ASCE CANAL FLOAT CAPTURES PRIZE

The ASCE Float, in the Rose Bowl Parade, which took First Prize in the Business Association category. Note the Erie Canal (and boat) in the left foreground.

New York City, Jan. 1, 1980: The American Society of Civil Engineers Rose Bowl Float, highlighting an ASCE National Historic Civil Engineering Landmark, the Erie Canal, captured first prize among Business Association Floats at this year's Rose Bowl Parade.

The float depicted an Erie Canal boat being pulled along the waterway by a mule. A beautiful backdrop of Niagara Falls was topped by the spreading rays of the sun. Islands of roses framed the bucolic setting.

The float featured as guest celebrity Lauren Tewes, who plays the naval cruise director on the television hit series, "The Love Boat.

In keeping with the theme of this year's parade, "The Music of America", the song which has become synonymous with the Erie Canal, "Low Bridge, Everybody Down", was playing in the background.

The panel of Rose Bowl judges awarded the prize, one of several given in different categories, based on the float's overall beauty, the execution of the parade theme, originality, use of flowers and the photogenic impact that would have on the television audience.

This float and float celebrate the journey of a canal boat along the 364 mile Erie Canal, running from Albany to Buffalo, N.Y. The Canal was built in 1825 under the direction of Benjamin Wright, founder of the American Society of Civil Engineers, in 1888. ASCE named Wright "The Father of American Civil Engineering".

CANAL CALENDAR

March 18th - (7:30 P.M.) Illustrated lecture by Dr. Mark Bolker, Imperial College, London, "Commercial Inland Navigation in the USA and Canada". Location: Sutton College of Liberal Arts, St. Nicholas Way, Sutton, England. Sponsored by the United States Section of ASCE. Contact: Dr. Roger Squires, Railfit Cottage, Manor Way, Beckenham, Kent BR4 3LJ.

May 2-4 - Bus Tour of Ohio and Erie Canal, Scioto River Valley from Portsmouth, planned by Canal Society of Ohio and Scioto Valley Canal Society. Write: John Wunderle, 401 Ivan Dr., Kent, Ohio 44240

May 3-4 - Canal Society of New Jersey field trip to northern section of Delaware and Hudson Canal. Contact: Bill Moss, Box 127, Fanwood, New Jersey 07023.


PRESIDENT'S MESSAGE

Perhaps the item of most interest to our members of the Society is the fact that we are about to publish a ninety-two page book entitled "The Best From AMERICAN CANALS." As the name implies, it will be a collection of some of the most interesting and informative feature articles in AMERICAN CANALS since we started publication eight years ago. We have been given most welcome financial assistance in this project by the Reynolds Metals Company of Richmond, Virginia, and hope to recoup some of the additional funds invested by a modest charge to ACS members wishing to add this important volume to their canal library. You will be hearing more about this publication very shortly.

We are pleased to report that since the last issue of AMERICAN CANALS, we have added three more names to our LIFE MEMBERSHIP ROSTER—that of John A. English of Troy, New York, David A. Williams III of Columbia, Maryland, and Tom Harr of Shepherdstown, West Virginia. We thank them for their financial support.

Our Secretary-Treasurer, Charlie Day, reports he is reinvoicing a few of our members who have overlooked the payment of their 1980 dues. Mail processing costs and ever-increasing postal rates prevent us from carrying along indefinitely individuals who are not interested in paying our very modest ACS dues. Regrettably, therefore, we must drop from our active mailing list any members whose dues remain unpaid at the time of the issuance of our May Bulletin.

On the plus side, our dues-paying membership roster continues to expand and we are currently approaching a total membership of six hundred canal buffs in the United States, Canada and the United Kingdom. Happy cruising to all of you! Bill Shank

Lock House Plot Deeded to Havre de Grace

The Lock House in Havre de Grace, Maryland, was the scene of a ceremony on June 17th, 1979, during which the Daed for the Lock House Area was officially presented to the City of Havre de Grace and the Susquehanna Museum of Havre de Grace by the Susquehanna Power Company. The latter company has held title to the property through which the former Susquehanna and Tidewater Canal ran in Maryland, for a number of years. Susquehanna Museum now owns the old Lock House, adjacent to the Outlot Lock of the S & T Canal, as their headquarters and repository for canal artifacts, furniture, maps, prints and drawings.
JAMES RIVER AND KANAWHA CANAL

I have read with interest Richard Waugh's article, "Canal Development in Early America - Parts 1 and 2" in the August and November issues of American Canals, but am distressed at the near total loss of the James River and Kanawha Canal.

Parts of this canal formed the first canal system in the United States. Construction was begun in 1786, and by December, 1789, one canal was open to navigation around the falls in the James River at Richmond. A second canal was completed in 1797, and both were extended into the city itself.

The James River and Kanawha Canal, when completed in 1854, ran from midwater east of the falls in Richmond west for 127 miles to Buchanan, Virginia (sixth largest in America).

The canal had ninety lift locks for an aggregate lift of 20 feet (seventh largest number of locks and eleventh greatest lift).

Judge Benjamin Wright was also long associated with the James River and Kanawha Canal, serving as a State Engineer, Claudius Crozet, in 1824, being appointed a State Assistant Engineer in 1831, and finally becoming Chief Engineer of the James River and Kanawha Company in 1835.

Initially, the locks on the James River were designed to be the same as those on the Kanawha Canal, but by 1853, they were designed to be different and more inadequate in size. However, when Judge Wright became Chief Engineer in 1836, he adopted uniform dimensions and specifications for all locks along the entire length of the canal.

For example, the lock chambers were to be 100 by 16 feet, the height of the walls and gates to be determined by the lift required. The foundations were to be laid on solid rock or built on hard pine or white oak, 12 inches thick, on a gravel base. The foot was to be of round timber, spiked with 6-inch nails. The granite blocks were to be at least 9 inches thick and 12 inches broad and were to be laid with not more than one-quarter inch between them. The lock gates were to be of well-planed heart pine timber, the balance beam 23 feet long and 15 inches square at the larger end. The gales were to be 12 inches thick at the bottom and 10 inches at the top.

From the scarcity of the specifications, one wonders why the quality of the craftsmanship, much of which can be seen today, is so little known.

Mr. Perina makes the claim that this was the oldest canal system in the United States. Are there any readers on this panel who can claim, for example, that the locks on the Potomac Canal at Great Falls, Virginia, which were completed in 1807, are the oldest existing locks in the U.S.?

EDITOR'S CORNER

Another Minderman "Original"

Justice William O. Douglas was buried in Arlington Cemetery. I think of this on a bus cautiously making its way over the Allegheny Mountain snow. I suppose he might have been in the higher grades of the President and the other dignitaries. But Bill Douglas would think no less of his forebears who preceded him on the bench in the same building as himself.

I wondered how many lives were touched by the liberal position regarding human rights, and how much of the environment was protected by the same. Justice Douglas introduced me to the world of canals and conservation. In so doing, he changed the direction of my life. I shall long remember the lesson of the need to be individualistic and the need for integrity.

With humility, several years ago, I took my spot as an advocate of the C&O Canal Association, recognizing even then that it would take many people to accomplish the project in a lifetime.

William O. Douglas was an early Director of the American Canal Society, followed by his wife and, I think I might add, our friend, Cathy.

May his life be an example to those who follow in what one human being can accomplish in this difficult world.

Jan. 23, 1930

Tom Hahn

AMERICAN CANALS, NO. 32 - February 1980
MY FIRST I.W.A. RALLY

by Bev Win Morant

The above title sounds like one a sixth grader might choose for a class assignment after a summer vacation. That is how I felt about the Inland Waterways Association National Rally August 26 and 27, 1972 at Northwich, England in the old salt mining country. Also one half mile to the north is the famous Anderton Lift lock that was built in 1757. I am still on "cloud nine".

What is a "Rally"? In Great Britain (which consists of England, Scotland and Wales), the canal societies have banded together under the I.W.A. Since 1946 thousands of canal buffs and historians believe in living canal history have gotten together to re-dig, re-brick and in general restore over 2,000 miles of canals that had fallen into decay. Under the leadership of the I.W.A., a Rally (like a convention) is held every year during the month of August on a river or large canal. In 1972 the Rally will be called the Lee Valley National Festival on the River Lea on the North Side of Greater London, in the case of the 1970 Rally, 422 boats cruised to Northwich over many canals and rivers and through hundreds of locks. A great number of canalers came by car and of course the food population were a big part of the crowd. The official attendance count went well over 50,000.

A great band crew had been set aside at the British Waterways Board maintenance-launching ways in the middle of Northwich on the Weaver River. A tent with a large seating capacity was set up over the B.W.B. ways. A large covered barge was moved next to the tent to act as a floating stage. The setup gave the dancing officials easy access to the stage by coming down the river to the applauding audience on shore, after which the boats were moored to the barge.

Dolly, my wife, and I are not boating novices (I have been cruising the rivers and canals of Canada, the United States, and the United States for over 15 years), but this Rally idea was a new and very enjoyable experience for us. We recommend it to you to hire a narrow boat during your vacation time that spans the two days of the Lee Valley Festival in August 16 and 17 of 1980. The excitement of seeing those historically shaped boats in their alien coloring and the instant enthusiasm of the canal-loving fraternity plus the dedication of each person to his or her job made an impression that we too caught the lower asked for a job as A.C.S. volunteers. We were assigned to help in the I.W.A. book-stall under the direction of John Gale; our teachers were Mr. and Mrs. Allan Clegh of the Shropshire Union Canal Society. We had so many pleasant conversations in the sale of lottery ticket sellers that we become integral to the Rally pattern.

A few of the 622 canal boats which congregated for the Northwich Rally, on the Weaver River. (Waterways World)

Saturday, the tent activities started about 9:00 AM. for the children. This gives the parents a chance to walk to Rally grounds, checking new boats and accessories, chatting with society and I.W.A. friends and generally taking it easy. After lunch the officials for the Rally and the many public officials cruised downstairs to the barge stage for the formal activities that started the weekend festivities. Later in the evening there was a parade of beautifully lighted boats. The Navies, next, put on their one-and-one-half hour side show of fun, spoofing each other, a continual "laugh-fest", as well as restoration accomplishments of the past year.

(Concluded on Page Five)

On the deck of the "Gooole Star", below the Anderton Lift. Bev Morant is on the extreme right, his wife, Dolly, next, and in the center Bill Banke's, Rally Director. The boat skipper is on the left, with an unidentified observer behind him. (Sheila Doeg of BWB)

The Anderton Lift, the fabulous mechanism which drops or raises whole boats, some fifty feet, between the Trent and Mersey Canal and the Weaver River.
NEW 100-TON MARINE RAILWAY ON THE TRENT-SEVERN WATERWAY

A fixed-keel sailboat coming up on the carriage.

During the summer of 1978 a new marine railway went into operation on the Trent Canal at Big Chute near Georgian Bay. After years of studies, discussions, public participation and political considerations, the Engineers finally came up with a solution to the somewhat unique boat transfer problems that prevail at this site.

The problems were:
1. To reduce the traffic bottleneck. The old railway was too small to cope with the peak summer traffic.
2. To allow the transfer of larger boats that could not be handled by the old system.
3. To develop a transfer system that, like the old one, would not allow migration of larvae into the Severn water shed.
4. To ensure that such a system would compare favourably in cost with a standard system of comparable capacity.

The new and the old marine railway by-pass Big Chute which drops 88 ft. in approximately 600 ft. Both railways can operate at the same time, if necessary and lengthy delays due to heavy traffic volume have been eliminated.

The maximum size boat which can be carried on the new marine railway is given below. Figures for the old marine railway are given in brackets.

<table>
<thead>
<tr>
<th>Displacement</th>
<th>100 tons (20 tons)</th>
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<tbody>
<tr>
<td>Length</td>
<td>100 ft. (50 ft.)</td>
</tr>
<tr>
<td>Draft</td>
<td>6 ft. (4 ft.)</td>
</tr>
<tr>
<td>Beam</td>
<td>24 ft. (23.5 ft.)</td>
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The boats are transported on a carriage 80 ft. long and taller than a 3-story building. The weight of the carriage is approximately 110 tons. One of the most impressive parts of this whole installation is probably the local supporting system on the carriage. It consists of a series of slings arranged in such a way as to accommodate all boats sizes up to the maximum of 100 tons and with practically any conceivable type of hull. These slings are manipulated by a total of 40 hydraulic cylinders operated from one power source. It is amazing how fast the operators can secure the position of ½ a dozen 20-30 ft. boats on the carriage and complete the transfer. Small boats can sit right on the carriage floor. Small crushers are deposited on the tripod slings. Larger cruisers are supported in the double sling system and the largest ones are placed in the middle of the carriage and supported laterally by the double slings arranged in a single sling cradle. Most boats are partially supported on the floor. A sling system of this type can accommodate the various hull profiles of flat bottomed house-boats, cruisers, stern drivers, outboard and sailing crafts with fixed keels.

The slings are made from nylon over steel wire rope thus combining the strength of steel with the protective covering of nylon.

Underwater viewing chambers on the side of the carriage allow the operators to check and adjust the position of the slings and floor supports under the boat to avoid damage to equipment or devices on the underside of the hull.

The carriage rolls on a double track system which slopes 2° from the summit to the water at both ends. In spite of this slope the carriage is held in an almost level attitude throughout the full length of the travel. This is made possible by the so-called "car-train" arrangement. The support of the wheels of the carriage do not run on the same rails as the track wheels, thus necessitating the use of 4 parallel tracks, which are arranged in pairs at different levels, depending on location. The carriage could have been kept perfectly level, at all positions, but a 5% banking angle has been introduced at each end of the tracks to facilitate handling of the boats.

The carriage is pulled by four 1½ ton hydraulic steel wire ropes powered by four 100 ton power, 240 volt direct current electric winches. These form two drive groups in a co-ordinated system to vary the tension in the four cables so the carriage is pulled smoothly over the summit of the 80° foot traverse. Controls that regulate and monitor the speed and torque applied to all winches are programmed.

The operation is also programmed to automatically accelerate, decelerate, perform the summit transfer and stop the carriage at specified positions. Carriage speed is limited to max 200 feet per minute.

The operator can control the carriage starting, stopping and speed up to the speeds programmed, with a master control switch located on the upper deck of the carriage.

Power is supplied to the carriage via a cable reel system with an open cable trench located alongside the track. The motor-driven reels are located on the side of the carriage.

The auxiliary control station, winches, regulators, tosho-generators, program switch, control panels and other integrated devices are located in a control building. An observation deck for public use is also included in the building.

Docking facilities have been constructed at the upstream and downstream entrances of the marine railway.

The earlier marine railway, at the site, is being maintained in operating condition [Contributed by W.E. Keenan, Ch.e., Restoration Services, Engineering and Architectural Branch, Indian and Northern Affairs, Ottawa, Ontario].

F. C. SOULE

From ACS Life Member William Tumbridge we have learned of the untimely passing of E. "Chen" Soule of Fayetteville, N.Y. "Chen" was an avid canal buff and President of the Canal Society of New York State. Memorial services were held February 7, 1980. Our heartfelt sympathy is extended to his wife and family.

AMERICAN CANALS, NO. 32 - February 1960
The Love Canal

by Ronald Findlay

(In the November 1978 issue of American Canals we requested information on the Love Canal at Niagara Falls, New York, the chemical pollution of which caused the evacuation of over two hundred families. Several members sent newspaper clippings regarding the emergency. The following is an abridged article on the history of the Love Canal. Ed.)

Niagara Falls, New York, widely acclaimed as the "Power City" has long been known for its beautiful natural wonder, the Falls of Niagara. But recently it acquired a more dubious reputation as the place where man's environmental mistakes have come to haunt him. Niagara Falls is the site of the infamous Love Canal, where toxic materials have escaped in recent years.

Last summer, when the story of what was happening here became national news, a visiting reporter asked one of the State officials why it was called the Love Canal. The official replied that before it was developed the valley was much used as a lover's lane by teenagers to park and park, hence the name Love Canal. A good story, but not so.

The waters of the Upper Great Lakes, on its way to the sea, passes over the Falls of the Niagara. There are higher and wider falls, but none have the volume of water that flows over Niagara's brink. In a 5 to 15 second interval, millions of gallons of water pass over the falls, and the power in all this water has been exploited for over 200 years, but only recently mastered with the advent of electricity. Love Canal was but one of many attempts to harness the Niagara.

The first power canal dug here in 1757 by the French on the bank of the American Rapids just below the cataracts for a sawmill destroyed during the French and Indian War in 1763. Later rebuilt with the raceway extended for other mills. After the War of 1812, a new canal, the "High Bank" was built to extend the exploitation of water power. Enlargements were made in 1826 and 1845.

In 1853, work began on the "Hydraulic Canal," which ran from a point on the Upper River about 1½ miles above the cataracts and the "High Bank" on the Niagara Gorge-Lower River. After numerous bankruptcies and changes of ownership, the canal was completed in 1860. The Gow😄skill borough marked the first site to be built using a twenty-five foot fall of water to power its turbines. No turbine at the time having yet been built to withstand the available 200 foot fall at the High Bank.

In 1884 the state created the New York State Park Reserve to preserve the beauty of the Falls, turning the island above the cataracts and the land bordering the Upper Rapids into a public park. The mills located there were razed; as there was no room to relocate at the High Bank, many industries and people left Niagara Falls.

Folks began to kick around ideas to harness the power of the river again at some new site, but only two made the test taking stage to the begining of construction. The first was proposed by Thomas Evershed, State Engineer, Westram Section, Erie Canal. He proposed a tunnel some 2½ miles long to be built under the city as a rail race for mills on the Upper River above the park reservation. Work began on the project c.1880, but much of it was allowed during construction, the plan to provide hydraulic power to individual mills being dropped in favor of building on the electric generating plant. And so the first tentative step toward harnessing the power of the river was taken. It was built mainly to provide electric lighting. But what with the development of the electric industry, no longer had to locate on the old millstream. (See Industrial Archaeology by Theodore Anton Sande, pp. 54-55.)

Winter Meeting of the PCS Board

The Board of Directors of the Pennsylvania Canal Society are a dedicated group who usually turn out, on nearly a 100% basis, no matter what time of year a meeting is called. The group of PCS Directors shown here met, with only one member missing, on November 11th, 1978 at the Etiwanda Restaurant in Carlisle, Pa. Around the table sitting at the left are: Karl Yusung, Zip Zimmerman, Steve Humphrey, Earl Heydinger (Treasurer), John Miller (President), Denver Watson (Bulletin Editor), John Frey, Charles Derr (Vice President), and Hayward Macdon. Backs to camera, left to right: Bill Yoder (Curator), Axel Peterson and Bob Mayo. Present, but not shown in the photo, were: George Johnson, Dave Wright and Bill Shant (who took the picture). Surely - a quorum! Many items of business were discussed, including Spring and Fall Field Trips for the next several years.

The other plan was made and promoted by William T. Love. He planned a canal that would run from 7½ miles to the north from a selection on the Upper Niagara River near the Village of LaSalle some 67½ miles above the Falls, going over the Niagara Escarpment in the Town of Lewiston. There at the northern end and below the escarpment Love planned his "Upland" or "Model City." The latter name was the most commonly used and is still in use. At the Post Office there is designated Model City.

Apparantly the plan was to build a power house on the escarpment using the sixty-five foot fall of water supplied by the water for electric lighting and also to distribute power by means of an endless wire rope on towers (much like a ski tow) to industries which would locate there. This endless wire rope would have entered the upper stories of industrial buildings, wrapping around a great wheel, the motion of the moving wire rope would cause the wheel to turn, and the wheel would then drive the transmission system of shafts, pulleys, and belts.

The canal was also promoted to possible investors as a navigation canal between Lakes Erie and Ontario. Although the proposed canal would have been of a depth equal to the 1867 enlargement of the Welland Canal, its eighty-foot width was but one-half of that of the Welland. Work was started and work began in 1862 at the canal's north end on the Tucarona Indian Reservation and at the intake at LaSalle on the Upper River. When work came to a halt with the Panic of 1862, only a couple of hundred feet had been excavated on the norther end and about a mile at LaSalle. The extensive land holdings of the company went on the block for back taxes in 1862 and largely remained vacant.

Love's Model City later became the United States Government's Lake Ontario Ordnance Works where waste from refining African uranium ore for the Manhattan Project (development of the atomic bomb) was buried, chemical wastes from the Hooker Chemical Company (and others), and sewage disposal by the city itself. Remedial work to date has included the installation of a drain tile system and a new clay cap, but not before 235 homes were contaminated in varying degrees by some 200 different chemicals. (Ronald Findlay, ACS, 230 Sixty-Sixth Street, Niagara Falls, N.Y. 14304)

My First I.W.A. Rally

(Concluded from Page Three)

We picked up our pint at the bar and upon entering the Nattive spirit room we were sure no another person could squeeze in, but in true Native gallantry, room was made for six of us. This evening the singing Natives were at their best with their old songs, fun songs, canoe songs and historical oations such as "Harold at the Battle of Hastings." Bill Banks introduced Dolly and me as American A.C.S. members. Immediately the Natives honored us with their rendition of the "Star Spangled Banner".

Perhaps the highlight of our visit was the tour that Bill Banks took us over the Anderdon Lift lock that joins the Trent and Mersey Canal to the River Weaver. The Anderdon Lift is a wonderful double elevator built in 1975 to take boats from the Trent and Mersey Canal in a gentle 50'-4" drop into the Weaver River in about 15 minutes. Each lock is 110 feet long and 12' wide with a carrying capacity of 100 x 70' or narrow boats. The total weight of each tank with a full load of water floating two boats is 260 tons. Each tank is controlled by steel cables over pulleys and counterweights with an electric drive. This mechanical design supplanted the hydraulic design, as engineered by Leader Williams, a Trent and Mersey Canal Engineer. The hydraulic equipment was built in 1882. The Roy Cornwall family, of Leicester, invited Dolly and me on a tour of the now 60-foot, narrow boat "Woodlark" for the exciting ride down to the River Weaver below. If you wish to see a similar elevator but of hydraulic design, you must travel to Peterborough, Ontario, Canada on the Trent-Shevrn Waterway, built in 1904. (See American Canals #1 page seven)

Sunday was the last day of the Rally Church was scheduled in the morning and afterward the boating activities started again. The excursion boats were still running at capacity and there was a parade of veteran historical boats, with lots of applause from the audience as they were recognized. There was even a stringy sailboat demonstration by the younger set. After lunch many of us gathered in the main tent for the awards event. At this time the services of the officers were recognized, as were other valued I.W.A. workers who had done their share to keep this wonderful Rally together.

Page Five

AMERICAN CANALS, NO. 92 - February 1980
SANDY & BEAVER RESTORATION

"Jim Crowe's Army" at work on the Sandy and Beaver Canal in Ohio. They are cleaning up Lock Number 28 on the Western Division. Dam Number Six may be seen at the right.

by Terry K. Woods

In a modern day Phoenix, a two-mile stretch of the Sand & Beaver Canal between Waynesburg and Magnolia, Ohio has once again risen from its weed-grown, dry bed. When this privately financed canal connecting Ohio and Pennsylvania was abandoned in the 1850's, a few small sections were obtained from the company and maintained for milking purposes. At least three of these fasten well into the twentieth century.

A section of a little over a mile long from Steiner Creek to the Arles Mill in Sandyville was abandoned in 1856 when the Muskingum Division Flood Control Project usurped the blood plain of the Big Sandy as far east as Magnolia. About 500 miles above Malvern, Dam #4 fed water through Lock #19 as a tie to the Power House at the Arles Mill until the 1940's. The relocation of State Route #42 in the 1960's erased all trace of the canal from the basin just east of town past the mill site.

Elson's Mill in Magnolia maintained the possibility of running on water power into the late 1960's. A two-mile stretch of the canal from Dam #6 and Lock #24 was kept in repair just for that purpose. As the years went by, however, steam-powered mill machinery (and later electric) made water power more of a luxury than a needed standby service. Accordingly, maintenance of that canal section became futile.

Finally, in December of 1968, the Big Sandy, a creek full of weeds, creeping south toward the canal tore out a section of equipment and materials in Magnolia. The bank a half a mile east of Magnolia Basin and the canal went dry. Elson's Mill didn't miss the canal much, but the people of Magnolia and Waynesburg did. The canal had always been there. Generations had fished it in summer, skated in winter, and just planned its year round. Somebody, everybody thought, should do something about it.

In late July, 1971, everybody at least, everybody in the Sandy Valley Jaycees did do something. Scores of people turned out to fix the breach, near three years of brush out of the canal bed and dozens of years of earth from the towpath. Finally, at 6:00 A.M. on November 20, 1971, water was let into the Sandy & Beaver Canal at Lock #24 and began its way toward the towpath, literally toward the Mill.

The 126-year-old lock, inner planking long since rotted away, leaked badly, the new earth at several spots in the repaired bed also leaked. And much more seriously, a leak appeared in the towpath bank just above the highway bridge at Magnolia. But the canal did fill, and it remained filled.

1971 Jaycee Project carried a two-fold objective. One, that ordinary people, working together, can accomplish things that may never get done if everyone were to wait for "someone" to do it. Object lesson number two was perhaps even more important — that when such a project is "complete" it has just begun. Without an ongoing program, with proper maintenance, what was accomplished at so great an expense of time and effort would be only a fleeting thing. So it was with this two-mile canal stretch.

Sometime during July, 1977, nearly six years after that small leak was first noticed near the highway bridge, that section became so weakened that it tore out, draining the canal again. This last section of the Sandy & Beaver was finished — this time for good. Everybody said so. Well, maybe nobody. Jim Crowe, a life-long Magnolia resident thought that something could be done about it. Jim was a busy man. Busy helping to raise a family of eight children; busy being Superintendent at Whirlpool-Greer in Waynesburg, busy helping out the Magnolia Volunteer Fire Department!

One day early in April of 1978, Jim and a couple other residents were helping some of the framers put up a filling from a small tributary of the Big Sandy south-east of town, someone, no one can remember just who, remarked that "It sure would be nice if the canal still ran through town." The need for a cleaner water supply had been紧 without end from that winter in February when a near disastrous fire had threatened to burn down the downtown area.

The incentive was there. April 14, 1979 saw Jim Crowe and three or four volunteers leading a gang of young men and boys into the canal bed. Through the next half a year the group that had swept in as an army of 75 (50 of them under 22) attacked that two miles of breached towpath, leaving bank holes and muddy beds.

The Sandy & Beaver had been a private canal and the right of way reverted back to the original landowners when the Canal Company failed. Mack Elson, a direct descendent of founder Richard Elson owned 141 acres around the mill and 11 acres around Dam #6 and Lock #24, but he only held water rights to the canal in between.

The first order of business, then, was to contact each of the more than one dozen landowners and get their permission to rewater the canal. This seemingly insurmountable hurdle was "no real problem": "I've known these people all my life," said the 53 year old Mr. Crowe, "and we all wanted the canal!"

A phone call to the company, the telephone company and a couple of Oil Well Driller's had needed to cross the canal. During this most recent "dry spell" it had become convenient for several of these to build or regain crossings across the canal bed. These people had to be contacted and agree to reopen their crossings and "go around" in the future. Without exception, each company contacted hedged their obstruction from the bed and in more than one case our patience played longer than was necessary just to "lord a hand" with the general restoration.

Local business firms, The Bank Magnolia, reactivated the old 1971 Canal Bo. Account and "sweetened" it a bit. The Ohio Bell Telephone Company quickly relocated one of their poles to allow their equipment to get into where it was needed. As already mentioned, the Columbus Transmission Company, Belden & Belden and D & S quickly replaced their crossings and lent equipment. The quantities and types of loaned equipment from various sources was staggering. Another of company donated a small boat and Elson's Mills the grass seed to grow up and hold the result born bums. While Crowe donated clay, equipment and a bit of Jim's time. Several local citizens contributed oats to Jim's weekend army and one of them is seriously considering changing the name of his canal and Magnolia Steel House to "The Sandy & Beaver Tavern!"

Not everyone thought Jim's army could accomplish their objectives. Many thought, and some said, "That old canal will never hold water," its "best to bulldoze it over and plant crops." To inquire that the people are wrong, the Project 79 Canal Group, as they were then being called, planned for more than a few publicity stunts in the towpath, brushing the bed and adding the water.

Much of the branch bank leaked, it had "always" leaked. So it was rebuilt from the basin east of Magnolia. About 700' of locked in the old bed. An electric pump was placed on the bank. An electric pump was placed on the bank. The new and old bed was built up. Compacting and redesigning completed this work.

For two months truck loads of rubbish were removed from the Lock #29 & #29 areas adjacent to the Village Park. The cut brush from the towpath and canal bed were burned on the open lot behind the park. For the beams and rails that had been "reclaimed" the bank was built up. Compacting and redesigning completed this work.

The job was immense, difficult and muddy. Every piece of equipment nearly buried itself more than once. It wasn't able to extricate itself, a wrecker of 'Big Cat' type went off on a "loan" from an interested local construction firm or till rig and quickly get things moving again.

Crowe and his helpers went for themselves of Christmas to complete the first portion of their project; they met it. Water entered the canal from #6 and #100 P.M. on Sunday, December 23 and reached Elson's Mill some 22 hours later on Christmas Eve, 1979.

But, as Jim says, "It was the first act."

We still have ten or so more to go. There are a few leaks. These have been located and temporary repairs made. Permanent repairs will be made this spring, which heavy equipment can get back in along the creek and regular maintenance of what exists will be performed.

Back in the 1930's, the Flood Control Project placed a dike around Magnolia. The canal enters through four iron gates. But when the creek was in peak flow, the water would back up into it from an Army Corps of Engineers' dike just south of the southern edge of town. Some sort of operating procedure still has to be negotiated with the Army Engineers and allow an even flow of water in the canal.

That stretch of canal through the Village Park will be redone, resodded and beautifully in the spring. Its presence definite that Magnolia will host an OLD CANAL DAYS event in May, 1980. This is high, canals be of one duration and quality refreshments, hay rides, walks along the towpath and several events only now in the plant stages.

Sitting down with Jim Crowe, Dan & John

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Page Six
The conquering of the isthmus of Central America in the name of commerce posed an irresistible challenge to 16th-century Europe. Virtually from the moment the geography of the narrow isthmus was recognized, ships and men who knew no bounds, under the auspices of the Spanish, began to look for a passage across it. The Spanish soon afterward built a route through the Panamanian jungles, wide enough for two large vessels. However, it was not until 1850 that the Chagres River was opened to commercial traffic, and it was not until 1870 that a steam-powered vessel could make the passage from the Caribbean to the Pacific.

In this 1974 photo, the right chamber of Miraflores Locks has been devester for overhaul. (The Military Engineer.)

By the late 19th century, when the capacity of engineers to build a transcontinental canal caught up with the exuberant vision of the financiers and merchants who recognized the immense value of such a route for military purposes and world trade, and who believed that it could be done, the idea of a canal across Central America became the focus of the world.

By the time of the gold rush to California in 1849, it was no longer a question of whether a canal could be built, but only where it should be located. The first complete systematic survey of the isthmus was made by the United States government, followed by the French in 1850 and 1852. The French, who had the financial resources to undertake the project, decided on the Panama route, which was closer to the Atlantic than the Caribbean, and which avoided the difficulties of the Chagres River. The Americans, who were interested in a canal to connect the Atlantic and Pacific, settled on the Gatun route, which was closer to the Caribbean.

The most fundamental question, of course, involved not only where a canal was to be built, but what kind of canal it was to be. In the 1880s, the renowned engineer, James Eads, had promoted a transcontinental ship-railway project that would have transported ships across the isthmus on a gigantic scale. This project, however, was never realized, and the Panama Canal was built instead.

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Page Seven
The partially demolished 96’ foot by 21.6’ foot hull of “J.B. Wright” on Racoon Creek on December 8, 1975. (Bill McKelvey.)

Sandy & Beaver Restoration
(Concluded from Page Six)

Joseph, Bill Woodward, Art Shilling, Tom & Al Witts, Tom Trushel & Joe Owens the other day in the "Sandy & Beaver Tavern", we get to discussing some of the future plans in this project. Some sort of formal organization is no doubt a must, with at least consideration being given to placing this stretch of the Sandy & Beaver on the National Register. Dragline dredging of the bed will begin in the spring. A lot of work has to be done on the towpath to stabilize it and lock #24 and #25 need some additional stonework and at least on inner planting—somewhat.

Then the workers of Magnoli’s Project 79 will get a far away look in their eyes as someone mentions the possibility of a full-size canal boat replica. That seems to be in the distant future. That is until one remembers what the portion of the Sandy & Beaver was like a short nine months ago and the tremendous effort that took. Don't tell the people of the Sandy Valley that something can’t be done. I, for one, am looking forward to that canal boat ride. (Terry K. Woods is a director of the American Canal Society.)

OVERSEAS MAILING

As an experiment, this issue of AMERICAN CANALS is being sent air-mail to our overseas members. Due to the heavy mailing expense involved, any members wishing to continue this service will be asked for an extra $4 (U.S.) dues per annum.

From short-end model of a Pennsylvania Canal Freighter in the Lycoming County Historical Society Museum. Richard Mix who supplied this photo, tells us that the model was built by Elmer Ebert and Howard Ebert, and was donated to the museum by Howard C. Ebert of rallies, Pa.

The partially demolished 96’ foot by 21.6’ foot hull of “J.B. Wright” on Racoon Creek on December 8, 1975. (Bill McKelvey.)

The partially demolished 96’ foot by 21.6’ foot hull of “J.B. Wright” on Racoon Creek on December 8, 1975. (Bill McKelvey.)

Nineteen seventy-nine was the final year for the last two freight canals which had survived from New Jersey’s canal era. Early in 1979 Captain John Wright gave M.V. J.B. WRIGHT to Henry (Pete) Powers for disposal. Pete, who worked as a crew member on the vessel from 1950 to 1962, pulled the engine out and shipped it south for use in South America.

In April J.B. (Joe) Brennan WRIGHT was towed up Racoon Creek from Bridgeport to the 1295 bridge by the tug SHELLY KEANE. From that point three outboard powered rowboats were used to tow J.B.W. to an isolated location to the rear of the Mattlink truck terminal near Swedesboro where the vessel was grounded and is being dismantled. Powers has surveyed all forms worthy of preservation, including the cherry wood which originally came from a Chesapeake and Delaware canal barge. Several items were given to Bill McKelvey who will display them at the museum of the Canal Society of New Jersey at Waterford when it opens on April 8th, 1980.

Sistership M.V. WRIGHT BROS. sold to a new owner in Panama in 1975, sank in Guatemala in the summer of 1973. Both vessels were built of wood at the Paul Boatyard on Manlius Creek in Paulsboro, N.J. The J.B. WRIGHT was launched in 1919 and WRIGHT BROS. in 1923. Each hauling cargoes east and west from New York until the Delaware and Raritan canal closed in 1932. They also plied the old Chesapeake and Delaware lock canal until 1927 when it was converted to a sea level waterway. The pair of Wright vessels continued to use the new Chesapeake and Delaware canal until 1958 when they were laid up on Racoon Creek for lack of work. Four and a half pages of illustrations of those two canal veterans appear in CHAMPLAIN TO CHEAPEAKE: A CANAL ERA PICTORIAL CRUISE by McKelvey.

PACKET BOAT COMPLETES THIRD SEASON

The 1803 Middlesex Canal packet boat "Colonel Baldwin" completed its third season of operation. The home-drawn packet carried over 1,000 visitors between July 1 and September 2 along a restored stretch of the historic waterway, from the Baldwin Mansion (Rts 38 and 126) in Woburn to a point just below Nichols Bridge in North Woburn and return, for a round trip distance of over one mile.

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On June 22, 1979 the Delaware Division Canal was officially designated as a "National Historic Landmark" and a plaque erected and dedicated. Ceremonies were held at the Canal Museum of the Hugh Moore Park, Easton, Pa. C. P. Bill Yoder was "Emcee". Speakers included John P. Miller, President of the Delaware Canal Society and the Hon. Clifford L. Jones, Secretary of the Pennsylvania Department of Environmental Resources.

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HOLIDAY 1980 SPEND A WEEK OR LONGER EXPLAING THE INLAND WATERWAYS OF ENGLAND AND WALES. OUR AGENCY OFFERS YOU OVER 500 TRADITIONALLY STYLED NARROW-BOATS FROM BASES ALL OVER THE CANAL AND RIVER SYSTEM. CHOOSE BETWEEN SELF-CRUISE BOATS ACCOMMODATING 2 TO 10 PERSONS OR HOTEL BOATS WITH SKIPPERS AND CREW. MODERN CONVENIENCES ON ALL BOATS INCLUDE HOT AND COLD RUNNING WATER, HEATING, FLUSH TOILET, FULL SIZE COOKER WITH OVEN, SHOWER, FULL LENGTH BERTHS, TILLER STEERING AND ECONOMICAL DIESEL ENGINES. COLOUR BROCHURE AND FURTHER DETAILS FROM ANGLO CONTINENTAL BOOKING AGENCY: 43 Robin Hill, NR Canterbury, Kent, England. Tel: 0227 77 543.

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