began at one end of the lock and by late afternoon had reached the other end. Sebastian Backstrom was a major factor in our success, as he brought the big equipment, including the woodchipper. The chipper made short work of trees, brush and many vines cut away from the lock. The pile of chips was



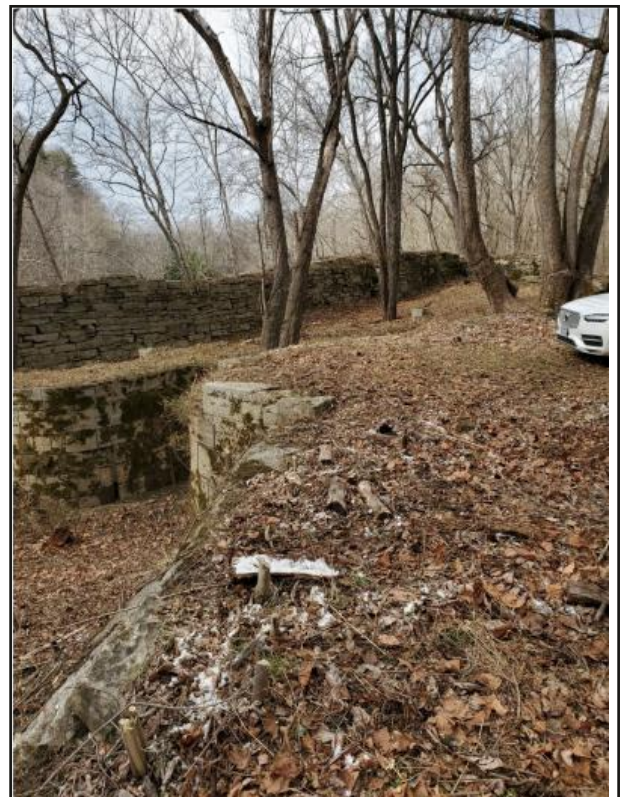
also a bonus as some of the smaller participants were more concerned with playing than working, and a large pile of chips made for a fun place to play.

Thanks to hot soup to warm up our insides and a campfire to warm our hands, the cleanup was a great success, and the final winter storm of 2022 didn't derail our efforts.

I also want to acknowledge Andrew Shaw and all the volunteers he lined up for this work. It was gratifying to see so many people doing the good work of the VCNS and caring for this important historic site.

The photos show the before and after of the cleaning.

Brian Coffield serves as the president of the Virginia Canals and Navigations Society.



Excavation Equipment of the NYS Barge Canal

The Cable Way

By Michael Riley

Of the many machines we see in the construction of the “modern era” canals, the cable way (also seen as one word, cableway) is likely the least noticed. However, it is one of the few machines that has survived through the years and is still in use today. The cable way was the true multi-tasker of the construction site.

A cable way is a very basic machine with two towers, a hoisting engine with a steam plant to power it, wire rope (cable), and a traveling carriage that runs along the cables. Depending on what work needed to be completed, the contractor would build suitable tall wooden towers so that the cable spanned the construction site. If the bases were mounted on flanged wheels on rails, the cable way could have movement in all three dimensions; side to side, back and forth, and up and down. Cable ways were very good at spanning deep cuts such as along the Chicago Sanitary Canal or in Lockport on the NYS Barge Canal. They were useful on sites with soft soils such as along the Hennepin Canal for dredging out muck and quicksand. They were useful on lock and dam sites that spanned deep or wide rivers and would “fly” in building materials and buckets of concrete. They were also very useful on sites where there might be blasting as the cable wouldn’t be damaged and could be left in place unlike a steam shovel or other large equipment. Depending on the diameter of the main cable, the cable way could lift and move tons of materials at one time.

Many manufacturers made cable way equipment as most of it consisted of the basic steam engine and hoisting machine that were used in many applications. In the Barge Canal photos you often see it described as the Lidgerwood cable way, but other manufacturers were Flory and Mundy.

178 MANUFACTURERS RECORD. [October 9, 1919.]

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A cable way delivers concrete for the construction of Lock 32.

All these images are from the NYS Archives, Barge Canal Construction collection 11833.



Neg. No. 5661. Contract No. 19. Lidgerwood Cable Way.
Sta. 6165 W.

In this image, the Lidgerwood Cable Way is equipped with a clam shell digging bucket and is being used to shape the bank of the canal. This shows the tail tower. Notice the piles of field stone at the base which were used as ballast.

The cable way is being used to remove stone from the deep cut, west of Lockport. The rock skip, basically a large pan that could be loaded with rock, is transported back to the work area where the steam shovel will load it. Multiple skips could be used if they were being loaded by teams of men.



Neg. 9426 Contract 40
Prism excavation west from Prospect St. bridge Lockport.
Mar. 13-13



Residency No2, Contract 8 Neg. 2870.
Dam No. 5, Lock No. 9
General view from highway north shore. Dec. 18-11

Construction of Lock 9/Dam 5 is almost complete and the cable way is the last machine to be dismantled. The head-tower is in the foreground and has the steam plant, hoisting engines and operators controls.

These images and others will be on the ACS website.

Oldest Railway Is Sold For Scrap

By Donald W. Kern

Railroad Magazine, Volume XXIII, No. 1 December, 1937

The auctioneer pounded his gavel and looked around at a small audience in the old dusty courthouse at Mauch Chunk, Pa., on September 2nd, 1937. It was something new for Homer S. Kern, the treasurer of Carbon County, to sell a railway for non-payment of a bank loan. He hated to do it, too, knowing that whoever bought the famous old pike would almost certainly rip her up as scrap.

Mr. Kern had a warm spot in his heart for the Mauch Chunk Switchback Railway. He was familiar with her unique history. Ever since boyhood in the long ago he had heard her little cars clattering down the inclines, and—gosh darn it! the Switch back seemed to be part of his very life.

True, she had been standing idle for years, pointed out to visitors as a curiosity, but she was still the oldest existing railway on the American continent. Mr. Kern knew there had been a day when the Mauch Chunk line was the largest and most important iron road in the country. And now she was being sold as junk.

He looked from one face to another. The audience inspired no hope for the realization of his unspoken wish that, in spite of everything, someone might at the last minute buy the old Switchback and start her running once more. Maybe a way could still be found to make her pay. But no! The auctioneer was positively sure that the gentleman who'd just made that last bid had no romantic notions about putting a worn-out pike on its feet again.

"Going! Going!" cried Mr. Kern. "Gone—to Mr. Isaac Weiner, of Pottsville, for the sum of eighteen thousand and one hundred dollars!"

This price included the right of way, eighteen miles of track, eleven passenger cars, land, buildings, fixtures and machinery.

Sic transit gloria mundi! A road "with a past" was being thrown onto the junk pile. Mr. Kern laid down his gavel wearily and turned to make out the necessary papers completing the transaction.

The Switchback which he had just sold was an

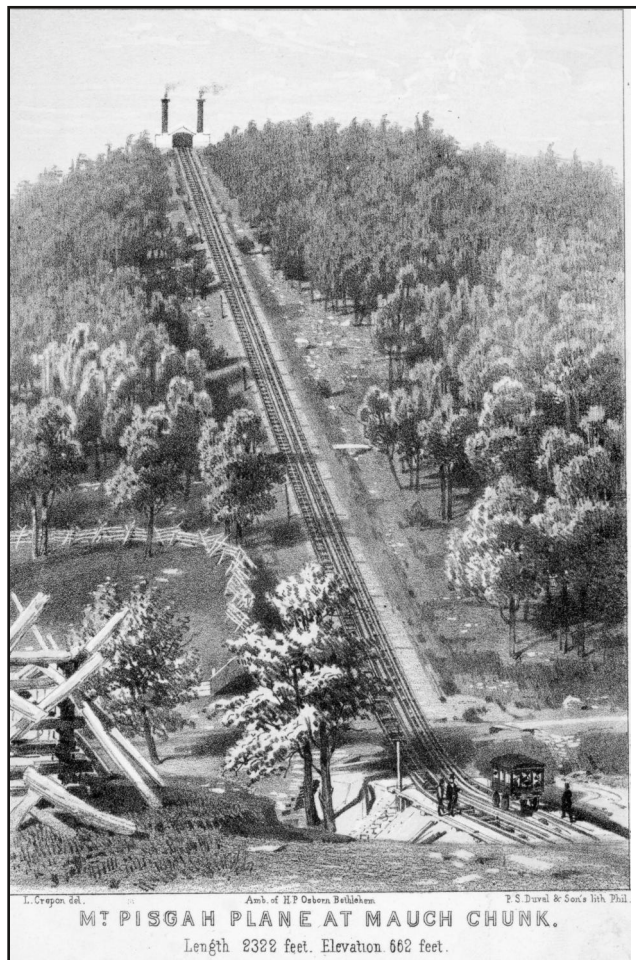
example of a rather rare type of transportation system, being run almost entirely by force of gravity. Laid out a hundred and nineteen years ago, it began operation as a coal-carrying line in 1827. At length, in 1870, this method of hauling fuel had become obsolete; but the Switchback continued to do business as a scenic road for tourists.

In recent years, however, the road made very little profit. Fact is, it began piling up a deficit—a deficit so large that in 1933 the pike had to be abandoned. Since then it had stood silent and forlorn, undergoing much damage from the elements and from vandals.

At length the Mauch Chunk National Bank, which had tided over its last days of operation with a substantial loan, despaired of ever getting the money back through any other method except a public sale. And that is how Isaac

Weiner, of Pottsville, Pa., came to possess title to the Switchback which he is probably ripping up now as this magazine goes to press.

The need for such a railway dated back to 1791, when coal was discovered by Philip Ginter, a German hunter, near what is now Mauch Chunk. A year later the Lehigh Coal Mining Co. was formed to exploit this discovery; and by 1818 the anthracite trade to Philadelphia, ninety miles



The Mt. Pisgah Incline Plane

away, and New York, about a hundred and twenty miles, had grown to such proportions that a canal was dug to haul some of it. Thereupon, with better facilities for transporting the coal from Mauch Chunk to the larger cities, the Lehigh Company decided to improve their methods of hauling it from the mines to the boats.

Accordingly, in 1818-1819 a road was surveyed and graded between Mauch Chunk and Summit Hill - it is said that this was the first time a surveyor's level was ever used - the idea being to lay rails on this road as soon as business warranted. By 1827 coal traffic had grown so much that the rails were laid. Construction of the iron highway on this roadbed was begun January 8th, 1827, and work proceeded at such a pace that the nine-mile stretch was opened for traffic May 2nd, 1827.

As Mauch Chunk lies 975 feet below Summit Hill, an ingenious system was set up. Coal was placed in small cars, each holding about two tons. Fourteen of these cars made a train. This train, in charge of one man, was allowed to drift by the force of gravity from Summit Hill to Mauch Chunk, the pitch being almost 100 feet to the mile most of the way. The empty cars were then returned to Summit Hill by mule power. Mules were carried in their own cars back to town with the loaded train. This transportation system became known later as Mauch Chunk Switchback Railway.

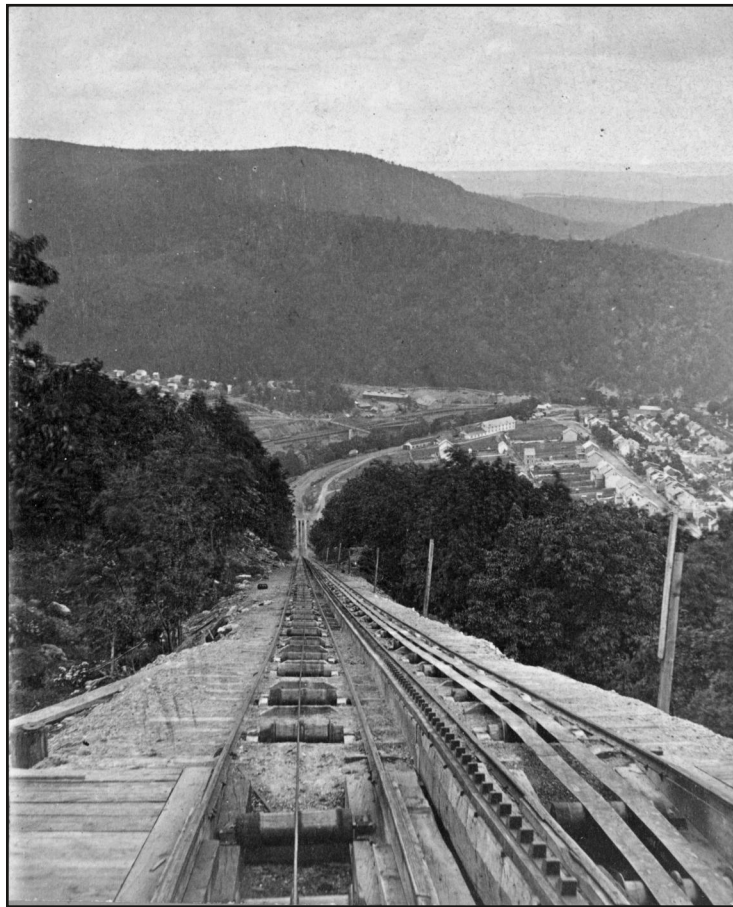
The rails were of wood, twenty feet long, four inches by five, faced with iron strap. They rested upon stone sleepers, some of which may be seen today. Total length of the road, including branches, was almost thirteen miles. Built at a cost of \$3,050 per mile, it was said to have saved about sixty-five cents on each ton of coal hauled on the nine-mile trip.

At this time the Mauch Chunk was the longest and most important railway in America. The only other ones

existing then were a small line extending into a quarry in Delaware County, Pa., and the Quincy stone quarry pike in Massachusetts. In the first years of its operation the Mauch Chunk road conveyed 32,074 tons of coal. By 1859 the total had reached 450,000 tons per year.

Meanwhile, in 1844, the Lehigh Coal & Navigation Co., successor to the Lehigh Coal Mine Co., realized that this method was too slow because of the length of time needed to return the empty cars to the mine; so they started construction of the back-track and completed it a year later.

This back-track, which is regarded as somewhat of an engineering feat even today, consisted of a return track



The view from the top of Mt. Pisgah

from Mauch Chunk to Summit Hill, utilizing two planes. The track was built up Mt. Pisgah, on the outskirts of Mauch Chunk, a distance of 2,322 feet with a rise of 664 feet. And it continued down the side of Mauch Chunk Mountain to the foot of Mt. Jefferson, on the outskirts of Summit Hill, where it ascended this mountain 462 feet in a distance of 2,070 feet.

Both Mt. Pisgah and Mt. Jefferson were equipped at the summit with powerful stationery engines which pulled the cars to the top of the incline, allowing the cars to then drift to the foot of the next plane where they were again raised. This back-track—or switchback—connected with the old mule-track at

Mauch Chunk and Summit Hill, thus forming a rough figure eight.

The back-track was laid with light iron rail imported from England, the rail being laid in four-foot segments. The hoisting devices at Mt. Pisgah and Mt. Jefferson consisted of stationery engines operating steel drums

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Canal Comments

For this Canal Comments, we will feature two of Terry's obituaries.

From Michael Morthorst, President of the Canal Society of Ohio

I have some sad news to report this date. Terry Woods, Canal Society of Ohio Honorary Trustee, canal historian, author, and former CSO President, passed away on the evening of May 6, 2022 after a short illness. He was 85 years old.

Terry was one of the early members of the CSO, and was its president on two different occasions. He was also President of the American Canal Society in the early 2000s. Over the years he authored numerous books and articles. It was not unusual to find his work in such periodicals as *Towpaths* (the CSO journal), various incarnations of Canal Society of Indiana publications, *American Canals* (the American Canal Society bulletin), and *Canal History and Technology Proceedings*, published by the National Canal Museum. His five published books include: *The Grand Canal: A Brief History of the Ohio and Erie Canal*, *Twenty Five Miles to Nowhere: The Story of the Walhonding Canal*, *The Ohio and Erie Canal in Stark County* and *The Ohio and Erie Canal: A Glossary of Terms*. It always seemed Terry was working on another project.

Terry also produced over 256 installments of his journal of personal experiences and general canal history: *Canal Comments*. He sent these to those on his email list he thought might be interested in them. He also spoke on numerous occasions to interested groups, libraries and schools. Although he could be irascible at times, Terry was always driven by his interest in canals and canal history. He will be missed.

And from his official obituary

After numerous attempts and near misses, death finally caught up to Terry K. Woods, 85, at his home on May 6, 2022. A lifelong resident of Canton since his birth on March 2, 1937, he was fortunate to be both successful and lucky during his time on this earth. His successes include being a 1955 graduate of Timken High School where he was involved in jazz band. He successfully earned a Bachelor of Science degree in mechanical engineering from The Ohio State University and a Masters Degree from the University of Akron. Between degrees he served as a first lieutenant in the US army, stationed at Fort Knox, Kentucky and in France. He considered himself

lucky to have served in a peacetime army. He achieved varying levels of success at his three jobs as an engineer – E.W. Bliss Company, Timken Company, and Goodyear - the latter which he retired from in 2001. He also successfully published numerous pieces of writing, both fiction and nonfiction, including five books on canal history which made him one of the leading researchers on canals in the country. Terry was a member of the American Canal Society, the Canal Society of Ohio, having served both as President, and also a member of the Pennsylvania Canal Society, the Canal Society of New York State, and was an active member of the Indiana Canal Society. Terry was a member of the Massillon Train Club and the Massillon Museum and authored a book regarding Massillon.

If asked what was better, being successful or being lucky, Terry would have answered being lucky. He was lucky to have had both his parents, Kenneth Clarence Woods and Fanchon Caroline (Mowry) Woods, on this earth with him for over seven decades. He is lucky to have his first friend and only sibling, Sandra (Woods) Staats, with him the entirety of his life. He was lucky to marry the beautiful Rosanne (McFarland) Woods eight months after meeting her despite her being way out of his league. They would go on to be happily married for 55 years and be lucky enough to grow their family to include five children and nine grandchildren. He was lucky to evade death three previous times: in 1955, 1995, and 2010. His luck really shone when he took the little league team he coached in 1994 from a regular season record of 1-15 to winning the league championship. Anyone who was familiar with Terry was unlucky to have to listen to every minute detail of that season anytime the conversation steered toward baseball, or winning, or anything really.

He is lucky enough to have his memory cherished by numerous people. In addition to his sister and his wife he is survived by his children Susan (Mike) Cammel, Kevin (Michelle) Woods, and John Woods all of Canton; Robert (Leslie) Woods of Cincinnati, and Kathleen (Jeremy) McIntyre of Gainesville, FL; grandchildren Nicholas, Jennifer, Brian, Brooklynn Cammel, Madelyn Woods, Bailey, Genevieve, Cayden, Liam McIntyre as well as numerous sisters and brothers-in law, nieces, nephews, and friends.

A Mass of Christian Burial was held at St. Michael the Archangel Catholic Church with Fr. Benson Okpara as Celebrant. Interment will be in Sunset Hills Memory Gardens with Military Honors.

Canal Tidbits and News

The **D & H Museum** in High Falls, NY has moved to the 1797 DePuy House. This impressive stone building sits just down the road from the old museum location but affords the organization more space for displays and gatherings, plus it helps to preserve the historic building.

The **Feeder Canal Junction Lock** of the Welland Canal has been recognized by the Ontario Heritage Act. The Lock sits at the southeast corner of Broadway and Prince Charles Drive in Welland. Only the eastern end of the lock is visible and that is limited to the top course of stones.

There is sad news from the **Whitewater Canal** in Metamora, Indiana. The Whitewater Canal State Historical Park reports; The *Ben Franklin III* canal boat, which ran on the Whitewater Canal for 33 years, has been deemed irreparable after its removal from the canal on April 11. A structural engineer who examined the 75-foot-long boat at the request of the Indiana State Museum and Historic Sites said that based on his observation, the boat has reached the end of its usable life. Equipment will be moved onto the parking lot of the Whitewater Canal State Historic Site administrative building parking lot where the boat is located to begin the process of disposing of the boat. The Indiana State Museum and Historic Sites is working to find \$7.6 million in funding to make the necessary repairs at the site, including funding for a new canal boat.

Readers might recall that the canal boat *Benjamin Franklin III* never opened for operations in 2020, citing Covid as the reason. Local residents and interested parties had been expressing concern over the boat and park for some years. The water-powered wheel at the grist mill has not been used in 10 years, and park conditions had only grown worse. It is hoped that the State will make reinvestments into the park and canal boat.

Meanwhile the **Whitewater Valley Railroad** has begun its 48th year of operations.

The **Illinois and Michigan Canal** rewatering project in Ottawa, Illinois has taken a hopefully upbeat turn. Readers might recall that after the initial rewatering last year, the canal was quickly choked up with weeds and algae, and it was dewatered after only a few weeks. The **Ottawa Canal Association** reports that they and the city have been awarded funds from the Illinois and Michigan National Heritage Corridor to make repairs and improvements and rewater the park. They expect the work to be complete by mid-June.

A nice article appeared online stating that the

Hennepin Canal might be the best place in Illinois for beginning or simply relaxing kayaking and canoeing. The 104-mile-long retains water along most of its route and with the exception of portaging around the locks, the canal is intact.

We also received a nice note from Gary Wagle, President of the **Friends of the Hennepin Canal**. Gary organized the group in 1989 with the idea of preservation of the canal remains. He noted that “We do have a FaceBook page as well as a web page. Note that we are the "Friends" group, not the "Foundation" group. The Foundation is a new group that seems to be focused more on recreation than on preservation.” So head over to the Facebook and search for @FHCanal, or Friends of the Hennepin Canal.

Canal boat rides are starting up again for the season and some after a two-year Covid hiatus. If high gas prices are keeping you close to home, go check out your local rides and maybe take a ride or two to help support the groups that run them. Also, please take a look at the information found on our **Canal Boat Rides map** on the ACS website, and send along updates to the information. These rides are constantly changing and it is difficult to keep up with all the news.

The **Pennsylvania Canal Society** held its spring trip along the upper Lehigh Navigation on April 22-24. It was advertised as a very active trip with lots of walking and Doug Logan lived up to his word with almost five miles on the step counter by the end of the day. A small group checked out sites along the Lehigh River between Jim Thrope and Stoddartsville over the three day trip. Check out the spring 2022 issue of Canal Currents for a detailed review. On Friday, Doug took us on a tour along the route of the old Switchback Railway that brought coal from the mines to the river to be loaded onto the canal boats. It was a fun look at what was considered to be one of the first roller coasters. The timing was also good for Richard Palmer to send in the old magazine article about the sale of the switchback railway on page 6.

The **ACS website** is going through some (hopefully) improvements. I will admit that it has been a rather clunky site to navigate. So I have added a ‘clickable’ map of North America to the homepage. Now you can simply pick the state or province that you want to study, click on it, and open the page. No more drop down menus! I have also been adding more basic information to each state/province

Continues of Page 15

The Original Mount Morris (NY) Dam

By Richard Palmer

In conjunction with canal navigation, dams were built to provide slack-water navigation across the watercourse they blocked. And a mule bridge bridge was usually required. The image with this article clearly shows the mechanism of a canal water-level crossing at Mount Morris.

Flood control may have been a secondary motive considering the fact that devastating floods frequently inundated downtown Rochester for more than a century prior to construction of the current dam completed in 1952 at a cost of \$25 million.

Whoever drew this image positioned the viewer looking upstream at the face of the dam, exactly at the level of the lip of the dam and the pool behind it. This and succeeding structures were located slightly more than a mile downstream from the current dam.

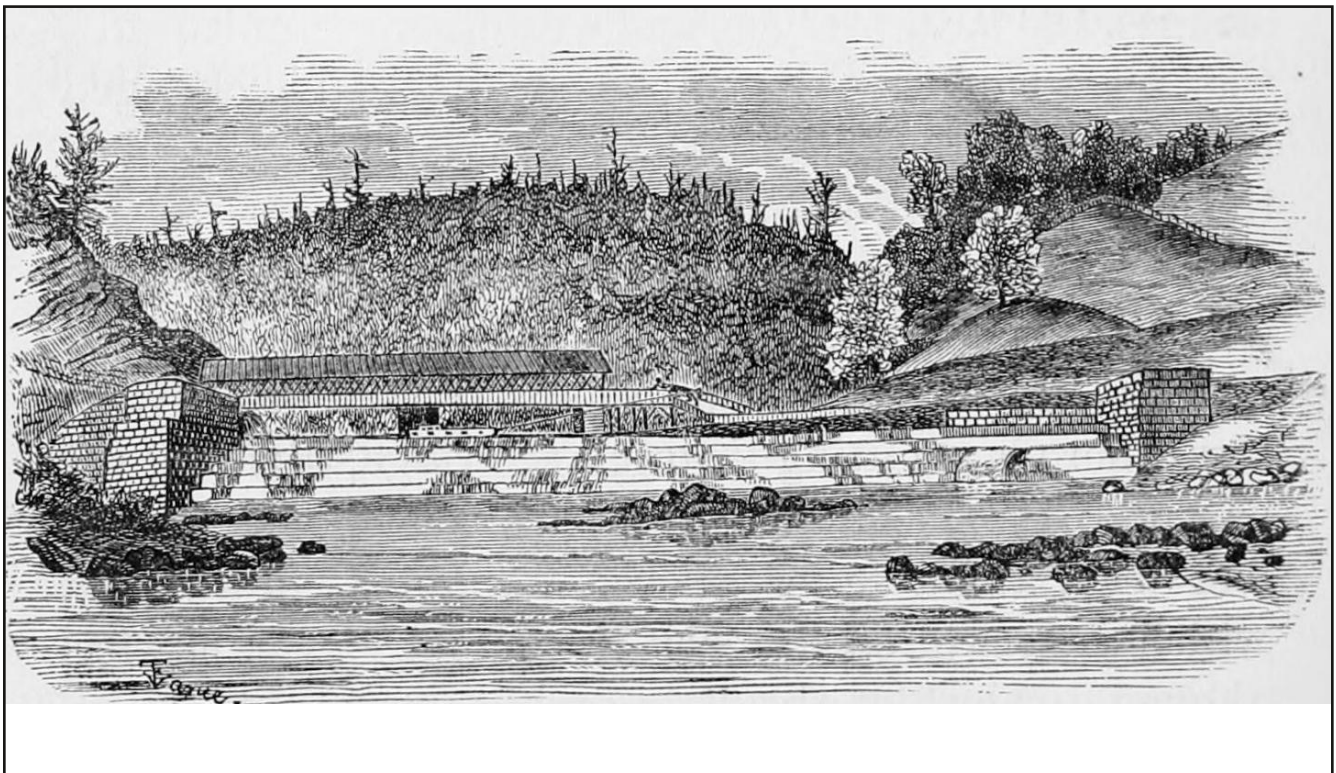
The dam built in 1852 was stair-cased and the right (north) abutment is integrated into the stonework of the guard lock that was located at the river's edge, protecting the canal to the north from the rampages of the river and allowing entry into the river when it was at a different level

than the canal.

The covered bridge in the background was about 100 yards upstream. In addition to providing a road crossing from Mt. Morris to villages to the north it carried a wooden towpath cantilevered to its downstream side. Seen in the image is a horse just exiting the bridge towpath with the towrope extending back to what looks like a packet boat being towed across the crossing.

To continue to the south, Locks #9 and #10 were immediately as you leave the river and brought the boats up to the level of downtown Mt. Morris. Spring freshets washed out about 100 feet of the dam on March 19, 1852. A temporary dam was substituted and navigation resumed on May 26. But another break occurred on June 11, closing the canal down until repairs were made. It reopened on July 8th.

The dam was 337 feet long and 25 feet high, built of timber and stone, with a succession of aprons on the lower side, and a slope on the upper. Each apron was covered with solid oak timber 12 inches thick, the base at the narrowest point being 65 feet, composed of timber and



Old woodcut of Mount Morris Dam where it crossed the river at a point called Squaukie Hill. From Lockwood L. Doty's History of Livingston County, New York, page 363, by Lockwood Doty, published in Geneseo in 1876.

stone.

The entire base, including the earth filling on the upper slope, was 110 feet wide up and down stream. A sluice with gates was constructed in the body of the dam, by which the pond could be drawn down during low water to allow for repairs to the dams and locks.

Although the Genesee Valley Canal would soon be abandoned, the state continued to maintain the dam. In the fall of 1877 they spent between \$1,500 and \$1,800 in repairs that took 38,000 feet of new timber, 100 cords of stone and 3,000 pounds of drift bolts. Also included was construction of a new farm bridge nearby.

Studies were made in the 1890s to build a new dam to create a reservoir to supply water to the Erie Canal, but nothing was done.

Notes

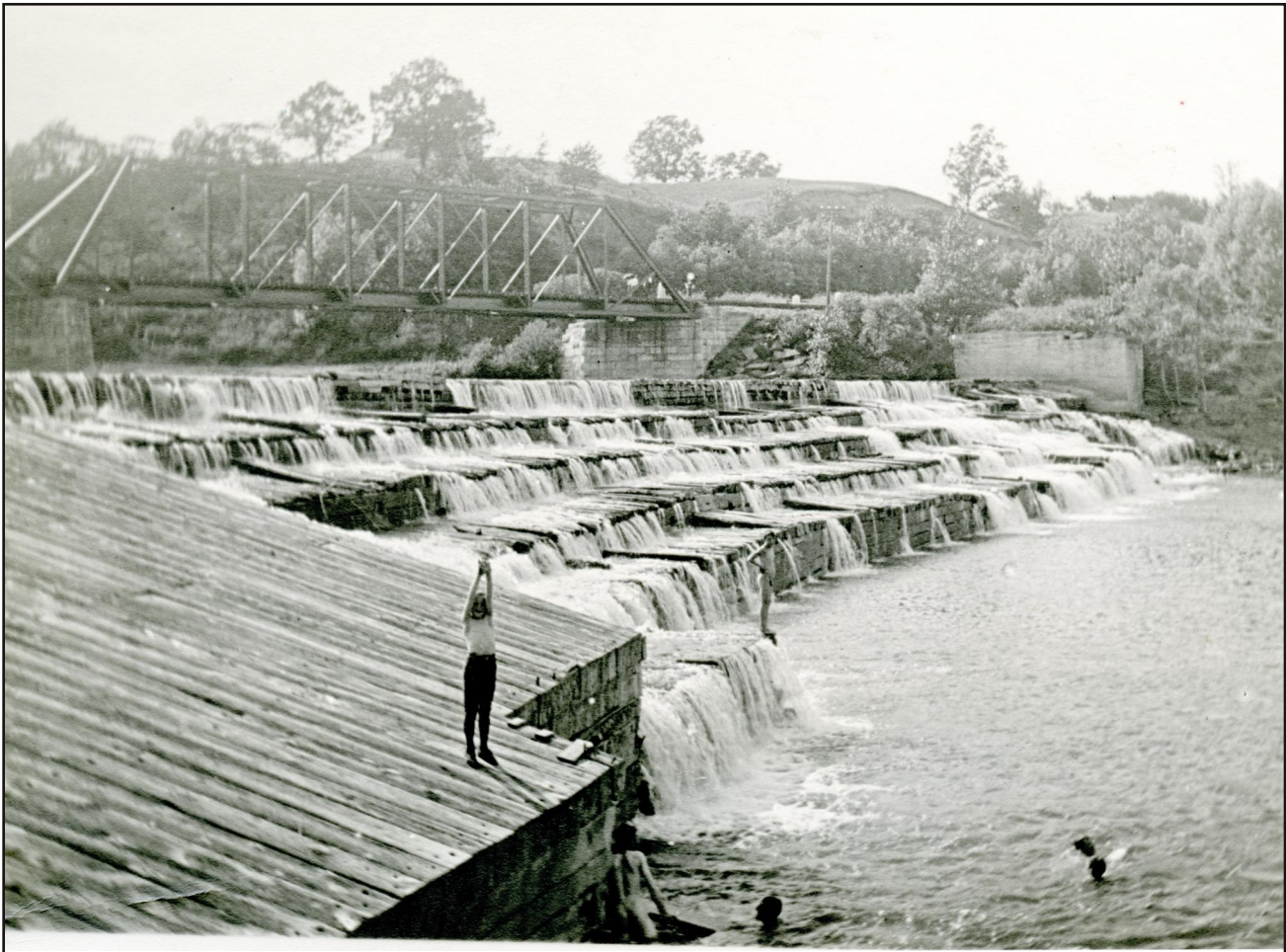
Comments of Dave Kipp and Craig Williams
Dansville Advertiser, September 6, 1877.

Lockwood L. Doty; History of Livingston County,
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New York State Engineer & Surveyor annual reports,
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State of New York, Vol. 1, Albany, N.Y., 1906

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York, New York State Museum Bulletin #85, Plate 13,
May 1905



The Mt. Morris Dam at the turn of the century

Spring Tour of the Canal Society of NYS

By Michael Riley

On Sunday May 8th and Monday the 9th, the Canal Society of New York State held its spring tour along the Oswego Canal, which is part of the working New York canal system. This tour has been presented a number of times in the past so the focus was on the work at Lock 7, a two year major rehabilitation project. All the participants received a very nice 44 page full-color guidebook. The trip was a bit unique as it took place on Mother's Day weekend, and it took place on a Sunday/Monday with the dinner and speaker on the first night. Forty-two people signed up for the trip and most were able to attend. Due to covid in the family and the fact that I live nearby, I decided to skip the Sunday events at the Coast Guard facility, the H. Lee White Maritime Museum, and the dinner and talk.

The canal was first opened in 1828 and was a mix of canals and slack-water navigations with 18 locks. It ran 38 miles from downtown Syracuse to the Lake Ontario port city of Oswego. The canal was one of the four that was enlarged to the enlarged Erie standards in the 1860s. These same four canals (the Erie, Champlain, Oswego, and Cayuga Seneca) were again enlarged and modernized in the 1905-1918 Barge Canal project with locks 44 wide by 300 long and a 12-foot-draft. The Oswego has 7 locks numbered 1-8 with lock 4 not being built. The current canal is 24-miles-long and runs from three rivers to Oswego. Three rivers is the confluence of the Oneida and Seneca rivers which then becomes the Oswego River. It is located north of Syracuse.

The headquarters was the Best Western which sits on

the bank of the river/harbor affording great views of any ship traffic. Monday was a delightful spring day and we hopped on the bus for a short couple-minute trip to the Port of Oswego where we heard from the director of operations about the increases in traffic along the Great Lakes and St. Lawrence seaway. When we visited a few years ago, most of the traffic was in aluminum ingots and road salt. These days grains, aluminum, windmill blades and parts, and salt make up a great bulk of the traffic at the port. It is unfortunate that this increase is not translating into any traffic along the Oswego and Erie canals. Most of the cargo is handled by railroad and trucks. The port is not set up for container traffic but this is being considered.



A workboat lies in the newly refurbished Oswego Canal Lock 7.

We then boarded the bus for another short hop to see Lock 8, which was being worked on for the upcoming season so we could only see it from a distance. It was then back on the bus to Lock 7. The NYS Canal Corporation had just completed a two-year overhaul of the lock and we got to visit with the lock tender who showed us the new "spacecraft" type buttons and

lights that replaced the old levers for opening and closing the gates and filling the lock. Greg Johnson of Bergmann Associates was on hand to discuss the work that took place. As the season had not yet begun we did not see any traffic pass through.

It was then onto the real treat of the day, a visit to the old enlarged Lock 14. Lock 14 remains in fairly good condition and is used by a number of homeowners as a mini marina along the Oswego River. As it happens, the parents of an archivist who has been working with the CSNYS owned the home overlooking the lock. With the blessing of



Enlarged Lock 14 now serves as a boat slip for homeowners.

the neighbors the tour was allowed to stop and visit. The group was given an overview and allowed to walk down to the lock. The top stones could be seen above the water level. It might have been the last time for such a visit as the parents have recently sold the house.

We then continued south to Lock 3 where we had lunch at the Tavern on the Lock. After we headed upstream to Lock 2 where Brookfield Renewable Power gave us a tour of the hydroelectric plant that sits by Lock 2. The Oswego River has been and is used by a number of industries to turn water wheels and power their operations. The old hydroelectric plant makes use of the river flows to generate power and acts as a buffer to the grid aiding the nearby nuclear plant in maintaining a steady power supply. We then got a tour of the unique swing bridge that crosses Lock 2. The old bridge was built as part of the 1930s Federal contract to deepen the Erie and Oswego canals and give a bit more headroom to passing boats.

Our next stop was at the NYS Canal Corporation maintenance facilities at Lysander to see the old tugboats *Seneca* and *Urger*.

Captain Steven Wunder (retired) was on hand to regale the group with stories about his time operating the two tugs. Both are threatened boats with their future in doubt and as of now, the Canal Corporation has not decided what to do with them. Preservationists have stopped plans to turn the *Urger* into a garden display or be sunk to the Long Island Sound reef, but the future is still very much undecided.

We then made a short hop to Lock 1 where we heard from Dick Drosse of the Great Bear Recreation Area. The park has the remains of a lock and canal and it is accessible by a short hike. After that we headed back to the hotel, but along the way we stopped at Lock 6 and the high dam.

If you do this on your own, all the current locks are easily accessible by car and the entire canal can be toured in a couple hours or a day. You do need to hunt for the remains of the old towpath canal as much if it was lost when the current navigation pools were constructed. Or if the old locks are visible, the homeowners guard them and keep them private.



The tugboats Seneca and Urger sit on the dry while they await their fate.

A New Home For Number One

Written by Rachel Mahoney and edited by Bill Trout.

The frayed, rusty remains of a canal packet boat that provide the ghost of a glimpse of Virginia's historic canal system now sit on display at its own exhibit next to the canal society's Batteau House – a sight better than the muddy burial grounds it emerged from.

Referred to as *Boat 1*, the iron hull was the first thing to be rediscovered during the excavation of the Richmond canal basin in 1983-1986. If not for this discovery, there would probably have been no "Basin Dig," no discovery of James River batteaux, and no Batteau Festival.

Originally a hub for canal commerce and transport, the canal basin property was sold to the Richmond & Alleghany Railroad – which would later become CSX – in 1880, shifting it from one era's commercial nerve center to the next. The Great Basin, three blocks long and almost a block wide, was filled with gravel and vertical pilings to support a rail yard in 1923, and was used as a parking lot later in its life.

In 1983, Faison Associates started converting the yard to an underground parking deck for the Omni hotel and the James Center, digging down 23 feet for the project and clawing into a treasure trove of discarded historical detritus.

At least, that's what it was to canal and history buffs.

There, Bill Trout recalled peering in through the fence to see what was going on and what the backhoe had revealed. He and Jimmy Moore both lived in Richmond at the time and they slipped into the site, asking crews if they had dug up anything. Even once pieces of the ship emerged, they were coated over with mud that had to be cleared away to see what they were.

So began a three-year excavation that's provided key firsthand historical information on what life was like along Virginia's waterways.

Groups with the Virginia Canals & Navigations Society and the Archeological Society of Virginia descended on the site to sift through the sticky mud after the backhoe had cleared away and see what they could find. Lyle Browning served as the dig's site director, though he said he found himself on the phone setting up donations most of the time. As leader of what was initially an unsanctioned operation, he recognized that optics surrounding the dig were important and tipped off members of the media to see remnants of Virginia's history revealed once more to the light of day.

"All of the sudden it was off to the races," he said.

It worked – the dig attracted national news attention and was, in Lyle's words, "quite an amazing business." Some 2,000 lookers-on would gather outside the fence at times as the crews extensively catalogued their findings with photos and drawings, using specialized equipment from VDOT thanks to Lyle's connections.

The boat's remains were one of three large canal boats unearthed at that dig; the remains of another iron-hulled packet boat, and a wooden freight boat were examined before they went to the dump. Alongside them, digging crews found pieces from what they figured to be 76 different boats. Likely a wreck even before it sank, *Boat 1* was stripped bare of anything people could salvage before it was abandoned. It was probably about 83 feet long. Half of it was removed; the other half (and who knows what else) is still buried deep in the mud under 9th Street.

Over the years the boat's ribs have rotted away, but the wooden keel at least partially remains. It bears several mangled holes made by wooden pilings driven through it when the railyard was built. Your eye also might be drawn to what's left of the women's toilet – a hole through the bottom of the boat.

As a packet boat dating from around the mid-1840s or later, it would've carried small parcels, mail, and passengers along the river, including 33-hour journeys between Lynchburg and Richmond. Men and women had separate compartments and separate bathrooms, and it was equipped with a communal comb and toothbrush for passenger convenience.

Boxes upon boxes of artifacts from the dig and *Boat 1* went to a barn for years of storage, at Historic Kittiewan Plantation, courtesy of the Archeological Society of Virginia. On April 24, the boat was trucked out to what should be its final resting place at the Batteau House in Madison Heights, near Lynchburg, in a newly built Boat Barn with an open porch specifically for viewing the packet boat skeleton.

Though Richmond was the birthplace, terminal and graveyard for these boats, Lyle said there's no real dedicated space for them there. Figuring Tredegar Ironworks was likely where the iron hulls were produced, Bill said he'd contacted them years ago about any interest in displaying the packet boat, but they didn't bite.

So much can be divined from those artifacts, down to the bright colors of peach and lime green paint that decorated the packet boats. Still awaiting in-depth analysis

are over a hundred boxes of pottery shards, utensils, baggage tickets, chains and dog collars, tannery leather, animal bones from meals that reveal extensive dietary information, and hundreds of worn out leather shoes.

An unusual set of grindstones are of particular interest to Lyle, slanted on the edge for what could've been grinding octagonal or hexagonal gun barrels.

“A huge amount of information came out of that dig that needs to get done,” he said.

For now, at least, that treasure trove has a permanent home where it's neatly organized, catalogued and ready for perusal, with a wealth of stories to tell.

*For more details see **The Falls of the James Atlas and The James River Batteau Festival Trail**, published by the Virginia Canals & Navigations Society, www.vacanals.org.*



Boat one in its new home at the Batteau House

Tidbits and News continued

page and trying to update all the contact information for canal groups and organizations. I need your help! One of the purposes of the ACS is to share information about the various groups so please send along your website and social media contacts so they can be added.

Have you visited the ACS website? On it you will find all the old canal data pages, full versions of American Canals between 1972 to 2020, a updated index, old maps, and the interactive maps to help you find canal parks and canal boat rides.

The latest news from the **Middlesex Canal Association** is promising. They have received their permit to complete the new MCA museum in the old Talbot Mill cloth warehouse.

The **Canal Society of Indiana** mailed out a very nice 40th Anniversary booklet that covers the history of the group and all that they have accomplished over the last four decades. It was a surprise as the CSI newsletter has been digital for a few years now, so having this booklet was quite a nice gift.

Terry Woods, from front page

contributor to **THE MASSILLON CONNECTION** published by the Massillon Museum in 2014, and he also had a bit of fiction published in 1988.

Terry served two terms as the president of the Canal Society of Ohio, and five years as president of the American Canal Society. (Oddly when he was elected as president of the ACS his local paper noted that he had been named as president of the American Cancer Society. It is an easy mistake.) When I was elected, I could always count on Terry to offer his opinion and comments when I asked the board a question. He kept telling me that he was too old to be on the board but he stayed on till the end. In his president's messages and in his columns, he always closed with the tagline "Headway to You All!!!" We wish the same to you, sir.

Submitted by Michael Riley

twenty-eight feet in diameter. On each of these drums were wrapped two heavy steel bands which drew the cars up the slope.

Both planes were double-tracked. As cars ascended one track pushed by a “barney” (a small truck), the other barney descended from the top and was used in hoisting the next cars. A safety device consisting of an arm fitting into a ratchet track between the rails was attached to the barney to prevent the cars from running backward down the plane in case anything should go wrong with the hoisting machinery.

In 1870 the Switchback stopped hauling coal and began hauling passengers only. This scenic road, along with Glen Onoko and Flagstaff Park, as old-timers remember, made Mauch Chunk a tourist resort. The Switchback was taken over by the Central Railroad of New Jersey, which ran the line until they sold it to a group of citizens in 1929.

Both the Jersey Central and the Lehigh Valley used to run big excursions into Mauch Chunk, bringing as many as 8,000 tourists on a Sunday or holiday. They advertised Mauch Chunk as “The Switzerland of America.” This “quaint and lovely town,” as the folders described it, was named from the Indian Machk Tschunk (Bear Mountain). It lies at the eastern end of the southern anthracite coal fields, nestled in the valleys of the Blue Ridge Mountains, which rise almost perpendicularly around it, to a height of seven hundred and fifty feet. The Lehigh River at this point is one succession of rapids, falls and dams, as it cuts

its way through the gorges dividing the town.

As a tourist attraction the Switchback was very popular. For a while it vied with Niagara Falls as a favorite haunt of bridal couples. The eighteen-mile trip on this line was made in one hour, with a liberal stop-over at Summit Hill to allow passengers to visit the widely advertised burning mine nearby. This route was through rugged and picturesque country surrounded by mountains and ravines. Along the home stretch the tracks followed the beautiful Mauch Chunk Creek for several miles. Pines and gigantic rhododendrons towered along its banks. It was a ride you never forgot. On the return trip to town the cars sometimes attained speeds in excess of fifty miles an hour.

And now as the years roll by, from early summer, when the honeysuckle, wildflowers, dogwood and rhododendrons are in bloom, until autumn when the whole countryside is a riot of color, the Jersey Central and the Lehigh Valley may continue to run their Sunday excursion trains to Mauch Chunk—but not to the Switchback. Natives will point out the abandoned site and tell the visitors a little of her history; and that is all you will find of the old gravity road—just a memory.

The recent sale, at which County Treasurer Kern officiated, dashed the hopes of many persons who wanted to see the Switchback restored to service. An ironical touch is seen in the fact that this pike, which operated for well over a century without a fatal accident, was finally sold for scrap to make instruments of war.

Transcribed by Richard Palmer

Canalendar

June 18-25, 2022: James River Batteau Festival, [Virginia Canals and Navigations Society](#)

June 26, 2022: [D&R Canal Watch](#) annual meeting, Griggstown, NJ.

July 2, 2022: Delphi Canal Days, [Wabash and Erie Canal Park](#) in Delphi, Indiana

August 27, 2022: Tour of canal sites around Logansport, Indiana, [Canal Society of Indiana](#)

October 2-4, 2022: New York State Canal Conference, Rochester, NY. [Canal Society of NYS](#)

October 21-23, 2022: Fall tour of the Blackhand Gorge along the Ohio and Erie Canal, [Canal Society of Ohio](#)

October 28-30, 2022: Fall tour of the Delaware and Hudson Gravity Railroad, [Pennsylvania Canal Society](#)

Be sure to check the websites for updates as schedules might change. We try to keep the Canalendar page on the ACS website up to date. Also remember that many of these groups host short walks, bike rides and other programming throughout the year. Check their social media pages so you can stay informed.