

# AMERICAN CANALS

BULLETIN OF  
THE AMERICAN CANAL SOCIETY

BULLETIN NUMBER 20

Editorial Address - Box 842, Shepherdstown, W. Va. 25443

FEBRUARY 1977

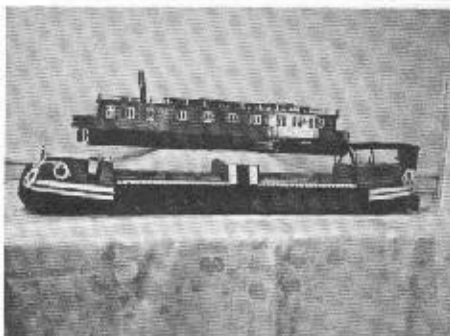
## ERIE CANAL LOCK 62

On November 13, 1976 the **Old Erie Canal Trail** connecting the **Barge Canal** with **old Erie Canal Lock 62** was dedicated. In addition to clearing a 50 year growth of trees and brush to open up the old towpath of the canal, the bed of the canal was cleared of debris, graffiti removed from the stonework, a protective fence was built and stairs providing access to the lock were constructed, all part of a future mini park being built around the lock.

This was the culmination of a year of intensive effort carried out by a Town of Pittsford citizens committee headed by Judy Kaplan, town officials, the N.Y. State Dept. of Transportation (which held title to the land), groups of Girl Scouts and Boy Scouts, a U.S. Army Reserve unit, the Rotary Club, local merchants, and many other groups and people too numerous to mention. This is an outstanding example of how citizens and local government can cooperate in restoring and preserving some of our industrial heritage.

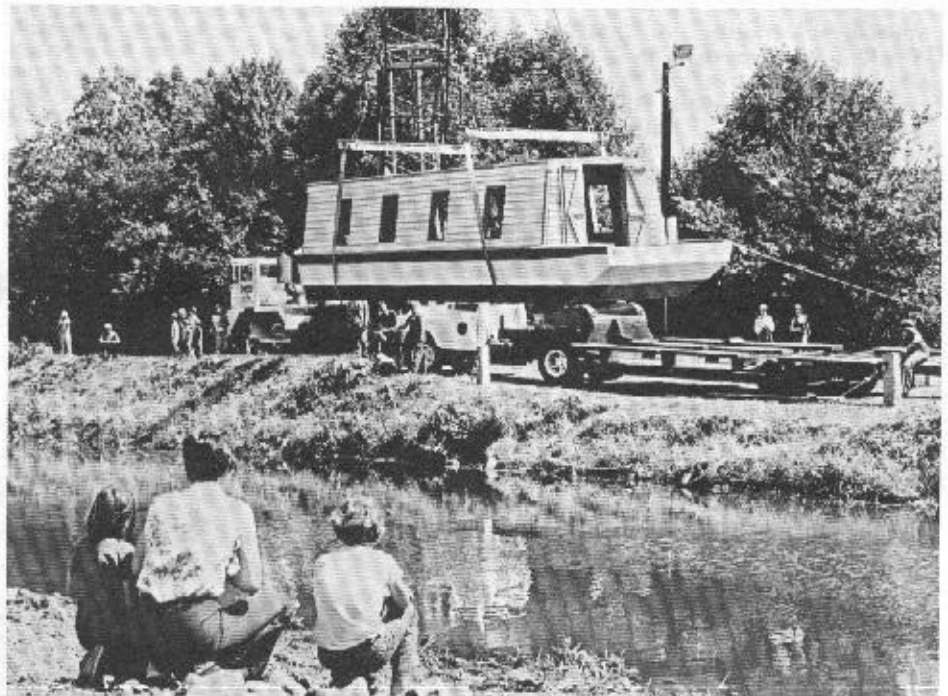
(Waldo J. Nielsen, ACS)

## CANAL BOAT MODELS FROM ENGLAND



ACS Member Sam Cash (#572769, H. M. Prison, Dartmoor, Princeton, Yelverton, Devon, England) is at it again with the completion of these two Chesapeake and Ohio Canal boats. Sam made the **Steam Yacht MARYLAND** (above) from plans made in the 1870s. It is not known if the boat was ever constructed, but to our knowledge this is the first model ever made of the boat. **Freight Boat No. 57** (below) was made from plans based on the ruins of the boat which were made at Hancock, Maryland in 1938. Plans were provided to Sam by Tom Hahn, for whom the boats were made. They are on display at Tom's home in Shepherdstown, West Virginia.

## MIDDLESEX CANAL BOAT RECONSTRUCTION



The launching of the 1803 Middlesex Canal Packet Boat, the "Colonel Baldwin" took place in July on the Middlesex Canal at North Woburn. It was moored and displayed until Labor Day, when it was, by special invitation, transported to the Museum of Science in Boston. The packet was docked in the Charles River at the Museum, where over 5,000 visitors boarded the historic craft during her ten-day stay. The "Colonel Baldwin" was then transported to the Merrimack River in Lowell, Mass., the Northern terminus of the Middlesex Canal, where she became the first Canal packet to cross the river in over 120 years. She now rests on a custom made trailer awaiting her maiden voyage in May along a one-mile reach of the old canal. (Photo by Mark Haggerty)

## DISMAL SWAMP STUDY

According to a study released by the Department of the Interior, the **Dismal Swamp Canal** and its Feeder Ditch may become the major access routes for visitors into the Dismal Swamp National Wildlife Refuge, which was recently established to save the remainder of the Great Dismal Swamp in Virginia and North Carolina. The study recommends that motorized access be prohibited, except for public boat tours and perhaps a ride on a narrow-gauge timber train. A number of the canals criss-crossing the swamp (one of them involving George Washington) will be used as canoe trails and there will be hiking trails as well. The idea is to keep the visitors' impact to a minimum, and the canals are ideal for this. In agreement with recommendations made by ACS, water supply for the canal will be

secondary to the needs of the swamp (the source of canal water) and inclined planes or other water-saving devices will be installed at the canal locks - perhaps the locks may also be reduced in size, to be more suitable for present-day yacht traffic along the Intracoastal Waterway.

## LEHIGH BOAT REMAINS

The latest on the canal boat remains in the quarry in North Hampton Borough, Pennsylvania is that there are three or four boat remains rather than the large number reported earlier. Diving has ceased for the winter, so it will be next spring before we have further information on the quantity and quality of the boats. (John Miller, President, Pennsylvania Canal Society, 3520 Quincey Lane, Hanover Farms, Bethlehem, PA 18017.)

# 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, with headquarters at Box 842, Shepherdstown, W.Va. 25443. Objectives of the Society are to encourage the preservation, restoration, interpretation and use of the historic canals of the Americas; 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 \$6.00. Individual copies may be purchased at \$1.00

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Chairman, Canal Index Committee - ACS Director, Peter H. Stott, Haines Road, Mount Kisco, N.Y. 10549.

Chairman, Canal Boat Committee, ACS Director, Carroll M. Gantz, 7100 Oxford Road, Baltimore, Md. 21212.

## AMERICAN CANAL GUIDE

Members of ACS are reminded of the availability of THE AMERICAN CANAL GUIDE, Part 2, published by Bill Trout and a team of canal explorers in August of 1975. This 8½" x 11", 12-page publication is fully illustrated with thirty drawings, photos, maps and text covering the ROANOKE CANAL, THE BEAN SHOALS CANAL, THE SOMERSET CANAL, CAPE FEAR NAVIGATION, CLUBFOOT AND HARLOW'S CREEK CANAL, CORE CREEK CANAL, ENO CANAL, CATAWBA CANAL, LOCKHART CANAL, COLUMBIA CANAL, SALUDA CANAL, DREHER'S CANAL, LORICK'S CANAL, SANTEE-COOPER CANAL, MAYO'S BAR LOCK, AUGUSTA CANAL, NEW SAVANNAH LOCK AND DAM, SAVANNAH AND OGEECHEE CANAL, SUWANEE CANAL, BRUNSWICK AND ALTAMAHA CANAL, APALACHICOLA AND CHATTAHOOCHEE NAVIGATION, WACISSA-AUCILLA CANAL, FLORIDA BARGE CANAL, KISSIMEE WATERWAY, OKEECHOBEE WATERWAY, CALOOSAHATCHEE RIVER LOCKS, HILLSBORO CANAL, WEST PALM BEACH CANAL, NEW RIVER CANALS and the INTRACOASTAL WATERWAY.

This fine publication is packed full of both historical and current information on these waterways including those sections which are still navigable. It is well worth the \$1 which is being asked to absorb part of its printing cost. While you think of it, drop a dollar bill in an envelope and mail it to Dr. Bill Trout III, 1932 Cinco Robles Drive, Duarte, California 91010.

## CAPTAIN'S CORNER

I have often lamented the plight of the small national organization in its survival in spite of its expertise in its field. This situation was brought home to me again last week when I received my last copy of "Echoes of History," the publication of the Pioneer America Society. Editor H. H. Douglas announced the demise of the society because of its lack of funding and its inability to manage only on dues of its members in an age of increasing costs of all kinds. We will miss the Pioneer America Society, but even more the work done by its founding Director, H. H. Douglas and Secretary June Douglas. Their work has been an inspiration to all of us and many useful preservation efforts have been made over the past ten years under their leadership.

The shame of it all is that such wonderful work has to be laid aside because of a few thousand dollars which would assure its continuation. There is something wrong when the organizations of experts lose out, when there is money available in preservation, but put to other purposes. One of the basic problems is the lack of time and expertise of the small national organization in knowing how to go about obtaining private funds. Another is the national system of things where most preservation money is fed down through the various states. What

each organization needs is a millionaire who also happens to be a member of the organization and an enthusiast in whatever it is that the organization does.

The following letter to ACS Vice President (and Editor of the **American Canal Guides**) Dr. Bill Trout brings mixed emotions: one of pride that we are doing a good job; and the other that if we are doing such a good job, why isn't there someone up there who is the hierarchy of things who recognizes the need and plight of the specialized, expert national organization?

"Thank you for your comments on the draft 'Bicentennial Catalog of Transportation Progress' and for enclosing the initial two parts of The American Canal Guide. In the course of editing this Catalog, I have spoken to a number of State Historic Preservation Officers on the historic canals within their States. In almost every case, the information that they send on to us came originally from the **American Canal Society**. You and your organization deserve congratulations for your unique and valuable effort to bring attention to the important role of canals and waterways in our Nation's history. I hope that our publication will contribute to the American Canal Society's goal of searching out and saving the historic canals in the United States." (Signed) John T. Kneebone, National Bicentennial Transportation Catalog, Dept. of Transportation.

Tom Hahn

## CROSS-FLORIDA BARGE CANAL DOOMED?

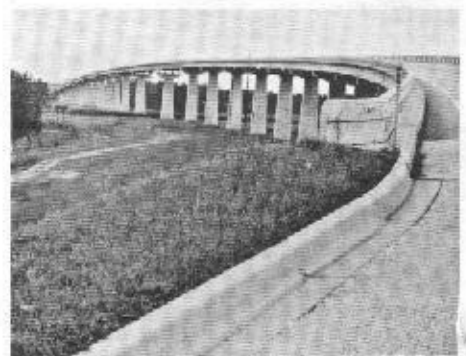


End view of Rodman Dam on the Cross-Florida Barge Canal, with Lake Oklawaha to the right. (Gould photo).

The Florida Cabinet voted 6 to 1 against completing the Cross-Florida Barge Canal, recommending that Congress end the controversial waterway. While the cabinet vote was not the official end of the canal, it may mean its death as Congress rarely continues public works opposed by state officials. Though many environmentalists applauded the action, others felt that much anticipated canal traffic would be shifted to land transportation, thus requiring environmentally damaging new highways.

Among other things to be decided is the disposition of the land acquired for the 110-mile canal and \$70 million of canal structures, including the lake created by the damming of the Oklawaha River.

(Based on information submitted by ACS Director Aiden Gould, 5558 Palm Beach Blvd., #114, Fort Myers, FL.)



A bridge resulting from the Cross-Florida Barge Canal, built in 1967 to carry Route 19 across the canal at a height of 65 feet. (Gould photo).



# THE HENNEPIN CANAL (Part Two)

by Mary M. Yeater

*(This article is the second of a series on the Hennepin Canal, formerly the Illinois-Mississippi Canal. Part Two continues with the planning stages of the canal under the title of "The First Fifty Years. Mary M. Yeater is an historian working for the Hennepin Canal Parkway.)*

The Civil War renaissance of the Hennepin Canal enthusiasm brought the issue before the public eye once again. During the remainder of the 1860's, several state legislatures, most notably those of Iowa, Illinois and New York, memorialized Congress for the establishment of a canal by the Federal government. Though these attempts were futile from the standpoint of appropriations, they did encourage local pro-canal initiatives in the face of massive post war railroad construction.

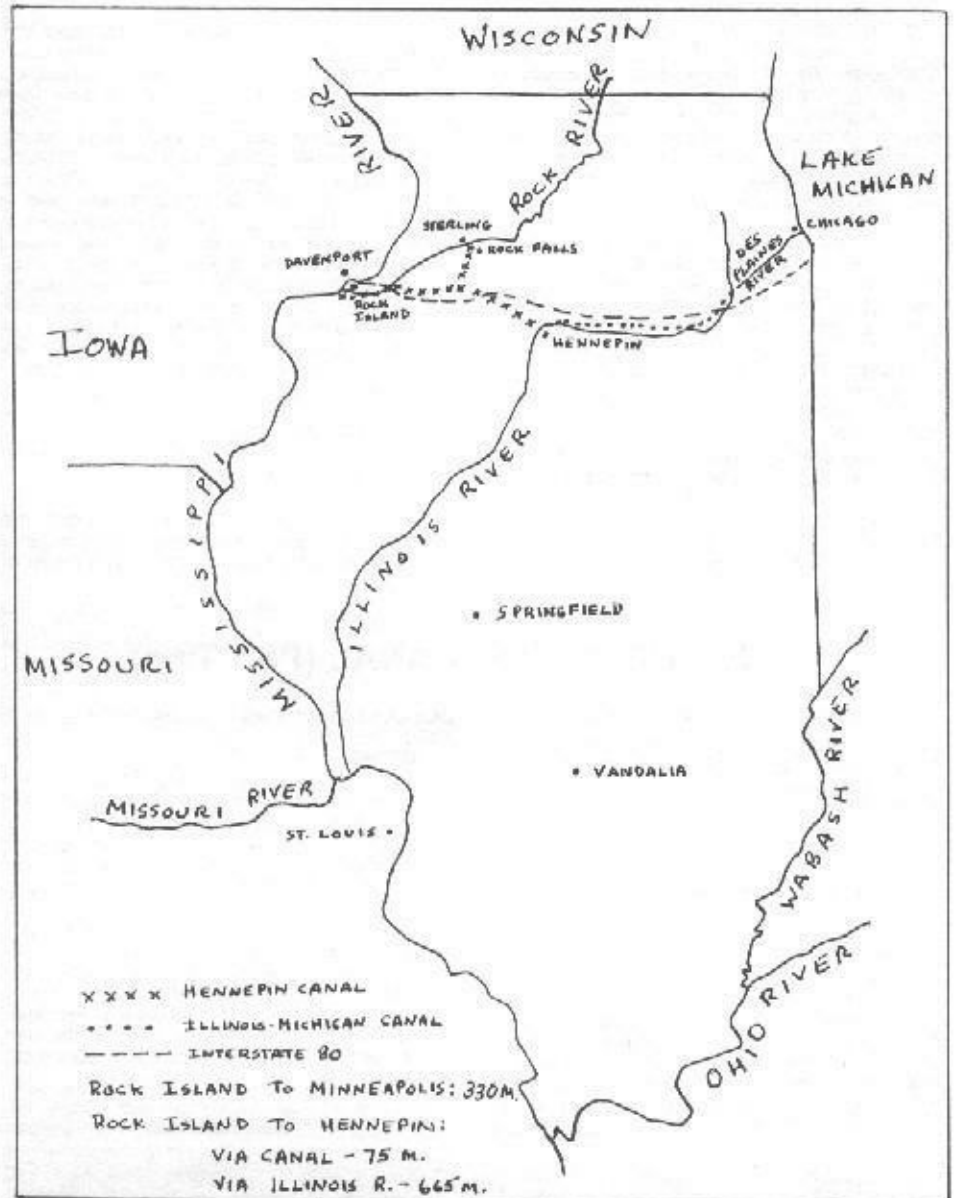
The local pressure for canal construction was also intensified by the fact that Western farming districts usually served by only one railroad line were hard hit by sky-rocketing freight rates. Farming and business interests unable to compete with Eastern producers in the important market places of the East began to build loose "Granger" political coalitions. By 1870, though, the "Granger" political leaders had won control of the Illinois legislature.

The first survey of the proposed canal, although made in 1866, was not the result of the Genesee Convention; instead it was the result of a subscription taken up among citizens of Dixon, Illinois. J. O. Hudnutt, a civil engineer and surveyor, proposed a canal 60 feet wide on the water line with a six foot channel and locks 150 by 21 feet. This canal would start at Hennepin and end near Watertown, Illinois, on the Mississippi, with a feeder from the Rock River at Dixon. The estimated cost was \$4,500,000.

After a resident of Northern Illinois, **Ulysses S. Grant**, was elected President in 1868 the Federal government began to respond to Illinois "Granger" pressures. The first Federal survey of the proposed canal was made in 1870 under the authority of Col. Wilson of the U.S. Corps of Engineers and conducted by Graham P. Low, Civil engineer and surveyor. Low's plan for the canal followed the same general lines as Hudnutt's but allowed for a canal 160 feet wide, seven feet deep with 350 by 70 foot locks at a cost of \$12,500,000. In 1872, on President Grant's recommendation, the Senate appointed a committee to study the value of the proposal. This committee concluded that a canal would have a great effect as a regulator of railroad freight rates and probably as an appeaser of "Granger" agitation and dissatisfaction in the mid-west.

This Federal interest in the proposed canal intensified local pro-canal agitation. In 1881, four hundred representatives of commercial, municipal and farmers associations from seven states conferred in Davenport, Iowa and authorized a Hennepin Canal Commission to negotiate with Chicago groups stressing the national importance of the proposed canal. The Hennepin Canal Commission also sent agents through the East to encourage national support for the venture.

The agents were most successful in gaining support in New York State, the home of the new President Chester A. Arthur. They also secured passage of a resolution in the Illinois General Assembly calling for Federal construction of a canal. These efforts bore fruit in 1882 when the issue came before Congress. A compromise bill provided \$30,000 for another survey of the route



and the gathering of information on the practical value of the project. The final amount was so small because many Representatives and Senators were leery of a national commitment to a project located entirely in one state and because of the hostility of lower Mississippi Valley and St. Louis interests who were afraid trade would be diverted to Chicago.

The results of the 1882-83 Federal survey carried out by Major W. H. H. Benyuard of the Chicago District of the Corps of Engineers was the recommendation that one of three routes be selected for the Hennepin Canal, the Marais d'Osier (Willow Marsh), the Watertown and the Rock Island. The line of the Eastern half of the route was the same on all three surveys: the canal would begin at the great bend of the Illinois River about 1.75 miles above Hennepin and run along the Bureau Creek Valley to a summit level, 18 miles West. The three routes differed only on the remaining Western portion. The northernmost route, the Marais d'Osier, had decided advantages; it was in a low lying area connecting the Rock and Mississippi Rivers upstream from Rock Island. During the high water season, the Marais d'Osier flooded to a depth which permitted steamboat travel between the two rivers en-

tailed excavation in rock and through a soil much more difficult to work.

The 1883 report also stressed the economic advantages to be gained from the construction of a Hennepin Canal particularly for development of the Upper Mississippi River. Arguments were presented that the canal would complement the railroads as well as compete with them; the waterway would be important in the transport of heavy and bulky freight while the railroads would cater to light freight and perishable goods.

In 1886, Congress appointed a Board of Engineers to examine the proposed routes and investigate the effect the canal would have on national commerce. The Board reported that benefits would exceed costs and suggested that the Marais d'Osier route be used. The favorable report on commerce was accepted by the Secretary of War and the Chief of Engineers, but they rejected the routing suggestion. For commercial reasons and because of "greater military significance" (perhaps related to the arsenal located at Rock Falls) the Rock Island route was decided upon. The canal would then follow the previously

(Concluded on Page Four)

## CHAMPLAIN CANAL DATA NEEDED

We in Waterford are beginning efforts to compile a comprehensive history of the 1823 Champlain Canal, running from Waterford to Whitehall, New York, for eventual publication. As New York canal enthusiasts know, no such separate history of this important waterway has been published to date, undoubtedly the fault of an ever-shadowing effect by the Champlain's more celebrated sister canal, the Erie.

We hope to correct this void, though we have no illusions about the amount of work involved. It is for this reason that we are seeking assistance from all ACS members. If anyone has any historical data, stories or information connected with the old Champlain Canal, we'd like to hear from them. We are also very much interested in relevant photographs, prints, maps, etc., and would be willing to cover the cost of copying any such useful materials. Naturally, all contributors will be duly credited in any eventual publication. If you believe you have any information, pictures or other items of potential interest and use in this endeavor, please write: Garry F. Douglas, Chairman, Waterford Canal Action Committee, 123 Fonda Road, Waterford, New York 12188.

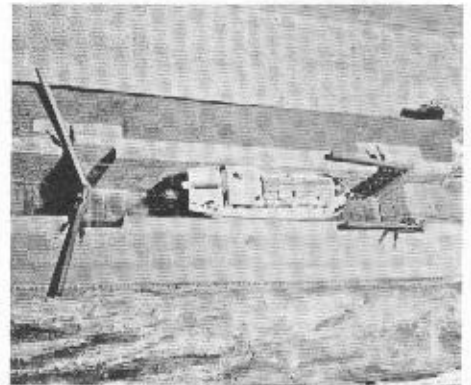
## Old Canal Freighters Survive!

The following is an updated excerpt from Vol. 33 #2, of the Summer 1976 issue of **Steamboat Bill**, Journal of the Steamship Historical Society of America: "More local history has gone from the Delaware River as motor vessel WRIGHT BROS. was sold to Mr. Herb Ruiz from Panama. This will leave her sister ship J.B. WRIGHT BROS. remaining behind, tied up in Raccoon Creek at Bridgeport, NJ. WRIGHT BROS. was built in 1923 at the Paul Boat Yard on Mantua Creek in Paulsboro, NJ. For many years she hauled tomatoes to Campbell Soup Co. in Camden, NJ, grain to Baltimore and fertilizer to Swedesboro, NJ. WRIGHT BROS. went to Dorchester Shipyard and was hauled out for hull repair and painting. From there, she sailed to Norfolk, VA and then to Miami, FL via the Inland Waterway and finally to Panama. She is now hauling railroad ties and general freight between Colon on the Caribbean thru Gatun Locks to Darien at the midpoint of the Panama Canal. Her new name in Panama is ALEXANDRIA I."

Well, this immediately sent me scurrying to the Merchant Vessels of the United States registry and sure enough, both vessels had a beam of

less than 23 feet and were shallow enough of draft to allow them to have used the old **Delaware and Raritan** and/or **Chesapeake and Delaware Lock Canals**. Both wood hull motorships were built at the same yard, but J.B. WRIGHT was built in 1919 and WRIGHT BROS. four years later. Mr. John Wright, the owner of J.B. WRIGHT lives only a few hundred feet distant in Bridgeport, from where J.B.W. has been tied up, inactive, since 1968. John said: "Sure enough, we used to carry dyestuff on both boats from the Du Pont Deepwater plant up thru the D & R canal for transshipment to the Dollar Line Steamships at New York!" (James Wilson, P.E.)

## BATTERY CREEK LOCK MODEL



Dr. Thomas A. E. Moseley, Jr. has donated a fine 1/4"-scale lock and boat model to the VMI museum in Lexington, Virginia. If you don't see it on display, be sure to ask to see it in the store-room. This is a very ingenious and detailed model of the **James River and Kanawha Canal's Battery Creek Lock** under the **Blue Ridge Parkway**, restored by the National Park Service, which helped supply details.

Dr. Moseley writes, "All of my planks for the gates and flooring of the lock are from wood tongue depressors from my old office in Florida. All of the bolts have square heads, accomplished by filing the round heads of 18 gauge wire nails between Emergency Room patients at the hospital. The flat hardware is made from developed X-ray film. This has a shiny side and a matte side, and cuts beautifully without curling. Already black and needs no paint. The stone texture was achieved by simply sifting fine limestone dust onto wet glue, then scoring for blocks. The tow path is sand, actually from the Battery Creek site." The sluice (wicket) gates really crank open and shut, using ball-point pen springs for screw threads, and pieces of key chain for ball-and-socket joints.

Watch for his article on the lock model in a future edition of the NAUTICAL RESEARCH JOURNAL (Merritt A. Edson, Jr., Editor, 6413 Dahlonga Rd., MD, Washington, D.C. 20016).

## THE HENNEPIN CANAL (Part Two)

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described route to the summit level, then through Penny's Slough to the Rock River and from there to the Mississippi River at the mouth of the Rock River, with a feeder to the Rock River near Dixon.

Agitation continued from 1886 through 1889. Congress repeatedly considered this proposal, but no construction appropriations were made. The main objections centered on the fact that without enlargement of the Illinois and Michigan Canal the Hennepin Canal would be of only local importance.

To counter this objection by stressing national significance, the name of the canal was changed in 1889 from the Hennepin Canal to the Illinois-Mississippi Canal. Simultaneously, detailed plans and estimates prepared by Capt. W. L. Marshall of the Corps of Engineers and based on

previous surveys were submitted to Congress in 1890. The total estimated cost by then was \$8,925,960.

This report finally bore fruit. By the River and Harbor Act of 1890, Congress provided \$500,000 for the buying of right of way and for construction of the first five miles of the canal just above the mouth of the Rock River (where most of the areas population was concentrated). The canal as authorized was scaled down in size (for instance, locks were to be 170 by 35 feet) to meet some of the objections offered by water-power interests on the Rock River and to fit more closely with the dimensions of the Illinois and Michigan Canal. Finally, after a fifty year struggle, the idea of a Hennepin Canal was on its way to becoming a reality.

(To be continued.)



The restoration of Lock No. 1 of the Illinois and Michigan Canal at Lockport, Illinois has been underway since last fall, beginning with a survey by engineers and followed by a clearing of plant growth. Plans are to stabilize the lock walls and then replace the coping stones. The lock (and other parts of the Illinois and Michigan Canal) are on the National Register of Historic Places. (Courtesy of John Lamb, ACS Director, 1109 Garfield, St., Lockport, IL 60441.)

## CANAL MEDALS

Due to the limited number of "Commemoration of the Completion of the Erie Canal" Medals available, the price is now \$4.50 plus 50c shipping. "Commemoration of the Beginning of the Pennsylvania Main Line Canal" Medal sales continue at \$4.50 plus 50c shipping. Both medals include rigid plastic cases. Send checks to ACS Treasurer W. E. Trout, 1932 Cinco Robles Drive, Duarte, California 91010.

# THE FIRST ALABAMA CANAL

by L. W. Richardson

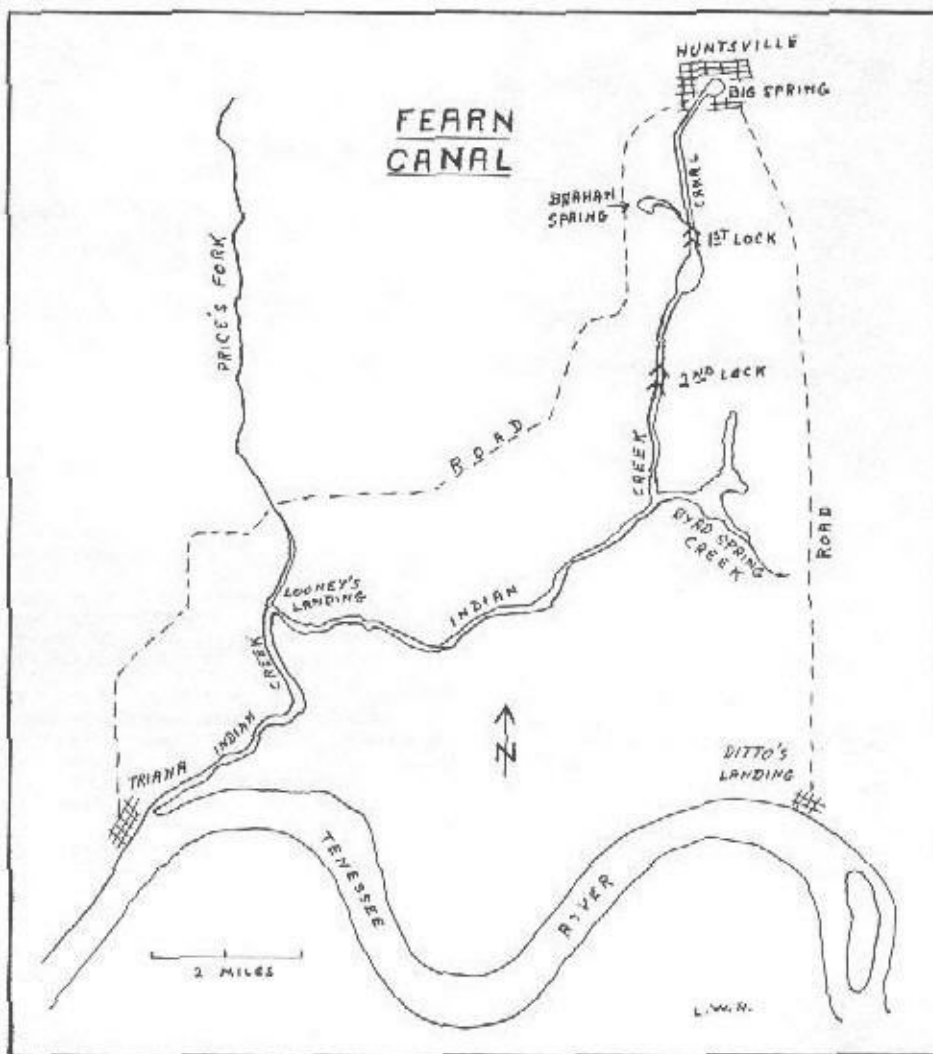
The **Indian River Navigation Company**. That was its corporate title, but from the very early years it was known in northern Alabama as the **Fearn Canal**. In later years some historians have chosen to call it the **Huntsville Canal**.

The valley of the Tennessee River, following the long loop of the stream through Alabama, was an early goal of white settlers. Even before the final pacification of the Creek Indians, the section that is now Madison County had become the most populous in the new territory. The principal trading center for the region was Huntsville, the county seat. In 1811, the village became the first in Alabama to receive a charter as an incorporated town and in 1820 the first session of the Alabama Legislature met here.

As was true in most of the south, cotton soon became the most important product. Further than most from the coastal markets, the planters and merchants had a serious problem. Although the long river voyage on the Tennessee, the Ohio and the Mississippi to New Orleans was expensive and dangerous, it was the only practical way to get the crop to the markets. It became customary to haul the heavy bales of lint to one of two little settlements on the river - Ditto's Landing (now Whitesburg) of Triana. Here the cotton was stored on large flats or barges to await the spring rise in the river. Local pilots would then undertake to get the craft through the dangerous stretch of river known as Muscle Shoals. They were not always successful but it would be several years before any attempt would be made to improve the channel and ease their problem.

While this involved and costly transport system worked well enough to bring a measure of prosperity to the valley, the merchants and commission agents of Huntsville were uneasy. The wagon haul over the bottomless roads between the town and the river was too slow and expensive. Besides, planters were beginning to bypass the town buyers and instead were dealing directly with the shippers in the river ports. To assure Huntsville's continued growth and prosperity, a better means of communication would have to be found. What better than a canal?

On Dec. 21, 1820, a charter creating the **Indian Creek Navigation Company** was granted by Legislature. Five Huntsville men, led by Dr. Thomas Fearn, were named as Commissioners, empowered to open books for the sale of stock in the enterprise. There was no



"Authorized Capital" limitation but the Charter did require that the project be built to accommodate "boats drawing ten inches of water" and set the amount of toll at two dollars a ton between Huntsville and Prout's Mill (Lonney's Landing).

On the day before the Indian Creek charter was granted, the Legislature had passed an Act creating the **Flint River Navigation Company**. More than anything else, this must have convinced the Huntsville group that their proposed canal was a necessity, not merely a speculation. The Flint was a longer and larger stream than Indian Creek. It rose in Tennessee, crossed the state line north of Huntsville and flowed south less than ten miles east of the town. Its course to the Tennessee was roughly parallel to that of Indian Creek. The charter named thirteen Madison County men as incorporators and provided that the Flint would be improved for the passage of boats from the big river north about fifteen miles to Captain Scott's Mills (now Brownsboro). If successful, and if Huntsville did not improve its position, it could mean that the village would very quickly lose much of its business and could eventually be surpassed by a new settlement.

The promoters of the Flint scheme began work promptly. The river ran for miles through timberland, with immense trees along each bank. As could be expected, from time to time, some of these forest giants would fall into the stream. The amateur engineers on the Flint board decided that to prevent this, the first order of business would be to cut all the riverbank timber. Rather

than spend more money to burn or remove the debris, it was further decided to fall everything into the river! The theory being, that the next spring freshet would wash everything downstream into the Tennessee, leaving a clear channel. It seems to have occurred to no one that this approach simply compounded the original problem. The floods came and on the lower Flint there was jammed together an impenetrable mass of twisted and broken tree trunks, a small scale Red River Raft. This was the end of the Flint River Navigation - now Huntsville could breathe easier.

Construction on the Indian Creek project had begun at once but progress was slow. In April of 1822, it was announced that "Dr. Fearn, President, is receiving bids for the unfinished half..." Five years later, in 1827, there was some traffic on the waterway but it would be four more years before it was finished. Some of the trouble was undoubtedly caused by the usual lack of ready funds. Much of it was due to a shortage of manpower. The possibility is that work on the canal could only go forward when labor was not needed on the plantations. And the engineering and planning was "home grown." No mention of a "Chief Engineer" or other imported expertise has been found.

The long delay was discouraging to many of the canal's early backers. It was only the dedication and enthusiasm of Thomas Fearn and his

(Concluded on Page Six)

## CANAL CALENDAR

May 13-15 - Pa. Canal Society Spring Field Trip on the **Chesapeake and Ohio Canal**. Tour Coordinator: John Frye, Gapland, MD 21736.

May 20-23 - Ohio Canal Society Spring Tour of Ohio & Erie Canal from Lock 27 at Everett to Masillon. Contact Canal Fulton Heritage Society, Box 607, Canal Fulton, OH 44614.

June 4-7 - Retford & Workshop Boat Club (England) 200th Anniversary Rally of the **Chesterfield Canal**. Write: Mrs. June Rice, Clematis House, Clayworth, Retford, Notts, U.K.

July 30-Aug. 6 - A field and lecture course on the Midland Canals. Contact Avoncroft College, Stoke Heath, Bromsgrove, Worcestershire B60 4JS, England.



## FOX CREEK CANAL



The special historical marker (shown above) was recently installed and dedicated at the Fox Creek Bridge in Ipswich, Massachusetts. Funds for the marker were raised by ACS Member Harold D. Bowen. Mr. Bowen reports that only a rowboat can pass through this canal today, whereas at one time large lumber schooners passed through. There are no locks on the canal. Thus the Fox Creek Canal is high on the list of North American Canal firsts, and we are proud that one of our members saw to it that the canal is commemorated with a permanent marker. Mr. Bowen is shown below addressing the audience, which gathered at the marker site, during dedication ceremonies. (Harold Bowen's address is: 3 Summer St., Ipswich, MA 01938.)



## OVERSEAS MAILINGS

When we began soliciting ACS memberships in the United Kingdom and other countries overseas, some of our out-of-State members indicated that they would prefer air-mail delivery of their quarterly bulletin. As a result, we set our overseas dues rates somewhat higher than our domestic rates to absorb this additional mailing cost. Lately we have found, because of the bulky nature of most of our mailings,

that it is much more economical to use steamer mail, at a sacrifice in time of only a few weeks in delivery.

We are therefore passing this saving along to our overseas members, whose annual dues rate (single) has now been **reduced** from eight to six U.S. dollars per annum, same as ACS members in the U.S.A. and Canada; \$9 U.S. dollars for man-wife combination; \$12 for family membership, etc.

## First Alabama Canal

(Concluded from Page Five)

brother, George, that enabled the village to celebrate, on the 5th of April 1831, an "epoch making event." On that day, two loaded keel boats arrived at the landing by the head of the Big Spring, in the heart of the settlement. On the same day, one craft, "loaded to the guards," began the return trip to the river. These keels were reported to have had a capacity of 80 to 100 bales of cotton and 50 passengers.

Unfortunately, little is known concerning the depth, width or lock size on the canal. The length, from Huntsville to Triana was 18 miles. Of this total, only the northern 2½ miles was excavated channel, the rest was improved river navigation. There was no problem with a water supply and no summit level to surmount. In Huntsville the route began at the Big Spring. This natural fountain has been measured in recent years and still has a flow of 24 million gallons per day. It was possibly greater in the 1830's.

The excavated section was essentially a deepening, widening and straightening of the natural channel from the Spring. The average Tennessee River keel boat of the period was between 40 and 80 feet long with a beam of 7 to 10 feet and when loaded, drawing 18 to 24 inches. It may be assumed that the canal prism and the locks reflected these dimensions. There was no towpath as the river craft were rowed or poled. Locks and other structures were built of wood.

From the Spring, the line went directly south. The first lock and dam was located at the end of the excavated section. A natural feeder from Brahan's Spring emptied into the canal above the lock and further augmented the water supply. At about this point, today the route enters the huge reservation of the Red Stone Arsenal. This is the home of the George C. Marshall Space Center and all the supporting facilities that have made Huntsville the "Rocket Capital of the World." Exploration of the remaining line of the canal is therefore, quite limited. In any event, it is doubtful that any trace of the old canal exists.

Just below the first lock was a considerable pond, utilized by Silvey's Sawmill. The second and remaining lock and dam was sited about a mile and a half further down, in the channel of the creek. Beyond that, about six miles from the Spring, the Fearn owned a large tract of timber and are presumed to have operated a sawmill on the creek. The ownership of the timber may account for some of Dr. Feam's great interest in the canal. On the Feam property, Byrd Springs Creek joined the main stream from the east.

From the juncture with Byrd Springs Creek, Indian Creek coursed west by south for some six miles to be joined by Price's Fork, flowing in from the north. At the fork was located Looney's (Prout's) Mill and Landing. Although the Fearn Canal was always described as being 16 miles in length, the 12 miles above Looney's seems to have been all that was improved by the Navigation Company. This is substantiated by the terms of the charter, wherein the Company is allowed tolls for only the route above Looney's.

## SECRETARY'S NOTE

As of press date for this issue, almost 80% of our membership have responded to our appeal of November 1976 and have paid their dues for 1977. In an all-volunteer organization, such as ours, we appreciate this greatly, as it reduces the amount of paper work we usually have to do at this time of year to remind those who are slow in paying their dues, or who have just plain "forgotten".

However, we still have the remaining 20% to worry with. Some of you will find duplicate invoices enclosed. This means your 1977 dues have **not** been paid. Our policy is that we will give you a second reminder only, and then your name will be dropped from our mailing list. Virtually all of your dues money is expended in the cost of printing for you, and mailing to you, **on time**, the best information obtainable on canal activities throughout the world.

We have had comments from many of you on the quality of our quarterly bulletin, and expressions of surprise that we are able to produce this kind of material at such modest cost. It is possible only because of a team of dedicated canal buffs who are willing to donate their time in collecting, editing and publishing this information. We need your continued support to keep it going!

Bill Shank

The **Fearn Canal** was a useful and busy waterway for at least a decade. The date of abandonment is not known but it must have been sometime after 1840.

Name changes through the years make it difficult to follow the route on today's maps. Before 1900, the creek above Looney's Landing became known as the Huntsville Spring Creek. The late USGS maps have downgraded it to the Huntsville Spring Branch! Whiteburg and Triana are still on the map but both villages have been moved from their original river front site to higher ground.

Huntsville is an historic town and has moved to preserve its heritage. Some 20 structures built before 1840 still stand in the downtown district. Historical markers abound. Sadly, no monuments have been raised to tell of the first Alabama canal. However, there is the Big Spring, surrounded now by a park. The wharf at the terminus of the canal was described as being "by the head of Big Spring." There are also two buildings of interest to canal buffs. The First National Bank, ca 1835, stands on the west side of the Square, above the Spring. Local legend has it that the six stone columns of the facade, their bases and capitals, were cut in Baltimore, hauled overland by oxcart to the upper Tennessee, brought down the river and then up the old canal by keel boat. Only a few blocks away, at 517 Franklin St., is the beautiful home of Dr. Thomas Fearn (private), built about 1820.

It has been mentioned that Huntsville is publicized as "The Flocket Capital of the World." If the Chamber of Commerce should ever wish to enlarge on this theme they could consider this "From Keel Boats to Space Ships."

(This is the first of three articles on early Alabama canals by ACS Director Lew Richardson.)

# SOUTH HADLEY INCLINED PLANE

by Herb O'Hanlon, ACS

Early attempts to open navigation on the Connecticut River led to plans for short canals around various rapids in the river. The first to be completed was the South Hadley Canal at South Hadley, Hampshire County, Massachusetts. Beset with problems from beginning to end, the South Hadley Canal was surveyed in the summer of 1792 and completed in April of 1795. Supervisor of engineering for the project was Benjamin Prescott who in later years became superintendent of the government arsenal at Springfield, Massachusetts.

According to Neal Fazsimons in his article **Benjamin Prescott and the Hampshire Machine**, "The canal began at a point by the South Hadley end of the great dam and extended two and a half miles along the River's trend northward entering the River above a wing dam projected obliquely outward. Most of the way the cutting was through solid red slate rock, and proved costly. The capacity of the waterway was equal to the transportation of boats or rafts forty feet long and twenty feet wide." Tonnage maximum was of twenty-five gross tons.

The mechanism used in the canal to raise or lower boats and rafts was unusual. Instead of using locks, an inclined plane was devised and successfully employed. The plane, when completed, was two hundred and thirty feet long with the face elevated at thirteen and a half degrees thus giving a lift of fifty-three feet. In addition, the face of the incline was covered with stout planks.

In operation, boats were floated into a submerged carriage in the lower lock chamber. When the water in the lock was lowered, the boat settled in the carriage. (How the water was lowered was not explained.) The boat and carriage were then drawn up the plane by use of hawsers (later chains) that were wound on a drum powered by a pair of sixteen-foot overshot water wheels. The two water wheels were located at the top of the inclined plane, one on either side of the canal. Power to operate the wheels was furnished by water from the canal. When a boat was passed downstream, the process was reversed with enough water being fed into the twin water wheels to act as a brake. Total cost of the project amounted to \$8,000, all of which was raised by lottery.

During its lifetime, the canal was the subject of many complaints from people living along the river. Fishermen voiced opposition complaining that the dam was a hindrance to shad and salmon ascending the river. Northampton in 1800 proclaimed the dam to be a nuisance and demanded its removal. Towns upriver maintained that the lowlands flooded by the dam were responsible for outbreaks of malaria. They, too, demanded removal of the dam. The proprietors of Locks and Canals, County of Hampshire, Massachusetts, who owned and operated the canal insisted that the canal was vital to transportation in the area and offered to make improvements that would lower the dam and the water level behind it, by several feet. Another lottery to raise \$20,000 was successful and work was soon begun on making the necessary changes. The channel in the canal was deepened, the dam was lowered and five locks substituted in place of the inclined plane. All improvements were completed in 1805.

The first successful inclined plane to be placed in operation on a canal was in 1788 when one was installed in the privately-built Kettleby Canal in Shropshire, England. But, when Benjamin Prescott decided to use the inclined plane at South Hadley, he had no precedent in this country to follow; he was obliged to execute it largely on original lines.



Seal of the Proprietors of Locks and Canals, showing the contrivance first used at South Hadley for passing boats.

## NOTES FROM ENGLAND

"Prince Charles, taking the helm of a narrow-boat for the first time last week, on the Welshpool section of the Montgomery canal, ran aground four times. His comment: 'It's not as easy as steering a minesweeper.'" (From *Broadsheet*, the newsletter of the Staffordshire & Worcestershire Canal Society, July 1976)

"This incident was described by a friend: 'I was cycling up Harringay Hill toward Manor House when I was overtaken by a red car - dunno what sort it was - with an "I Dig Canals" sticker in the back. It didn't occur to me that it wasn't you, so I pulled alongside and thumped on the roof. I looked in and a surprised lady I didn't know looked out . . . So as not to lose face, I shook my fist and rode off into the traffic.' If the lady concerned reads this, I hope it will clear-up an otherwise unexplained incident.'" (From *NAVIES 60*, newsletter of the Waterway Recovery Group, May 1976)

## FIRST CANAL BOAT OF THE 1900's



This photo shows some of the pageantry which periodically takes place on the "St. Helena II", first authentic canal freight boat to be built in the Twentieth Century. The boat was built in 1970 at a cost of \$26,000 by various historical organizations at Canal Fulton, Ohio, and operates (behind a mule team) along a section of the old Ohio and Erie Canal. Activities on the "Helena II" will be a part of the Canal Society of Ohio tour this Spring.

The South Hadley Canal endured in its reconstructed form until 1848. Competition from the railroads and demise of boating on the Connecticut River finished the waterway as a successful business venture. In that year the property and franchises were sold and the canal became a channel for supplying waterpower to the mills in the area.

### Bibliography:

Fazsimons, Neal, Benjamin Prescott and the Hampshire Machine; *Civil Engineering*; A.S.C.E.; Dec. 1970.

Bacon, The Connecticut River, Bangor (Maine) Public Library, 1911.

Love, N. De Loss, The Navigation of the Connecticut River, *American Antiquarian Society*, Press of Charles Hamilton, Worcester, 1903.

Hoxle, Wilbar Col., Plaistow, New Hampshire, April 1976. *conversations*, President, Middlesex Canal Association.

## "CANAL BOAT CAPTAIN"

ACS has just acquired its first "Canal Boat Captain" member, a title acquired by the simple expedient of submitting a \$50 initiation fee. The recipient: **William M. Hosking, Jr.**, of Hellertown, Pa., who lists his special interest as the Lehigh Coal and Navigation Company and the Delaware Canal. Thanks, Bill; we appreciate it!

## CANAL STUDY

The Columbia-Montour Joint Planning Commission, Courthouse, Bloomsburg, Pa. 17815 has just issued the "Columbia and Montour Historic Transportation Study", an interesting 60-page booklet, which includes detailed photos and maps of the Susquehanna North Branch Canal in those two Pennsylvania Counties. (An HUD project; extra copies available.)



## "QUEEN OF THE FLEET"



The Packet Boat "Marshall" shown in this very old photograph, was sometimes referred to as the "Queen of the James River and Kanawha Fleet". Of particular interest to our canal buffs in the deep South is the fact that this boat was used during the War Between the States to carry the body of Confederate General Stonewall Jackson back to Lexington, Virginia for burial in 1863 - via the North River Branch of the James River and Kanawha Canal.

The "Marshall" was the last of the canal boats to enter Lynchburg, Virginia, and was beached

on the south bank of the James River one mile above the city. It remained there until carried away by the flood of 1913. The old hull, constructed of galvanized iron is 90x14 ft. and is on display at Riverside Park. The last owner and captain was James A. Wilkinson and the last mate was Captain Wilkinson's son, James P. Wilkinson.

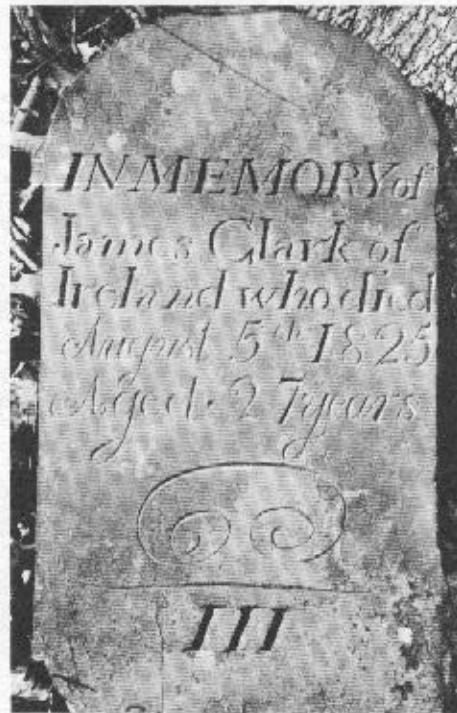
(Submitted by ACS Member T. G. Hobbs on behalf of the owner of the photo, Mrs. Al Bodner, a descendant of Capt. Wilkinson.)

## STONE RUBBINGS

One way to develop interest in your canal is to display a stone rubbing of canal masons' marks, or of an inscription or gravestone associated with the canal - even a modern marker. Look closely at locks, aqueducts and culverts for symbols or letters made by the stonemasons. For example, Dr. Alton Thomas and I found several carefully-inscribed "F"s on the Blackstone Canal lock in Millville, Massachusetts. The rubbings are made by placing a sheet of paper over the stone and rubbing with a hard wax cake or "heelball"; crumbling inscriptions are not suitable for this!

The New York Central Supply Co., 62 Third Ave., N.Y., N.Y. 10003, sells an Oldstone Rubbing Kit with paper, wax, brush, tape and instructions for \$8.50; get an extra Oldstone 2 oz. black rubbing wax cake at \$1.50 to meet their \$10 minimum, plus 15% postage. Write for their free catalog of rubbing materials. For large inscriptions or for making extras for the local

library a roll of paper is handy, such as the 40" x 10 yd. roll of white Aqaba, at \$8.50 ppd. Further suggestions are welcome - especially a technique for making good rubbings from rough stones. (Dr. W. E. Trout, Vice Pres., ACS)



An example of a good subject for stone rubbing. This gravestone near the Blue Ridge Parkway commemorates a worker on the J. R. & K. Canal who died of cholera during construction. (Photo by Bill Trout)

## "CONOWINGO CANAL"

Robert S. Mayo, P.E., ACS Member of Lancaster, Pa. has been searching for years for detailed information on the short-lived, original "Susquehanna Canal" in Maryland, sometimes referred to as the "Conowingo Canal", which was completed in 1802 on the east bank of the Susquehanna River, from Port Deposit to Love Island. Now he reports that he has found full information. Bob has prepared detailed Conowingo Canal drawings which will be featured in the next issue of "AMERICAN CANALS". Bill Shank has also covered the politics behind this very early Maryland canal (chartered in 1783) in his new book "THREE HUNDRED YEARS WITH THE PENNSYLVANIA TRAVELER", which contains a lengthy chapter on canals in Pennsylvania and Maryland.

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Until further notice we will continue to include a panel publication worth 10% of each order (our choice) to members of the American Canal Society.

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PASSAGE BETWEEN RIVERS (Menzies). A Portfolio of Photographs of the Delaware & Raritan Canal, paper, 132pp. \$4.95.

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CHESAPEAKE AND OHIO CANAL MEDALLION commemorating the beginning of the canal in 1828, bronze, lock scene on one side and C & O Company seal on the other, 39mm diameter. Enclosed in epoxy case. Ready in March. Orders now being taken. \$4.50.

THREE HUNDRED YEARS WITH THE PENNSYLVANIA TRAVELER (Shank) - 200 pages, 8 1/2" x 11", 123 old photos, 75 drawings, 11 maps, in two-colors. A text book of travel history. Includes fifty pages on canals, aqueducts and inclined planes. \$13.50.

(American Canal and Transportation Center, Box 842, Shepherdstown, WV 25443. Add 50¢ shipping per order.)

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