

AMERICAN CANALS

BULLETIN OF
THE AMERICAN CANAL SOCIETY

BULLETIN NUMBER 98

Editorial Address—968 Chapel Road, Monaca, PA 15061

AUGUST 1996

PRESIDENT'S MESSAGE

It is my great pleasure to announce that *Terry Woods*, our ACS Director in Ohio and one of our most productive members, has agreed to take his turn as President of the American Canal Society, beginning a year from now. We'll have a suitable ceremony during the next International Conference on Historic Canals, on the Blackstone Canal on October 14-17, 1997.

This conference will also mark the Silver Anniversary, the 25th, of the American Canal Society, and the publication of the 100th issue of *AMERICAN CANALS*. It will also be the occasion for our next annual board/membership meeting. We'll have more about Terry, the conference, and our anniversary in later issues.

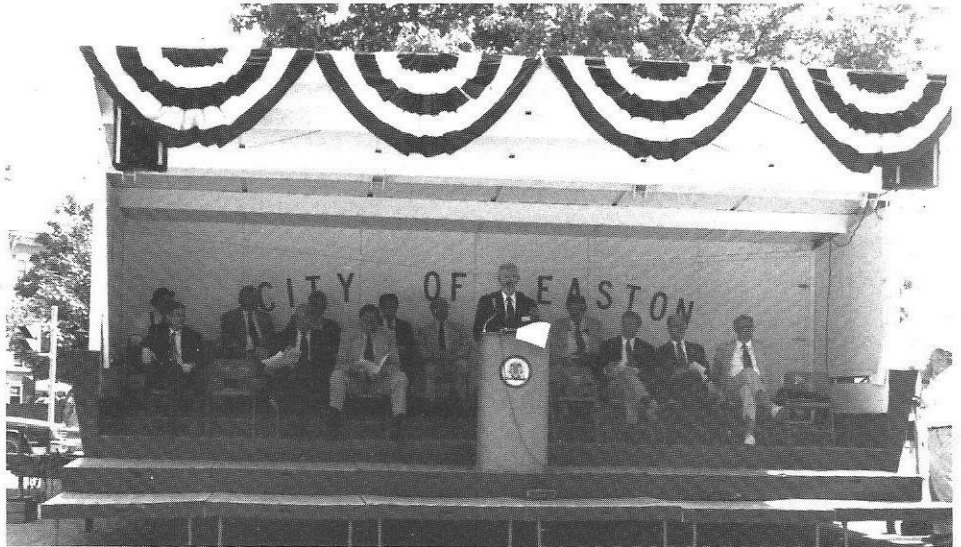
Meanwhile, let us know your ideas for a proper ACS celebration. It's about time we had another ACS bumper sticker, and a burgee and windbreaker or jacket for the occasion. These have been discussed over the years but we need your ideas again. Should we reprint our SUPPORT YOUR LOCAL CANAL bumper sticker or do another one? What's the best logo for an ACS burgee? For a windbreaker? And where should we have it done?

This year thanks to the inspiration of *Bill McKelvey* we had our annual ACS board/membership meeting at the impressive gala opening of the National Canal Museum in Easton. I was pleased to see so many of you there and to enjoy the new canal exhibits. The museum can use our help to develop its exhibits and especially its archives, to become the nation's major canal research center and I hope the catalyst, with ACS members around the country, for major canal projects of national scope.

We also are delighted to have as a new ACS Director, *Dr. Tom Grasso*, president of the Canal Society of New York State. Over the years he has written and lectured extensively about New York's canals, effectively bringing to bear his professional interest in geology and geography. We can use his expertise to complete our Historic American Canals Survey and American Canal Guide

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NATIONAL CANAL MUSEUM OPENS AT EASTON PA.



One of the local dignitaries addresses the crowd of visitors from a temporary stage on Easton Square.



Entrance to the new three-floor National Canal Museum at 30 Centre Square in Easton.

By Bill Shank

To a large crowd of canal buffs and dignitaries from at least five states in Eastern USA, the new NATIONAL CANAL MUSEUM opened its doors June 14, 1996 at 30 Center Square in Easton, PA. Hugh Moore Historical Park headquarters will now be located in this three-floor building; address: P.O. Box 877, Easton 18044-0877. Phones; (610) 250-6700 for Museum; (610) 250-6703, Library and Archives. Also in the

(Concluded on Page Three)



Ribbon-cutting ceremony.

American Canals

BULLETIN OF THE AMERICAN CANAL SOCIETY

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AMERICAN CANALS is issued quarterly by the American Canal Society, Inc. Objectives of the society are to encourage the preservation, restoration, interpretation, and use of the historic navigational canals of the Americas; to save threatened canals; and to provide an exchange of canal information.

Annual subscription to AMERICAN CANALS is automatic with A.C.S. membership. Send dues payment (\$15 minimum) to Sec'y/Treas. Charles W. Derr, 117 Main St., Freemansburg, PA 18017. Single copies may be purchased at \$3.00 from the publisher.

Manuscripts on subjects consistent with the objectives of the A.C.S. are welcome. They should be sent to the editor.

NEW BOOK

TALES OF THE MINE COUNTRY - By Eric McKeever. \$10.00 plus \$1.00 for shipping. A 124-page 5-1/2" x 8" paperback, the book brings back all the color of life in the Anthracite Coal Region of Northeastern Pennsylvania over a hundred-year period in the 1800's and 1900's. It tells the story of the hard life of the miners, who spent most of their waking hours underground in the coal mines, where "hard coal" was produced to fire the homes, the industries, the steam locomotives, and an entire way of life in those early days of the growth of industrial United States. The life of a hard-coal miner was difficult, dangerous and short and the pay was poor. He lived constantly with the possibility of caves-ins, explosions, and fatal sickness from coal dust in his lungs. The "Molly Maguires" were a secret organization of miners who fought the coal mine operators and tried to obtain better working conditions for themselves and their comrades, but many wound up on the gallows for their efforts. Mules were the primary source of power for towing coal out of the mines, and any miner who mistreated or killed a mule, was subject to immediate dismissal. There are several chapters on the use of tow-path canals as the primary medium for delivering anthracite coal to market in the northeastern cities. The development of the historic canals closely parallels the growth and expansion of the coal industry both hard and soft coal. This book is filled with interesting anecdotes from the life of the coal miners. It uses excellent

photos and drawings of the mines, the coal breakers, the machinery, the mule carts, the canal boats and the men who worked the mines. Excellent reading! Write the author and publisher, Eric McKeever, 8506 Valleyfield Road, Lutherville, MD 21093 for copies.

Bill Shank

NARROW LOCK, WIDE BOAT

The course of the Civil War was affected by a failed operation that involved canal boats at Harpers Ferry, in February of 1862, while the opposed armies were locked in a temporary stalemate. General George McClellan's huge Army of the Potomac sat inactive while, across the river in Virginia, only 25 miles from Washington, the Confederate army was camped near Manassas and Centreville and from there controlled the Potomac River above and below Washington, so that the capital was essentially under siege. President Lincoln and Secretary of War Stanton pressured McClellan to reopen the Potomac River and so break the state of siege.

On February 26, Federal engineers succeeded in throwing a light pontoon bridge across the Potomac River at Harpers Ferry; immediately, Federal troops crossed into Virginia and began to move on the road to Winchester, to take that town so that Confederate troops could not counter-attack by moving northward up the Shenandoah Valley. To supply the Federal column with food and munitions, McClellan's engineers had to build a more substantial bridge across the Potomac at Harpers Ferry. Their plan was to build that bridge by laying timbers across canal boats that were to be anchored in the river.

Canal boats needed for the second "pontoon" bridge were to be brought to the site on the Chesapeake and Ohio Canal; the boats then were to be moved out of the canal and into the river by passing them through an outlet lock that had been built to allow boats from the Shenandoah Canal to pass into and out of the C&O Canal. The Federal engineers were ready to begin construction of the canal-boat bridge when they discovered, to their great embarrassment, that C&O canal boats were 6 inches wider than the outlet lock, which had been built to pass the narrower boats that worked the Shenandoah Canal.

Obviously, the engineers had assumed that all canal boats and locks were the same. The plan to capture Winchester and block the Shenandoah Valley had to be abandoned.

President Lincoln was so furious that he displayed his temper, something he rarely did, and demanded to know "Why....couldn't the General have known whether a boat would go through a lock before spending a million dollars getting

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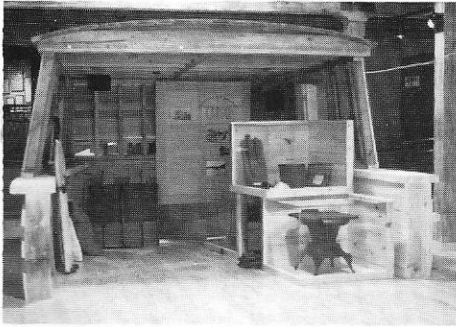
Other publications: *The Best from American Canals*.

William H. Shank, editor and publisher.
American Canal Guides,
William E. Trout III, editor and publisher.

them there? I am no engineer, but it seems to me that if I wished to know whether a boat would go through a hole or a lock, common sense would teach me to go and measure it. I am almost despairing at these results...." The affair produced much heated discussion, and also some laughter. It was said that the Harpers Ferry initiative had died of lockjaw.

(Submitted by William Dzombak)

NEW NATIONAL CANAL MUSEUM



Cut-away section of a typical canal boat cabin, in the exhibit area.

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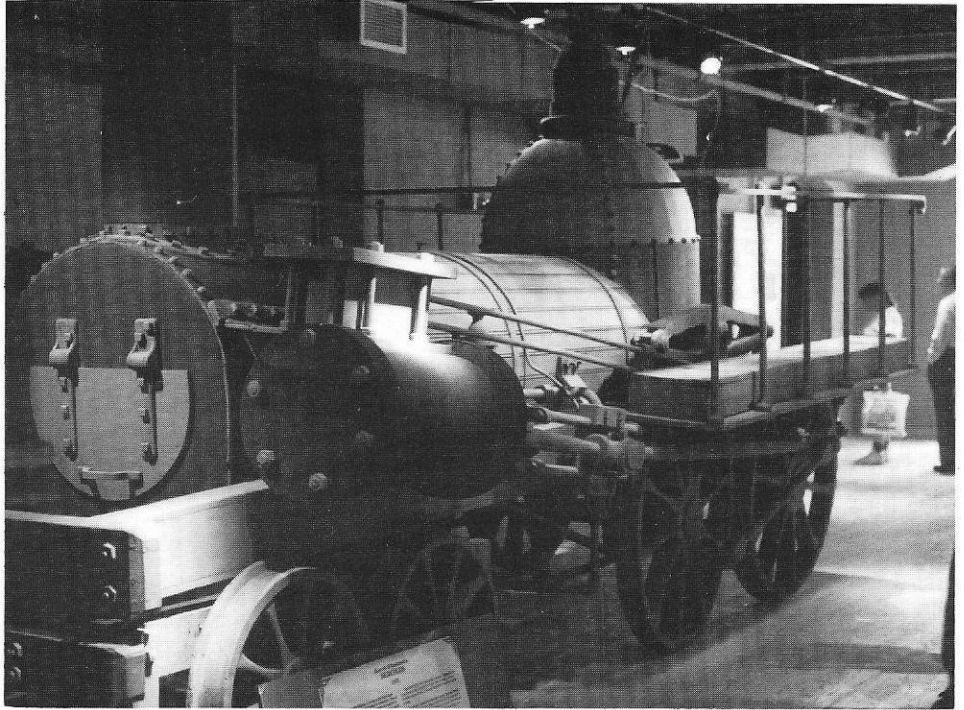
same building is the Crayola Factory as well as the National Heritage Corridor Visitors Center. The entire complex is known as the "Two Rivers Landing", with 9770 square feet of permanent and exhibit galleries, offices, museum store, auditorium, large freight and passenger elevator, and a fast food restaurant for group dining.

The canal exhibits are located on the third floor along with the Hugh Moore Offices. Admission to the National Canal Museum and Crayola Factory is \$6 for adults and children, \$5.50 for Senior Citizens, Children under two, free. Open Tuesday-Saturday 9:30 AM to 5 PM, Sunday Noon to 5 PM.

Special guests at the all-day celebration included dignitaries from the Federal and Pennsylvania governments and the City of Easton, most of whom participated in the



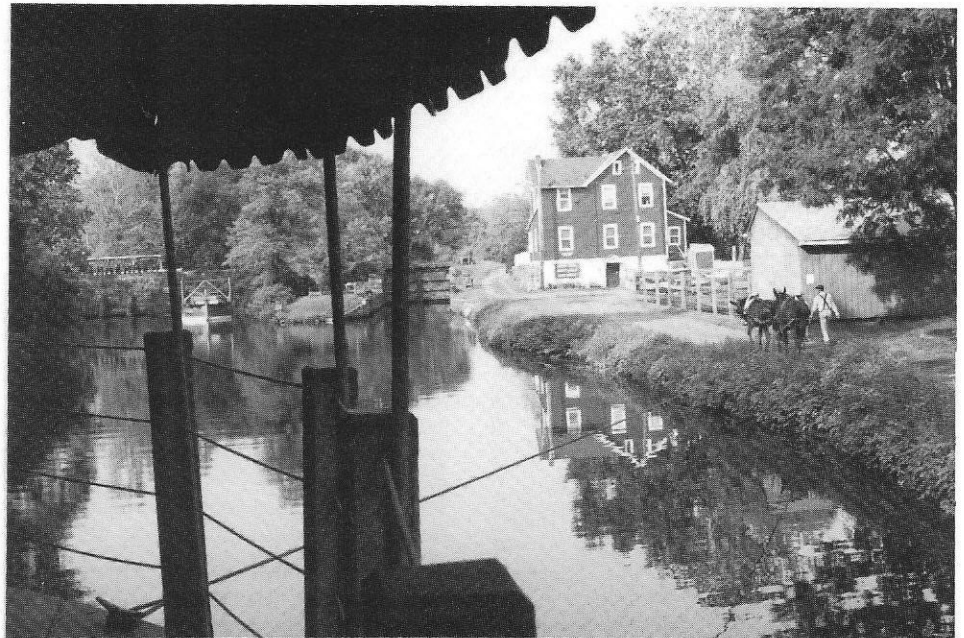
A lock attendant cranks up the special drop-gate designed by Josiah White, on the lower Lehigh Canal, after our canal boat passed through.



Replica of an early steam locomotive, used on the Main Line Canal-Railroad between Philadelphia and Pittsburgh.

ribbon-cutting ceremony. Later a special "Wedding of the Waters" took place with representatives from nation-wide canal organizations pouring water samples from North American Canals into an oaken keg which was then ceremoniously emptied into the Museum's working lock model.

A sizable auditorium on the ground floor provided plenty of space for a well-attended meeting of the ACS Board following the dedication ceremonies. Plenty of dry storage space also available for future acquisitions by the Museum.



Some of the early visitors were taken on a breakfast boat ride on the enlarged "Josiah White II" on the Lehigh Canal. Lock Tender's Museum and Mule Towing team can be seen from the fore-deck at the right. Lock feeding the canal at the center. Retired "Josiah White I" canal-boat at the left.

PRESIDENT'S MESSAGE

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for New York; anyone willing to assist please get in touch with him.

Mark Newell would like to hear from more ACS members and canal societies about the new ACS Home Page on the Internet. This is a great way to introduce your canal and your canal society to the world, but it won't happen unless you send information to Mark, or if you already have a Web page, to link it with ACS. See page 1 of the last issue for details. Mark's phone and Fax number is (803) 279-8216.

The World Canals Conference in England was quite a shindig! The USA was well represented, with 25 out of 254 registrants and a fly-by of Capt. McKelvey's fleet of six narrowboats full of New Jerseyites. The Inland Waterways Association, British Waterways, and the Birmingham City Council must have put in an enormous amount of work getting ready for us, the press, and other visitors which projected the meeting to more than just us canal buffs. There was even an inspiring address on canal regeneration by a Member of Parliament, speaking for the Labour Party: every promise was carefully noted by the audience for future use against him.

About twenty years ago, when I was last there for an IWA boat rally, downtown Birmingham (The Venice of England) was an industrial wasteland with plenty of leaky, broken-down buildings to spend the night in. Now, thanks to the canals, the inner city has been revitalized and is full of pubs, hotels, and a convention center, oriented toward the canals. It is a wonderful example of what the English call "Regeneration" - the theme of the World Canals Conference. There are even fish in the canals now, where there was once oil and garbage. And only rarely is there a fence or wall between the sidewalk or towpath and the water - a lesson American planners and lawyers still have to learn. No wonder Birmingham won the prestigious international "Excellence on the Waterfront" annual award. In the US, several waterfront projects have won this award - but no canal, not yet.

The conference marked the Golden Jubilee - the 50th anniversary - of the Inland Waterways Association, Britain's canal society which did so much over the last 50 years to change a declining canal system into one of the world's greatest national parks. British Waterways, which manages most of the canals and was once "the enemy", demolishing historic lock cottages, is now a staunch supporter of canal preservation, a friendly green giant which is actively restoring canals as you read this.

The conference also saw the first board meeting of the new international canal organization, World Wide Waterways, dedicated to the conservation, proper management and restoration of waterways



In England, life is just one canal rally after another. One of the many boats on display at the World Canals Conference in Birmingham was the ATLAS, a restored narrow boat complete with cargo and a traditionally decorated cabin. A week after the conference she was here on the Dudley #1 Canal at a boat rally in a brand-new basin in the brand-new mall town of Merryhill. (Photo by Nancy Dunnivant.)



A JCB for the WRG: An opening ceremony at the World Canals Conference was this presentation of the key to a brand-new blue backhoe, from the JCB Company to the Waterways Recovery Group, the volunteer restoration arm of the Inland Waterways Association. Audrey Smith, Chairman of the IWA is at right. (Photo by Nancy Dunnivant.)

world wide. At least 36 members and eight societies from the US are already members of WWW, at first called the IAIW, The International Association for Inland Waterways, created by ACS member Ron Oakley. Our British Director, Dr. Roger Squires, is the ACS representative to WWW. Subscribers to AMERICAN CANALS received free early editions of their illustrated magazine, WORLD WIDE WATERWAYS. Now it's really off and running. To join, see the first page of AMERICAN CANALS for May 1995.

At the conclusion of the World Canals Conference the next two International Conferences on Historic Canals were announced: next year's (the tenth) will be on the Blackstone Canal Corridor in Rhode Island and Massachusetts on October 14-17, 1997; and after that we'll be back on the Illinois & Michigan Canal National Heritage Corridor where it all started in 1988, on September 17-19, 1988. So mark your calendars!

Bill Trout

SUSQUEHANNA RIVER TO BE DAMMED AGAIN

The latest Chesapeake BAY JOURNAL reports that plans are moving ahead for a hydroelectric dam at Harrisburg, Pennsylvania. It will inundate part of the Susquehanna River which was used in early days by white-water freight boats. Is a canal buff going to do a careful survey of the river bed at the proposed dam and pond, recording the channels made for rafts and arks two centuries ago?

Bill Trout

THE SOO LOCKS



A US-UK connection? Thanks to 20 years of dogged work by the Chesterfield Canal Society in northern England, the canal is a restoration success story. Here's a new gate at the moment of being lowered into Lock 48 near Worksop.

Still to come someday: only 39 more locks and a collapsed tunnel! We're working with the Chesterfield Canal Society, the IWA, and British Waterways toward an interesting interaction with the canals in Chesterfield (and Richmond) Virginia. (Photo by Nancy Dunnivant.)

CANAL CALENDAR

August 16, 17 and 18, 1996

27th Annual Coshocton Canal Festival, Coshocton, Ohio. Contact: 800-877-1830.

August 24 and 25, 1996

C & O Canal Days. Williamsport, MD. Contact 301-223-7010.

September 1996

Farmington Canal Exhibit at Connecticut Historical Society in Hartford.

September 23, 1996

C&O Canal Bike Ride (MD). Contact: (301) 540-6974.

September 28 and 29, 1996

Cumberland Canal Boat Festival. Cumberland, MD. Contact: 301-729-3136.

September 29, 1996

Delaware & Hudson Canal Walkathon. Cuddebackville, NY.

October 18, 19 and 20, 1996

Canal Society of Indiana Tour - Illinois & Michigan Canal. Morris, IL. Contact: 317-257-6114.

In the President's Message in the August 1995 Bulletin, Bill Trout mentioned the canal "safety blocks." On one of our annual pilgrimages to the Soo Locks (I used to live in the area) I noticed such blocks in prominent locations around the canal area. Their importance is readily apparent when one of the massive ore freighters eases into the lock. Given the amount of traffic that has gone through the Soo Locks over the years I wonder what if anything was done before the blocks were available. Being crushed by a freighter would be a noteworthy event but I don't recall reading of any such accidents. The Soo Locks have enjoyed a good safety record but one event does stand out and resulted in the installation of temporary gates which could be lowered into the canal to stop the flow of water in case of damage to the lock gates.

On June 9, 1909, the steamer PERRY G. WALKER accidentally went to full steam ahead as it entered the Canadian Lock, striking and ripping away the lower lock gates. The still open upper gates allowed a twenty foot wave of water to charge through the lock, sweeping with it the passenger ship ASSINIBOIA and the ore carrier CRESCENT CITY. Though traffic could at the time still use the American Locks, a contemporary repeat of this event would be far more serious as most of the current Great Lakes Fleet can only use the MacArthur Lock and the Poe Lock, and twenty of these ships, due to their incredible size, have to use the Poe Lock exclusively. If either of these two locks were to be damaged as in the 1909 incident, though the emergency gates would stop the flow of water, traffic would be backed up for a long time during the repairs. (The full story of the Soo Lock incident can be found in "Memories of the Lakes" by Dana Thomas Bowen, Freshwater Press, Cleveland, OH, along with many other fascinating stories).

The Soo Locks are really a must-see for canal fans. Lake traffic, though down for a while, is on the upswing and what is more impressive than a busy canal! The sidewalk in the Soo Locks park allows one to literally follow a freighter from one level to another and the view from the lower level as a freighter emerges from the MacArthur lock is quite breathtaking. The view from the observation platform is superb and provides a good look at not only the ships but also the workings of the lock itself. Of course no visit to the locks is complete without a trip on one of the Soo Locks tour boats for a ride through the locks. The boats are boarded from several locations on the lower level, cruise along the Soo, Michigan waterfront past several interesting sites such as the Corps of Engineers facility, a huge hydroelectric plant, and the museum ship VALLEY CAMP, to name a few. The boat then enters one of the three still-operating locks, MacArthur, Poe and Davis. (the Sabin lock is closed) After locking through the boat

continues up the canal and crosses to the Canadian side for a look at the bustling Algoma Steel plant. The tour used to lock down through the Canadian lock but this lock has been closed since 1987 due to the collapse of one of the lock walls. The future of the Canadian lock is still undecided but hopefully it will be reopened in the future, as it was used extensively by pleasure boats. The tour boat heads back to the American side to lock down again and then cruises to the Canadian side again, taking in a great view of the St. Marys rapids on the way. Proceeding along the Soo, Ontario waterfront several interesting sites include the museum ship NORGOMA, the Ontario Bush Plane Museum, and the J.W. Purvis Marine Ltd. dock which usually has a variety of fascinating boats moored there. I highly recommend the tour boats and, though we didn't get to try it, one of the boat lines features a dinner cruise.

I will leave potential visitors with a small caution: on our trip this summer we visited the locks several times during our stay but on the last day I visited the canal alone while the family went shopping. I saw a number of ships lock through, shot lots of video, spend a bit of time in the visitors center (which has several interesting displays including a model of a lock and ship models) and walked the entire length of the park more than once. Needless to say I was quite surprised when I realized that more than five hours had elapsed and I could have stayed longer! Can't wait 'til next summer.

Scott D. Ankeney #1726
916 Chestnut St.
Xenia OH 45385

C.S.I. ISSUES W. & E. "NOTEBOOK"

WABASH AND ERIE CANAL NOTEBOOK (Allen and Huntington Counties) by Thomas E. Castaldi. \$8.00 from the Canal Society of Indiana, P.O. Box 40087, Ft. Wayne, IN 46804. A 6" x 9" paperback, with 76 pages, it tells of the building of the longest cut canal in the USA, which nearly bankrupted the State of Indiana. It was subject to constant misuse and mismanagement by the operators who were faced with constant repairs, and the miscreants who maliciously cut canal banks and drained reservoirs, sometimes petulantly tearing out the dams. Unscrupulous boat skippers altered cargo manifests to swindle the toll collectors. The struggle against man and the elements was so costly that the Wabash and Erie never made any money for the State, which eventually threw in the sponge, millions of dollars in the red. Pictures and maps are used to advantage to show the route and some of remaining ruins of the old canal structures.

AMERICANS ON THE FRENCH CANALS



The 't SKUTSJE' on the Burgundy Canal in downtown Dijon, France.

Some years ago on a pleasure trip to France, Charlotte and I inspected the canals and saw the hotel barges. We said idly, "Someday maybe we'll do it."

A few months later, while looking at ads for private jets, estates on the Riviera and other exotica in the Wall St. Journal, I saw a small ad that changed our lives. "Luxury French Canal Barge, etc. ..." with a Florida phone number. After a phone call we received photos, a description, and we began to get that hooked feeling. More calls to France, and a deal was worked out. We would go out for a few days on the canals on the barge, and if we liked it we would make an offer. If not, we would pay for the few days. Accordingly we took ourselves to Paris and then by the TGV fast train to St. Jean de Losne (barge heaven), a small town at the junction of the Burgundy Canal and the river Saone, home to hundreds of barges, pleasure boats and rentals. There we met Charles and Patricia, owners of 't SKUTSJE.

Charles was German and his wife American. He was charming as only a used boat salesman can be, that peculiar breed descended from horse thieves, via used car dealers and siding salesmen. Charlotte and I boarded, inspected and unpacked and met Adam, a young Welshman who was to be our pilot/teacher/mentor for the next few days. We looked at our new home-to-be. God, was it big! Twenty meters (65 ft.) long by 4 meters (13 ft.) wide and 30 tons of wrought iron and wood.

Could two late-middle-age Americans whose combined nautical experience con-

sisted of owning a canoe and taking a trip on the QE II ever learn to handle this thing? After stocking up on food and wine, we headed into the river and upstream to the first lock on the Rhine-Rhone canal and then to the city of Dole. By the time we returned to St. Jean de Losne, we were in love with this boat.

Negotiations began. Charles and Patricia bought the vessel ten years previously and had lived aboard until the birth of their second child. Reluctantly they had to sell. We were assured that there was not another vessel like it in the world, that everything was in perfect order, that the price was fair, etc. etc. etc. We bought it, in every sense of the word.

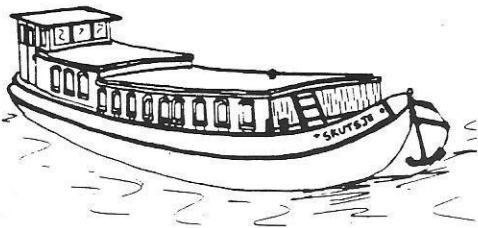
Our canal barge is a very common Dutch type known as a 't chalk. Originally a sailing cargo vessel designed for the shallows of Holland, it was converted to diesel power and the masts and sails removed. Today it is a modern, comfortable two-bedroom, 2½ bath home that travels. More about life on the canals later.

The navigation system in France consists of over 5,000 miles of canals and rivers interconnected with those of Holland, Belgium and Germany. It is possible to go from the Atlantic to the Mediterranean via the French canal system, or east to Eastern Europe, the Danube and the Black Sea.

The original French canal system was intended to link the major navigable rivers, providing inexpensive transport to most of France. Dug by hand by platoons of "navvies" and in some cases by prisoners of war, the early canals changed the lifestyle of the

French. No longer were people isolated in their little villages. Originally there was no standardization of lock sizes and prism shapes. In 1878, Charles de Freycinet, minister of public works, set the standard that is still in use today. Locks are fixed at a serviceable length of 38.5 meters (127') by 5.20 meters (16.69') with a minimum canal depth of 1.8 meters (5.9'). These dimensions set the maximum size of vessels using the canals. The standard French cargo barge, the peniche is 38.5 meters long by 5.06 meters wide, almost an exact fit, with a loaded draft of 1.8 meters, and is capable of carrying 300 tons of cargo. These Freycinet locks of 100 years ago were made of beautifully cut stone, much of which was quarried along the right of way. Today the stone is still in excellent condition, often bearing the date of construction carved into the stone. Wooden gates have been replaced with steel, but otherwise locks remain as they were originally built.

Locks on the rivers are considerably larger, corresponding to the European standard capable of handling large Europa-class barges. The early barges were hauled by humans, sometimes the wives and children of the barges, later by animals, and still later by small locomotives on narrow gauge tracks or canal-side tractors. By the early part of this century barges were fitted with small diesel engines. From a high of 10,000 barges actively employed in the fifties, barge traffic has dwindled down to less than 2,000 in use, and these often have to wait many weeks for the next load. Whereas thousands of families made their homes on barges, and



Our own sketch of the 't SKUTSJE' which is part of our letter mast-head.

sons followed fathers as bargees, today young people do not seem to find the life of a bargee attractive. With competition from highway trucking, the canals fell into decline in the '70s. Some were abandoned altogether, while others suffered from lack of maintenance. It was then that an enterprising Englishman set up the first hire-boat (U-drive rental) center in France. This proved to be the salvation of the canal system. Today there are hundreds of rental bases all over France, bringing in tourist dollars, pounds, marks, etc. The French government has responded by energetically restoring canals, advertising and generally trying to be helpful and supportive. The odd peniche is still carrying a few bulk cargoes of grain, coal, fertilizer or sand, where speed of delivery is not as important as low cost. A husband and wife operating a peniche can carry 300 tons of bulk cargo less expensively than any other means with less fuel cost, noise, and wear and tear on highways.

As pleasure boats increase and commercial activity decreases, the canals are changing. At one time each lock had its picturesque, flower-covered lockhouse, with resident lock-keeper, garden, fruit trees, farm animals, poultry and rabbits. Usually lock-keepers were glad to sell their fresh farm

products to passing boaters. Today more and more locks are automated, with deserted lockhouses. In some cases a travelling lock-keeper on a motor bike replaces ten or more resident lock-keepers. While this makes for faster, more efficient travel along the canal, it does rob the boater of the friendliness and congeniality of many of the lock-keepers.

The economics of living full or part-time on a private canal boat are quite appealing, at least as evidenced by the hundreds of families who have sold the family home to live full-time on the canals. The great bulk of full-timers are British, followed by the Dutch, with perhaps 20-30 Americans. Once you own your boat which can cost anywhere from \$30,000 to \$200,000, the other expenses are insurance, fuel and the vignette (the permit to use the waterways). Up to a few years ago, the canals were always free for the pleasure boater. In 1990 a new system of fees for canal use was adopted. The fee depends on the size of your boat and the number of months in use. In our case it is \$300-400 per year, less for smaller boats. Fuel is expensive in France, with a liter (approx. one quart) of diesel fuel costing about \$.80. Since most canal boats use small, efficient diesel engines, it is not a major expense. We use 3.1 liters per hour at cruising speed. Food prices are comparable to those in the U.S. but the produce and local wines are superb and cheap.

Many towns along the canals have built excellent mooring facilities that include water and electricity. Many are free; others make a small charge of \$3-10 per night.

Since we only use our barge for 3-4 months in the summer, we were happy to find a boatyard that would take care of our barge during the balance of the year, winterize, do repair work, etc. for about \$100

per month. All in all, the cost of three months on the canals approximates what we would pay to stay home. The occasional paying guest helps defray any expensive repairs.

*Charlotte E. Mazonson & Harold Sossen
31 Constitution Way
Marblehead, MA 01945
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TOWPATHS TO TRAILS

The national organization that helped America realize the enormous trail potential of abandoned railroad corridors has begun to look at canals.

Rails-to-Trails Conservancy (RTC), in cooperation with the Rivers, Trails and Conservation Assistance program of the National Park Service (NPS) has been researching historic canal corridors through a "Towpaths-to-Trails" Initiative launched earlier this year.

"Abandoned railroad corridors, riverways, and waterfront areas have served as traditional routes for trail and greenway development. Historic canal corridors and their adjacent towpaths provide additional resources that have, for the most part, been overlooked," stated Kristine Olka, Special Projects Assistant for RTC. This cooperative initiative is a first-of-its-kind effort to inventory historic canal systems east of the Mississippi and determine the recreational potential of what remains.

Nearly 5,000 miles of canals were constructed in America from the late-1700s to the mid-1800s. These canals were the major transportation arteries of the nation, along which many cities and towns grew and flourished. "Adaptive reuse of canal corridors as trails will not only give the public access to historical relics, but also serve as transportation and recreation facilities for walkers, joggers, bicyclists and others," said Rory Robinson, NPS spokesperson.

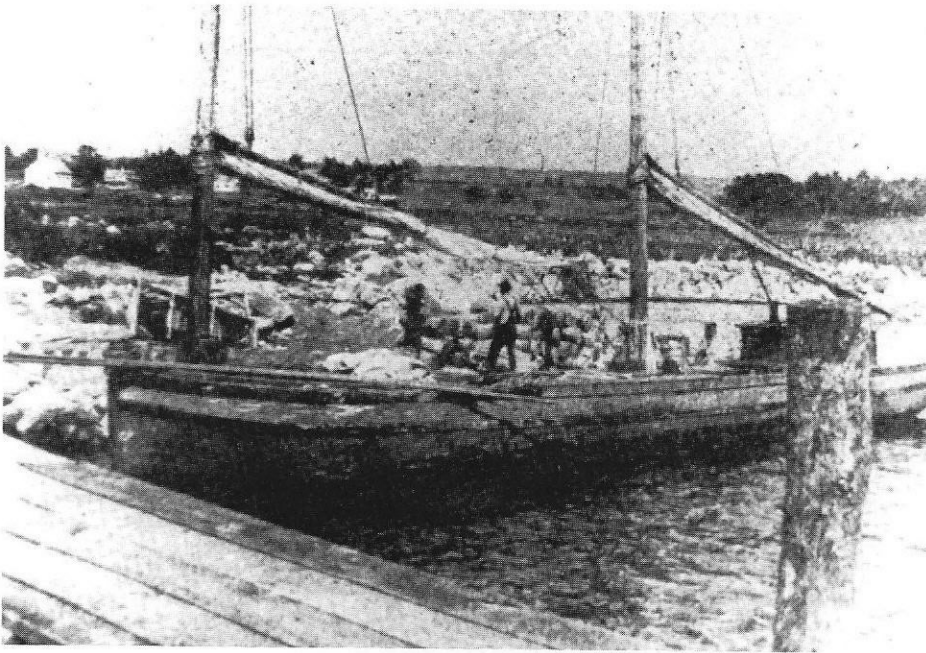
The results of the "Towpaths-to-Trails" study have recently been published and were unveiled at the International Conference on Historic Canals in Augusta, Georgia. The study revealed some interesting findings. There are at least 35 canals in the northeast and midwest which have towpath-trails along some portion of their length. These trails total over 1,000 miles. In addition, there are 767 miles of canal towpath that, due to their condition, have the potential to become trails, and towpath-trail conversion efforts are now underway along 31 canals.

To receive a complimentary copy of the study or to provide information on towpath trails and trail projects which were not included in the study, contact: Kristine Olka, Special Projects Assistant, Rails-to-Trails Conservancy, 1400 16th Street, NW, Suite 300, Washington, DC 20036.



Saloon and galley in our French floating hotel boat.

UP THE CANAL TO THE MOUNTAINS



Loading a C. & O. Canal Boat at Chadbourne Landing, Lake Sebago at Standish, prior to 1879. (Courtesy Ernest Knight)

By William Dzombak

John Bradley Hudson (1832–1903) was a landscape artist who lived in Portland, Maine. In 1859, he and a friend began a hike to Mount Washington by riding a canal boat on the Oxford and Cumberland Canal, which ran from Portland to Sebago Lake and Long Lake, from 1830 until 1872. Here follows his account of the first part of that outing. [1] Aug. 6, 1859.

Started with my friend Kimball up the Oxford and Cumberland Canal. We had previously provided ourselves with knapsacks, intending after going as far as possible in the boat, to walk the remaining distance to Mt. Washington. I carried the tent, Fred — extra clothing, bread, frying pan, and hatchet. It was six o'clock at night when the driver started his horse to tow us up, winding around Bramhall's hill, the canal being built close to the shore. Passing under Vaughan's bridge and across the basin we came to Stroudwater village where there were some tide mills. Here we lost sight of the salt water and in a short time reached the seven locks, the distance from the first to the last one being about two miles. On approaching a lock, the driver gives two or three peculiar shouts, raising his voice and holding the last note for a long time. This is to arouse the keeper, who lives near, and is obliged to open the gates when a boat approaches; when within the lock, the lower gates are closed, and the large plank slides open in the upper, through which the water rushes in perfect sheets, splattering over the bows and surrounding us with foam.

Soon the boat begins to rise and in a few minutes is on the level with the water above.

All hands now jump on shore and help open the gates, leaning their backs against the projecting part of it and their feet against pieces of wood placed on the ground in circles, stepping backwards from one to the other until the gates opened wide enough for the boat to pass through.

About seven we were invited to the cabin to supper. A room some six feet square and about the same height, it contained a cook stove, hanging table, two broken chairs, chests, buckets and a collection of cooking utensils. On two sides were sleeping berths.

Our supper consisted of hot biscuit, applesauce, and tea. During the evening we sailed quietly along, passing under overhanging trees, or by the side of cultivated fields; ever and anon varying the monotony by entering a lock, the call of the driver sounding uncommonly loud and wild in the stillness. At ten o'clock we stopped for the remainder of the night.

On retiring to the cabin, there not being berths enough, I was invited to sleep in one with the Captain. The place was anything but inviting, the clothes looking as if they had never come in contact with soap and water. Divesting myself of coat and boots, I got in and was soon sound asleep. I do not know how long my nap lasted, but was awakened by the buzzing of mosquitoes and a sense of being bitten by bugs crawling over me. I was covered with perspiration, the air in the room being intensely warm and not a window or door open. Sleep vanished from my eyelids and I passed the remaining hours until daylight in perfect misery.

All hands then turned to and we were soon on our way again. It was a beautiful morning and as we floated along I could scarcely distinguish where the bank and the water

met, so perfect was the reflection. I went on shore and walked ahead of the boat for a long distance, then sat down and worked on a sketch until overtaken by the boat.[2]

Arriving at the head of the canal, we left the horse, hoisted sail, and crossed the pond[3], some three miles long. The sails were full of holes and there was a strong breeze which whisked through them at a fearful rate. I expected every moment to see them torn from the masts, but they held on while we went through the water at great speed. These boats are noted for their swiftness, especially when beating to windward, as they can lay nearer to the wind than any other boat. When going about, they raise one of the center boards, which are placed near the bow and stern, and she turns as quickly as though on a pivot. The captain said he had been up the Kennebec River from Portland in a canal boat seven times, and to Bangor once, though it is very dangerous, they [the canal boats] being too long and narrow for a sea voyage.

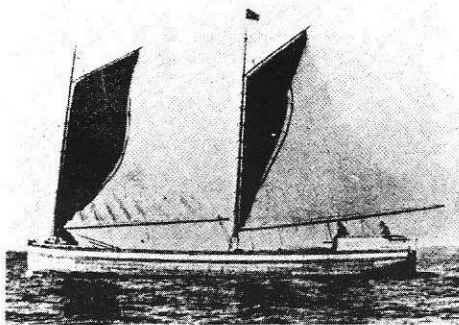
At the head of the pond we stopped at White's Bridge, the entrance to Sebago Lake. As the boat was to remain there and we should have to wait until another came up, before proceeding on, we went ashore and took a walk. There was but little of interest to be seen. A plain country tavern was situated a short distance from the bridge. We went there and got dinner, then strolled along the shore(s) of Sebago, which here are fine white sand.

All hands went to bed but the captain and I. After awhile got to sleep, was waked by him and advised to go into the cabin as the night was quite cold. Went and laid down on a bench, not wishing to try a berth again, and was soon asleep.

When I awoke, everything was quiet, I got up and went on deck. We were fastened to a dead tree and seemed to be surrounded by them. The moon was just sinking out of sight, and as I looked I almost fancied myself in the Dismal Swamp, so forcibly did it remind me of Post's crayon descriptions and sketches. It was the mouth of the Songo River, which for some miles up is surrounded by a swamp. It gave me such a strange feeling I was glad to go back and lie down again.

Sunday morning all hands were called to help work the boat up river. This had to be done by poling, as it is called. They have long poles with one end padded and the other pointed with iron. First placing the pole perpendicularly, they send it with a quick motion down to the bottom, then lean with their shoulders against the padded end and walk toward the stern as the boat moves along, leaning forward so as to touch the rail where their hands were. We found upon trial that even this work required some practice, as we were unable to throw the pole to the bottom. When placed for us and we had walked to the end of the boat with it, could not get [it] out of the mud again.

THE DITCH THAT SALT BUILT



A Cumberland and Oxford Canal Boat, under sail, probably in Sebago Lake.

I had been told that this river was very crooked, but was not prepared for so many twists and turns. At one place a large tree which looked as though it was on the bank was pointed out with the assertion that we should pass it five times before losing of it and sure enough we did, going in one direction a short distance then turning to go in an opposite, leaving but three or four feet of bank between one bend and the other. So short were some places that the boat touched the shore on both sides in turning.

The men having heard us humming, requested we should sing and they would manage the boat, so we sang all the tunes both sacred and otherwise that we knew. The banks became higher as we ascended and were densely covered with foliage. About half way up the river were some falls. Here is a lock to take the boats up to the water above. Soon after passing through this, a breeze sprang up. We hoisted sail and went along finely the rest of the distance, passing many farms and finally entering Brandy Pond, which we crossed, and then the Bay of Naples to the village of the same name, where we stopped and landed.

Bidding adieu to our kind friends, who would take nothing for our passage, we started for a camp a short distance off....[The remainder of the article deals with the hike.]

[1] *Appalachia*, vol XXXVI, No. 15 (1971), p. 109-111. Copy of the text provided by Ernest Knight, Raymond, Maine.

[2] Most people easily walk 3 mph; the speed of most canal boats was only 1 to 1.5 mph

[3] The "pond" was Sebago Lake.

NEW BOOK

ARTIST-LIFE IN THE HIGHLANDS AND AMONG THE NAIL-MAKERS — An 1859 Visit to Northern New Jersey's Iron Industry and the Morris Canal. A 56-page reprint from 1860 Harper's Monthly Magazine, which includes an excellent write-up on the Morris Canal, as an important link between Pennsylvania's anthracite coal fields and northern New Jersey's important iron industry. Introduction by Robert R. Goller. Harper's sketches of the Morris Canal have reproduced quite well. Send checks to the Canal Society of New Jersey, via Geri Coldon, 11 Longwood Court, Wayne, NJ 07470. Price \$7.50 each.

The Erie Canal was identified in that way for two reasons: Not only were large quantities of New York salt shipped on the Erie Canal but, more importantly, a state-imposed tax of 12½ cents on every bushel of salt produced in New York financed much of the cost of construction of the Erie Canal in the first place.

Before the Revolutionary War, the American colonies obtained all of the salt they needed from Liverpool, England, because that port was only 15 miles from a large deposit of rock salt in Cheshire. During the War of Revolution, importation of salt was interrupted. In desperation, the colonies made salt by solar evaporation of sea water, but British troops destroyed those salt works at every opportunity. Domestic sources of salt had to be developed.

After the war, soldiers who had served the American cause were granted parcels of marsh land bordering Onondaga Lake, in the State of New York, where a French Missionary, in 1654, had shown the Indians how to make salt from the brine springs they had pointed out to him. By 1797, several settlers were making salt at Onondaga by boiling (evaporating) brine dipped out of shallow pits dug along the margin of the lake. Boiling was done in iron kettles suspended over a wood fire. Those first salt works were located at the south end of the lake, at a place called Salina, where present-day Syracuse now stands.

One of the first settlers to make salt at Onondaga was a migrant from Carlisle, Pennsylvania named James Geddes. Even at that early date, he was urging construction of a canal that would enable salt makers to transport their product to distant markets, both east and west. At the time, roads were few and poor, so transport was limited to boats that navigated the rivers and the great lakes. Geddes became known for his public-spirited activities, and after he became justice of the peace, he was known as Judge Geddes. That name stuck with him, even after he became a chief engineer during construction of the Erie Canal. His salt works at the south end of the lake grew to become a village named Geddesburg.

Another center for the manufacture of salt was established on the east side of the lake, at a place that was named Liverpool so that salt makers there could claim that they were shipping "Liverpool Salt". Salt from Liverpool, England, was known to be a fine product (Cheshire rock salt was 98.5% sodium chloride). Eventually, salt made at Liverpool, New York, was loaded onto boats on the Oswego Canal that took the salt southward, to make connection with the Erie Canal, or northward to Oswego, on Lake Ontario and from there to all places on the great lakes.

By the Treaty of Fort Stanwix, the Indians ceded to the State of New York all of the salt lands bordering Onondaga Lake, except for a tract reserved for their occupation. The In-

dians had the right to make salt free of charge, and did so, selling their output in Quebec and Albany. To protect those valuable sources of salt from take-over by private monopolies, the State set aside the Salt Spring Reservation and managed those salt lands as a State monopoly, for "the common benefit of the people", and also as a source of revenue for the State. Lots on the salt lands were leased to individual salt makers bound into a cooperative business arrangement. Individuals could not sell the salt they made; every bushel of salt was collected into a State warehouse and then sold at a price set by the State. In that way, the public could obtain that necessary commodity at an affordable price.

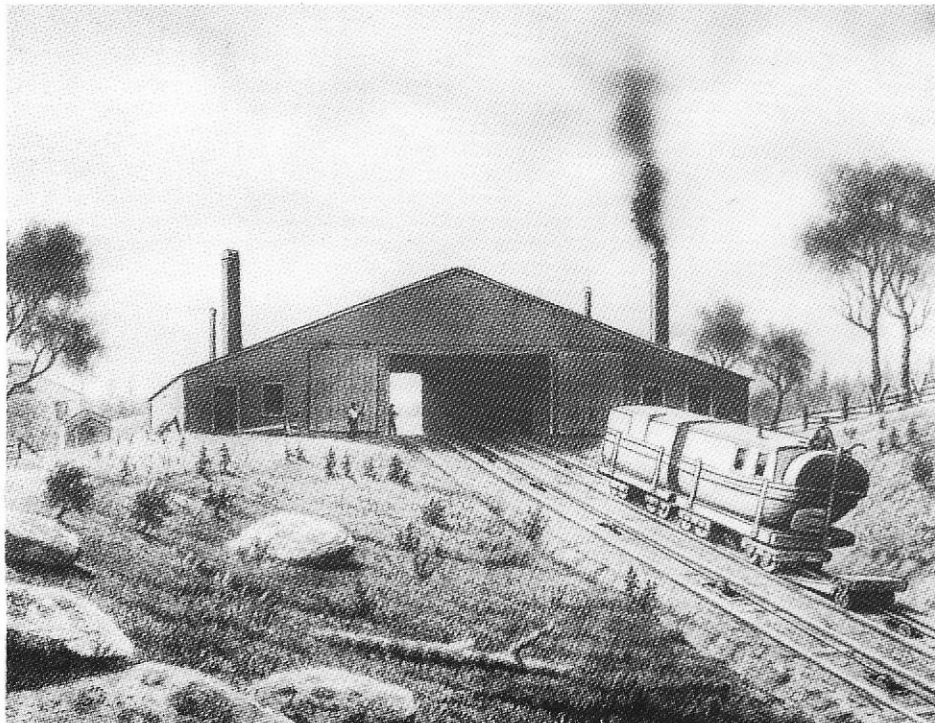
When construction of the Erie Canal was undertaken, the State imposed a tax of 12½ cents on every bushel of salt sold from the warehouse. That tax paid half of the cost of the Erie Canal and was, therefore, a principal reason why the State was never saddled with a large canal debt, as happened in other states. By 1830, New York was the largest producer of salt in America. Second in output was the Kanawha works, near present-day Charleston, West Virginia; third in production was Saltsburg, Pennsylvania, on the Western Division of the Pennsylvania Main Line of Public Works. Kanawha salt was shipped down the Ohio River, and Saltsburg shipped some salt to eastern Pennsylvania, but those two salines found it difficult to compete with salt from England, which could be carried cheaply up the Mississippi and Ohio rivers, or westward from the coast, as far as Hagerstown and Chambersburg, at prices that matched the cost of salt made domestically. In any case, the discovery of rock salt in New York, in 1885, brought an end to domestic production of salt from brine springs, and terminated the importation of salt from England. But in New York, salt built the canal and shipments of salt constituted much of the freight hauled on the Erie Canal after it was built.

(Submitted by William Dzombak)

NEW BOOK

THE ARTIFICIAL RIVER (The Erie Canal and the Paradox of Progress) by Carol Sheriff, sells for \$19.95. Publisher: Hill and Wang, 19 Union Square West, New York NY 10003. It is a 5-1/2" by 8" paperback with 234 pages. No illustrations to relieve the rather heavy discussions of the economic, social and cultural effects of the Erie Canal on the people and the regions through which it passed. Carol Sheriff vividly demonstrates the sudden adjustment to the new geographic mobility, rapid environmental change, governmental intervention in local business, market expansion, reorganization of work, and moral reform which resulted from the building of the Canal.

WHY WAS IT CALLED THE "MAIN LINE"?



Plane Number Six of the Allegheny Portage Railroad.

By Bill Shank

In Pennsylvania in the 1820's there was near panic when the business people of that State realized that the Erie Canal, completed between Albany and Buffalo in 1825, was drawing away their international trade which had been coming to the Port of Philadelphia, and was making New York City the principal seaport on the Atlantic Coast.

The citizens of Pittsburgh were particularly outspoken in their appeal to the Pennsylvania state legislature for some transportation medium which would link them with the seaboard. Although railroads were now being talked of, a canal system was generally favored, particularly since the Union Canal Company was finally making progress in its efforts to tie the Schuylkill and Susquehanna Rivers together.

Thus, with public pressure rapidly increasing, the state legislature of Pennsylvania successively passed three canal acts. The first was dated March 27, 1824 and instructed Governor J. Andrew Shulze to appoint three commissioners whose duties should be to examine a canal route to lead "from the great valley of Chester and Lancaster Counties along one or another set of natural waterways westward to Pittsburgh."

The second act, dated April 11, 1825 was to consider and adopt measures directed toward the establishment and implementation of "navigable communication between the eastern and western waters of the state and Lake Erie." Five commissioners were now designated to investigate not less than seven different waterways across the state.

The third act (February 25, 1826) authorized "the commencement of a canal, to be constructed at the expense of the state and to be styled "The Pennsylvania Canal." This act empowered the commissioners to begin construction immediately of canals at three points: First, along the Susquehanna River from Swatara Creek to the Juniata River; second, along the Allegheny River from Pittsburgh to the Kiskiminetas River; and third, down French Creek to connect by feeder with Conneaut Lake.

Ground was broken by Governor John Andrew Shulze for what was later to be known as the "Main Line Canal" at Harrisburg July 4, 1826, with much ceremony.

Construction began with very little thought given as to the means of constructing a canal all the way from the Delaware Valley at Philadelphia to the Ohio Valley at Pittsburgh. The task of crossing Allegheny Mountain with a canal was not even seriously considered. All the Commissioners knew is that they needed "something" to immediately compete with the Erie Canal!

The thought of connecting the nearly completed Union Canal at Middletown had occurred to the Commissioners. That is why they were instructed to begin their work at the Swatara Creek, where the Union Canal joined the Susquehanna. However it was soon realized that the Union Canal, with locks only 8-1/2 feet wide, would not be able to handle the much larger boats planned for the Main Line Canal with locks 15 to 17 feet in width. Therefore their attention was turned to building a connecting railroad from Philadelphia to Columbia, further south on the Susquehanna.

When work on the Canal approached the terminus of the digging near Allegheny Mountain, they thought it might be possible to approach the ridge of the mountain from small tributaries of the Juniata and Conemaugh Rivers on each side (about six miles apart) with a water tunnel of four miles length making the final connection. But they realized that no one in this country had yet dug a tunnel of that length, not to mention the difficulty of maintaining water level at such a height.

Hence the tunnel idea was ruled out, and an alternative plan for a Portage Railroad over the mountain was considered.

To get back to the name of the system: It couldn't really be called a "canal" any more since it was now to be a combination of canals and railroads. Finally the term "Main Line of the Public Works of Pennsylvania" was selected to describe the entire operation, from Philadelphia to Pittsburgh.

Work continued, as authorized by the initial acts of 1824-26 plus additional acts passed by the State as needed. From East to West, the various sections were designated as: the Philadelphia-Columbia Railroad, the Eastern Division, the Juniata Division, the Allegheny Portage Railroad, and the Western Division.

Each section had its own time-table and specifications — Eastern and Juniata Canals 17' lock widths, Western Division 15' lock widths, and the Allegheny Portage Railroad, most complicated of the entire system with ten inclined planes (five on each side of Allegheny Mountain), being the last section to be completed.

Thousands of state employees were needed to operate the complex Main Line system: locktenders, level walkers, maintenance personnel, stationery steam-engine operators on the Portage, "hitchers" for the rail cars being pulled over each inclined plane. The "Main Line" became a political plumb for the party in power at Harrisburg. It is surprising that it operated with any great degree of efficiency.

The trip over the Mountain turned out to be an exciting and novel part of the travel, which frequently attracted travelers to select the "Main Line" route, rather than the more conventional route of the Erie, for connections from the Atlantic Ocean ports to the Ohio Valley and West.

Interestingly, the term "Main Line" still is heard along the old route west of Philadelphia. For many miles along suburbia west of the City of Brotherly Love, the term still applies to the string of small towns along the Lincoln Highway. West of Harrisburg it is seldom heard.

Years later, (1857) the Pennsylvania Railroad bought the entire system, between Philadelphia and Pittsburgh, from the Canal Commissioners. It was still occasionally referred to as the Pennsylvania Railroad "Main Line".

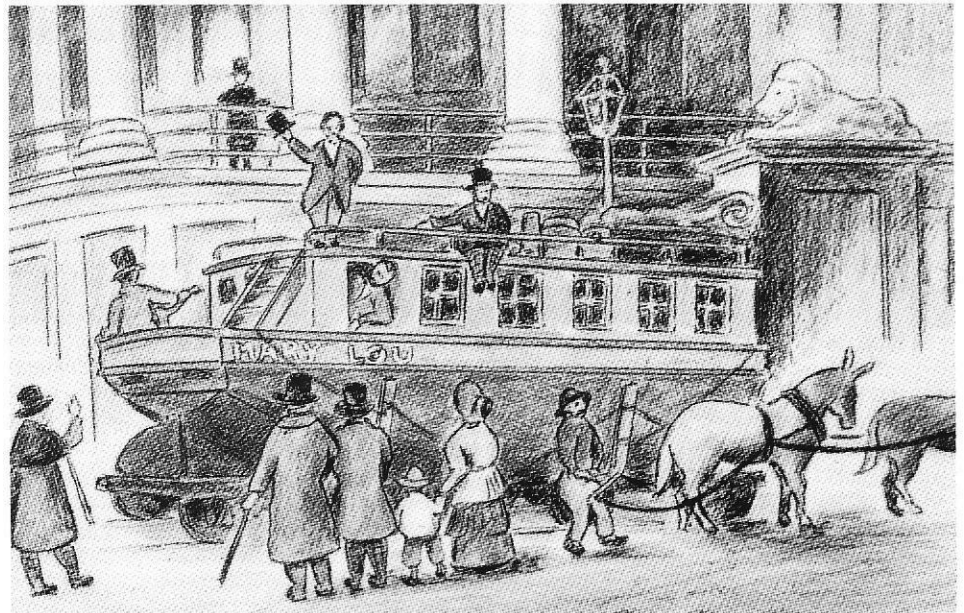
The following excerpts from "Centennial History of the Pennsylvania Railroad" (1946) by George H. Burgess and Miles C. Kennedy, describe the details of the two railroads which the Pennsylvania Canal Commissioners were authorized to build in 1828, as part of the "Main Line" between Philadelphia and Pittsburgh.

The final plan for the Main Line of Public Works began to take shape in an act approved by the Governor on March 24, 1828. The Canal Commission was directed "to locate a railroad across the Allegheny Mountains" and a "railroad from Philadelphia through the City of Lancaster to Columbia."

Philadelphia & Columbia Railroad

Major John Wilson, of the United States Topographical Engineers, had previously reported that the route between Philadelphia and the Susquehanna River was not favorable for a canal, but would be appropriate for a railroad. After the passage of the Act of March 24, 1828 surveys for a railroad were made by Major Wilson, who had as one of his assistants a youth of twenty, named John Edgar Thomson, who twenty-four years later was to become the Pennsylvania Railroad's great Engineer-President.

As finally located, Major Wilson's line began at the corner of Broad and Vine Streets, in Philadelphia, and ran for a short distance north on Broad Street then west on Pennsylvania Avenue to 21st Street, and thence northwest to a crossing of the Schuylkill River below Peter Island. Here, on the west bank, was an inclined plane half a mile long with a seven percent grade, called the "Belmont Plane", so named from the



Sectional canal boat train, horse drawn, leaving Philadelphia.

Belmont mansion located near its top, which was used to bring the cars to the high ground over the river. From the top of the plane, the line kept to the high ground for some miles before descending into the Chester Valley through Downingtown and Coatesville to Lancaster. The original location did not pass through Lancaster on the way to Columbia, but such an outcry arose from the citizens of that metropolis that the line had to be changed. At Columbia, another inclined plane, with a total drop of ninety feet, brought the railroad down to the canal basin, where the Pennsylvania Canal began.

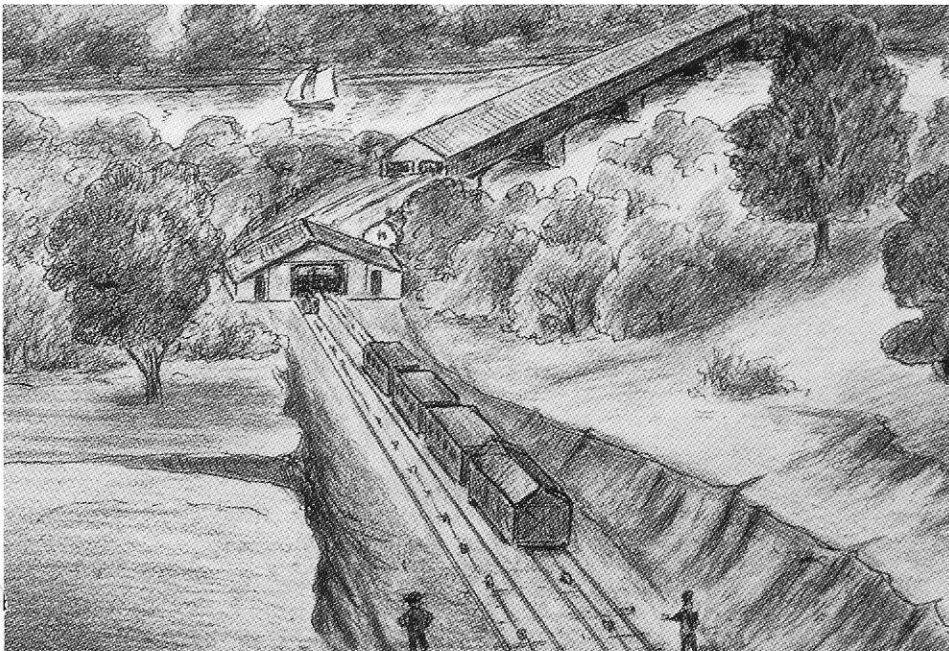
Construction of the line was started in February 1829, and the entire line was formally opened for operation on October 7,

1834, although disconnected portions had been in use since 1832, and one through track since April, 1834.

The country traversed was more rugged than it appears to the uncritical eye, and, in spite of the attempted economy in the location, the grading was fairly heavy. There were some cuts 40 feet deep, and some embankments 80 feet high. The viaduct across Big Conestoga Creek was 1,412 feet long, and one of its piers was 60 feet high. The Schuylkill bridge consisted of 7 wooden truss-spans on masonry piers, with a total length of 1,040 feet.

The first track was built in part with flat iron bars for bearing surfaces, attached to longitudinal granite or wooden sills. For the most part, however, a more advanced type was used, a "rolled edge" rail, with a bulbous head, which rested in cast-iron chairs supported on stone blocks. The iron bar construction proved highly unsatisfactory under the wear of steam locomotives, and had a tendency to break loose from its fastenings and curl up. It was soon replaced by a more durable type of construction.

Although the railroad was open for use by private transporters with their own wagons and teams, and continued to be so used until 1844, the steam locomotive was employed by the State from the time the road was opened throughout, in 1834. In April of that year an Act of the legislature authorized the Canal Commissioners to purchase locomotives, and the Commissioners immediately arranged for the transfer to the State road of a locomotive then under construction by Matthias Baldwin for the Philadelphia and Trenton road. This was the "Lancaster", which went in service on June 28, 1834. By October 31, 1835, there were ten units of this type in service. The "Lan-



Belmont Plane, just west of the Columbia Bridge over the Schuylkill River in Philadelphia.

(Concluded on Page Twelve)

“THE MAIN LINE”

(Concluded from Page 11)

caster” had 9” x 16” cylinders, one set of drivers of 54” diameter, and weighed about 17,000 pounds. It regularly hauled gross loads of 75 tons.

A locomotive built by William Norris shortly afterwards developed greater power by reason of having its driving axle forward of the firebox, where it got a heavier load, and this type was favored for freight service.

The freight cars were all owned by private corporations and individuals. They were of various sizes and types, and their capacity ranged from three to five tons apiece. If they were hauled by the owner’s horses, a toll was charged for the use of the road, and if they were hauled by locomotive, an additional charge was made.

Allegheny Portage Railroad

The location and construction of the railroad across the mountains presented a problem entirely new to the most experienced engineers available. The country was very uneven and rugged, and the slope on the eastern side quite steep. Here it was necessary to overcome an elevation of 1,400 feet from the headwaters of the Juniata River to the summit of the mountain. On the western slope, the headwaters of the Little Conemaugh were 1,175 feet below the summit, and the slope was considerably more gradual.

As finally located, the Allegheny Portage Railroad extended from Hollidaysburg on the east to Johnstown on the west, a distance of 36.69 miles. There were ten planes in all, five on each side of the summit, and eleven “levels”, one at each end, and the others intermediate between planes. These “levels” actually had light grades, and were intended to be operated by horsepower. Most of the levels were less than two miles long, although the two nearest Johnstown were 4.13 miles and 13.06 miles long, respectively.

The railroad was constructed with two tracks throughout. There was one tunnel on the line about four miles from Johnstown, 901 feet long and 20 feet wide, which was the first railroad tunnel built in the United States. All bridges and culverts were of masonry construction. The largest structure was a double-track, stone-arch bridge of 80-foot span which subsequently supported the Pennsylvania’s main line until it was destroyed in the Johnstown Flood in 1889.

The track on the inclines was of strap iron fastened to longitudinal wooden stringers which were supported on wooden crossties embedded in broken stone. On the levels, the track consisted of rolled rails imported from England supported in cast-iron chairs fastened to stone blocks, 12” x 24”, embedded in broken stone. This rail weighed 39 pounds per yard. This type of

track construction was unsatisfactory as the stone blocks were disturbed by frost, which caused the rails to spread so that cars were frequently derailed. The track was finally reconstructed with crossties of timber supporting T-rails much like the track construction of today. The cost of the railroad was over \$1,600,000.

The transfer of freight from canal boats to cars and at the opposite end of the railroad from cars to boats caused much delay in the through movement. To overcome this difficulty, canal boats came to be made in detachable sections which could be loaded on cars or trucks and hauled over the mountain, then reassembled at the opposite end. These canal boat sections were also hauled over the Philadelphia and Columbia Railroad so that a cargo could be moved between Philadelphia and Pittsburgh without transfer of the load.

The first car passed over this road on November 26, 1833. After the operating force had become experienced, the time required for passenger cars to pass over the Portage Railroad was reduced to about four hours. The traffic of 1835 amounted to about 50 thousand tons of freight and about 20 thousand passengers. The volume of business increased gradually and by 1846 over 145,000 tons of freight were moved, although the passenger business had decreased.

NEW BOOK

HOME ON THE CANAL by Elizabeth Kytte. \$18.95, from the Johns Hopkins University Press, 2715 N. Charles St., Baltimore, MD 21218. 7” x 9” paperback, 287 pages. Originally published in 1983, it has been reworked and re-published in 1996, with additional editorial and pictorial material. It covers the complete history of the Chesapeake and Ohio Canal, originally planned to run from Georgetown to Pittsburgh, including details of construction from the time of the early Patomac Canal, to its completion as far as Cumberland, Maryland, and final abandonment as a commercial waterway in 1924. The most interesting chapters include interviews with dozens of the old canal bottom boatmen and their families, taped and verbal, who worked the canal in its declining years. Included is a glossary of canal terms in common use during the days of the canal’s full operation. Even though beset with numerous difficulties during construction and operation, the C. & O. Canal performed a valuable service for the City of Washington in bringing soft coal, lumber, and other commodities from the hinterland of western Maryland and West Virginia, at a time when it was needed to supplement the services of the B. & O. Railroad. A fascinating and well-told story from beginning to end.

WASHINGTON CITY CANAL



We thank Elmer and Ferne Aughenbaugh of Hanover, PA for this photo of the Lockhouse in downtown Washington, D.C. on the old Washington City Canal. This is all that’s left of the old canal, included as part of the original 1790 Pierre L’Enfant plan for the City. The purpose of the canal was to provide a connection from the Capital City to the C. & O. Canal starting in Georgetown and extending ultimately as far as Cumberland, MD. The City Canal was built (1835–1860) but was found too expensive to maintain for its very limited usage, and was abandoned and filled in by 1870.