

AMERICAN CANALS

BULLETIN OF
THE AMERICAN CANAL SOCIETY

BULLETIN NUMBER 27

Editorial Address - Box 310, Shepherdstown, W.Va. 25443

NOVEMBER 1978

THE CANAL NAMED AFTER MOSCOW



A passenger boat on the Moscow Canal emerging from the upper end of Lock Six. Note the beautiful towers flanking the recesses for the upper lock gates. (Moscow Canal brochure.)

By William E. Trout III, Ph.D.

Moscow's Canal is one of the most elaborately decorated canals in the world, built in the heroic Moscow style of the 1930's which also produced the famous early Metro (subway) stations with their statues, mosaic paintings and stained-glass windows. The Russians appreciate this: the canal buildings and statues (as well as many other sites in Moscow) have an ongoing preservation and restoration program which has been greatly accelerated to prepare the city for the 1980 Olympics. I was even told that some of the canal's statues which were originally of concrete or stone were being re-cast in more permanent bronze! And because the canal is considered an historic monument, there are no plans to alter the elaborate architecture.

The canal was originally called the **Moscow-Volga Canal** when completed in 1932-37 (and that's the name inscribed over the canal's passenger station in Moscow) but during the celebration of Moscow's 800th anniversary in 1947, it was renamed "**The Canal Named After Moscow**" in honor of the city.

The canals starts 77 miles north of Moscow on the Volga River near Dubna, the city of the

Atomic scientists. Six locks raise boats up to a huge summit level lake (much used by Muscovites for recreation) and two two-lock staircases (locks 7 and 8) in Moscow lower it down to the **Moscow River**, on which there are three more single locks as it passes through the city. From the **Volga River**, five pumping stations at the locks pump fresh water up to the summit for Moscow's drinking and industrial needs, and a hydroelectric plant in Moscow recaptures some of the energy, which among other things powers the lock gate motors at locks 7 and 8. With this canal and others, Moscow has become a port of **five seas - the Black, Azov, Caspian, Baltic and White** - and one constantly sees commercial ships and tows, excursion boats, and long-distance hydrofoil passenger boats on the canal and passing by the Kremlin on the Moscow River.

I was fortunate to have a royal visit to the canal one morning arranged by the Russian travel agency Intourist, and the canal authority, complete with a hired car, interpreter, and driver. At my hotel I was met by Mr. Sergi Lapshin of the Moscow Canal administration, and at Lock #7 by Mr. Jacob Sergevich, Chief of the hydro stations in the region, and Mr. Vadjabin, the Lockmaster.

(Continued on Page Three)

PRESIDENT'S MESSAGE

Looking over the material for this issue of **American Canals**, I get the feeling that we are becoming an inter-national canal organization. Bill Trout's excellent article on the **Moscow Canal**, Tom Hahn's fine photos taken during his recent travels on the English canals, my own impressions of the canals in Ireland, activities on the **Welland Canal** in Canada - all this might possibly give our readers the impression that we are overlooking our prime function - to report and encourage revival of canal interest here in the United States.

However, we must remember that the canals in Europe were the fore-runners of our canals in the Western hemisphere. The Italians, the French and the British were building canals while we were still hacking our way through the forests in the 1600's and 1700's here in North America.

A study of historic European canals gives us much valuable information on the canal era of the 1800's in the United States. The English canals, for instance, were built in the late 1700's, and about 2000 miles of them have been preserved or restored, almost exactly as they were 200 years ago. Early American canal engineers studied the British canals and duplicated them here in the 1820-1850 period of canal-building in the northeastern states. Unfortunately, we have "plowed under" all but a few miles of our historic heritage from the British. If we want to see how our American canals looked in full-scale operation in the 1800's we have to visit the canals of England or Ireland. Restoration of sections of our historic canals in the United States is gradually bringing the picture back to us. Let us hope this trend continues.

Bill Shank

Historic Sites in Ohio

The **Twin Arch Stone Culverts**, near Troy and the **Turtle Creek Culverts and Embankment**, New Bern, both on the **Miami and Erie Canal**, have recently been added to the National Register of Historic Places.

The Great Miami River Corridor Committee Miami/Shelby Counties is studying the possibility that the area from and including the **Piqua Historical Area**, and to and including **Lockington**, be designated as a National Historic District.

It is expected that the canal superintendent's building in **Dayton**, which is to be restored by the Montgomery County Historical Society, will be moved to Carillon Park.

Young Adult Conservation Corps (YACC) members will shortly begin to stabilize the historic house at **Lock 38/12-Mile Lock** on the **Ohio and Erie Canal** in Valley View to prevent further deterioration. (From CSO Newsletter)

American Canals

BULLETIN OF THE AMERICAN CANAL SOCIETY

"DEDICATED TO HISTORIC CANAL
RESEARCH, PRESERVATION
AND PARKS"

AMERICAN CANALS is issued quarterly by the American Canal Society, Incorporated. 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 minimum ACS dues payment of \$8.00. Individual copies may be purchased at \$2.00.

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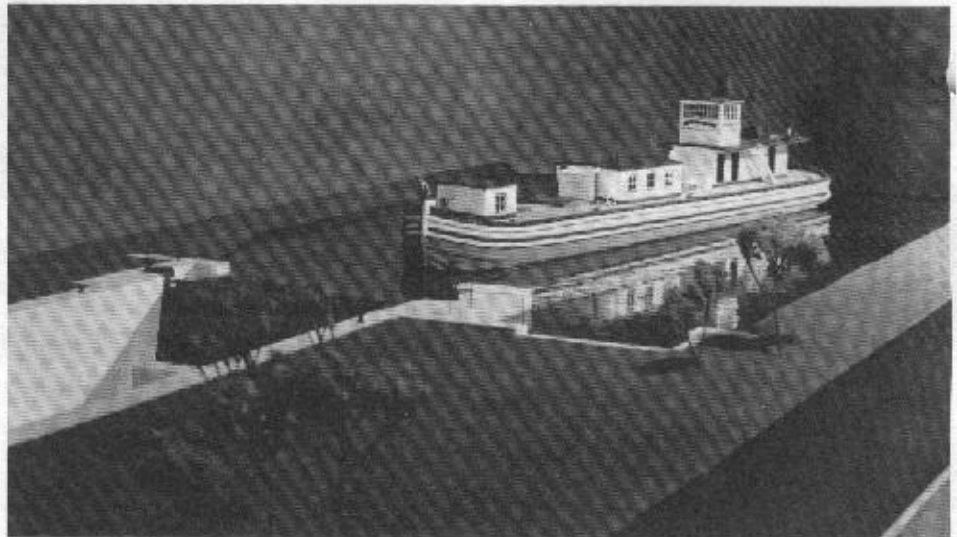
Chairman, Canal Parks Committee, Dr. William E. Trout, III., 1932 Cinco Robles Drive, Duarte, CA 91010.

EDITOR'S CORNER

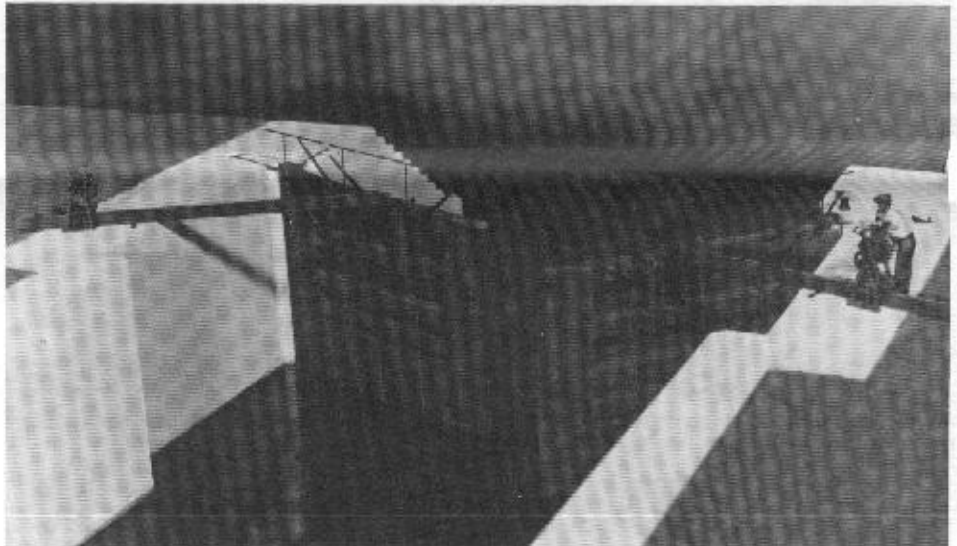
Along with the nominal (I think) dues increase, I hope all of you noticed in the letter President Bill Shank sent along that we are hoping to increase the number of pages of **American Canals** from eight to twelve if the membership response warrants it. This increase is something I have pushed for for some time as it will not only permit more articles to be published, but also will allow more articles to be published *in one issue* rather than to be serialized. With this increase we can add more articles on canal technology, individual canal histories, and just simply provide you with a better publication. So, I urge each of you to renew your membership and stay with us, as there are good articles coming to you next year in **American Canals**. As we are a voluntary organization **American Canals** is put together through the voluntary "slave labor" of the Hahns, Shanks, and Derrs (with the cooperation of a lot of other people) and as we have no resources for advertising, I also ask that you let your canal friends know of our organization and help boost the membership. A larger (and sustained) membership will ensure quality publications, among other things.

Tom Hahn, Editor

"CITY OF PEKIN" AND LOCK MODEL



Model of the Canal Boat "City of Pekin" at Lock 16 of the Hennepin Canal. The model is now on display at the Visitor Center of the Hennepin Canal at Sheffield, Illinois. The lock and canal boat arrangement were designed and built by Bruce Anderson, ACS, professional model builder (Architectural and Industrial Model Building, 26 Choate, Park Forest, IL 60466). Bruce built the lock of plexiglass, the lock gates and the boat of basswood, and the water of liquid plastic. Of additional interest is the possibility of finding *The City of Pekin* near Channahon, IL. (See article this issue "I & M Canal Boat Hulks.") Photographs by Bruce Anderson.



Placing Canals on the National Register

The May issue of 11593, the newsletter of HCRS - the Heritage Conservation and Recreation Service - (free from them at Department of the Interior, Washington D.C. 20240) has an article on "Technological Nominations: Ways to Expedite National Register Review" by Isabel Hill of the Historic American Engineering Record (HAER). Because the state historic landmarks offices rarely have canal experts, they have to get most of their information, and even photographs, from us canal enthusiasts, to prepare an acceptable nomination write-up. A canal or canal site can't be described by an architectural historian - it takes a canal buff. They need details such as date of construction, number of locks,

approximate lock dimensions, source of water supply and the elevation of each terminus and the summit. For a site, use an informative name, such as "Roanoke Navigation: Cat Rock Sluice," not just "Cat Rock Sluice." In the Statement of Significance, discuss the canal or site being considered, not canals in general (as was done in a recent nomination sent to them). Work with your state landmarks office, which will send nominations on to HCRS, which includes HAER. They will be glad to help with any questions involving canal nominations. This is a good time to make sure that canals are properly represented in your state.

CORRECTION

"Scholarie Aqueduct" on page 2, column one of **American Canals** No. 26 should be changed to Schoharie Aqueduct.

THE CANAL NAMED AFTER MOSCOW

(Continued from Page One)

Both Locks 7 and 8 are on the same straight cut from the summit pond near the passenger station down to the Moscow River, passing over Volokolamska Avenue on an aqueduct. Both locks are two-lock staircases (all the others are single) with 30 x 300 meter chambers and electrically operated miter gates, except for the upper gate of Lock 7 which has been replaced by a tainter gate - it is lifted slightly to fill the lock, then dropped to let boats pass over it. At the time of my visit the locks were full of commercial craft, some with empty barges going up the canal for another load of sand for Moscow's extensive building program.

Beside each lock gate is a decorated tower containing the operating mechanisms for the gates and sluices; one of the six towers at Lock 7 is also the control tower, with an impressive panel which allows the lock to be operated by one man. Analog devices show the positions of the gates and the water levels, especially interesting at a two-lock staircase with two chambers and three sets of gates.

Although all of the locks on the canal are similar, the architectural embellishments vary from lock to lock, from stone statues on the roofs at Lock 6 to a huge model of the Santa Maria on Lock 3, and a bronze statue of a sailor throwing a line, at the foot of Lock 8. There is also bas-relief sculpture on the towers, and an overall theme of full-size anchors on the buildings and grounds. There is even a painting of a lock under construction, on the ninth floor of the main building of Moscow University.

The Moscow Canal deserves a big picture-book, and a history in English (there is a history in English on the White Sea-Baltic Canal from the same period), and news about Russia's historic canals needs to be brought to the world's attention. For example, at the lock I was presented with a lapel-pin made for the celebration of the canal's 40th anniversary in 1977, but who in the canal world heard about it? Also, we would like to hear more from Russian canal historians and archaeologists of the history and remains of the country's very early canals, which as described by Roger Calvert in **INLAND WATERWAYS OF EUROPE**, go back at least to 1700, and deserve



The "SANTA MARIA" on a tower at Lock Three. (River Fleet office photo.)



Looking down Lock Seven at two large vessels "locking through", with the ornate, decorated gate towers in the background. (Photo by Bill Trout.)

attention as part of Russia's cultural history. But information in English is hard to get, so the best source of canal material (other than Calvert's book) is still **SOVIET WATERWAYS** (1956), written in Germany by Andrei Lebad and Boris Yakovlev.

Although you can see Lock 10 or 11 at a distance on the regular tourist excursion to the site of the czar's summer palace at Kolomenskoye, and can visit the monumental North Harbor Passenger Station by taking the metro to Vodnyj Station, you can photograph the locks only through application to Intourist (45 E. 49th St., New York, N.Y. 10017), unless your trip includes an excursion through the locks, or a long-distance hydrofoil trip. In that case, whether you can take photographs of the locks or not depends on your Captain. (The regular excursion boats up the river from downtown Moscow don't go through any locks.) Official visits can be arranged through the Captain of the River Fleet, Petrovka 3/6, Moscow. This office and Intourist were especially helpful in arranging this visit to the canal for me. Spasiba!

HENNEPIN CANAL ON REGISTER

The Hennepin Canal Historic District was designated a National Historic place on May 22, 1978. The Hennepin Canal Historic District is 89.8 miles of canal and surrounding right-of-way. It includes approximately 2,329 acres lying in Bureau, Henry and Whiteside counties of Illinois.

The Hennepin Canal Historic District extends from Lock 2 on the main line (1.3 miles from the Illinois River) to the junction of the mainline and the Rock River channel (61.8 miles from the Illinois River). It covers the entire 29.3 miles of the feeder canal.

The National Register of Historic Places "Statement of Significance" details the Hennepin Canal's national, regional and local significance in seven areas: commerce, economics, engineering, invention, politics, social, and transportation.

WARNING: The Russian government is dead serious when it warns tourists about taking pictures of railways, bridges, or industry, or taking panoramic views, or "deviating from your itinerary"; railway buffs have been especially liable to severe treatment. Canal locks apparently also fall under this rule, so obtain permission first! Let's hope that the crowds at the 1980 Olympics (where there will be excursions along the canal) will help ease this old-fashioned restriction.

Dr. Bill Trout is Vice President of the American Canal Society and visited Moscow several months ago.

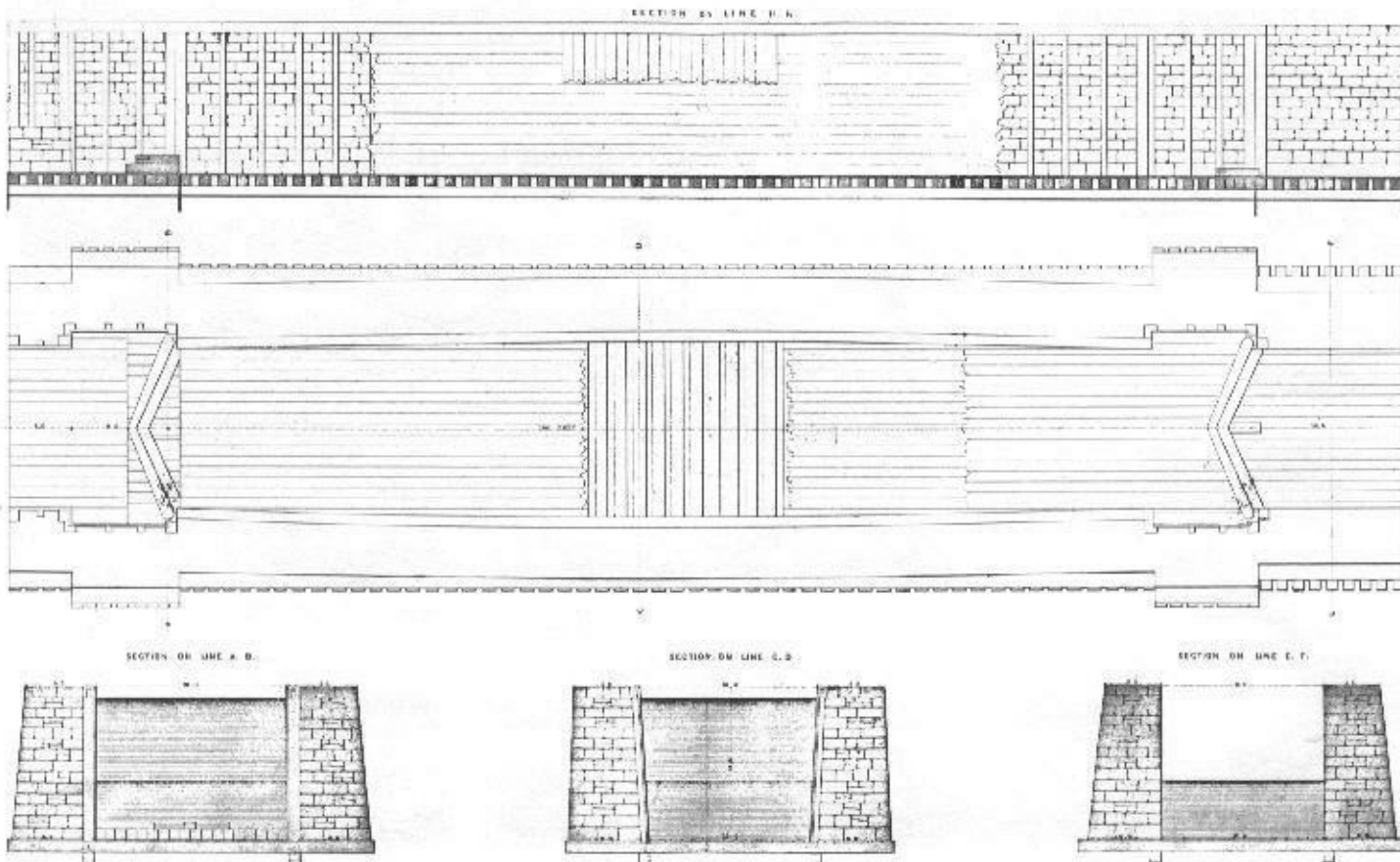
FLORIDA BARGE CANAL STILL ALIVE?

The following is an extract from a letter received by Colonel Giles Evans, Manager Florida Canal Authority from Congressman Bill Chappell (Florida):

"As of this date (13 March 1978), there has been no legislation introduced in the House to de-authorize the **Cross-Florida Barge Canal**. I want to reiterate my strong and continuing opposition to any action at the Federal level which would lead to the destruction of those facilities already in place and any action which would alter the present status of **Lake Ocklawaha** . . . As a member of the Subcommittee on Public Works of the Committee on Appropriations, I intend to see that adequate funds are provided to maintain the Cross-Florida Barge Canal in its present status."

Giles Evans in his covering letter to the Editor of *American Canals* commented "I thought your page block about filling the Panama Canal, in Bulletin #24, very timely. Your headline about the **Florida Barge Canal** in Bulletin #25 would have done well to carry a similar lampoon, for ample justification equally exists. The Executive Branch of Government, State and Federal, appears to have waged a continuing battle to thwart the statutes established by the Legislative Branches. Further, they have continued to ignore flagrantly the technical findings, and the results of extensive analyses and studies undertaken as the result of court orders."

VIRGINIA WOODEN LOCKS



By T. Gibson Hobbs, Jr.

Detailed specifications for the type of lock shown here are included in the Fifth Annual Report of the James River and Kanawha Canal Company for 1839. Where a stone foundation could not be reached timber was used, as shown. This consisted of 81 good pine or white oak timbers 12" square and 31 feet long, or more, laid at right angles to the lock. These were levelled and puddled in between with gravel. They were covered with 2" pine planking secured with heavy nails. Note the four rows of sheet piling of best pine plank, 2½" thick and not less than 6 feet deep, to prevent washing under the foundation.

Upright timbers 7" square, bolted to the stone walls, carried the 2" well jointed, pine planks running horizontally for the side walls. These and the floors were finished off with 1" pine plank, well jointed and all secured with nails. The stone walls were rubble masonry laid dry, except in the gate areas where hydraulic cement mortar was used. Upper and lower stone wing walls, not shown, were to be 25 feet long laid at 45° to the lock. Cement was furnished by the company from its own mills. No spiritous liquor was allowed on the job.

Construction of the 148½ miles of this canal between Richmond and Lynchburg, Va. started in 1836. At that time Charles Ellet, Jr. was chief engineer and Judge Benjamin Wright the consulting engineer. The 51 lift locks, having a total lift of 428 feet, were all planned as cut stone locks laid with hydraulic cement mortar.

In 1837, with the work behind schedule, costs exceeding estimates, funds running short, a financial panic affecting the whole country, and good stone in short supply on this section, the engineers recommended wood (composite) locks for those locks not already under construc-

tion, 29 in all. Their reasoning to justify this is interesting: A stone lock was estimated to cost \$11,800 versus \$3,800 for the wood lock, or a total initial savings of \$232,000. The wood locks were to be laid out so that permanent stone locks could be added beside them after the canal opened. This would permit cheap and easy hauling of good stone and construction at comparative leisure by selected mechanics under favorable circumstances.

The material that could be reused later in the stone locks or other structures was valued at \$3,430. These savings offsetting the extra labor and other expenses of building two locks, made the wooden locks, replaced later by stone, cost only \$370 more per lock than building the stone locks to start with. They estimated this would allow opening the canal a year earlier so the added revenue would more than offset this small difference.

Judge Wright recommended "that a model be made of one inch to the foot, representing every piece of timber, and the manner it is put together - so that contractors cannot mistake the intention of the board and may understand their own proposals."

This drawing is one page of a book of lithographs entitled "Public Works of the United States of America", printed in London in 1841, edited by William Strickland, Edward H. Gill and Henry R. Campbell, Civil Engineers. It sold for \$5.00 and a copy is on file at the National Archives. It included drawings of the Philadelphia Gas and Water Works, plus locks on the Schuylkill Canal, a dam on the Sandy and Beaver Canal and a number of structures on the James River & Kanawha Canal.

E. H. Gill, who made this drawing, was hired by Ellet as a principal assistant engineer in 1838 to survey the water parts of the line on both sides of

the Allegheny mountain. He had previously served on several of the Ohio canals. He continued to serve ably in engineering capacities for a number of years, being chief engineer for a short time.

Most of the original drawings and other records of the company were lost when the office in Richmond was burned during the Civil War.

Canal Calendar

Jan. 15-Feb. 15, 1979 - "The Rideau Canal" - a collection of photographs illustrating the Rideau, from the Art Gallery, Ontario. To be shown at St. Catharines Historical Museum, 343 Merritt St., St. Catharines, Ontario, Canada. Open 1 to 5 daily.

April 15-28, 1979 - Hike along entire 184½-mile Chesapeake & Ohio Canal. C & O Canal Association. Ms. M. E. Johns, 6233 18th Road NW, Arlington, Va. 22205.

May 5, 1979 - Canal Society of Ohio, Ohio & Erie Canal Tour, Carroll to Newark including Baltimore, Buckeye Lake, Deep Cut. Barnett Goding, 111 Richards Road, Columbus, Ohio, 43214, Chairman.

May 18-20, 1979 - Pennsylvania Canal Society, Lehigh Coal & Navigation Tour, John P. Miller, 3520 Quincy Lane, Hanover Farms, Bethlehem, Pa. 18017.

Aug. 17-19, 1979 - Roscoe Village Canal Festival. Roscoe Village Society, 381 Hill St., Coshocton, Ohio 43812.

(Canal organizations please note. Send information regarding your events for **American Canals** by 1 January, 1 April, 1 July, and 1 October: Editor Tom Hahn, American Canals, Box 310, Shepherdstown, WV 25443.)

ERIE CANAL IS HAVING TROUBLE COPING

The fabled Erie Canal, made famous to schoolchildren through the song about the mule named Sam, is having trouble coping with the 1970's. The state Barge Canal, the successor to the engineering marvel of the early 19th Century, now faces an uncertain future.

With its locks too small for modern barges, and competition from other modes of transportation, the canal needs a major renovation, or will serve only pleasure craft. Some even predict it could be shut down within a decade if not improved.

The condition is a far cry from the time the canal system was the major link between the Atlantic Ocean and the nation's interior. Cities like Syracuse, Rochester and Utica grew along the canal which also helped make New York City the economic center it is today.

When the original four-foot deep canal opened in 1825 it was hailed as the greatest public works project of a free society. It was the longest canal in the world.

The canal lowered transportation costs. It also tied the Midwest to the Northeast, rather than the South and the Mississippi River, a significant factor in the outcome of the Civil War, according to historians.

In its heyday, traffic was so heavy the canal not only paid for itself, but also financed state government, until it was made toll-free in 1883.

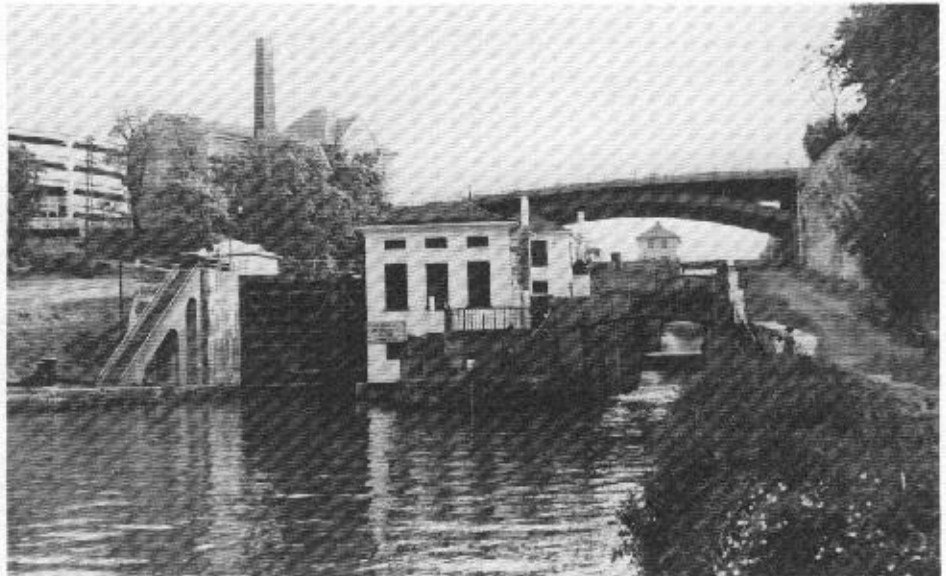
The canal gave New York City a big advantage over Boston, Philadelphia and other port cities, drawing business to New York City with its access to the Midwest. But the glory of the canal system has tarnished in the face of competition from highways, railroads, airports and the big fighters of the St. Lawrence Seaway.

Now only about 40 barges regularly carry cargo over the 527-mile canal system. After more than 150 years in operation the historic canal faces a bleak, and possibly limited, future.

Although the state still spends about \$10 million a year to keep the canal system operating, a state Senate task force recently warned the barge canal may be closed within a decade if it is not modernized. A U.S. Senate subcommittee scheduled a hearing on the canal's future in Washington in August.



Interior of the guillotine type lift lock, highest lock on the eastern half of the Barge Canal, at Little Falls, N.Y. (Photo by Bill Shank.)



The fabulous double flight of ten locks on the old Erie Canal at Lockport, New York, has been partially replaced (1915-18) by two, fifty-foot lift locks of the Erie Barge Canal (at left). One of the old "flights" has been preserved (at right) partly for its historic value, and partly to serve as a spillway to bring Lake Erie water to the upper reaches of the Barge Canal. The old lock gates have been replaced with vertical weirs. (Photo by Tom Hahn.)

The 57 locks on the 14-foot deep canal are too small to allow the big barges that ply the waters of the New York Harbor and Great Lakes to use the up-state canal. Some of the locks are over 60 years old. The average barge using the canal is two decades old and the newest has been in operation five years, the state senate task force reported.

A tug boat on the Ohio River can move 20,000 tons of cargo. A tug on the Mississippi River can move 50,000 tons. But a tug on the New York barge canal can handle only about 3,000 tons. Those physical limitations reduce the efficiency and economy of the barge canal, making it harder to compete with other forms of transportation.

The current canal, 14 feet deep and 140 feet wide, was built in 1915. It uses some sections of the old Erie Canal.

The expansion was done after the possibility of enlarging the canal for shipping was dismissed. Instead, the St. Lawrence River to the north was eventually dredged to accommodate ocean-going freighters, replacing the canal as the major water link between the Atlantic and the Great Lakes.

Traffic on the canal first declined in 1883 when the Erie barges began losing cargo to railroads. In 1951 the modern canal carried five million tons of cargo, its biggest year ever. But traffic on the canal has declined ever since. Last year, less than two million tons moved.

The canal remains a major transportation system for petroleum, especially industrial fuel oils. More than 94 percent of all cargo carried over the canal last year was petroleum. Molasses, cement, machinery and chemicals were also carried over the canal.

The canal itself has shrunk by almost 300 miles with branches being abandoned that once linked it to the cities of Port Jervis, Binghamton, Olean and Elmira, as well as a northern branch to Carthage.



The "Emita II", only commercial passenger vessel of modern times to cruise the entire length of the Erie Barge Canal. Modifications to the super-structure of the vessel this past summer made it possible for the "Emita II" to pass under the extremely low bridges of the Canal west of Syracuse. Captain Peter Wiles can be seen at the left. (Photo by Bill Shank.)

The canal's best hopes for a revival appear linked to the energy crisis. Rising fuel costs make the cheaper water transportation of the canal increasingly attractive. A canal barge can carry as much petroleum as 79 tanker trucks, with less pollution, but only at speeds up to 10 miles an hour.

The renewed emphasis on coal as an energy source has also raised hopes the canal may become a major conduit for western coal into the Northeast. However, coal has not moved on the canal in 16 years.

Although the canal is the only one in the United States not under federal control, dollars from Washington may be its best hope for modernization.

The state constitution prevents New York from giving up the canal, but there has been growing discussion of the need for federal help in updating the waterway.

(Submitted by ACS Member Daniel Mondell from the Batavia, N.Y. Daily News)

ENGLISH CANAL TRIP



Nothing is more beautiful than the graceful English canal bridges. This changeover bridge (Bridge No. 1) near Marple, Cheshire on the Macclesfield Canal permits the changing of the towpath from one side to another.



This photograph at Stoke-on-Trent, Staffordshire depicts an industrial scene on the Trent & Mersey Canal near its junction with the Caldon Canal.

Once again ACS Editor Tom Hahn and his wife Nathalie and daughter Betsy traveled the English canals and rivers (fifteen of them) in the Narrow Boat "PHOBOS", owned by ACS Member Tom Sewell, over 500 miles, through 399 locks. The "PHOBOS" comes complete with a steersman and can carry six passengers comfortably. (Those interested in a canal boat experience should write to Tom Sewell, East Whitley Farm, Shamley Green, GU5 0TE, England for the 1979 season.) The photographs shown are typical of scenes encountered on the trip.



A typical English canal lock (Aston Lock) from below on the Trent & Mersey Canal in Staffordshire. Note the brick lockhouse to the left, the handy stairs on each side of the lock, and the rise for the tow animal on the left.



One of England's outstanding canal engineering structures is the Anderson Lift in Cheshire built by Leader Williams in 1875 to connect the Trent & Mersey Canal with the Weaver Navigation 50 feet below.



Railway enthusiasts would be enthralled by this railway station overhanging the Froghall Branch of the Caldun Canal near Froghall, Staffordshire.

NORTH NEW RIVER CANAL LOCK ON REGISTER

Lock #1 of the North New River Canal in Florida was entered on the National Register of Historic Places on 17 February 1978. The North New River Canal was, in its early years, (begun 1905) a major transportation artery between Fort Lauderdale and Lake Okeechobee. Lock #1 was the first lock to be built on the canal, and the first lock in South Florida. Lock #1 was closed in 1926. (ARCHIVES & HISTORY NEWS, Mar.-Apr. 1978).

BOOK REVIEW

IRISH CANALS

Canal Boatman: My Life on Upstate Waterways by Richard Garrity (Syracuse: Syracuse University Press, 1977. 222 pp. \$11.95)

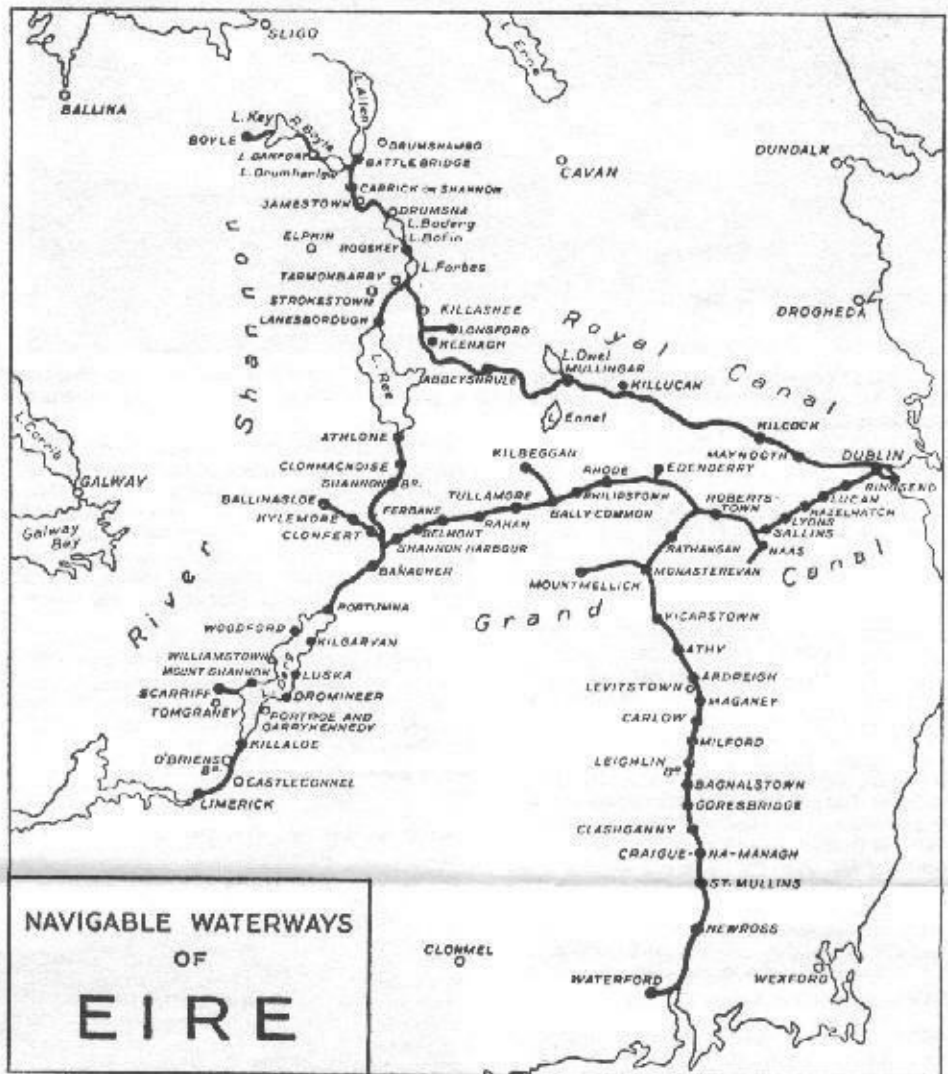
Review by Ernest H. Schell

Canal buffs will find this autobiographical account of life on New York canals and waterways from 1905 to 1970 both informative and delightful. The author, who has also written a couple of pamphlets for the Historical Society of the Tonawandas, recounts typical day-to-day events on mule-drawn lumber and grain boats and on tugs and steam barges, as well as providing a wealth of technical information about operations on the canals. Charmingly anecdotal and illustrated with dozens of photographs and numerous sketches, the book transcends the deadly "first-this-happened, then-that-happened" school of reminiscence, giving us instead a selection of interesting, even dramatic, vignettes that capture the flavor of by-gone days while revealing significant details about the construction, maintenance, and use of the New York state canals (and the function of associated waterways), the vessels that plied those waters, and the dedicated and hardworking men and women who were at home on them.

At the heart of the book and dearest to Richard Garrity's own heart are the years he spent as a boy on the **Erie Canal** from 1905, when he was two years old, until the canal was abandoned in 1917 and the Barge Canal System replaced it. The family owned a pair of mule-drawn lumber boats that carried lumber from the Tonawandas area to points all along the Erie Canal and even to ports as distant as New York City. When the lumber business tapered off around 1910, they converted the cargo holds to make them suitable for hauling gravel, employing the boats in the construction of the **Barge Canal** until 1916, before a final year on the Erie carrying lumber once again. Thereafter, Garrity found employment as a deckhand and later as engineer on a series of tugs and steam barges, working on a diesel tug on Lake Ontario for the Army Corps of Engineers in 1935. From 1943 until he retired in 1970, the author served as engineer on a steam tug for the Great Lakes Towing Company.

While the book abounds in technical information interspersed throughout the narrative, particularly details on the canal boats and barges, the lack of an index discourages using it as a reference volume. Well-organized chapters provide access to some of this store of knowledge, but many of the basic canal facts are available elsewhere, in any case. What makes this account especially worthwhile, however, is the personal story its author has to tell. As Lionel Wyld, author of **Low Bridge: Folklore and the Erie Canal**, remarks in the Foreword, "There are few other books like this one about any of the canals, and none so complete by a person who has lived and worked on the waterways of upstate New York."

The most persistent theme of the life of Garrity and his fellow canalers is the precariousness of their employment. Even when the Garrity family owned their own pair of boats, securing freight for them was a fortuitous business. And whether as owner or hired hand, a canal boatman's work was seasonal, forcing him to rely on odd-jobs throughout the winter months. When there was steady work, it could take a man away from his family for weeks, unless his family went with him, which they were able to do on the Erie Canal in Garrity's youth. Above all, the boatowner faced countless risks in keeping his vessels operational, and often could not cope with every contingency. The last season on the Erie Canal Garrity's father left his icebound boats at Frank-



Bill and Ruth Shank recently returned from a tour of Ireland, during which they traveled for miles along the River Shannon, photographed active locks and waterways of the Grand Canal at Dublin, and visited several defunct canals at Limerick and Tralee. The accompanying map is reproduced from the excellent book "Green and Silver" by L. T. C. Roit, published originally in 1949 and re-printed (by George Allen and Unwin, Ltd., London) in 1968. At the time the book was originally published, the Royal Canal, now defunct, was still operational. All the other waterways shown on the map may still be enjoyed by the ardent canal buff. The best short articles on Irish Canals, of recent date, were those written by our own Herb O'Hanlon, Aurora, Colorado, and were published in Issues Number 7 and Number 9 of AMERICAN CANALS.

fort for the winter. When he returned next spring, they were lying at the bottom of the canal, which had been drained and discontinued. After waiting several weeks for a planned reopening of that section to serve the Mohawk-Utica area, he learned that those plans, too, had been abandoned. The state refused responsibility, claiming that as a toll-free waterway the canal was open without the state being liable for any damage or loss incurred in its use.

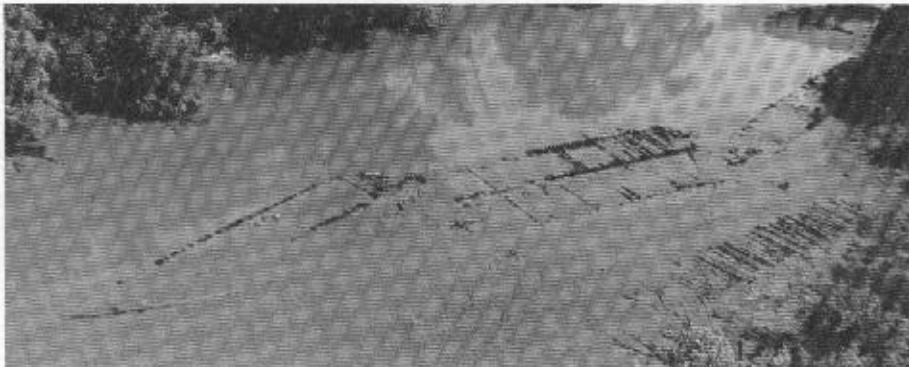
Garrity recounts one unusual instance told to him many times by his father in which the canalmen tried to obtain greater control over their fate. In 1895 lumber boat operators organized a **Boatmen's Association** at Tonawanda to set up a strike against lumber shippers, whose rates were too low and whose contracting practices were unfair. When a captain who refused to join them aroused their ire, the other owners set upon him and his son on their boat, killing them both. In the wake of the riot, two men, one apparently innocent, were sent to prison for the murders.

The author recounts no other efforts, peaceful or otherwise, of canalmen to organize or unionize to have a say in setting the conditions of their labor. They either adapted to them or left. Most, like Garrity, preferred their way of life on the water to any other.

This profusely illustrated volume offers a unique and moving story about life on America's inland waterways. **Canal Boatman** will make a fine addition to the shelves of anyone interested in the variety of people, most of them humble, honest, and honorable, whose spirit lends added significance to any canal.

Information is sought regarding the "Love Canal" at Niagara Falls, New York. A short article would be even better. Send to Editor Tom Hahn, **American Canals**, Box 310, Shepherdstown, WV 25443

I & M Canal Boat Hulks



Five canal boat hulks discovered in the Illinois and Michigan Canal, near the Armstrong Street crossing in Morris, Illinois, June 27, 1978. (Photo courtesy of Illinois Department of Conservation.)

CANADIAN CANAL SITES

In co-operation with the Welland Canals Preservation Association (W.C.P.A.) on 1 October, the St. Catharines Historical Museum sponsored the Official Opening of Mountain Locks Park. The park was developed between January and July of 1978 on a Canal Heritage Project working out of the Museum. Featured at the opening was the unveiling of plaque dedicated to the Second Welland Canal. The plaque, co-sponsored by the St. Catharines & Lincoln Historical Society and the Ministry of Culture and Recreation, was jointly unveiled by Mr. Colin Penketh, President of the Society, and Mr. Frank Hawley, a Director of the Society, a Director of the Ontario Heritage Foundation and a Museum Board member. The unveiling was followed by a walking tour of the park and a tour of one of the locktenders' houses in the area.

With the assistance of a Canada Works grant, the St. Catharines Historical Museum will be redesigning its Welland Canal exhibit area in preparation for the 150th Anniversary of the First Welland Canal in 1979. The four people hired will also be preparing other exhibits for use at the Lock 3 Observation Platform, in shopping malls, at schools, and for special events. Work has also commenced on cataloging the Museum's extensive collection of Welland Canal maps and artifacts, as well as preparing a bibliography which will be useful for those carrying out research on the Canal.

The Welland Canals Preservation Association has also received two Canada Works grants totalling \$63,000. The Association will be using most of the money to hire seven full-time employees for a period of one year. The employees will form the core of the workforce which will begin on the W.C.P.A.'s plans to restore and develop lands along the length of the Second Welland Canal, originally constructed over a century ago. The initial stage of these plans calls for W.C.P.A. supervisory personnel and inmates of the Niagara Regional Detention Centre, working through the Community Work Order programme of the John Howard Society, to clean and de-brush lands along the Second Welland Canal. In addition, the workforce will begin construction of a walking trail and bicycle path to run from Port Dalhousie to the southern boundaries of St. Catharines. In the future, the W.C.P.A. hopes to extend these walking and bicycle routes south to Thorold.

(From St. Catharines Historical Society Newsletter)

The accompanying photo shows the five canal boat remains in the **Illinois and Michigan Canal** which were mentioned in the August 1978 issue of **American Canals**. The hulks were discovered by Dave Carr, Site Supervisor of the **Illinois and Michigan State Trail** near the Armstrong Street Crossing in Morris, Illinois. Mary Yeater, Canals Interpreter, Hennepin Canal Parkway comments:

"Local legend has it that vandals, campers, hunters, etc. scavenged the upper wooden portions of the boats for fire wood, etc. Finally, the vessels were so damaged that they sank. The I & M underwent a major renovation in 1918 (which would have destroyed any boat remains). The next major work (which would have again destroyed any boat remains) was in the 1933 Civilian Conservation Corps rehabilitation of the canal for recreational use in 1933. The tentative assumption is, therefore, that the boats last operated sometime in the 1918-1933 period.

"Hearsay also places another wreck near Channahon, just east of the lock tender's house. People even recall the name of the boat that is supposed to be there - **The City of Pekin**. (See the photos of the model of this boat elsewhere in this issue of **American Canals**.) We now have another area to explore. Hopefully, there will be more left of that canal boat than of these hulks. The more I investigate the question, the less likely the chances look for raising the hulks. But the need for detailed and thorough documentation by an archeological team appears more urgent all the time.

"I have certainly appreciated the help of all the ACS members who have provided me with in-



The above photo (over 110 years old) was submitted to us by Bill McKelvey. During the Civil War, Bill tells us, the Government seized or chartered 842 canal boats and barges, and 89 steam tugs. The Quartermaster Corps developed this supply base at White House Landing on the Pamunkey River, Virginia. Over 400 vessels moved in and out of this narrow and tortuous waterway without a loss. Boats were drawn from most east coast canals for the war effort. Note the armed sentry on duty at the left. (Brady photo collection, National Archives.)

CLASSIFIED ADS

T. G. Hobbs, Jr., Vice President, Manufacturing, C. B. Fleet Co., Box 11349, Lynchburg, VA 24506 seeks Annual Reports of the James River and Kanawha Canal for the years 1858, 1859, 1861, 1862, 1863, 1867, 1868, 1875, 1879, 1880, and 1881.

Tom Hahn, Box 310, Shepherdstown, WV 25443 requests any and all information pertaining to canal songs: music, words, sources canal, recordings available, etc. for inclusion in a possible publication on canal songs.

Clearance Sale

Canals of Northern Ireland (McCutcheon) \$11.95 (now \$6.95)
 Canals of South Wales and the Border (Hadfield) \$12.95 (now \$7.95)
 Canals of Northwest England (Hadfield & Biddle) Vol. 2 \$12.95 (now \$6.95)
 Holiday Cruising in Ireland (Ransom) \$7.95 (now \$4.95)
 Canal Architecture in Britain (soft covers) \$3.50 (now \$2.50)
 Industrial Archaeology Vol. 7 \$9.95 (now \$6.95)
 Industrial Archeology Vol. 8 \$11.95 (now \$7.95)
 Canal Days in America \$10.00 (now \$5.00)
 Thomas Telford (soft covers) \$3.50 (now \$2.50)
 Rideau Waterway (Leggett) (soft covers) \$4.50 (now \$3.00)
 Fences, Gates and Bridges \$5.95 (now \$3.50)
 Barns, Sheds and Outbuildings \$6.95 (now \$4.50)
 Covered Bridges of the Northeast (Allen) \$10.00 (now \$7.50)
 America's Windcatchers Windmills (Torrey) \$11.95 (now \$9.00)
 All hardcovers except as indicated.
 Offer expires 31 Dec. 1978. All items limited.
 Plus 75 cents shipping: ACTC, Box 310, Shepherdstown, WV 25443.

formation on canal boat hulks and wrecks. The file I have on the subject gets thicker and thicker each day. I also got a lot of good advice from Al W. Banton, Jr. of the National Park Service who has been personally involved since 1957 with the raising and the preservation of the **Cairo**, the sunken iron-clad, found near Vicksburg.

"I'm so glad to have the **American Canal Society** to call on for information. You truly do function as a central clearing house for canal research."