

AmericanCanals

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Dedicated to Historic Canal Research, Preservation and Parks

Winter 2016

From the President

By David G. Barber

First, here is something to do when you are stuck inside this winter. On the American Canal Society web site, americancanals.org, I have added an item from the Blackstone River Heritage Corridor which you might find interesting. It's a paper cut-out model of the canal packet *Lady Carrington*, which once traveled on the Blackstone Canal. You just download the pdf file, print it out on one page, cut out the pieces and glue them together. It comes complete with mules, driver, and captain. You might like to use heavier card stock paper.

Second, I want to report on a project in my area that touches on a watered section of the Blackstone Canal, although it is not the canal itself. Please ... understand that I am not trying to brag, but to celebrate and use this as an example.

The mill village of Waterford is in Blackstone, Massachusetts. The village is immediately on the Rhode Island border, and the Saranac Mill, which is associated with the village, was actually in North Smithfield, Rhode Island. The mill burned in the 1960s. The village was established by Welcome Farnum, who invested in the Blackstone Canal and influenced the route of the canal to cross the river twice, both below and above his mill and village, to provide transportation of goods for the mill. When railroads were developed in the area, Farnum invested in them also. Specifically, these were the Norfolk Country Railroad, which ran eastward towards Boston, and the Southbridge and Blackstone, which connected westward to Putnam, Connecticut. Both of these lines became part of a through route from the Poughkeepsie Bridge to Boston. In World War I, this double tracked route was important enough that the United States Railroad Administration (USRA) beefed up many of the bridges so that it could carry heavy freight traffic and Santa Fe 2-10-2 locomotives to relieve congestion on the Shore Line.

In 1954 the through route was broken when Hurricane Diane destroyed the Airline Bridge just southwest of Putnam. The Massachusetts portion was *Continued on page 4*.



The Blackstone Viaduct. Photo by David Barber

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American Canals

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The objectives of the American Canal Society are to encourage the preservation, restoration, interpretation, and use of the historical navigational 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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Material submitted to *AMERICAN CANALS* for publication should be typed and double-spaced or sent by email in WORD format. You may send actual photographs (which will be scanned and returned), or digital versions may be emailed or sent on a CD.

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TRIP TO THE PANAMA CANAL IS PLANNED

We have received much interest in the Panama Canal trip that was described in the Fall *American Canals*. The date we have selected is Saturday, March 4 - Thursday, March 9, 2017. The trip is a RoadScholar Trip to Panama and is identified as "Grit & Glory: Exposing the Panama Canal" #9901RJ." Further information is available at www.roadscholar.org. If you are interested, please email either Bob Schmidt (indcanal@aol. com) or Linda Barth (barthlinda123@aol.com). The maximum on this tour is 51, so if you are interested please sign up soon.

You will need to make your reservation directly with RoadScholar, but please let us know if you plan to go. The 2017 (program only) rate is \$1798 per person for double occupancy (\$2143 for a single occupancy). Airfare can be arranged by them or you can do this on your own. Trip cancellation insurance with Road-Scholar is \$182 per person. They will take care of all airfare out of any major U.S. city for you or you can make your own arrangements.

Our basic schedule is:

Saturday, March 4 - leave U.S. and arrive in Panama City. Hotel Amador Country Inn Suites No other scheduled activities

Sunday - Welcome meeting and visit to Panama City and afternoon program lecture on the Panama Canal past & present

Monday - visit early trail used by Spanish, See Miraflores Locks Visitor Center, view workings of locks

Tuesday - Full 12-13 hour transit thru canal and all locks Pacific to Atlantic by boat and arrive at Colon.

Wednesday - Go to New Lock Visitor Center, afternoon train ride across Isthmus back to Panama City and Farewell dinner with local music

Thursday - Fly back to the U.S.

Walking and standing for up to 90 minutes at a time in hot, humid weather will be required.

From the President. Continued from page 1.

abandoned west of Franklin, Massachusetts after a bridge over the river in Blackstone was damaged in a flood in 1969. More recently, the Commonwealth of Massachusetts acquired most of the 22 mile long right of way west of Grove Street in Franklin and has designated it as the Southern New England Trunkline Trail. The trail continues in Connecticut as the 60-mile long Airline State Park. Currently, the Massachusetts Department of Conservation and Recreation is in the final stages of converting $3\frac{1}{2}$ miles of the route from the site of the Blackstone Depot, west to Rte. 146A into a paved rail trail to be part of the north—south Blackstone Greenway.

The Greenway is to extend from Providence, Rhode Island to Worcester, Massachusetts and is part of the East Coast Greenway. The portion being worked on now is thus to be part of two bike trails. One north—south and the other east—west. The current project includes the rehab and decking of seven rail-road bridges, a new bridge over Main Street in Blackstone (to replace a missing bridge), and a tunnel under Church Street in Blackstone. Only one of the bridges, which is part done, remains be completed.

The ribbon cutting is planned for next spring, but folks are using sections now.

In Rhode Island, there is ten miles of off-road bike trail south of Woonsocket that is in use. A final two mile section up to the state line is on the verge of con-



A test area on the viaduct where the concrete was removed to expose the original granite. Photo by David Barber

struction start. Thus, the missing one—third mile Massachusetts piece between the Blackstone Depot site and the Rhode Island border is very important.

The initial plan was to continue the bikeway along the railroad alignment across an eighth steel bridge, which spans the canal and a local street and which is on the National Historical Register, and then along the Blackstone Viaduct. The Viaduct consists of three fills connected by a single arch bridge and a seven arch bridge. The arch structures are granite masonry arches built in 1873 and encased in concrete in 1918 by the USRA. The problem is that the 97 year old concrete is failing, but it hides the older masonry, which appears to be intact. But, they are the most historic structures in the town of Blackstone and are on the National Historical Register.

A further problem is that engineers stopped building such structures in masonry in the early twentieth century and today's engineers are mostly not experienced in such structures. The preliminary engineering survey recommended removing the historic structures. That was a complete departure from earlier plans and sent everyone ballistic last May. This greatly surprised the state folks who had assumed that the lack of comments earlier meant a lack of interest. In fact, the lack of comments resulted from agreement with the prior plan.

However, none of the local boards had good information about the structures or the new plan. This I solved by getting a copy of the preliminary report on the viaduct, using a public information request to get a copy of the preliminary reports on the steel bridge, copying the November, 2014 status report on the Southern New England Trunkline Trail, and obtaining the accessors records and easements on all of the property involved from internet and other sources. Assembling all of that information into several copies in loose leaf binders, I provided copies to each of the interested town boards. With the facts in hand and a briefing on the consequences of the state's proposals, the boards could then unite on a common plan and involve the state representative and state senator. That changed everything.

Recently, the state has agreed publicly that their proposals were poor and studies inadequate. They have frozen any plans for demolition and have hired engiFrom the President. Continued from previous page.

neers to thoroughly study rehabbing the viaduct for use as the bikeway. We have pointed out that bicycles are much lighter than locomotives. The viaduct route provides a grade separated route across three streets, two quite busy. It is much safer and preserves historic structures. It also eliminates any additional impact on the historic canal. We aren't at the end of this yet, but the group involved has made significant headway.

My point here is that we do not have to accept what government may propose. If we dig out the facts and involve the local boards, we can successfully push back against poor proposals. However, it does take effort on the part of the public.

This is David Barber's 50th "From the President" letter. The first letter was in the Fall 2002 issue. Thanks, David, for providing all of the relevant and insightful letters over the past fifteen years.

American Canal Society Sales

The Society has the following items for sale:

Best from American Canals #2	published 1984	\$4	
Best from American Canals #5	published 1991	\$4	
Best from American Canals #6	published 1993	\$5	
Best from American Canals #7	published 1996	\$5	
Best from American Canals #8	published 1998	\$6	
American Canal Guide #1: West Coast	published 1974	\$1	
American Canal Guide #2: South, NC to FL	published 1975	\$2	
American Canal Guide #3: Lower MS & Gulf	published 1979	\$3	
American Canal Guide #4: WV, KY, Ohio River (Photocopy)	published 1988	\$3	
American Canal Guide #5: DE, MD, VA	published 1992	\$3	
20 year American Canals Index 1972-1992	published 1992	\$3	
Canal Boat Construction Index (12 pages)	published 1992	\$2	
Picture-Journey Along the Penn. Main Line Canal	published 1993	\$10	
ACS Burgee (blue on white cloth)		\$15	
ACS cloth sew on patch (2" x 3" red, white & blue)		\$3	

Special Offers – while stocks last

Back issues of American Canals - free to members - enquire for a list of available copies and mailing cost.

An ACS bumper sticker ("Support Your Local Canal" or "Restore Your Local Canal") will be sent **free** with each order

Shipping and handling: Orders can also be sent by mail with a check payable to American Canal Society to 43 Brunswick Rd, Montclair, NJ 07042. **Include \$3 postage for first item and \$1 for each additional item** for Media Mail within USA. Enquire for other destinations and expedited delivery. Allow for your order to take up to 4 weeks to dispatch. Email Sales.AmericanCanals@gmail.com for further information.

Accompanied by the Past

by Dr. Karen Gray

History is the witness that testifies to the passing of time; it illumines reality, vitalizes memory, provides guidance in daily life, and brings us tidings of antiquity. Marcus Tullius Cicero (106–43 BCE), Pro Publio Sestio

The following two articles are reprinted from the C&O Canal Association's Along the Towpath and are the result of Dr. Karen Gray's research along with analysis conducted by Karen Gray and Bill Holdsworth of canal boat records that were transcribed by William Bauman.

C&O Canal Boats and Boating 1870–1889: Part I

By the early 1870s, the long, narrow, and shallow-draft boats used on the Potomac and its tributaries had become a small minority of the boats using the canal. The building of large canal freight boats was booming and trade on the canal was growing, with 395 boats engaged in the coal trade alone in 1870. These freight boats could hold up to 130 tons, and an occasional boat even carried a few tons more. Generally, however, they carried between 105 and 120 tons. In 1870 the total tons of coal carried to various wharves along the canal or in Georgetown, Washington, and Alexandria was 606,707.

The rate at which boats were built is indicated by the fact that 40 were constructed during the 1869–70 winter, 60 in the winter of 1871–72, and in 1873 there were in excess of 500 boats in operation on the canal as a result of the coal companies having 91 additional boats built in the Cumberland yards. These numbers, however, also suggest that older or smaller boats were being retired at the same time.²

Precise data on the number of boats carrying agricultural and other cargoes has not been found, but trade tables for this period document 16,484 tons of flour, wheat, and corn as well as 968 tons of lumber carried in 1870. Annual tonnage shipped hit its peak in 1875: 904,898 tons of coal; 13,447 tons of flour, wheat, and corn; and 1,270 tons of lumber.³

The importance of the grain trade on the canal emerges in the reports found in Washington's *Daily National Republican*, such as that on September 9, 1870. The report describes eight grain mills along the canal in and on the level above Georgetown, and it states: "The bulk of grain is received by way of the Chesapeake and Ohio canal, and a great deal comes

by wagon from neighboring counties of Montgomery and Prince George, Maryland; but the supplies are not always sufficient to satisfy the demand."⁴

By 1871, the inadequacies of the canal's wharf access and methods of unloading the boats in Georgetown were clearly apparent in the complaint of an officer from the company operating the Seneca quarries. He described the Georgetown level as often so clogged with boats that navigation was almost impossible, and on June 14 he counted ten tiers of boats three abreast, twenty tiers two abreast, and two tiers four abreast—all waiting to be unloaded.⁵

In 1873–74 the canal company surveyed the commercial cargo-carrying boats on the canal, creating a register of 539 boats.⁶ Of these, 538 were organized into 5 classes with boat lengths varying from 50 ft. to 96 ft., and the draft when loaded varying from about 2.5 ft. to 4 ft. 9 in. In this heyday of boat building, the variations make it clear that all the boats were not built to the same pattern and other details with regard to the cabins, hatches, and size of the tiller deck, etc. must have varied as well.⁷

The last two—and smallest—classes (labeled D and E) likely included some of the boats able to navigate the upper Potomac and its tributaries, as the smallest had a length of 75 ft., and a draft when loaded of as little as 3 feet. Class E included only one boat 90 feet in length but with a draft of only 2 feet, 6 inches when loaded.

Of particular interest in the 1850–1889 era is the ownership of the boats and the makeup of the crew. Surprisingly, there is very little indication of boats being operated by a family—i.e., a crew composed entirely of nuclear family members, such as a father, possibly his wife, and one or more of their children. More will be said of this in subsequent columns of this series on canal boating in the different eras, but it is likely that family boating became common only during the receivership years (1891–1924).

In 1851 most boats were registered to individuals, but many of these individuals owned more than one boat and a significant number of single-boat owners can be identified as businessmen in towns on or near the canal. Indications are that businessmen hired men to operate their boats. Examples of this ownership pattern are James H. Anderson of Williamsport and L. W. Poffenberger of Shepherdstown, both of whom owned three boats but were not captains of any of them.⁸

By 1873–74 nearly one fourth of the boats were registered in the name of companies, some with sizable fleets. The largest were the American Coal Company, which boasted 78 boats, and the Consolidation

Coal Company, with 55. Among the boats in an 1875 register were those owned by, or operated for, two Williamsport companies: Steffey and Findlay: and Embry and Cushwa.⁴ These firms are examples of the many coal companies that were not themselves involved in mining, but acquired their product from brokers in Cumberland and sold it to their own customers at their own wharf, or to the customers of another coal dealers with a wharf.⁹

In addition to the coal carriers in this register, there were eight grain boats, one boat that carried bricks and another that carried limestone. The remaining boats were simply designated "outside boats" and likely carried whatever cargo their owner and/or captain could obtain.¹⁰

In 1877, after a rate war with the B&O Railroad and a two-month-long strike by the boatmen, one of the worst floods in the region's 150 years of recorded history devastated the canal on November 24. To repair the flood damage, the canal company in 1878 issued bonds that were ultimately owned by the B&O Railroad. This resulted in the railroad's control of the canal under the receivership established by a 1889 bankruptcy court.

After the 1877 flood, A. L. Miller of the Consolidation Coal Company documented the location of 170 loaded boats along the line of the canal, providing an exceptional picture of the effect on canal boats of a major flood. The fact that the boats tended to be found in groups at specific places may be evidence of the boatmen's awareness of danger and the decision of some to wait out the storm at preferred locations. For example, there were clusters of 6–10 boats on each of the following levels: Oldtown; the Paw Paw tunnel; Seven Mile; Two Mile; Dam 6; Williamsport; Locks 35 and 36 above Harpers Ferry; Berlin (now Brunswick); Monocacy; Seneca; and Seven Locks.¹¹

Miller also noted the boats condition, such as those that would need to be lightened before they could be refloated, and those that were so badly damaged as to be unusable until repaired, if repair was possible. Seven were clustered on the three-mile level between Lock 59 and 60 (above Dam 6 in the Paw Paw bends). Of these, four were damaged and would have to be unloaded, and two required complete unloading or lightening before refloating. Only one boat, which was actually in a lock, appeared to be in good condition. At the Five-Mile Level where Little Orleans is located, one boat had been washed out onto the towpath and was not usable and at Four Locks where 23 boats had sheltered, one had been washed up onto White's coal yard and was unusable. Of

the five boats at Lock 43 (below Williamsport), all were unusable, with one washed onto the bank and another onto the river bottom (i.e., flood plain), while one was described as "upset in the lock." ¹²

There appears to have been no regular use of steam freight boats until the 1870s, during which time the number on the canal slowly increased, with one coming into service in 1873, three in 1874, five in 1875. By 1879 there were 19 steamers making between 7 and 22 trips in that year, the most notable being the steamer *Areturus* that made the 22 trips, carrying a total of 2,058 tons. It should be noted that this represents an average of 93.5 tons per trip—10 to 15 tons less than a mule boat due to the steamer's boiler and engine occupying some of the hold.

Of particular interest is a packet boat, the *Maryland*, that was built in the winter of 1875–76 by H. Ashton Ramsay, a Baltimore builder of iron ships, marine engines and boilers. Entering service in June 1876, this steamer had an iron hull, two decks, and a skylight. It was one of the boats that rode out the 1877 flood with the 22 other boats at Four Locks. ¹³ At the beginning of the boating season in early April 1878, the canal company president and board took the *Maryland* down to Georgetown, descending to the river on the inclined plane.

The other steam boats were likely all built in Cumberland at the boat yards of: William Young; Weld and Sheridan; R. & M. Coulehan; and Doener & Bender. Among the other steam boats on Miller's list of the location and condition of boats on December 7, 1877, were the *Patton* at Berlin (Brunswick) and the *Regulus* at Seven Locks.¹⁴

When it comes to the boatmen in this era, Unrau in his Historic Resource Study of the canal notes that the canal company directors were critical of the "abrasive behavior" of the boatmen, citing their:

(1) disregard of company rules and officials, (2) clamoring for access to the coal wharves on the congested Georgetown level, (3) reckless navigation practices which led to boating accidents and to the destruction of works on the canal, (4) incidents of physical violence vis-à-vis the lock tenders, (5) reluctance to meet the minimum requirements of the company regulations relative to the quality of the barges, and (6) attempts to defraud the company of its rightful tolls.¹⁵

In one particularly notorious example, George Reed, captain of the *Mayfield and Heiston* refused to pay fines for violations of canal company regu-

lations, refused to obtain waybills and to pay tolls, and forced his way through the locks from Cumberland to Georgetown where his boat was unloaded. He continued that aggressive behavior on his way back to Cumberland where his boat was seized with the aid of the police until all fines and unpaid tolls had been paid.¹⁶

The most common kind of damage done by carelessness on the boatmen's part involved damage to lock gates when boats were not sufficiently slowed and/or snubbed as they entered the lock or as water levels were changed. In the worst cases the damage could require the replacement of gates, preventing use of the lock until the new or repaired gate was installed. Such damage occasioned a heavy fine on the responsible boatman. In the 1877 to 1880 period, boatmen were fined for running into and/or breaking lock gates on nine occasions.¹⁷

But sometimes it was the boat that was damaged. In late November 1872, the captain of the *Loreto* struck the upper abutment of Lock 15, knocking a one-foot hole in his boat, which caused it to sink and prevented passage by other boats for 24 hours. Another chronic problem involved leaky boats that would sometimes sink, impeding navigation. In the 1877 to 1889 period, some 20 citations were issued by the company for boats that sank or required help in pumping to keep them afloat.¹⁸

Arguments that sometimes turned violent between crews on different boats, or between boatmen and locktenders, also appear as a repetitive problem in canal company records and newspaper reports. ¹⁹ At times it is difficult to tell from the reports precisely what happened, as in the report "that a man named Bushrod, employed on the steamer *Areturus*, was seriously injured on Saturday by being struck with a hammer in the hands of the captain, W. T. Hassett."²⁰

Drownings were among the most common cause of deaths among the boat people as well as the lock-tenders and their family. In one case, a father watched his nine-year-old son drown after falling from the boat into the canal. Neither could swim and no means of aiding the boy was apparently available on the boat.²¹ Incidentally, this incident is significant as an example of a father and young son on the same boat but no indication of other family members being present.

The extent to which closely related family members made up crews in this period can only be determined from news reports of canal incidents, and these largely provide a picture of apparently-unrelated allmale crews, not families. When a young boy is men-

tioned, he is as likely to be simply referred to as a "tow boy" as to be described as a son of the captain or a crew member.

In the second part, I'll continue a discussion of boating in this 1870–1889 era and explore some mysteries about boat operation in the era that emerge in an analysis of the information in William Bauman's transcriptions of coal boat departure reports from the Cumberland papers. This data also suggests that captains did not always command the same boat or work for the same company, and it provides further evidence contrary to the traditional image of one captain running the same privately owned boat with his immediate family serving as crew.

C&O Canal Boats and Boating 1870–1889: Part II

The previous article carried Part I of this focus on boating during the 1870–1889 era. That column (and the ones concerning earlier eras of C&O navigation) emphasized that our interpretation of boating on the canal is misleading if is based (as it almost always is) on practices and patterns characteristic of the canal's last three decades (1891–1923). That is especially apparent when one studies William Bauman's transcriptions of newspaper boating reports and articles about the canal in the peak years of boat use, the 1870s.¹

Bill Holdsworth, working with William's transcription of 1875 records for boats passing Lock 75 and other sources, demonstrated just how important such sources can be in providing a data-based understanding of canal use at the time. The following draws on William's *Canal Trade* files for the mid-1870s, Bill's work, and my own analysis from these sources.

In the years of 1874 and 1875, some 539 boats can be documented. However, for no year can a definitive determination of the number of boats using the canal be made due to such complications in the data as: names being changed when a boat was sold; the failure to record boats that were not coal-carrying freighters and that operated in lower sections of the canal or used the canal only rarely; and likely errors in the original sources.

The diversity of boats and "floats" is striking. For example, there are boats described as "scows" being used to haul coal and sand, such as the *Hammon*, that show up on a Tidelock register but not on the Lock 75 register. Also there are boats that are sometimes carry-

ing stone and at other times coal, such as the Gilbert scows 2, 4, and 6. A "farmer boat" shows up a couple of times and a boat is simply shown as "Jenkin's flat". These latter demonstrate the informal use of the canal by local people and occasional use by people owning boats primarily for their own products.

A good example of the latter situation is seen in the case of Knott's quarry, located near Bakerton, West Virginia, and across from today's Dargan Bend Recreation Area. The quarry company owned boats that it used to transport limestone on the canal from its wharfs on the West Virginia shore of the Potomac. Those boats would have entered the canal from the river at the Dam 3 Inlet Lock. We find, for example, in the May 1875 register of boats passing the Tidelock, the *Irene Knott* carrying limestone; and, in the last years of the canal's operation, a steam boat named the *George M. Knott* and a mule boat (unnamed) — all owned by the quarry.

Other unusual craft and cargo are indicated by entries such as the "Flat Boat Steel Works" and possibly the craft of the "H. Miltenberger Lumber Company." Although there is evidence that standard coal freighters sometimes hauled wood, boats carrying diverse cargo were typically not owned by coal companies or dealers, but by individual boatmen or business men hoping to make a profit with one or more boats.

Steamboats on the Canal

The 1870s was a time of much interest in and growing use of steam to propel canal boats. But that there were failures is apparent in a couple of newspaper references to the *Pride of Erin*. In September 1874 its launching was enthusiastically reported, although its machinery was yet to be installed. Nothing more appears concerning it until a March 6, 1876, *Alleganian* article on another, highly successful steamboat, the *Ludlow Patton*. Almost in passing, the article states:

Recollections of the late lamented Captain Edward Lynch's extraordinary anticipations for the steamer *Pride of Erin*, in which a number of our prominent and shrewd citizens invested many thousands of dollars, and the subsequent non-career of that boat, are too fresh in the public mind for repetition.

Contrariwise, the *Ludlow Patton*—described as being unique in that it has a propeller that could be raised or lowered—was reported to have made the

fastest round trip "ever recorded" of four days and nineteen hours. The article also notes that it only burned 4½ tons of coal on that trip and delivered 102 tons. It appears that 105 tons was the maximum load of coal for any steamer (compared to the up-to-130 ton capacity of the largest mule boats).

Another March 6 article is a general survey on the use of steam on the canal in 1876. It mentions that 10 steamboats were currently operating on the canal and it states: "The experiments hitherto made in the building and running of steamboats on our canal have been eminently satisfactory as a whole, and give bright promise of what in the future can be done in this line of operations."

Reference is made to two steamers used only in the lower section of the canal and owned by the Washington City Ice Company. Likely they delivered ice to customers along the canal from the ice houses in the federal district that were supplied at that time by ships from Maine's Kennebec River ice industry. A mention is also made of the *Skedaddler*, a steam boat that had generally been used as an excursion boat on the river at Cumberland but had made a few trips down the canal with coal.

Also discussed is the *New Era*, built to carry coal while also towing mule boats. The *New Era* was owned by John Cowden and Sons, and was launched from the yard of William Young & Bros., on September 29, 1875. It had two engines and two propellers on separate shafts and could carry 105 tons. Its propellers revolved "in the same direction towards each other to neutralize the agitation of the water". That first fall it averaged a little over five days for each round trip.

The *Alleganian* stated that it believed the *Thomas Moore* was the first two-wheel steamer on the canal. It had been reconstructed in the fall of 1874 by Messrs. Stewart & Co., of Rochester, Pennsylvania, out of an old boat. Rochester is on the Ohio River west of Pittsburgh, and it is likely that the boat reached the C&O canal by way of the Ohio, Mississippi, Gulf of Mexico, Atlantic coast, Chesapeake Bay, and tidal Potomac route. At the time the town's boat builders also built boats for Ohio and Pennsylvania canals, as well as the region's rivers.

The *H. T. Weld* was designed by Cumberland resident, Captain Alexander McDonald, and built at the yards of Messrs. Weld & Sheridan in 1874. Its distinctive feature was the revolution in opposite directions of two propellers on one shaft. However the paper

notes that during the previous winter of 1875–76, it was converted to a one-propeller boat, suggesting that its special design proved to be undesirable in the end.

The *Alleganian* article concludes with a report that five other steamers were being built. The engine for one of them also was coming from Rochester, just as had the rebuilt *Thomas Moore*. The Rochester engine is described as "an immense one, and the propeller will be five feet in diameter". It is unclear how such a large propeller would work when the boat was empty with little of the hull in the water. One would expect that the propeller could be lowered for efficient propulsion when the ship was light, but there is no indication of such a capability.

A review of the trips on the canal by the steamer *New Era* provides examples of a boat being under a different captain on different trips, something that occurs frequently in the newspapers' boating data. Also, it seems certain that the *New Era* did tow boats as it was designed to do, for the reports show another boat or two are often on the canal at the same time under the control of Captain Peter G. Cowden (although sometimes only "Captain Cowden" without a first-name, and there are other Cowden captains on the canal at this time). Recall that the boat was owned by John Cowden and Sons, making it quite possible that Peter was one of those sons.

The *New Era* made all its trips for the Borden Coal Company, while other boats often carried for several companies. Also, the *New Era*'s destination was always Georgetown and never Alexandria or a Washington city wharf. Other boats sometimes served various locations on their trips to tidewater, and Alexandria was a frequent destination since some coal companies had their coal depots in that city, which was the only commercial port in the federal district deep enough for the deep-draft trans-Atlantic vessels.

The 1876 list of *New Era* trips illustrates the difficulties of tracking a boat; a captain may be making a trip with boats under tow or traveling in convoy (as was most likely with multiple mule-boats under one captain). A round trip, even for a steamer like the *New Era*, would take five to six days.

Many departure dates for a boat or boats under Captain Cowden appear impossible without making assumptions about the newspapers' boating records. I found I could make sense of them only if I assumed (1) that the date listed for a boat's "departure" in the newspaper was in fact only the date the boat was loaded rath-

er than when it started down the canal; and (2) that the steamer *New Era* and mule boats *Henry Kraus* and *F.L. Tilghman* were usually under Captain Peter Cowden. The issue of whether mule boats towed one or more other mules boats is a complex one and I tend to assume such boats convoyed when under one captain.

But, regardless of the validity of my hypotheses, it is clear that during these busiest years of the canal, the actual boating practices were often much more complex than at other times—and that fact may be the single most significant characteristic of this 1870–1889 era.

Part 1 Notes:

- 1. Unrau, Harlan D., *Historic Resource Study Chesapeake & Ohio Canal* (2007 edition), 352. Sanderlin, Walter S., The Great National Project, 307.
- 2. Ibid., 353.
- 3. Ibid.
- 4. *Daily National Republican* articles from 1870–71 concerning the canal were transcribed by William Bauman and are available from the C&O Canal NHP library as a pdf file.
- Unrau, ibid.
- 6. William Bauman has transcribed this register (as well as others) and made it available in pdf format on the Association's website at www.candocanal.org/histdocs/index.html.
- 7. Ibid., 353–54. Note that the first 24 locks were built with about 90–91 ft. between gate pockets (or miter sills)—i.e., the lockage space available for a boat. This is too short for boats of the length given here. The mystery of boats that appear to have been too long, for the shorter C&O Canal locks, according to the registries, has not been solved. Locks 5, 6, and 7 were lengthened by 10 feet in 1876–77. In addition Locks 28 and 31 were both under 91 feet. I have discussed this problem more fully in past columns.
- 8. "1851 Canal Trade", consisting of transcriptions by William Bauman of canal-related article from the Cumberland *Alleganian*.
 9. Ibid., 354.
- 10. Ibid., 354-55.
- 11. The Cumberland *Alleganian & Daily Times*, December 7, 1877. This information was extracted from William Bauman's 1877 Canal Trade document containing his transcription of canal-related information in this paper.
- 12. Ibid.
- 13. Ibid.; and Unrau HRS, 358.
- 14. Ibid., 359; and Miller's list from the *Alleganian & Daily Times* cited above.
- 15. Unrau, 809.
- 16. Ibid., 810.
- 17. Ibid., 811.
- 18. Ibid., 812.
- 19. Ibid., 813-814.
- 20. The *Alexandria Gazette*, October 7, 1878 as recorded in William Bauman's "1878 Canal Trade" transcriptions.
- 21. Hagerstown Weekly Mail, September 25, 1874.

Part 2 Note:

1. See William Bauman's transcriptions at: www.candocanal.org/histdocs/newspaper.html.

American Canal Society Hall of Fame Nomination

Larry Turner was born in Akron Ohio on February 8, 1946. He obtained an early and everlasting love for, and an understanding of, the History of Akron, Barberton and surrounding areas at the knee of his Irish Grandfather. That area history, of course, intimately involved the history of the Ohio and P & O Canals. Larry graduated from Akron's Bishop Hoban High School in June of 1964 and obtained a Bachelor's Degree from the University of Akron in 1968.

Larry married his high school sweetheart a couple of years after graduation, while he was a young Lieutenant in the United States Army. Part of his service time was served with an engineering company in Korea laying out and building landing strips in several remote areas.

Once back state-side and a civilian once more, Larry and his family moved into a home that he built himself on the southern outskirts of Doylestown, Ohio. He began what eventually became a 45-year long love/hate/love relationship with the Babcock & Wilcox Company of Barberton, Ohio.

It is not at all clear just when and how Larry developed into the expert and well-informed canal historian that he was when I was first introduced to him in early 1987 by the equally well-known Ohio canal historian, Ted Kasper. Suffice it to say that is what he was, and he has only gained in knowledge and expertise over the intervening years.

Larry was planning a Canal Society of Ohio (CSO) tour of the Portage Lakes Feeder System of the Ohio Canal that spring we were introduced. So he had been a member of the Canal Society of Ohio for some time before that. He eventually was elected a Trustee of that society as well as a Director of the American Canal Society. Larry is presently the Chairman of the CSO's Tours Committee, a position he has held for many years. Partly due to his involvement in planning many of the CSO's membership tours, his interest in the history of the state's and nation's canals has spread widely. His research and dedication to collecting any and all information on canals has made him well-versed in the history of many of the nation's early transportation canals. He and one or two life-long CSO friends regularly attend two or three canal tours throughout the eastern United States every year. And he has on at least one occasion taken that interest in canal history across the Atlantic Ocean to Europe.

Larry's special history interest, though, still lies in the immediate area of his birth and life. He is a long-time member of the Portage Lakes Historical Society and the Rogue's Hollow Historical Society. In fact, it is difficult to find a local Historical Society that Larry Turner has not at least spoken before. And, naturally, he is a member of many Canal Societies in near-by (and some not so near-by) states and localities.

Larry was also one of the first and most vocal local historians to support what is now the Cuyahoga Valley National Park and the Ohio & Erie Canal Historic Corridor. In fact, he can be considered to be one of the "Founding Fathers" of both. During one of the 'hate' periods between Larry and Babcock & Wilcox, Larry worked as a Ranger in the new national park and physically assisted in building sections of the popular Towpath Bike Trail. He also once, personally, outfitted a 185-mile cycling trip for several friends just for the opportunity to do some exploring along Maryland's Chesapeake & Ohio Canal.

Larry is a tenacious researcher. He seldom takes as "gospel" what previous historians have determined. He likes to "prove" things through his own research. Thanks to this attitude Larry Turner "rediscovered" the very well-preserved remains of the concrete aqueduct that once carried the Ohio Canal over Wolf Creek south of Barberton. His research indicated that, shortly after the "turn of the last century," Wolf Creek had been redirected a bit to flow into the Tuscarawas River some few hundred yards above where it originally had. This, of course, meant that previous historians had been looking for remains of the aqueduct to the north of where it actually was.

Even now, Larry is avidly conducting research to determine if, indeed, the Killbuck Canal and the Chippewa Canal, two artificial Ohio waterways many historians say were planned, but never constructed, actually did exist and carried boat traffic. More power to you, Larry!!

We—Boone Triplett and Terry K. Woods—hereby nominate for the American Canal Society's Canal Buff's Hall of Fame: LARRY TURNER.

A Journey via Stourport

Story and Photos by David Barber

Three of us flew from Boston in May, on an early morning flight to avoid the usual red eye experience, and arrived at Heathrow airport about 7 p.m. It also avoided the usual very long passport lines. Immediately, we took a local airport bus and checked into an airport hotel for supper and a good night's rest. The next morning we took the Heathrow Express train into Paddington Station, where we had plenty of time to buy train tickets before our train to Worcester. At Paddington we were joined by another of our party, who had flown in from New Jersey overnight.

After a two-hour railroad trip, we arrived at Worcester's Shrub Hill Station just after noon. Since there was a small cafe at the station, we elected to have lunch there before proceeding further. After lunch, we rolled our suitcases downhill to the hire base at Lowesmoor Wharf. There we met up with the fifth and final member of our group, who had traveled via Birmingham airport the prior day and overnighted at Worcester. As our boat was not yet ready due to our early arrival, we left one of the group with the luggage, while the rest visited a supermarket that was right outside the marina to get our initial supplies.

On returning to the marina, we loaded our gear aboard the boat and procured life jackets for all as we were going to be navigating on the Severn River part



A narrowboat emerging from the lower lock of the Droitwich Barge Canal at Hawford Junction viewed from the Severn River.

of the time. After a briefing by one of the marina staff and completing the usual paperwork we cast off for our first leg of the cruise. This required us to exit the side spur of canal that the boatyard is on and then put the bow against the far bank of the winding hole so that we could kick the stern to port to turn right on to the canal. After proceeding under several bridges, we came to our first two narrow locks. Passing these, we entered Diglis Basin, where boats of many sizes were moored. On the far side, were two separated, wide locks that lowered us to the Severn River. After these, we turned to starboard and motored upstream, past the cathedral to public visitor moorings at the race course. We tied up there for the night and walked into the city to a pub, The Crown, for dinner.

Since the river locks don't open until 8 a.m., we had a leisurely breakfast and then cast off up river for Stourport. Along the way, we passed through three very wide, manned, river locks. Coordinating the grabbing of lines on the lock walls at both the bow and stern, while braking the boat with the engine was a bit tricky. The backwash from the reversing propel-

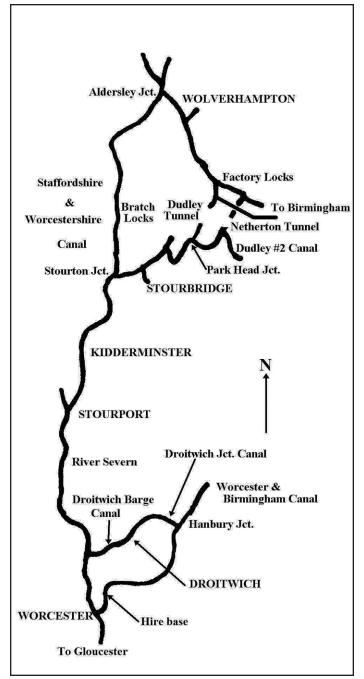


Looking up the four narrow locks at Stourport.

ler tends to push the stern away from the wall. On reaching Stourport, we had to lock up through two flights of paired narrow locks. We were lucky that we were the only traffic at the time due to it being a Sunday morning. But, the alignment between the two sets is not straight, making an interesting maneuver.

Upon reaching the level of the multiple basins, we had to make a difficult right turn between many moored boats to pass through to the second basin. At the far side of the second basin, we turned left and immediately moored against the wall at the water point and proceeded to refill the water tank. Realizing that the wall just behind the boat was an official visitor mooring and available, we line hauled the boat backwards and moored for the night. We then went off to explore the town and find a supermarket for supplies plus info on pubs serving dinner. The only pub that we found serving dinner on a Sunday was Ye Olde Crown Inn, near the river bridge, which we patronized. It had a common ownership and menu with the pub of the prior evening in Worcester

The next morning we got an early start locking up through many widely separated narrow locks to reach our target of Kinver. There



Above - Route of the journey. Below - The Vine at Kinver.



we tied up in the early afternoon below the next lock and explored the village and its shops. Next to the lock was a pub called The Vine, part of a small chain, which we patronized for dinner.

On Tuesday, after passing through three locks, we passed Stourton Junction, the foot of the Stourbridge Canal, which we would return down later in the trip. We stopped for lunch at the Round Oak in Swindon. We then continued through Swindon and Marsh Locks and the Botterham Staircase of two locks. Our plan was to journey to just below Bratch Locks, which are a staircase of three with a keeper and some tricky work. But, we were doing so well that we went through them and continued on to Compton, almost our planned stop for the next day. There we had an uphill walk to the Westacres pub for dinner. That put us almost a day ahead of schedule, a plus that we enjoyed for the rest of the trip.

On Wednesday, we began by locking up through the lock at Compton and soon reached Aldersley Junction. Here we turned off of the Staffordshire and Worcestershire Canal and on to the Birmingham Canal Navigations Mainline. Immediately, we were faced with the 21 Wolverhampton Locks. These began in

a country setting, but finished in a very urban area. We soon became very efficient at locking and reached the summit in the late morning. We only encountered two boats going the other way. Just beyond the summit was a short spur to the left into a Canal and River Trust basin which had a water point. We had been advised to back in, which proved difficult in the wind. But, we pulled it off, but we could have gone bow in as there was a water point at each end. After watering the boat, we stayed there for lunch. We then backed out of the basin in the wind, and proceeded along the Main Line through an urban environment and Coseley Tunnel to Factory Junction. There we branched right on to the Old Main Line. I had planned to stop just after the junction and have dinner at the Barge & Barrel. However, the moorings there were all private. We went a short distance further and were beginning to tie up along the towpath, when a boat going the other way advised that there was a better spot around the corner. So we went a short distance more before tying up just short of a pub called The Fountain in Tipton. This proved better as there was also a small village shopping center just beyond.

Thursday, we decided to visit the Black Country Museum, which was only a short distance away. After cruising down the branch which leads into the Dudley Tunnel, we first watered up the boat. After that, we did a tight turnabout with the bow in the branch to the museum's basin. Then we tied up at the museum moorings where space had just been vacated. We had a little time before the museum opened for the day, during which we purchased museum tickets and tickets for the first boat trip of the day into Dudley Tunnel. It was good that we had not planned to go through the tunnel, as the canal was blocked off and dewatered to allow for the construction of a new museum entrance building. We all then toured the museum and had lunch at the various offerings available there plus a beer on the patio of the Bottle & Glass Inn.

In the early afternoon, everyone was satisfied with their museum visit, so we departed back to Factory Junction and locked down three locks and on to the New Main Line eastwards. After about a mile, we turned right on to the Netherton Branch, passed under Tividale Aqueduct that carries the Old Main Line over the branch and entered 3027-yard long Netherton Tunnel. This tunnel is wide enough for two way traffic

and has a towpath on both sides, although only the one on our left was in use. In the dark depths of the tunnel, it was interesting to have a bicyclist pass by with his bike lamp on.

At the south end of the tunnel, we came to Windmill End Junction and turned left onto the Dudley No. 2 Canal. This canal was built to bypass Birmingham, but is only partly in use. It was much narrower than the canals we had just been on and quite twisty, making us wonder if we had made a good choice. After a while, we came to Gostly Hill Tunnel, which was barely larger than the boat. On the far side, we came to a very wide section of the canal with many industrial ruins. Here, we turned around and tied up for the night. Walking back towards the tunnel, we came to a ramp that led up to street level and the Lighthouse Inn where we had dinner.



Above - Tied up at the Black Country Museum. Below - The entrance to the Dudley Tunnel.



On Friday we returned through the tunnel and along the Dudley No. 2 Canal to Windmill End Junction, where we turned left again. Here, we had planned to water the boat, but the tap was broken. So, we continued on to Park Head Junction where there was a water point. At the junction, we met the Stourbridge Canal. Leaving the water point was tricky as we had to turn sharp left into a lock while dodging another boat emerging from the lock that wanted to use the water point. From there we continued on to the Merry Hill Shopping Center, where we tied up to visit the supermarket and have lunch in the Waterfront Inn.

After lunch, we continued on, locking down the Delph Locks. There are supposed to be nine locks, but there were only eight. All of the locks except the lower one have side spillways to pass excess water. As a result, when we let water out of the seventh to



Above - Watering up at Park Head Junction. Below - Descending the Delph Locks.



lock down, we flooded the towpath and the grass and water was spilling everywhere. We did manage to get the boat into the last lock and open the paddles which corrected the situation. We finally continued on to Farmers Bridge, where we tied up for the night. There was supposed to be a fast food and fish and chips shop here, but it was closed. We had toasted cheese sandwiches for supper.

It was here where a problem that plagued us for the rest of the trip appeared. We had noticed low voltage on the house circuits overnight. At this point, our water pump failed. We used a cell phone to call the boatyard and they instructed us on how to switch to the spare water pump. That solved the immediate concern, but not the real problem.

We continued the short piece to Leys Junction on Saturday, turned left along the Stourbridge Canal and proceeded down the Stourbridge Sixteen Locks. Locks 9 & 10 were interesting as they are telescoped together with a hidden side pond. They took some study to get through. Partway down we stopped and visited the glass museum and had lunch. Finishing the flight, we turned left at Wordsley Junction and proceeded up the Stourbridge Arm. At the end of the arm, we availed ourselves of the pump out services offered by the local canal society and watered the boat. Pump out was a little tricky, as the boat had two heads on opposite sides and we had to turn it in a very tight winding spot to access both sides. After the servicing, we availed ourselves of the offered (for a small contribution) secure berth within the canal society's moorings. From the mooring, we made a couple visits into the town for shopping and dinner. Dinner was at the Duke William, where we shared a table and conversation with a local.

On Sunday we returned along the arm to Wordsley Junction and then along the remainder of the Stourbridge Canal to drop down through the Stourton Locks to Stourton Junction which we had passed the prior Tuesday. Here we turned left on to the Staffs & Worcs Canal. Passing Kinver again, we stopped at The Vine once more for Sunday lunch. We then continued on to Kidderminster. Approaching town, our second water pump failed, so we tied up next to the Sainsbury supermarket and called the boatyard again. The site was good, as parking and access were right next to the towpath. After the expected time a service man showed up and replaced both pumps. His voltage me-

ter was defective, so he couldn't check battery voltage, but our theory was that the batteries were not holding charge, causing low voltage to the pumps. While we were waiting, I had scouted out restaurants, so we then walked to one along the towpath once he was done.

Since we had arrived after closing on Sunday afternoon, we waited around for Sainsbury to open for some guick purchases. We then continued on back to Stourport, stopping just after Bridge 5A to have lunch at the Rising Sun, a pub we noticed from the canal while passing by. After lunch we continued to the Stourport basins as we needed water. Here things were busier than our prior visit as it was the Monday of a bank holiday weekend. After watering, we could not use the mooring we had before as it was occupied and we continued through the basins to the river locks. We had to wait for other traffic here, but we got to see a boat leaving the lower two locks pass a boat leaving the upper two locks under the guidance of a CRT lock tender. Fortunately, when our turn came, we did not have other traffic.

On locking down to the river, we found all of the visitor moorings taken. So, we quickly decided to continue down river through Lincomb Lock to try our luck at Hampstall Inn. On arriving we found lots of available pontoon mooring. The only problem was that one should moor with the bow upriver rather than down. So, getting as close to the left bank as I dared, we threw the rudder over and turned as hard as we could. The river wasn't wide enough to complete the turn, but we got around by backing up twice. We then proceed to the pontoon and tied up. There was one boater in a fancy fiberglass cruiser who was a little nervous about our steel rental boat turning near his craft, but we stayed well away from him. After checking at the inn about the mooring and food availability, we had happy hour and dinner.

Tuesday, we left the mooring using ropes to quickly turn the boat downriver as we left the dock and soon passed through Holt Lock. After a couple of miles of river travel, we came to the outlet of the Droitwich Barge Canal where we turned left to enter the lower lock. These locks are wide locks, so locking through with one boat requires work with lines. When we first visited the Droitwich Canals at the Birmingham World Canals Conference in 1996, we toured locks under restoration on the barge canal. When we cruised the Avon Ring a few years after, the Hanbury Locks at the upper end of the Droitwich Junction Canal were being restored. On this trip we got to cruise through the restored canals. After locking through the second lock, we were quickly joined by a second boat that had been moored along the towpath.

This canal is very reedy along both sides which was an interesting contrast to others we had been using. After the eighth lock there was a long curvy, level section before reaching the town moorings in Vines Park, Droitwich. We had some confusion figuring out the finger piers which were much shorter than the boat and where the water point was. But, we managed to



Hanbury Junction with the Droitwich Junction canal to the right and the Worcester & Birmingham Canal to the left and behind.

get into a berth within hose length of the tap. After watering the boat, we all went into town to see the sights and do some shopping. That night, we had dinner at the Gardeners Arms, just off Vines Park.

As the local museum had been closed on Tuesday, we spent Wednesday morning in Droitwich touring the museum and other sites. After lunch, we got underway and proceeded through the Barge Lock in Vines Park and then through four new concrete locks. Along the way we passed under the M5 motorway in a tight culvert. Then we climbed the three restored locks of the Hanbury flight, each with an operating side pond. Here we had the help of a volunteer lockkeeper. Above these we reached Hanbury Junction, where we turned right under a bridge and tied up for the night by the Eagle and Sun Inn. It was a special delight to cruise these recently restored canals.

Thursday began with us watching a crane pick a narrowboat off of a truck and place it in the canal at the boatyard on the far bank. We then had a problem as there are no water points between our location and Diglis Basin, Worcester, but we did not want to stay at the boatyard two nights. So, we cruised down the canal to Diglis Basin and watered up. Then we turned around despite wind and tight space in the basin. Traveling back up canal, we found all of the nearby mooring spaces had been taken since we first passed. So, we had to lock up through two locks to find space along the towpath. Once there, it was easy access to the city. We had dinner that night at the Kings Head.

Friday was the day we had gained our first week, which was great. So, we spent it touring the Commandery, the Worcester Cathedral, and the Royal



Craning a narrowboat into the canal at Hanbury Wharf

Worcester Museum. Audrey and I also had lunch at the King Charles II. In the late afternoon, we moved the boat back to the marina at Lowesmoor Wharf for the final night. From there, we went back to the King Charles II for our last night's dinner.

On Saturday, we turned in the boat and took a taxi to the station for our trains on to various locations. We went to London and spent two days touring museums and the recently rebuilt Paddington Arm and Little Venice. On our final morning, we hired a taxi to take us to Paddington Station where we could get an express train to Heathrow Airport. But, on the way, the driver offered us a fee all the way to the airport that was much lower than the local taxi plus train fare. That was an easy decision. I found that quite interesting as on our prior trip to England, we had paid much more for the same trip in the opposite direction. After a long wait, we then flew back to Boston.



Paddington Arm, London



A small narrowboat on the Paddington Arm, London

American Canals, Winter 2016

Clinton & Kalamazoo Canal

By Terry Woods

As all of us canal buffs know, and are apt to 'spout' without much provocation, "the early transportation canals were everywhere." And we might even add, "every state east of the Mississippi had one or more canals." Actually, I never really checked up on that last statement, so I don't know if it is literally true, but if not it is darn close. A case in point is the Clinton & Kalamazoo Canal in the fine state of Michigan.

Some yeas ago, somewhere, I met a fellow from Michigan, Don Green, who trumpeted Michigan's Canals. Then, a couple of years ago, our youngest daughter spent four years in Ypsilanti, Michigan while her husband toiled away at the nearby University of Michigan. While visiting her and her family in "That place up North" I was whiling away some time on their computer and ran across an article on the Clinton and Kalamazoo (C & K) Canal. There was a map included in the article and I noticed that the proposed route, which was never finished, ran through a town, Hastings. I had spent some time there during my early days as an engineer with the E.W. Bliss Company. I copied some of the material and got in touch with Don, who is writing a proper book on the subject. He was quite helpful with his information. So, here is a brief summary of Michigan's C & K Canal!

The State of Michigan was officially born on January 26, 1837. Its first Governor, Stevens T. Mason¹ hoped to "jump start" the economy of this new state, which at that time was a land of vast forests and marshes, by proposing the construction of a system of internal improvements—transportation routes. The Michigan State Legislature approved Governor Mason's plan by passing an act that provided for construction of three railroads and two canals within the state. Governor Mason promised a little of something for every settled portion of the state with his proposal. He hoped these projects would be instrumental in developing the state's wilderness areas and provide jobs for the increase in population these transportation systems would entice.

One of the proposed rail lines was to run from Monroe to New Buffalo, and another from Detroit to St. Joseph. A third would connect St. Clair to Grand Rapids. A canal was to unite the waters of the Saginaw and Grand Rivers in the center of the State. The most ambitious of these proposed transportation systems was the Clinton & Kalamazoo Canal, a 216 mile long artificial waterway that was to run from the mouth of the Clinton River near modern-day Mount Clemons, then west through Utica, Rochester, Pontiac, Howell, Hastings, Singapore and to the mouth of the Kalamazoo River near Saugatuck. Governor Mason felt that his young state did not have the financial resources to build these transportation systems itself and he proposed that the state authorize private companies to construct the various railroads and canals. He also proposed that the state provide these companies with the powers to raise and borrow sufficient funds to finance the projects. However, the fledgling state legislature, flushed with optimism brought on by the high flying then-current economic conditions, decided that Michigan should construct these "Internal Improvements" on its own.

As Michigan was a new state with little credit rating, instead of sending representatives to the eastern and foreign money markets to sell canal bonds, as was done in Ohio, Governor Mason authorized the Morris Canal and Banking Company to sell Michigan's canal bonds, on commission, up to a total of \$5,000,000. The nation's economic bubble burst early in 1837, but the effects were slow in reaching the northwestern frontier. Construction on the C & K was formally begun on July 19, 1838 amidst a host of activities ... a 13 gun salute (in honor of the original 13 states), music, speeches and Governor Mason's symbolic "turning" of the first shovel full of the excavation.

The line of the canal was divided into sections and bid out to private contractors. Each section was approximately ½ mile long, depending on the complexity of the job. And soon there were hundreds of workmen along the line (many of them Irish Immigrants) working from sunrise to sunset for \$0.65 a day. But as the vast throng of men labored upon the canal ditch with picks, shovels, and wheelbarrows, thrusting the canal westward, the nation's Financial Panic began affecting the western country as well. Things were very bad back east. Early in the year 1840, the Morris Canal and Banking Company was unable to make their periodic payments to the State of Michigan, causing a temporary halt in construction of the C & K Canal. In the meantime, Governor Mason was having troubles of his own. The impacts to area business caused by the "Economic Panic" plus a statewide

outbreak of malaria and the lingering effects of losing the Michigan-Ohio War² were all blamed on Mason. His popularity sank out of sight and he chose not to run for re-election. As a result, the other party, the Whigs, won control of the State Legislature and were not sympathetic to the Internal Improvement project.

When the Federal Government agreed to pay workers in Federal "Land Script," work on the C & K canal was renewed and some additional progress was made. But payment of the contractors was not always made, certainly not in a timely manner. Work was stopped and restarted several times. There was unrest in the worker's camps and nearby residents were disturbed by the drinking and rowdiness of the canal workers. Some unpaid workers began stealing supplies and there were reports that some even destroyed finished sections of the canal. Finally, the last of the money ran out and the State ceased any additional work on the canal after 1845.³

The canal had been completed only as far as the City of Rochester. Only 16 miles of the planned 216 miles were navigable. That small section of canal was used, however, in a number of ways for some time. At least one boat, the *Uncle Peter*, traveled the canal between Frederick (the eastern terminus) and Utica for two years. The canal supplied waterpower to mills in Frederick, Utica, and Rochester. This usage lasted, for some mills, into the 1940s.

Today, at several places along the route of the canal, local historical societies have made efforts to preserve bits of the old waterway for posterity. In Clinton Township, Canal Park at Canal Road and Clinton River Road, features the remains of an old stone lock and a wooden dam used to create slackwater for boats to cross the Clinton River. There is a goodly stretch of the rewatered canal at Holland Pond Park at 22 Mile Road and Ryan in Shelby Township. The remains of an aqueduct that was built for another crossing of the Clinton River can be found at the Yates Cider Mill near 23 Mile Road and Dequindre in Rochester Hills. Another portion of the canal is well preserved all through near-by Bloomer Park.

There is a Clinton & Kalamazoo Canal Society headed by Don Green, whom I mentioned earlier in the column. Don is well-known to many American Canal Society members. He is also a tireless worker in preserving the memory and remaining artifacts of the C & K Canal of the great State of Michigan.

Notes:

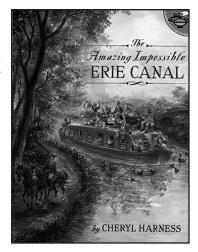
- 1. Mason, Michigan's famed "boy" governor was 26 at the time he became Governor.
- 2. We'll have a future column on that War that was caused by both States claiming the northern terminus of the Wabash & Erie Canal on the lake
- 3. One account gives this date as 1848.

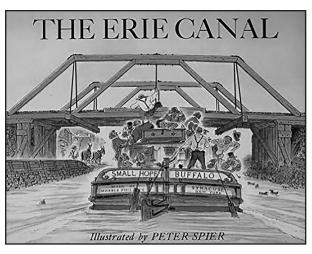
Information about canals by state may be found at www.americancanals.org/Data Sheets/Data Sheets.htm - Editor

CHILDREN'S CANAL BOOKS

Linda Barth, former editor of *American Canals*, has a large collection of canal books written for children. Due to space constraints, she would like to give them away to interested individuals, canal museums, or canal societies. Books will be shipped (cost negotiable) or, in some cases, delivered.

If you would like to receive a list of available titles, please contact Linda at barthlinda123@aol.com or 908-240-0488.





CANALENDER

March 5, Canal Society of New York State Annual Winter Symposium: Monroe Community College in Rochester, New York. For further info visit www.newyorkcanals.org/explore_symposium.htm.

April 8-10, Spring Tour: The Hagerstown Extension of the Whitewater Canal in Wayne County, Indiana. Tours, site visits and dinners all three days. Headquartered in New Castle, Indiana at the Steve Alford All-American Inn. Make reservations now under Canal Society of Indiana, Robert Schmidt. Toll free 877-55STEVE or 765-593-1212. Room rate \$56.00 + tax. Further info at www.indcanal.org or email indcanal@aol.com

April 29 - May 1, C&O Canal Association Annual Douglas Hike and Dinner. Two days of hiking and camping near Williamsport, Maryland, with annual Douglas Hike and Dinner on Saturday. For more information, visit www.candocanal.org/ or email programs@candocanal.org

May 13–15, Spring Tour: The Legacy of the WPA in Stark County, Ohio. Tours and activities featuring many interesting, historically significant O&E Canal artifacts. Jointly sponsored by Canal Society of Ohio and the Pennsylvania Canal Society. For further info contact Dan Schuster, Tour Chair at 440-237-9005 or danschusterCSO@aol.com

September 18-21, World Canals Conference 2016, Inverness, Scotland: Celebrating Scotland's five canals, hosted by Scottish Canals on the Caledonian Canal. inlandwaterwaysinternational.org/world-canals-conference/

October 5-10, C&O Canal Through Bike Ride: Explore the full 184.5-mile C&O Canal towpath from Cumberland to Georgetown on an intentionally leisurely-paced ride, averaging about 31 miles a day. No sag wagon provided. Reservations required, no later than September 1. Limited to 20 riders. Contact: Pat Hopson, 703-379-1795 or phopson727@verizon.net.

October 8, Allegheny Portage Railroad National Historic Site, Gallitzin, Pennsylvania. Jointly sponsored by the Pennsylvania Canal Society and the Canal Society of Ohio. Further info at pacanalsociety.org or contact Dave Wright at dwright@alleghenycounty.us

September 24–28, 2017: World Canals Conference 2017, Syracuse, New York. September 25-28, celebrating the bicentennial of groundbreaking for the Erie Canal and the centennial of its still operating successor – the New York State Barge Canal System. Co-hosted by the New York State Canal Corporation, Erie Canalway National Heritage Corridor, and Visit Syracuse. inlandwaterwaysinternational.org/world-canals-conference/

CANAL BOAT RIDES IN THE U.S. AND ONTARIO

The 2016 version of the Canal Boat Rides guide will be released with the Spring 2016 *American Canals*. If you are involved with any of the rides or exhibits included in that guide and wish to provide updated descriptions, contact info, images and/or schedules, please contact the editor, Steve Dean via email at 184.5 miles@comcast.net, or via mail at Steve Dean, PO Box 132, Saint Leonard MD 20685.