

AMERICAN CANALS

BULLETIN OF
THE AMERICAN CANAL SOCIETY

BULLETIN NUMBER 5

EDITORIAL ADDRESS - P. O. BOX 638, GLEN ECHO, MD. 20768

MAY 1973

"Captain's Corner"

In April the principal officers of the American Canal Society (President Tom Hahn and Vice Presidents Bill Shank and Bill Trout) met in Washington, D.C. (Brookmont) to review the first 16 months of the existence of the American Canal Society and to make plans for the year ahead. Discussed were the formulation of the by-laws, our bulletin - AMERICAN CANALS, the work of present and future committees and all the things that needed to be hashed out. One thing was very apparent - we need more help in our activities; during the coming year we will be asking more of you, members of the Society, for your help in our various projects.

We will appoint an Information Committee. One of the functions of the Committee will be to disseminate dates of the functions of various canal organizations. We do not intend to tell any organization when it should have its meetings or field trips. Rather, we hope to exchange information in sufficient time to allow flexibility and choice in selecting dates. Some of us had to miss the joint Spring Field Trip of the Pennsylvania Canal Society and the Canal Society of New York State because of conflicting dates with the Annual Reunion Hike of the Chesapeake and Ohio Canal Association, though we tried to avoid a conflict -- but it did not work out; the PCS-CSNYS Fall Field Trip on the Delaware and Raritan in N.J. was held on the same weekend as a Canal Society of N.J. function; the Rideau Canal trip in Canada sponsored by the Society for Industrial Archeology and the American Canal Society, is on the same weekend as the Field Trip of CSNYS and the Delaware and Hudson Canal Historical Society in September, etc. With good communications and cooperation surely we can do better in

the year ahead. Send in your tentative dates as soon as you can and we'll see what happens. Dr. Trout suggests a monthly status report for more timeliness - perhaps this is also something we can consider in the future.

One major objective of the American Canal Society is to preserve the historic canal remains of the Americas. We were appalled to learn in the January 1973 issue of ECHOES OF HISTORY (published by the Pioneer American Society) that the last substantial bit of the Alexandria Canal - the old locks taking the canal back into the river in Alexandria, Va. - was bulldozed out of existence for a motel in December 1972. Right in our back yard! Would it have helped to have had a Virginia Canal Society as a watchdog? We simply cannot sit back and see our American heritage destroyed in this manner. A key point here is that we need to help index, catalog, measure, catalog, study and get official status (National Record of Historic Places, etc.) of all historic canal structures. Part of this can be done with your assistance to Peter Stott and the Canal Index Committee. We are working with the Society of Industrial Archeology (SIA) and the Historic American Engineering Record (HAER) in the exchange of information in the indexing of canals and their structures. Dr. Bill Trout and I had fruitful talks with the chief of HAER and the National Trust for Historic Preservation (of which ACS will be a member organization) on the subject of preservation. Our rapidly expanding western planning and industrialization are overtaking our past but with intelligence and application we can take advantage of modern technology to preserve and restore structures of the past.

Tom Hahn

Rideau Canal Field Trip

Sept. 22-23. Join with members of the Society for Industrial Archeology and take part in their first project on a Canadian site. Examine the industrial settings and engineering works following the 120-mile canalized Rideau River between Ottawa and Kingston, which retains its original locks and hand operated machinery. Tour by bus and foot the historic rural milling and foundry town of Merrickville, typical of mid-19th-century industrial towns dominated by one family, along the commercially and militarily important waterway. Travel by boat a length of the canal from Chaffey Locks, through Davis, to the Jones Falls site, famed for its great masonry arch dam, hillside flight of locks and 19th-century buildings. Rest there overnight at the Hotel Kenny and travel next day to the head of the canal, Kingston. There a tour of the town will include the pump house - steam museum, dry docks, and the Kingston brewery.

Several publications, of which The Rideau Waterway (SIA Occasional publication No. 1) was the first, are being produced for the occasion and the registration fee has been carefully kept down to approximately \$30.00, which will cover all costs - publications, transportation, admissions, meals (3), and overnight accommodation - from 9 A.M. Saturday until 5 P.M. Sunday. Tour registration forms will be available in July from: Dianne Macdougall, National Historic Sites Service, KIA OH4, Ottawa, Canada. To obtain a copy of The Rideau Waterway send 5¢ to: Society for Industrial Archeology, Room 5020, National Museum of History and Technology, Smithsonian Institution, Washington, D.C. 20560.

Canal Index Committee

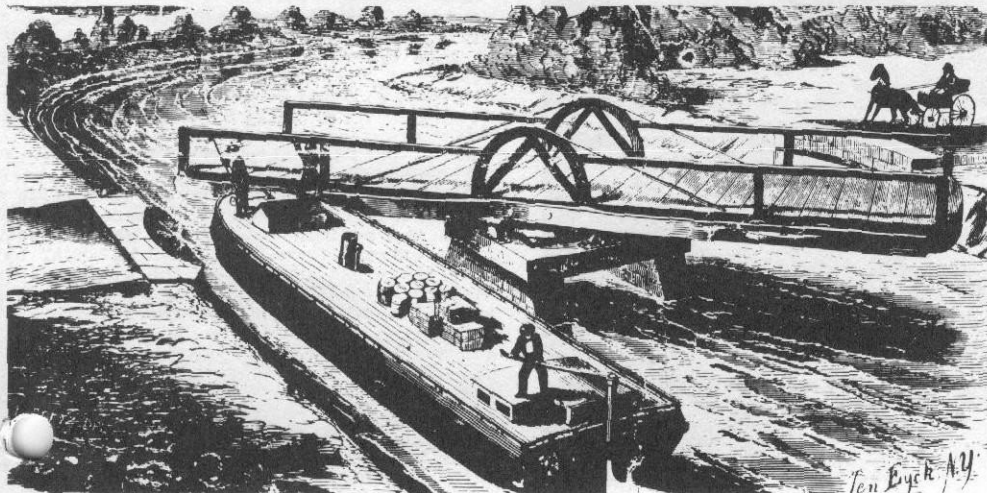
A number of entries have come in regarding canals in the southern states, particularly 13 recently received from Mr. L. W. Richardson. The Mid-West is also represented (we include Mr. Lamb's Illinois & Michigan report in this issue), comments and additions are requested from American Canal readers.

No response however has come from Pennsylvania or New York and we hope that members will not remain idle long?

Peter Stott

U. S. "Canallers" Guide

We are gathering information for a travellers guide to key canal points of interest in the United States, to contain in particular information on restored areas, canal parks, museums, canal boat restoration, and the like, with details on how to get there, when they are open, etc. We plan to have a person or committee soon to handle this project. In the meantime we need contributions to get us started. Send to: Canallers Guide, P.O. Box 638, Glen Echo, Md. 20768.



"Selser's Self-Adjusting Canal Bridge" was developed by John Selser of Williamsport, Pa., circa 1860, and was used for "at grade" crossings of the West Branch Canal in Williamsport and nearby points. Pressure from a moving canal boat was sufficient to open the bridge, and its own weight, on an inclined circular pivot at the center, brought it back to closed position. (Courtesy Richard L. Mix)

American Canals

BULLETIN OF THE AMERICAN CANAL SOCIETY

"AMERICAN CANALS" is issued quarterly by the American Canal Society, with headquarters at Lockhouse #6, Chesapeake and Ohio Canal, P.O. Box 638, Glen Echo, Maryland 20768. Objectives of the Society are to encourage the preservation, restoration, interpretation and usage of American Canals, past and present; to provide a focal point for action on threatened canals; and to exchange information of general interest.

Annual subscription to "AMERICAN CANALS" is automatic with a minimum ACS dues payment of \$4.00. Individual copies may be purchased by non-members at \$1.00

ACS President and Editor-in-Chief--
Capt. Thomas F. Hahn, USN (Ret.)
P. O. Box 638, Glen Echo, Md. 20768

ACS Vice President, Secretary and Production Editor -- William H. Shank, P.E.
809 Rathton Road, York, Penna. 17403

ACS Vice President, Treasurer and Associate Editor -- Dr. William E. Trout III
1932 Cinco Robles Dr., Duarte, Cal. 91010

Douglas—ACS Director

The American Canal Society is honored to announce that Justice William O. Douglas, Room 120, The Supreme Court of the United States, Washington, D. C. 20543 has accepted appointment as a Director of the Society as a Special Advisor to its President.

Justice Douglas is an internationally known conservationist with a keen interest in the preservation, restoration and usage of the historic canals of America.

The President of the American Canal Society would like to share with ACS members a letter from Justice Douglas dated June 5, 1973.

"Dear Tom: I am delighted that an effort is underway to preserve remnants of old canals. There are quite a few east of the Mississippi; I have seen segments in several states. Although few remain intact there are portions which can be made the center of state or local parks. Even a mile or so offer recreational prospects. There is one in the Onondago Valley near Hamilton, N.Y. that should be saved.

"Mrs. Douglas and I joined a group some few years ago to have a small segment of an old canal included in one of Pennsylvania's state parks. Canals are choice bits of Americana often associated with important historic events and usually perpetuating choice folklore."

G.E. Donates Canal Land

General Electric is giving to the town of Rotterdam land involving a total of 3.5 miles, in four segments, of the abandoned canal's towpath, starting at a point east of Thruway Exit 26 and terminating in Rotterdam Junction. Included in the parcel is one of the remaining canal bridges. The bridge carried the towpath across Flatstone Creek (Plotterkill). One of the studies being made includes a bike path along the river.
(Schenectady Gazette. Submitted by Daniel J. Mordell.)

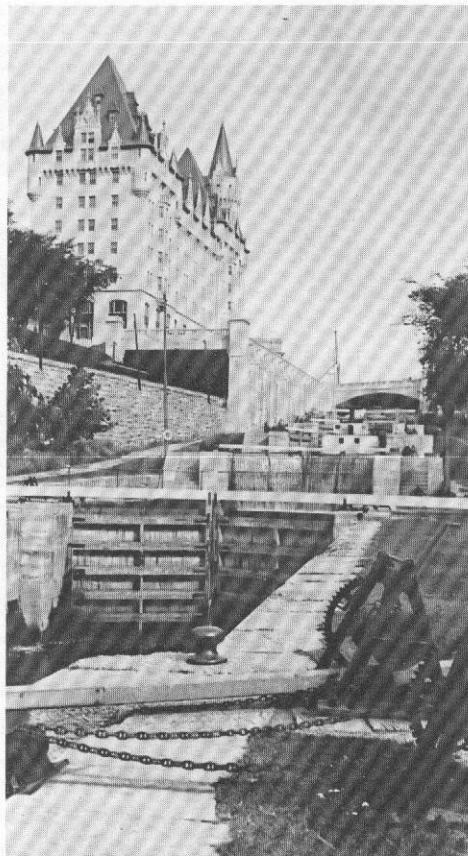
THE RIDEAU WATERWAY

The Waterway ... is 123-1/2 miles long, measured from the beginning of the chain of locks at Ottawa to the bascule bridge across Kingston Harbour which may be taken as the junction of the canal with Lake Ontario. About eighteen miles of this total length are really an artificial waterway, the remainder being the ordinary courses of the two rivers and the lakes which form a part of the route. There are a number of so-called branches, one up Kemptville Creek to the town of Kemptville and four on the Lakes to give access to small towns once served by the Canal, and there is one real branch constructed just after the Canal proper had been completed. This leads from Big Rideau Lake to the town of Perth; it is almost seven miles long, and has two locks with a total lift of twenty-six feet.

On the main Canal, there are 47 locks with a total lift, up and down, of 439 ft. 33 of these locks are required for the ascent from Ottawa to the summit level of the Canal which is in Upper Rideau Lake, with a lift of 277 ft. For the descent from upper Rideau Lake to Kingston, only 14 locks are used, the drop being 162 ft. The difference in the number of locks for the two sections matches the more gradual rise from Ottawa to Upper Rideau Lake, the average lift in each lock on this section being only 8-1/2 ft., and the steeper descent to Kingston, the average lift of these locks being 11-1/2 ft. The locks all measure 134 ft. long and are 33 ft. wide, but the maximum size of vessel permitted thru the Canal is 110 ft. in length with a 30-ft. beam. The official limiting draft is 5 ft. but boats drawing up to 5-1/2 ft. may normally go thru all parts of the Waterway. The main channel of the Canal has a minimum width of 60 ft. at the bottom and 80 ft. at the top, but the rounded bottom sections of some of the locks limit the

size of barges which can be moved thru the Canal to somewhat less than the minimum size for normally shaped boats. Bridges over the Canal limit the overhead clearance for masts, the critical section being at the Ottawa end where the limit is 26-1/2 ft.

At the Ottawa end the Canal starts with a flight of 8 locks which have become a familiar sight thru popular photographs showing them adjacent to the Parliament Buildings. This great water stairway, with a total lift of over 80 ft., is necessary in order to overcome the drop of the Rideau Falls into the Ottawa. The flight brings the Canal up to the level at which it is seen along Ottawa's Driveways and in Dows Lake. Still within the city limits of Ottawa are the next locks, a set of two at Hartwells, and another set of two at Hog's Back Dam. Two more sets of locks come within the next few miles, and there is also at Long Island one of the notable arched masonry dams which are so striking a feature of the engineering works of the Waterway. Then follows a stretch of water over 20 miles long in which the Canal is the river itself, as it flows gently thru the level fertile farms of this part of Carleton County. A succession of locks in the next 20 miles leads to the two sets, one a flight of three, at Smiths Falls. Here, too, is a fine arched dam near the center of town, but the interested visitor must search for it. The lock which follows those at Smiths Falls lifts the Canal to the level of Big Rideau Lake, the first and largest of the Rideau Lakes. It is from this lake that the Tay Branch to Perth takes off, the Beveridge Lock being located at the mouth of the Tay River. A lock at the Narrows connects Big Rideau and Upper Rideau Lakes; the latter is the summit of the Canal and so the link between the Rideau River system and the Catarqui River. What used to be a portage became a cut thru the height of land into Newboro Lake, whence the Canal descends thru Opinicon, Sand, Whitefish and Cranberry Lakes. A large bog between the last two of these lakes was submerged when the water level was raised by the building of a dam at Brewers Mills; it was the site of some of the greatest difficulties in building the Canal. Between Sand and Whitefish Lakes is the outstanding piece of engineering of the entire system, the great arched dam and flight of four locks at Jones Falls. Still but little known except to fisherman and the occasional visitor, this giant curved stairway of locks, flanked by a dam which is a noble structure even by modern standards, is perhaps the most striking testimony to the skill of Colonel By and those associated with him in the construction of this Waterway thru the bush. Below Brewers Mills, the Canal is formed by an artificial lake created by the flooding of the old course of the Catarqui River by the dam at Kingston Mills, where there is another flight of three locks in a beautiful narrow gorge. The last of these locks discharges into the estuary of the Catarqui at the level of Lake Ontario, and from this point it is a sail of about 6 miles to the bridge over Kingston Harbour which marks the official end of the canal route. (This extract from THE RIDEAU WATERWAY by Robert Leggett is made by the kind permission of the University of Toronto Press and may not be reproduced under copyright protection without their permission. This authoritative, well-illustrated, 249-page paper-bound 6 x 9" book, with a good index and tables of mileages, lifts, clearances, maps and references to works used is available at \$4.00 from the American Canal and Transportation Center, 809 Rathton Road, York, Pa. 17403)



Flight of Locks on the Rideau Canal at Ottawa, circa 1912. The Chateau Laurier is on the left, and the Canadian Houses of Parliament are close by. (Courtesy -- The Public Archives of Canada)

We hope to see all of you during our combined field trip along the Rideau Canal with the Society for Industrial Archeology in September. See full details on page one.

Lehigh Canal

Charles W. Derr, Chairman of the Citizens Canal Restoration Committee of the Borough of Freemansburg, Pa. 18017 reports that the city of Allentown made the necessary repairs to the towpath and that the section of the Lehigh Canal in east Allentown, Bethlehem and Freemansburg are watered once again.

Mr. Derr also reports on plans for the Canal Park: "Freemansburg borough council awarded the contract for construction of our Canal Park at Monroe St. We hope to have this completed for use this coming summer. Not to rest on our past accomplishments, we have started working on the second and more extensive phase. As the Monroe street park is intended for more passive recreation, we're planning a historical restoration of Lock 44 and the Nancy Run Creek area. This was the part at which the tour stopped last summer in Freemansburg. I have talked to Harry Rinker, James Reilly, the borough engineer, and the borough park architect about this. We want to come up with a comprehensive plan for this area. Some of the ideas are as follows: restore the lock appearance; also the appearance of the lock house; replace the Nancy Run Creek culvert; replace the creek's mill bridge across the canal; and rewater the section of the canal from the dam to the lock. These plus a general cleanup of the area will constitute the basis for the project. Again, this is only a comprehensive plan for the future with no immediate plans to start any construction.

"In conjunction with the above plans I tried to persuade borough council to purchase the Lehigh Coal and Navigation Co. store building that overlooks this area. As the council could not place this in the 1973 budget, I have taken it upon myself to purchase this structure as a holding agent until this park site is developed."

Bald Eagle and Spring Creek Navigation

The Pennsylvania Historical and Museum Commission is about to spend some money restoring the Curtin Village area through work the Bald Eagle and Spring Creek Navigation system ran. Excavation of the furnace area and the forge of the 19th century Iron Plantation was done in the fall of 1971 and the spring of 1972 at which time survey work was done on the grist mill and the canals which pass thru the site. The restoration of a canal lock is included in the restoration. The site will be restored to the 1850-1860 period.

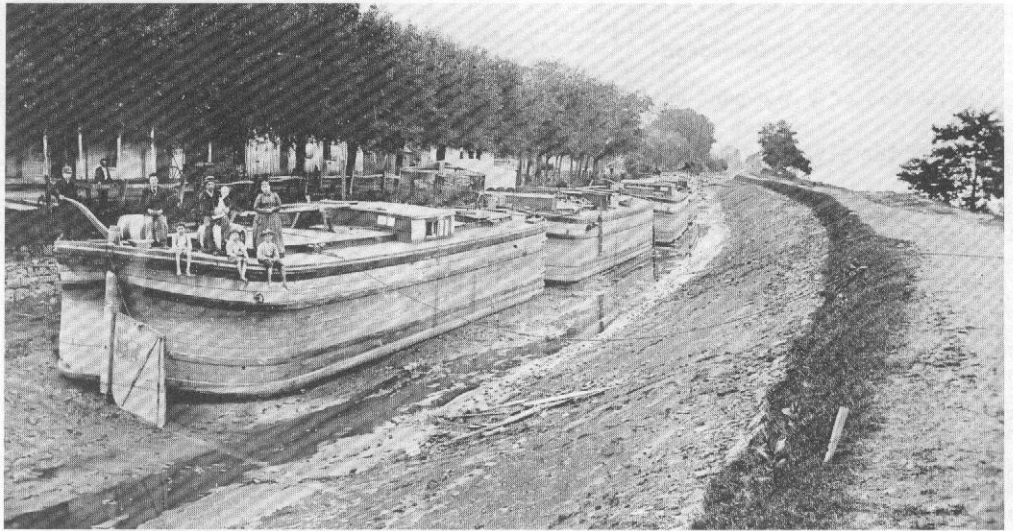
Ohio Society Field Trip

The Canal Society of Ohio has scheduled its fall canal tour for the western portion of the Sandy and Beaver Canal on 19, 20 and 21 October. Further details in the next issue.

"Steamboat Bill"

The Winter 1972 issue of STEAMBOAT BILL (quarterly) of the Steamship Historical Society of America, Inc. contains a beautifully illustrated seven page article "Passenger Steamers of Dismal Swamp" by ACS Director Alexander Crosby Brown. Price for a single copy is \$2.00 from: Mrs. Alice S. Wilson, Secretary, 414 Pelton Av. Staten Island, NY 10310. Any person interested in steam or other power driven vessel is eligible to apply for membership in the Society. Individual memberships are \$7.00.

"MAIN LINE" COMES ALIVE AGAIN



This stalled canal-boat train vividly portrays one of the hazards of traveling the Pennsylvania Canals one hundred years ago. It also serves as the front-cover illustration for an excellent revised edition of "THE PENNSYLVANIA MAIN LINE CANAL" by Robert McCullough and Walter Leuba, just off the press. With its 218 pages of vivid and colorful text, 69 illustrations -- including photos by the authors never previously published, innumerable sketches by Phil Hoffmann, and actual operating photos from the collection of Bill Shank -- it is one of the best documentaries on the Pennsylvania Canal Era now available. (A project of the American Canal and Transportation Center, priced at \$4.75)

TUNNEL REOPENING AT DUDLEY

By Clive S. Taylor

Having lived alongside the gaping hole that was the Tipton portal of Nether-ton Tunnel (Dudley's big brother) I had always been interested in canals. Being so close to Dudley Tunnel I had a particular interest in its reopening.

I arrived at the rally site with my boat AYNUN at 5 PM on Thursday, far from being the first there. After an evening meal I looked around the site, stretching some 1-1/2 miles. A really superb job had been made of Parkhead Locks since I had last seen them. The Rally site Office was situated in the former Toll office by Parkhead Bottom Lock (No 3), a fitting use for the occasion I thought. As the daylight faded it became clear just what an unusual yet interesting site we had - cement works, a steam generator firm, a steelworks, a large housing estate, green fields with cows grazing and Nether-ton church on the hill proudly surveying all, were all in or overlooking the rally site. I was in sole company of an ice breaker and the local constabulary that Thursday night .. Friday saw a hive of activity going on, boats arriving, more tents being erected, Trust and members engaged around the site on numerous jobs.

Saturday even more boats arrived including the Narrow Boat Owners Club, and visitors galore, even the Wallsall Trolley Bus arrived, and at 3 PM the Chairman of EWB, Sir Frank Price and the Mayor of Dudley, Alderman E. Morris officially reopened the Dudley Tunnel. Still boats arrived and by this time the two trip boats were operating, causing some congestion (yes on canals!). It was all sorted out in the end, by nightfall.

Sunday saw rain, but the paper boy still came round as the previous two days. Well, we had complained about the low level of the canal water due to the lack of rain, so I suppose we brought it on ourselves. Boat owners received the handsome plaques on Sunday, and trips through the tunnel started. I went through at 2PM the journey taking approximately 1-1/2 hrs though time flew. On arrival back at the site by the special bus provided, I started up my boat engine to try to get to

Malesowen and back before nightfall. It was then 4 PM when we set out (I had a friendly crew by this time) and it took us 1-1/2 hrs. to reach the junction (2 miles) having passed most of the boats attending the rally.

We reached the tunnel entrance (Costy Hill) to be faced with four boats entering from the other end, the first of which was the only steam boat at the rally namely PUFF. The last boat got stuck on shallows just clear of the tunnel entrance and between the two crews we took 1/2 hr. to free it. Having lost 1 hour, we proceeded through the 557 yard tunnel to be met by the sight of some 60 wooden and steel boats, most loaded, moored in the center of Coombeswood tube works (British Steel) which spans the canal.

We proceeded down to Mawne Basin where after photographic evidence, we turned round and headed back in the fast fading light. Another wait at the tunnel entrance for two more boats made our arrival back at the Rally site somewhat late: 11:30 to be exact. We, the crew, had not eaten since noon and were invited back to a crew members house for tea? I eventually got back to the boat, thence to bed at 2 AM Monday morning. On Monday it rained and was so wet most of the days events were rained out. Tuesday brought a cloudless day.

In all 320 boats had come from just about as far North, South, East and West as you can get. I'm sure the organizers had not originally envisioned 320 boats attending. Full credit to them. Although TRAD has ended things have not ended yet! There is still a heck of a lot to do. One intention, eventually, is to run round trips i.e. Park Head, Dudley Tunnel, Tipton, Nether-ton Tunnel, Park Head, but that is in the future. Meantime, trips through Dudley Tunnel will continue at the weekends and any ACS member who manages to find himself on one of these trips will, I am sure, be made extremely welcome by the DCT members. (Mr. Clive Taylor is a member of the American Canal Society.)

THE CANALS OF SOUTH CAROLINA

By Lewis W. Richardson

(Conclusion of a two-part article)

THE RIVER NAVIGATION

As early as 1714, the Proprietary Government was concerned with aids to river navigation. In 1777, with the Revolution in progress in the North, twenty-four thousand pounds was appropriated for the improvement of various waterways near the coast. The British invasion of the state halted all such projects and it was 1784 before the program was resumed. For the next thirty years, there were periodic attacks on the river problem, with small appropriations, widely dispersed and with little effect.

The completion of the Santee Canal in 1800 accentuated the need for river improvement. The way to the Charleston markets was open to a great part of the state, provided the dangerous stretches of river navigation could be tamed. The improvements needed required too much money with too much risk, to attract private investors, and the state government failed to act. Peace, following the war of 1812, brought with it a rapid rise in the price of cotton, which had by then become the chief money crop. This boost to the economy plus a considerable surplus in the State Treasury, finally forced the General Assembly to act. In 1818, it created a Board of Public Works and appropriated a million dollars to be spent in four years for "The Internal Improvement of the State." Some of this money was earmarked for turnpike roads and some to improve the Pee Dee River, but the bulk of it was to be expended on the Wateree, Broad, Saluda and Congaree; all part of the Santee system.

Work began in 1820 on none canal projects, one other to be added later. It had been evident from the start that obtaining a labor force for such a crash program would be a problem. The Santee Canal experience had proved conclusively that leased slave labor was unsatisfactory for such work. In any case, with high cotton prices, the slaves were needed on the plantations. Then too, artisans capable of stone cutting and masonry would be needed. Recruiters (they were to earn \$10 a head) were dispatched to New York and Boston and by the summer of 1820, nearly 1000 men, including many Irish immigrants, were on the job. These hands received their passage money and were paid at least 10% above the prevailing local rates. This policy, very unpopular in the neighborhoods where the work was in progress, was expensive and supplied valid ammunition to critics of the program.

All of the canal projects were built by "cost-plus" contracts with no real cost estimates and a general lack of management or control. This worked no better than it does today. Late in 1822, five of the canals had been completed, but the day of reckoning was at hand - the million dollars appropriated for internal improvements had been expended. There was much dissatisfaction, particularly in those sections that had not directly benefited from the program, and serious opposition to the granting of more money. However, the Legislative Committee investigating the matter stated "If the public works are abandoned -- the immense sums expended on them will be worse than lost. -- (and it) will leave a lasting stigma on our national character --." This and similar arguments prevailed and, by 1830, additional appropriations had brought the cost of the Internal Improvement program to \$1,935,556.

With this money, the State had built some roads, made "cuts" and deepened chan-

nels along the coastal waterways and had improved, by removing logs and other obstructions, miles of river channels. The major portion, however, had been spent on the up-river canals. There were 25 miles of these, with 59 locks overcoming a lift of "417 feet of perpendicular elevation." Four locks were built of wood, four of brick and fifty one of granite. Two of the wooden locks were rebuilt of stone in 1831. While the lift in feet of each lock is a part of every "Report", the other dimensions are difficult to determine. The original proposal for the navigations, in 1818, stated that the lift locks should be 80' x 10', the guard locks, 100' x 12'. This was evidently the size built, as the river boats are described as being 54' x 8', 56' x 9-1/2', etc. An exception was the Columbia Canal, where the locks were 70' x 16'.

The State established tolls for the canals, beginning at one cent per bale of cotton per lock. Information is very sketchy but there seems to be no doubt that the Columbia Canal was the most profitable of the river works. In the best year 1027 boats and 66,597 bales of cotton passed through. These figures do not include boats with produce and merchandise, arriving or departing from the town wharves. Cargoes other than cotton, included bricks, flour, grain, salt, wood and manufactured goods from the Charleston merchants. For several years, the Columbia was to return a profit to the State. In contract, the canals on the Catawba-Wateree never paid for their maintenance and the \$200 a year paid the lock keepers. In no case did prosperity linger. The spreading network of rails hastened the end and before 1850, all of the canals were closed to traffic. The only part of what has been termed "The Costly Delusion" that remained was the bonded debt.

It may be of interest to note that the President of the Board of Public Works, for a time, was Joel Poinsett, whose name is perpetuated more successfully by the Christmas flower than by his long career in public service. Serving with him, was Robert Mills, later to be the Federal Architect in Washington and the designer of the Washington Monument.

Because of changes in design and additions to the original plans, data on the river canals is confused. For example, Mill's Atlas (1826) lists a total of

only 55 locks. The figure following, on the individual canals, are derived from the Engineer's Report of 1828, when there were 59 locks.

Catawba-Wateree River

In the canal era, the river was known as the Catawba as far south as Wateree Creek, about twelve miles below present Great Falls, below this point it became the Wateree. Canals were built around the four principal falls on the river, all on the west bank. Some work had begun on all of them by 1820; the Landsford and the Catawba were completed in 1823, the Wateree in 1826 but it was 1828 before the builders could promise that the Rocky Mount would be "finished so as to pass the crop of next year." All were abandoned by 1838.

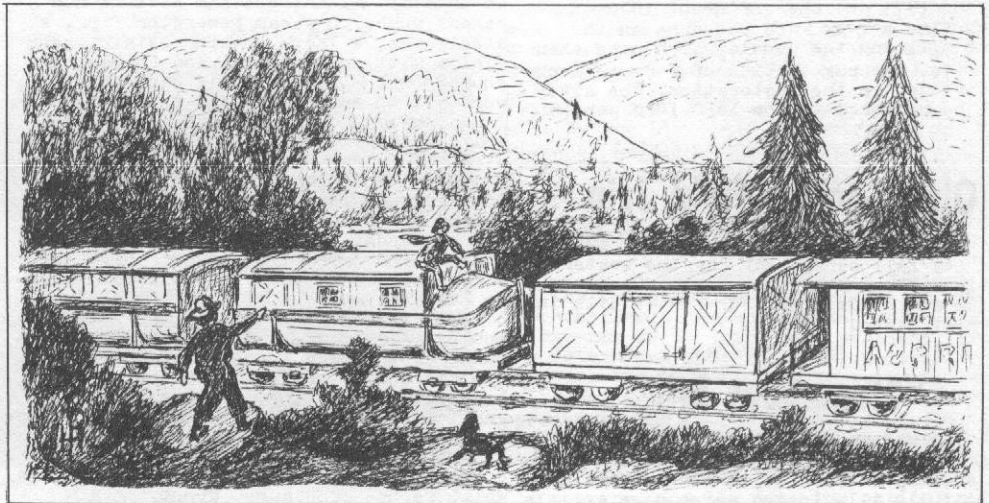
LANDSFORD CANAL: At Landsford, 13 miles south of Rock Hill. Cost \$130,000; two miles long; 35' lift. One guard and four lift locks, all stone. The contractor was Robert Leckie, later to be Superintendent of Masonry on the Chesapeake & Ohio Canal.

CATAWBA (FISHING CREEK) CANAL: From Powell's Landing, near present Fort Lawn, over a ridge (The deepest cut in the state, 32') into Fishing Creek valley, thence to the river at the mouth of the creek. Cost, \$165,000; length, 3 miles; lift 56'. One guard and six lift locks, all stone.

ROCKY MOUNT CANAL: Near present Great Falls. The canal here was a combination of excavated channel, dams and slackwater pools, around the most difficult stretch of river in the state. Cost, \$202,000; length, 5 miles; lift, 122'. One guard and fifteen lift locks, all stone. Both the Catawba and the Rocky Mount projects are now under the water of Wateree Lake.

WATEREE CANAL: About seven miles north of Camden. The canal began at Jones Mill, a little above the mouth of White Oak Creek. It was planned to cross Sawney Creek by an aqueduct and return to the river at Sander's Creek but instead the canal was terminated at Sawney Creek. Cost, \$190,000; length,

(Concluded on next page.)



Philip J. Hoffmann, retired engineer of Johnstown, Pa., continues to turn out some of the finest and most authentic sketches available of life on the American canals a century ago. Above is his rendition of a canal boat and freight train on the Allegheny Portage Railroad -- the connection between the Juniata and Western Divisions of the Pennsylvania Main Line Canal. Mr. Hoffmann is the principal illustrator of the "Pennsylvania Main Line Canal" by McCullough & Leuba and "Welch's Report on the Allegheny Portage Railroad" -- both recently produced by AMERICAN CANAL AND TRANSPORTATION CENTER.

Canals of South Carolina

"POLING THROUGH"

How old is "Old" ?

(Concluded from preceding page)

...miles; lift, 52'. One brick guard lock, four stone and three wooden lift locks.

Saluda River

LORICK'S (LORICK'S MILL) CANAL: On the north bank, about 35 miles above the confluence with the Broad, now under Lake Murray. Exact length uncertain, but was only to pass a mill dam. Begun, 1823; completed, 1824; abandoned, 1837. Cost, \$2,500; one wooden lock; 6' lift. Mr. Lorick, mill owner, paid \$1,500 of this sum so as to forestall the destruction of his dam, by "sluicing" the channel.

DREHR'S (DREHR'S SHOALS) CANAL: On the north bank, about 11 miles from the Broad, now the site of Lake Murray Dam. Begun, 1820; completed, 1821; abandoned, 1837. Cost, \$78,000; length, one mile; lift, 21'. One guard and three lift locks, all stone.

SALUDA CANAL: Along the north bank, entering the Broad just above the juncture of the two rivers. Traffic from the Saluda Canal crossed the Broad River in the slackwater of the Columbia Feeder Dam. Begun, 1820; completed, 1821; abandoned, 1837. Cost \$161,000; length 3 miles; lift, 34'. One guard and four lift locks, all stone.

Broad River

LOCKHART CANAL: In the town of Lockhart. The canal begins on the west bank, about 1-1/2 miles north of State Rt. 9, and returns to the river opposite the mouth of Turkey Creek. Begun, 1820; completed, 1823; it was abandoned for traffic in 1849 but is still in use as a hydraulic. Cost, \$111,000; length, 2 miles; lift, 51'. One guard and six lift locks, all stone.

BULL SLUICE (COLUMBIA EXPANSION) CANAL: On the east bank of the Broad, two miles above the mouth of the Saluda. Originally intended to by-pass Bull Shoals, it was planned to improve, by means of a wing dam and one stone lock of 8' lift, a natural channel between Guignards Island and the river bank. Begun, 1820; completed, 1822; length 1/2 mile. Costs were included with the Columbia Canal below. In the face of diminishing enthusiasm for the inland navigation projects, in 1830 Columbia merchants began agitation for a connecting link between the Bull Sluice and the Columbia Canals. It took six years to convince the House of Representatives, then \$40,000 was appropriated. Work began in 1837 and the extension was complete by January, 1840. The following May, an unusually high flood destroyed the works and they were never repaired. About 1-1/2 miles long, the Extension Canal is thought to have had one lock additional to the Bull Sluice lock.

COLUMBIA (CONGAREE) CANAL: In the City of Columbia. The canal began at a point on the Broad, opposite the river lock of the Saluda Canal, went down the east bank of the Broad and Congaree to enter the latter at Granby. Begun, 1820; completed, 1824; abandoned, 1840. Cost, \$206,000; length, 3 miles; lift, 34'. One guard lock and four lift locks. The upper guard lock and the river lock at Granby were stone, the other three were brick.

Two canal restorations are under way in South Carolina. The State Department of Parks is creating a park at the Landsford site. The stonework here is in excellent condition. In Columbia, the Parks Commission is locating and stabilizing the remains of the Saluda Canal in the Riverbanks Park. A small museum is planned for the site.



The Union Canal Tunnel at Lebanon, Pa., was so narrow that there was barely room for a canal boat to squeeze through, with no additional clearance for a tow-path. Hence, the mule teams and their drivers climbed over the hill, while the boats were poled through. (This woodcut from "Lebanon County Through the Centuries" -- a publication of Lebanon Steel Foundry -- sent to us by ACS member George R. Wills.)

Some years ago ACS Vice President Bill Shank attempted to lay the matter of the "First Canal in USA" permanently to rest with the following introductory paragraph to an article which he published in the International "Torch" Magazine:
"America's first canal was built about 1636 in Plymouth County, Massachusetts, when the people of Plymouth, Duxbury, Kingston and Marshfield banded together to reduce the dangers to navigation in their area by digging a short channel from Plymouth Bay to Green Harbor, Marshfield. This primitive, tide-water canal was usable only 20 hours a day at the time of changing tides."

Re: the antiquity of American Canals, "How Old Is Old?" In past years, talking to groups, one could always anticipate the question, "Which one was first?" My answer was to tell of a canal built by the Jesuit Fathers on the River Wye at Sainte Marie, near Georgian Bay, Ontario. The Fathers and their Huron charges, under constant harassment by the Iroquois, built a stockade around their mission and village, about a hundred yards from the river. A large spring within the stockade provided the water supply for a channel, large enough for the freight canoes, from within the stockade, down to deepwater. To overcome a fall of about two feet, a simple, one-gate lock was added. This "Canal" allowed the heavy canoes, bringing vital supplies to the mission and taking away furs, to be loaded and unloaded within the safety of the stockade. The date was 1648-1649! Although miniscule, this canal had all the elements of later and larger projects. Was there any earlier? (Submitted by ACS Director, L.W. Richards)

An article by Mal Tottingham in Towpath Topics inspired a long and informative letter to the editor of that publication: To the Editor: I enjoyed reading THE BELLOW FALLS CANAL, by M. N. Tottingham, in the latest TOWPATH TOPICS. It is an excellent history and description of that canal, and I certainly will have it along with me as a field guide if I visit Bellows Falls.

The roadside marker stating that this canal, opened in 1802, was the first in the United States amused me. It is to Mr. Tottingham's credit that he does not defend this very vigorously. Roadside "historical" markers too often are put up by state or local interests to broadcast a local "brag" without any serious attempt to check the information.....

Bellows Falls is a long way from Long Island Sound, and there are several falls and rapids in the Connecticut River downstream from Bellows Falls. If the B.F. canal were truly the first in the United States, it would be of only local benefit. Actually, we find that South Hadley Falls was bypassed by a canal opened in 1795, using an inclined plane to lift the boats. The plane was replaced by five locks in 1805. The Montague Canal at Turners Falls opened in 1800. Windsor Locks, oddly, were not opened until 1829; until that time, upstream boats were poled or cordelled thru the Enfield Rapids. Steamboats used their engines to assist.

The steamboat BARNET reached Bellows Falls in December, 1826 but was too wide to pass the locks. Apparently no one thought to measure them! Mr. Tottingham correctly names VERMONT as the first steamer to pass thru the locks, in 1829.

Now to look a little farther afield, the first example to meet the eye is the Pawtucket Canal in Lowell, Mass.-originally opened in 1797. (I'm surprised you forgot that one!)

The tremendous, politically-inspired celebration which marked the opening of the Erie Canal in 1825, blinded the school book historians to the fact that there was an established canal and river navigation along the same route long before "Clinton's Ditch". The Western Inland Lock Navigator Co. was incorporated in 1792 to improve travel to the west. A canal and locks were opened in 1797 at the summit level at Rome N.Y. to connect the Mohawk River (flowing east) and Wood Creek (flowing west to Lake Ontario). The same company had opened a canal bypassing Little Falls (of the Mohawk) in 1795, and the German Flats Canal (near Herkimer, around rapids) in 1798.

The Patowmack Company, which numbered George Washington among its stockholders, built a canal around Great Falls of the Potomac, on the Virginia side, opened according to various sources, in 1795, 1797, or 1802 - take your choice. This canal was eventually superseded by the Chesapeake & Ohio Canal which was built on the other (Maryland) shore.

The Dismal Swamp Canal in Virginia and N. Carolina, was started in the 1790's and by 1801 several miles at each end were in use. The canal was not completed as a thru route till 1805.

And to really reach out, the Northwest Fur Co. built a canal with two locks at Sault Ste. Marie, opened in 1797 and destroyed by military action in 1814. We can't count this one though; it was built on the Canadian side.

By now I hope I have convinced anyone except Vermonters that the Bellows Falls Canal was not the first in the U.S. If you want to double check-me, I have listed my sources on a separate sheet. Sincerely, James Wilson, 414 Pelton Ave., Staten Island, N.Y.

(Editor's of Towpath Topics Note: The answer to the dilemma appears to be the difference between a traction canal and a navigation canal around the falls. Is there a reader who can now document our claim that the Middlesex was the "first traction"?)

VIRGINIA'S OLD CANALS AND NAVIGATIONS

By W. E. Trout III

THE TIDEWATER CONNECTION FLIGHT: Most critical is this important flight of 5 large stone locks in downtown Richmond, 3 of which will be destroyed by the imminent Downtown Expressway. A donation to James River and Canal Parks Inc., Box 777, Richmond, Va. 23206 will entitle you to be a "Friend of the Canal" and help this very active citizens group. The lower end of the canal, the Richmond Dock, may be rebuilt of concrete as a storage lagoon for storm sewage - hopefully a temporary role as promised. On the good side, the 2 other locks of the flight have been dramatically cleaned up by Reynolds Metals and recently received, with ceremony, the first plaque to be presented by the Virginia Historic Landmarks Commission. Reynolds has made a showplace of the site and has even begun a canal library. (J R & K Library, Reynolds Metals Co., 11th & Byrd Sts., Richmond, Va. 23219)

THE RAPPAHANNOCK NAVIGATION. This is the best remaining lock-and-dam navigation for bateaux in the U.S. and will be flooded if the Corps of Engineers Salem Church Dam is constructed. Although this threat appears to have been overcome there is still the more difficult task of having the Rappahannock declared a Scenic River with thoughtful park development as proposed by the National Park Service and the Bureau of Outdoor Recreation. Actively working on this is the Rappahannock Defense Committee, P.O. Box 1146, Fredericksburg Va. 22401, which publishes a newsletter and urgently needs contributions.

THE DISMAL SWAMP CANAL. Congress has declared part of the Great Dismal Swamp a Natural Landmark, and has authorized a study of the best means of protecting the swamp and the Dismal Swamp Canal. Since the health of the swamp must come first, the canal might have to be modified to save water, perhaps by halving the size of the lock chambers or building smaller ones more adapted to the present traffic, and bypassing the locks with marine railways when necessary. The locks in use are modern, but the stone Gilmerton Lock from the 1840's should be preserved and used in a park. See Alvah Duke, Dismal Swamp Preservation Committee, 5008 Ballahack Rd., Chesapeake, Virginia 23322.

THE NORTH RIVER NAVIGATION. The proposed 7-mile towpath along the Maury River between Lexington and Buena Vista, using the route of an abandoned C&O Railway Branch, appears to be in limbo but may not be dead yet. This well-preserved and co-

piously endowed navigation is the most accessible by car in Virginia. Ben Salem Lock is already a scenic wayside park.

THE RIVANNA NAVIGATION. The Fluvanna County Park Authority (Chairman, J.W. Siegfried, Fork Union, Va. 23055) was formed to create a park of the 4-1/2 mile "Rivanna Connection" canal from Rivanna Mills to Columbia. The rest of the navigation, however, will be flooded if the Corps of Engineers builds the Roundabout dam instead of using an alternate site upstream of Charlottesville. Somehow the use of the alternate site should be encouraged.

THE UPPER APPOMATTOX NAVIGATION. VEPCO has generously given three miles of the Upper Appomattox Canal to Petersburg for use as a park. Unfortunately, the remaining mile of the canal will be used as a landfill by the city, but can be re-excavated when the time comes. The ruins of Indian Town Creek Aqueduct, and of the flight of Toll Locks will be preserved and should become part of a river access corridor. The locks were badly damaged, thru ignorance, by the Appomattox River Water Authority, illustrating the need for inexpensive markers at all sites.

THE GOOSE CREEK AND LITTLE RIVER NAVIGATION. This may become part of a Loudoun County park. The unusual double lock at the mouth of the creek is owned by Xerox Corporation which has expressed interest in preserving and perhaps restoring the lock and its mile-long canal.

THE TUCKAHOE CREEK NAVIGATION. The fascinating Tuckahoe Creek area on the west of Richmond is rapidly being invaded by housing developers because landowners mistrusted the creation of a nature preserve. Hopefully they will have second thoughts before it is too late.

THE ROANOKE NAVIGATION. At the lower end of this 350-mile sluice navigation through Virginia is the Roanoke Canal, between Roanoke Rapids and Weldon, N.C. There is some interest in using the canal as a towpath park, and in making sure that the stone locks, and a wonderful aqueduct in Weldon, will be preserved.

Canal enthusiasts should visit the National Park Service's canal parks at Great Falls, Va. (Patowmack Canal), and under the James River Bridge on the Blue Ridge Parkway (Battery Creek Lock).

The Virginia Historic Landmarks Commission, and Va. Outdoor Recreation Commission have been quite active in canal preservation and deserve our support. For details contact W.E. Trout III, PhD, 1932 Cinco Robles Dr., Duarte, Calif. 91010

Illinois-Michigan Canal

A Long Stretch of Peace and Quiet

The discussion concerning the development of the abandoned Illinois and Michigan canal, a National Historic Landmark, arouses many people - fisherman, hunters, trappers, hikers, canoeists, campers, bird-watchers and others who like to get acquainted with nature first hand and on their own, as opposed to industrial use of this beautiful place.

The stretch of nearly 90 miles of canal lands from LaSalle to near Chicago is one of the most fascinating and scenic in the nation. The rivers and islands are part of the charm. The cliffs, the streams, the draws, the benches and beaches and swamps are another part. The birds and wild game, the blaze of color in the spring and fall, the blush of buds in later winter; these are also some of the glory of the place.

In the 1940s, many traveled the tow-path restored by the CCC and WPA. It was for them an exciting adventure and recreation. Hundreds of people still use this sanctuary for hiking and camping.

It is a refuge, a place of retreat, a long stretch of quiet and peace at the back door of Illinois' population centers. It is a wilderness where man can be alone with God and with beloved nature - a place not yet marred by the roar of wheels and the blast of horns.

It is a place for boys and girls, men and women. One can hike 15-20 miles on a Sunday afternoon or sleep on high, dry ground in the quiet of the forest, or just go and sit with no sound except water flowing over your feet.

It is a sanctuary for everyone who loves woods - a sanctuary that would be utterly destroyed by industrial development.

We (the nature lovers) wish the men who defeated House Bill 2377 - a master plan for this recreational asset - would take time off and come with us. We would go with packs on our backs and walk the 90 miles to Chicago. We feel that if these senators did, they would return to Springfield new men and use the power of their office to keep this very beautiful sanctuary untouched. (Are there any takers of this challenge? - Ed. American Canals).

One who talked the canal its full length could plead its cause with the eloquence of a John Muir. He would get to know muskrats, beavers and fox, he would hear the roar of the wind in the thickets; he would view strange islands and promontories through the fantasy of fog; he would discover the glory there is in a blade of prairie grass. The whistling wings of wood ducks would enhance the silence.

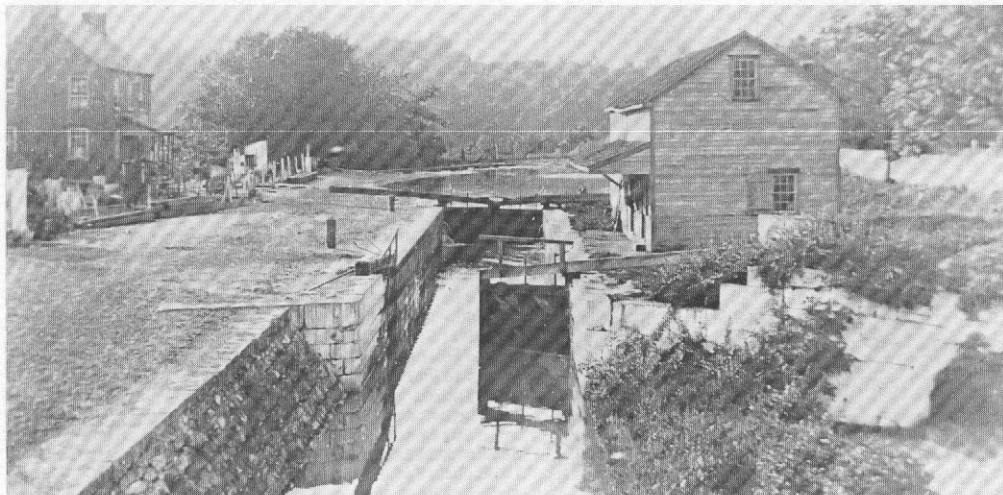
(Excerpts from a paper by Dan Johnson, written for his class in Environmental Problems at LaSalle-Penn Township High School, printed in THE DAILY NEWS TRIBUNE, and submitted by Dr. R. F. Whalen (DVM))

I. & M. Canal Foundation

I & M CANAL FOUNDATION is dedicated to the promotion and development of the recreational, historical, and natural environments of the Canal and adjacent lands, is determined that the Canal will be restored, its full recreation potential developed, and its historical significance preserved for future generations. The ball is rolling, but now it is more important than ever to develop a broad base of support for the Canal. The time for decision is nearing, and the need for action is greater than ever.

For continuing media programs the Foundation badly needs copies of pictures and documents dealing with the canal.

For details and shorter range goals write to: Illinois and Michigan Canal Foundation, 302 Liberty St. Morris, Ill. 60450. Individual or Family Memberships \$3.00; others available.



Life on the C. & O. Canal in a more leisurely day is depicted by this photo from the collection of John Frye of Lock Number 38 at Shepherdstown, Md., circa 1900. This is one of many historic photos which illustrate Tom Hahn's four-part series entitled "Towpath Guides to the C. & O. Canal". The Shepherdstown Lock, and a wealth of local history, is covered in Section Three -- "Harpers Ferry to Fort Frederick". (A project of the American Canal and Transportation Center; \$2.50 each).

Middlesex Canal

The Historical Commission in conjunction with the Middlesex Canal Society of Woburn has filed a bill in the State House of Representatives pertaining to the Old Middlesex Canal in Woburn.

This bill pertains to the portion of the Canal which lies on State property between Route 128 and Route 38 and between Route 38 and Alfred Street.

Appearing to present the bill was Leonard H. Harmon, the new chairman of the Woburn Historical Commission, who through the use of maps and photographs called upon the state to direct the State Department of Public Works to dredge, clean, and refurbish the Canal.

Mr. Harmon noted that the State is scheduling a similar program in Wilmington for a 1200 ft. section where Route 129 is to cross the canal.

It was pointed out that just last fall the Federal Government recognized the Middlesex Canal as a National Historic site, starting at Kilby St. in Woburn and proceeding north towards Lowell.

Representative Fred Cain and Woburn Historical Commission members Margaret Mills and C. Fred Burdett spoke on the importance of this Canal to the future historic development of this area. (Woburn Times 2/8/73)

Georges River Canal

The purpose of the Georges River Canal Association is to acquire the remains at the Upper Falls in Warren, Knox Co. Maine and to preserve and restore the same. Meetings are regularly held on the second Monday of every month at the Intermediate School in Warren at 7:30 PM. Membership dues are \$1.00 per year for an individual, \$2.00 for an organization. ACS President Tom Hahn told the association, during a visit to the canal last summer, that the American Canal Society would support their group in any way that it could. One immediate source of help would be for ACS members who are able to support the Georges River Canal Restoration with \$1.00. Money goes a long way down east in Maine and your donations would be well spent.

Georges River Canal Association President Ronald A. Overlock (RFD 2, Box 21, Warren, Maine) and other officers of the association and the Warren Historical Society can be justly proud of the contributions they have made in the restoration work they have begun. A visit to the canal site quickly shows visitors that they have accomplished much.

"Yachting" Magazine

The March 1973 issue of YACHTING contains a six-page special, "Wild and Unblended" - cruising through the Scottish Highlands via the Caledonian Canal.

Also a five-page article on a "Wrong Way" cruise from New Jersey to Florida via the Great Lakes and Mississippi - this part between Chicago and Clearwater, Fla. via the Chicago River, the Chicago Sanitary and Ship Canal and the Illinois River (All parts of the Illinois Waterway), the Mississippi River, the Innerharbor Navigation Canal, Lake Pontchartrain, the Gulf Intracoastal Waterway and the Gulf of Clearwater.

Individual copies of the magazine available for \$1.00 from Yachting, 50 W. 44th St., New York, NY 10036.

Dismal Swamp Canal

A measure of success in the long campaign to Virginia's Great Dismal Swamp -- Union Camp Corp. will deed 49,000 acres of the swamp (including Lake Drummond) worth \$12.6 million to the Nature Conservancy which will transfer the property to the Interior Department for a wildlife refuge. (Central Atlantic Environment News, Feb. '73)

Canal Society of N.J.

The Canal Society of New Jersey is considering the publication of the book THE MORRIS CANAL: THE BEGINNING AND THE END by Society Editor, Bob Galler. The proposed book would have a foreword and a transitional chapter between the 1823, which is very rare and the 1929 Vermuele Report on the dismantling of the canal, long out of print. The book would be printed on good antique-white paper stock and bound with a good quality hard maroon buckram binding. The pictures and the four foldouts in the 1929 report would be reproduced and there quite probably would be additional illustrations in the transitional chapter. Such a commemorative volume would be particularly appealing at this time, since 1974 marks the 150th anniversary of the Morris Canal. The Morris Canal and Banking Co. will finally be dissolved at the end of this year. The book would sell for about \$10. In order to help determine whether there is sufficient interest in publishing this book, ACS members who would like to purchase it should write to: The Canal Society of New Jersey, Macculloch Hall, P.O. Box 737, Morristown, N.J. 07960. There is no commitment to buy - just indicate your interest.

N.Y. State Barge Canal

Native American ingenuity plays a large part in maintenance of the 57 massive locks of the New York State Barge Canal System. Commissioner Schuler says the 524 mile network of the Erie, Champlain, Oswego and Cayuga-Seneca Canals carried 2.5 million tons of barge cargo and recorded 84,000 passages of pleasure boats through the locks during the regular April-November navigation season last year.

The present canal system, much enlarged from its 19th century origins, was built in the years 1905-1918. "Most of our heavy and complicated lock mechanisms and gates," Commissioner Schuler said, "are at least a half-century old, and all get lots of use. When winter ice shuts us down we make the repairs and improvements that we need and can afford." Joseph R. Stellato, director of waterways maintenance for the State Department of Transportation, says that on the average, each lock is rehabilitated once every 10 years, with a minimum of six locks being overhauled at a time.

Stellato's staff of under 400 craftsmen and laborers fashion their own parts not only for the system's 57 locks but also to keep their fleet of about 50 tugs, derrick boats, dredges and other work vessels afloat. The men recondition machine parts such as gears and shafts. They replat worn and rusted hulls. Steam engines are replaced with diesel engines and the latter are periodically disassembled and completely overhauled.

Boat Restoration

Canal enthusiasts in the Cumberland, Maryland area are raising money to build an authentic C & O Canal boat, patterned after the plans of the Canal Company, Barge No. 57. A dollar of more contribution will entitle the donor to a colorful "stock certificate" in the restoration project. Send contributions to: C & O Canal, Cumberland, Inc., Box 1378, Cumberland, Md. 21502.

"Waterways World"

"Waterways World" is published monthly, and is devoted entirely to matters concerning navigable rivers and canals in Britain and abroad (including from time to time the United States). The annual U.S. subscription is \$10 payable to: Waterway Productions, Ltd., Kottingham House, Dale St., Burton-on-Trent, Staffs. DE14 3TD, England.

Texas Barge Canal

Representatives of 40 Texas counties hope to form a San Antonio River Basin Development Association to create interest in a proposed barge canal linking San Antonio with the Gulf of Mexico. The canal would run from Floresville, about 20 miles southwest of San Antonio, to Victoria, Texas, via the San Antonio River. The group reportedly already has the backing of Texas Gov. Preston Smith.

New Signs for Old Erie

New historical signs are going up along the path of the old Erie Canal in the Fayetteville area. The signs are both land and water-borne. The "information" markers will explain how the canal was engineered, constructed and used. Of equal importance will be other signs discussing the economic impact of the canal and its role in today's environment. The project began after the museum received requests for information on the canal from people hiking and bicycling along the towpath and using the water for canoe trips.

Renovation Funds Asked

Canal Museum trustees have asked for county government financial support of a project to turn the clock back on the Weighlock Building in Syracuse, N. Y. Approval is being sought for \$10,000 in county funds to renovate the structure at Erie Boulevard and Montgomery Street to visually open it to the public. This will give the former Erie Canal weigh station the look of the 1880's, when the greatest tonnage was carried on New York's canals. It has been a county-sponsored museum since 1962.

Dam-Lock Discovered

An element of the timber tidal dam across the estuary between the Charlestown (Mass) peninsula and E Somerville, erected c1670 to power a series of mills, was exposed during a utility excavation in what Prof Douglas P Adams of MIT believes to be one of the important IA discoveries of the decade. Shortly after construction of the Middlesex Canal in the late 18thc, a set of reversible locks was cut through the dam's east end to permit passage of the canal boats to Boston Harbor. The locks' double gates allowed passage regardless of the relative heights of pond or sea water on opposite sides of the dam.

In c1878 the estuary was filled in for a Boston & Maine yard (now much diminished); Canal St., adjacent to the canal was widened into present Rutherford Ave; and all traces of dam and locks were lost to view. The possible existence of both have intrigued historians for years, but not until excavation for a major storm drain last fall was there any certain evidence of remains. Exposed to view for a brief period was the south or saltwater end of the timber wall that ran through the dam, forming the pond-side lock wall. It was in good condition. Before re-entombment its location was recorded by Prof Adams and other members of the Middlesex Canal Assn of which he is pres.

Those concerned hope that the site can be formally excavated, and the remains of parts of the dam, locks and associated mills permanently exposed, preserved and interpreted as part of a chain of city, state and national parks and historic sites in the area (which includes nearby Bunker Hill and the Charlestown Navy Yard). Efforts are underway to involve the controlling authorities and the new Bunker Hill Community College whose campus covers part of the site. Those interested are encouraged to contact Prof Adams: 58 Monument Ave. Charlestown, 02129 (617) 241-8580.

D.&H. CANAL HISTORICAL SOCIETY ACTIVITIES



This old photo of an abandoned lock on the Delaware and Hudson Canal at Lackawaxen, Pa., is thought to have been made about 1925. (The D. & H. Canal ceased operations in 1899.) This photo was sent to us by Dr. Ernest H. Coleman, ACS member.

The Delaware and Hudson Canal Historical Society is already into a busy year. The annual meeting was held in March, at which were elected President, Warren Van Kleeck; Vice President Walter Gibson and Treasurer, Eli Zwick. William Collins was elected Chairman of the Board and Mrs. Ruth Muth was appointed Secretary at the organizational meeting of the Board of Trustees. Committee Chairmanships were appointed and so work for the year is underway. The museum reopened 20 May; it is located on Schoolhill Road in High Falls and is open Friday, Saturday and Sunday to at least the end of September. The Bulletin will be published on a regular basis. The Society is going to sell Bottle #2 in the series. This one will be in commemoration of the Roebling Aqueduct across the Delaware. Bottle #1 can still be ordered from Mr. James Powers, 201 Park Lane, Port Ewen, N.Y. 12466. It is blue and features the gear house and commemorates Locks 16, 17, 18, 19 and 20 in High Falls, receiving

National Historic Site designation in 1969. Price is \$6.00 plus 75¢ postage and insurance, when mailed.

The Canal Society of New York State will go to the Delaware and Hudson for a field trip on 22 September. Headquarters will be Lake Minnewaska, a resort beside a glacial lake atop a mountain. The trip will be all day and run from the Ulster-Sullivan County line at Spring Glen to High Falls. It will feature a walk to a falls with a lead mine at the base, two locks and a stop at the towpath in Ellenville to see buildings used in canal days. The group will visit Port Ben, Middleport and Port Jackson and will see the remains of 1828 locks as well as the remains of the enlarged locks. At High Falls the group will visit the D & H Museum and visit the DePuy Canal House Tavern. The day's outing will end with dinner at Lake Minnewaska and an evening slide program plus a surprise. (Submitted by Mrs. Grace Elliott)

Canal Village Train

The second of the Historic Rome Development Authority's feature attractions for the Erie Canal Village - a narrow gauge railroad - is well on the track and headed for an anticipated June test run. The train which will include an engine and tender, four gondola cars, and a caboose, is being built by Edward J. Nolan of Pulaski. With the exception of some wheels, couplings and some iron trim, all the units making up the train will be new, and according to the builder, will be an exact replica of the type of train popular around the turn of the century.

The type of engine being built by Nolan is called a 2-6-2 engine, in that it consists of two wheels in the pilot truck, six drive wheels, and two wheels in the trailing truck. Upon completion, the four gondola cars will be fitted with seats and have a capacity of about 125 passengers. The railroad will be located on the "birm" or south side of the canal and will carry its riders over a one and one-half mile route along the restored section of the canal between S. Charles St. and the Ft. Bull area. The north side of the canal will be the path used by horses to draw the canal boat, which is also nearing completion.

"Canal Fever"

The February 1973 edition of SURVEYOR, the quarterly publication of the American Bureau of Shipping, contains a 5-page article, "Canal Fever is Contagious" on the boat, canal and building restorations in Ohio at Coshocton (MONTICELLO II) Piqua (THE GENERAL HARRISON) and Canal Fulton (ST HELENA II). Also included is a three-page article (both articles nicely illustrated) "For British Canals: A Thorough Restoration." Queries to: Editor, SURVEYOR, American Bureau of Shipping, 45 Broad St., New York, N.Y. 10004

Glossary

Tom Hahn is collecting canal terms for a glossary of all canals of all periods. Cooperation of canal enthusiasts is needed. If others are interested in the project, perhaps a small committee can be formed as much work is needed in collecting and collating information. In addition to the term itself, when known, indicate with what canal associated, at what period and source of information. Information and queries to Canal Glossary P.O. Box 638, Glen Echo, Md. 20768.

Farmington Canal Restoration

By Lt. Col. Wilbar M. Hoxie

Charter was granted in 1822 by the Legislature in Connecticut for The Farmington Canal Company; in 1823 Massachusetts chartered a connecting Hampshire & Hampton Canal Company, to connect the two waterways in a single system. Explosive growth of metal-working industries, textiles, brick-yards, sawmills throughout the valley created markets for better transportation, and the Canal grew famously. In 1839, New Haven shipped northward on the Canal boats 4,000,000 pounds of traffic. Passenger traffic New Haven-Northampton at a fare of \$3.75 in 24 hours bankrupted the stage lines with their dusty and bumpy roads.

Of the 28 locks rising 220 feet above tidewater, none were in the Farmington River floodplain from Southington to Avon, where Canvass White's location survey took advantage of the river gradient. After the initial surveys and estimates, Mr. White remained as Consulting Engineer, and he often told Mr. Hillhouse, one of the primary proponents, that the Farmington Canal could never succeed as a profitable investment. Many of the investors became interested in railroads, and when the Canal closed for the winter of 1847, its short life was over. Sheffield and Farnum could see the rails as the transportation of the future, and gave up the Canal. The New Haven and Hartford Railroad commenced operation in 1848 and has continued under various managements to the present time, with both freight and passenger traffic.

Growth of the towns, new roads and streets, new factories and public works have grown in every direction through the Great Plain communities. In many places every sod and stone of the Canal has been obliterated. Floods of a century filled the channel or washed out the sluices and culverts. Only in a few corners have the muskrats continued to build their holes where a little drainage water remained clear enough for them to live, and where the town children and dogs were too indifferent to chase them. Thorn bushes, tangles of wild shrubbery, and weeds covered even the memory of the Farmington Canal, leaving as monuments so many Canal Streets, Basin Streets, or Lock Streets marking a rough line of Canal to this day.

In 1970 the Plainville, Connecticut, Historical Society, Inc. took action to recover a portion of the Long Level in its Town. Contractors donated their equipment and men, individuals worked hard to clear brush and rake new gravel, and the State of Connecticut erected a splendid granite market with bronze plaque in tribute to the Farmington Canal. For this effort, Mrs. Ruth Hummel and her Historical Society friends were awarded in 1971 the first prize of the Connecticut Historical League for their preservation efforts.

Now, in spring 1973, with the same incentive, the Farmington Canal Corridor Association has been established to explore possibilities of recreation, open space, and historic preservation in the vicinity. Planners, conservationists, and historians in each town are preparing with slide shows, maps, and materials for the schools for a major effort. It will be a long hard task, but all Canal historians wish the Association well. For information or offers of assistance, please write Mrs. Ruth Hummel, P.O. Box 24, Plainville 06062 Connecticut.

(Col. Hoxie is vice president of the Middlesex Canal Association and a Director of the American Canal Society.)

THE WELLAND CANAL EXHIBIT of the St. Catherines (Ont) Historical Museum contains, among other displays, a 16-foot operating model of one of the original locks (1829).

THE PUMP HOUSE STEAM MUSEUM, Kingston Ont., of special note, will be visited on the Rideau Canal Tour, 22-23 Sept. 1973.