President's Message

For the first time in the history of the galaxy, the Inland Waterways Association, the Canadian Canal Society, and the American Canal Society met in joint session, and it was all part of the IWA’s three-week long tour of the American Canals.

The meeting was a great success, thanks to hard work by the tour organizers Ron Oakley (IWA), meeting organizers John Sunnion and Lou Cahill (CCS) and registrant Henry Baxter (ACS). There were enough of us to completely fill a meeting room in Buffalo’s Radisson Hotel, and the weather co-operated by raining that day when the group was inside instead of outside touring a canal. Our ACS Sales Chairman Keith Kroon was there with a display of American canal publications and even some canalboat wearthenaves. A high point of the meeting was the discovery by George Humen, past president of CCS, that all the cans and bottles of Scotch pop at the drinks table were marked "CANNED BY CLINTON'S DITCH COOPERATIVE COMPANY, INC., CICERO, N.Y.".

In the morning after doughnuts we were treated to a series of slide presentations by IWA members, including a European canal cruise by David Stevenson, National Chairman of the IWA; and a report on the Eblanski Canal by Ron Oakley.

After an impressive buffet lunch the afternoon was dedicated to a symposium on the benefits of canal restoration. Roger Quire, our society's Director for the U.K., spoke on "The Benefits of Canal Restoration to Bankside Communities," and Professor John N. Jackson of the CCS presented a scholarly account on "The Welland Canals as a Catalyst for Urban-Industrial Development."

The ACS contribution was a discussion of the ins and outs of restoration of American canals to operating condition. David Ross, our Navigable Canals Committee Chairman (who gets the prize for being the only one to bring his own boat to the meeting) presented "Some Heretical Questions about Restoration and Navigable Canals"; and Bov Morant, our international canal boater and outspoken restoration advocate, proved "Why we must Restore our Historic Canals." (Bov and his wife get the prize for Americans coming the greatest distance—all the way from California.)

The ACS presentations concluded with accounts of two specific examples of American canal restoration problems. Terry Woods, ACS Director and Chairman of our Canal Engineering Design Committee, presented "The Case for the Muskingum (which has been restored and is navigable — so far); and Frederika Kleta, ACS Director and founder of the Portage Canal Society, presented "The Case for the Portage Canal (which should be navigable but isn’t — yet).

Those who didn’t come to the meeting will be able to read the symposium presentations, thanks (Concluded on Page Two)
President's Message

(Concluded from Page One)

to Ron Oakley who will be publishing the proceedings as a lasting benefit of the meeting.

The meeting ended with a sumptuous banquet during which we gave a toast "to canals" and tried to

find our way home. Unfortunately, we were miles apart, and the IWA group prepared for the final day of their American experience — a visit to Niagara Falls, a tour of the Welland Canals, and a long voyage along the entire length of the Erie Barge Canal, the modern descendent of Clinton's Ditch.

But the story does not quite end there. Three of the IWA members, Roger Squires and Ron and Joan Oakley, were eager to see some of the Ohio Canals, which had to be left out of the IWA tour. So instead of looking at Niagara Falls on Sunday they hopped over to Ohio for the day on a whirlwind tour. You can read Carl Ehmann's article about it in the Canal Society of Ohio's July newsletter. It reminds me of the St. Clair's Ewell's experiences with mad Englishmen and the old adage that in

America, a hundred years is a long time; in Europe, a hundred miles is a long distance! If you aren't already a member of the IWA, I recommend joining. If only to be inspired by the enthusiasm and scope of canal activity which goes on all over there, and to give you material to show your local planners and politicians. Overseas annual membership is £24 to the Inland Waterways Association, 114 Regent's Park Road, London NW 1 8JR, England.

Next, it is with regret that I must announce that David Ross has had to retire from the editorship of America's Canals. He did a marvelous job and introduced some valuable changes. He has not retired from the canal society, however, or from his canal work. You can see his articles on navigable historic waterways in America's Canals, in Heartland Boating magazine and in Quinty's Cruising Guide. Don't forget that Dr. Ross is Chairman of the ACS Navigable Canals Committee and is eager to work with any members who would like to participate in solving the problems and prospects of navigable historic canals and waterways.

A major goal is to identify those historic canals which are navigable; those which are in danger of being closed down; and those which should be made navigable again. If you are concerned about such a waterway, join the committee and work with them to see what can be done about it.

Last but not least I am pleased to announce that we now have two new ACS Directors. Arden Phair (who is the Director of the St. Catharines Museum on the Welland Canal) is our new Canadian Director. He was enthusiastically recommended by Lou Cahill, who after 20 years has decided to retire from that position. Lou has worked long and hard for both the American and the Canadian societies and has been a major moving force behind both. We strongly recommend a visit to Mr. Phair's new museum at Welland Canal Lock 3, where you will find, among other things, a historic plaque dedicated by ACS and CCC during our joint meeting in 1988.

David Johnson is our other new Director, representing the Chesapeake and Ohio Canal Association, of which he is current President. He is very active in canal work and was the chief organizer of this year's International Conference on Historic Canals, which will be held at Harper's Ferry on the C&C, (Oct. 18-22).

There will be an informal get-together of ACS officers, members and interested persons who attend the Annual International Conference. This is not an official board meeting so do not feel obligated to attend. However, these annual meetings offer an ideal occasion to get together every year to discuss society affairs.

We have arranged with the conference organizers for ACS to meet after dinner at 7:30 p.m. on Sunday evening, October 18, at the Cliffside Inn. This will give us the rest of the evening for socializing, the weather permitting. We will have the rest of the conference to figure things out on any good ideas.

Bill Trout

American Canal Society
President: Dr. William E. Trout III, 35 Towana Rd., Richmond, VA 23226, 804-288-1334.
Vice Presidents: William E. Gerber, 16 Princess Ave., N. Chelmsford, MA 01863; 617-251-4971.
Secretary/Treasurer: Charles W. Derr, 117 Main St., Fairmount, PA 18017, 215-691-0956.
Directors: David G. Barber, 16 Ballou Rd., Hopedale, MA 01747, Sidney W. Beydoun, Star Rd., Peru, NY 12972.
Thomas F. Hahn, Box 310, Shepherdstown, WV 25443.
Dr. Brian M. Kutner, 211 Buck St., Box 584, Millville, NJ 08332.
John M. Lamb, 1109 Garfield St., Lockport, IL 60441.
Ardon Phair, 19 Sarah Court, St. Catharines, Ont. L2T-3R6, Canada.
Arthur W. Sweeton, III, 6 Humphrey Rd., Canton Center, CT 06019.
Terry K. Woods, 6939 Eastarn Ct., Canton, OH 44708.

Committees:
A.C.S. Sales, Keith W. Kroon, chrm., 2240 Ridgeway Ave., Rochester, NY 14626.
Canal Archaeology, Mark Newell, chrm., USC-IAA, 1321 Pendleton St., Columbia, SC 29203.
Canal Operations and Maintenance, Charles W. Derr, chrm.,
American Canals Survey, William Dzombak, chrm., 621 Spring St., Latrobe, PA 15650.
Navigable Canals, David F. Ross, chrm., Rt. 1, Box 87T, Savannah, TN 38372.
Other Publications: The Best from American Canals.
William H. Shank, editor and publisher.
American Canal Guides, William E. Trout III, editor and publisher.

American Canals, No. 82 - August 1992
BRITISH I.W.A. VISITS THE U.S.A.

By Roger W. Squires

Britain’s IWA International became of age when it successfully organised its first International Conference in Buffalo, New York State, in conjunction with the A.C.S. on 20th June 1992. The theme was the ‘Multifunctional Use of Canals’. Speakers were drawn from the IWA, various American Canal Societies and the Canadian Canal Society. David Stevenson, the IWA National Chairman, joined Bill Trout for the opening address. A second day, run by the Canadian Canal Society, comprised a guided tour of the Welland Canals and included a trip through one of its great ship locks. In all the event was a great success and stimulated those present to ask for a further conference in another year or so.

Some 28 IWA members from Britain attended the Conference, as it formed part of a three-week tour of the Canals of the Eastern United States organised by the IWA International Committee Chairman Ron Oakley. Various American Groups were able to use the occasion of the tour to repay past hospitality from their earlier visits to the UK and, as readers will realise, the bonds of international friendship were firmly established whilst at the same time offering U.S.A. canals activists an ideal opportunity to gain maximum publicity for their local canals.

The I.W.A. tour started in Boston with a visit to an early waterpowered iron works and then a dinner in the Middlesex Canal Engineer’s House hosted by the Middlesex Canal Association. The overnight hotel in Lowell offered a pair of locks under restoration adjacent to the hotel grounds and that set the scene for the rest of the second day, which was spent touring the town of Lowell and seeing how water power and canals had enabled it to become the first mill centre of America. Whilst the mills no longer operate commercially, it was a welcome sight to see a floor of 100 looms recreated in a restored mill building as part of the revival of the old town as a State Historic Park.

The group was able to see a second State Park when they visited the Blackstone Canal the following day. In this case five local communities have banded together to stimulate the development of a linear park centered on the old and now derelict navigation. A subsequent visit to a major wooden aqueduct on the Windsor Locks Canal and the sight of the Hudson River offered a vision of what was to follow.

The rail buffs of the group had a field day at Kingston (N.Y.) where they had a vintage diesel railcar all to themselves on a local restored line. Canal buffs did not miss out as later in the day they were able to explore one of the few suspension aqueducts ever built. It once formed part of the Delaware & Hudson Canal but has since been converted into a road bridge.

The railway centre at Scranton (PA), with its recently rebuilt roundhouse and extensive displays of historic locos, provided a chance for the group to ride on the Lackawaxen Railroad before heading south to the canal town at Easton, Pa. Here the group visited the Hugh Moore Park Canal Centre to see a slide presentation on the PA canals by Bill Shank and to learn about the three major local canals before being given a mule-drawn boat ride along the Lehigh Canal. The highlight of the trip was the first hand experience of seeing the ‘drop gate’ operate on the restored lock.

The New Jersey Canal Society provided the group with a full day exploring the remains of their key canals. Sadly few relics of the grand inclines of the Morris Canal are preserved today but we heard of plans to restore the incline at Waterloo Village. One of the highlights was a BBQ at Jim Lee’s where the turbine chamber of the old incline has been excavated and partially restored. The group then went on to see the Delaware & Raritan Canal, with its dropped bridges, and the Feeder at Prallsville, before returning to Easton along the...

(Continued on Page Four)
The new Visitors Center at the famous Horse Shoe Curve, near Altoona, Pa. The Inclined Plane shown at the left and the walkway to the right take visitors to the upper level where freight and passenger trains make a frequent appearance.
The completely new Allegheny Portage Railroad Visitor's Center at Cresson, Pa. Many canal artifacts are housed in this building. A short, down-hill walk takes visitors to the Lemon House and re-built Plane Number Six.

Looking down the rebuilt Plane Number Six on the Allegheny Portage Railroad at Cresson. Strap-rails were mounted on heavy wooden timbers with wooden ties between the up-bound and down-bound tracks. In the far distance can be seen the famous Skew-Arch Bridge.

through the Federal Lock. It was nice to see one of the hire boats moored alongside with people enjoying themselves on this under-used waterway.

From Troy we headed back on the Turnpike to Boston to see the restored Market area and the Harbour. Also the new locks on the Charles River and the trip boats by the Science Museum. The new and old transit systems were explored as was the local railway to Salem. Then all too soon it was back to the airport and across the Atlantic.

What did the IWA visitors learn? Firstly, the small bands of local enthusiasts in the USA all do their own thing. The distances prevent regular easy contact and sharing of ideas. Secondly, much of the early canal network in the USA has been 'trashed'. Roads now take their route. Historic marker boards often are all that remain. Thirdly, even where there is potential to restore viable

sit to Troy, N.Y. The size of the lake through which the route passed next was quite daunting. Especially when the Skipper told tales of the way the weather can 'out up rough'. Still we all survived and many had sunburn to prove it. The route went on past the canal town of Rome, with its restored canal-side village, before joining the Mohawk River Valley at Herkimer. Here a local 'diamond' seller joined us for a while.

The transit down the Mohawk Section is quite unique in that the navigation dams are all demountable and can be raised above the flood level to allow the winter ice to move away unhindered. The former carpet mill town of Amsterdam provided the second overnight stop before the final leg to the Hudson Valley. But first we had to transit the famous Waterford Flight of five locks that lowered the canal down the valley side. At the top of the flight we were greeted by Kilted Pipers and all the town dignitaries. Press photos, interviews and then on down the locks. What splendid end to a fantastic cruise. Our berth that night was on the Hudson River at Troy which was reached by passing lengths for powered boats, the option is not followed through. There is a real fear that powered craft will wash away the banks. The IWA International Conference went a long way toward opening up ideas about restoration, but generally the locals felt it was not viable. Perhaps they are right? It seemed to the outsider that general public attitudes and perceptions in the USA do not relate easily to the early canals. For the most part the odd relics remain as historic monuments each commemorating the canal of which they were once part. One can only hope that the Erie Canal (New York State Barge Canal) will not go the same way.

At the International Meeting in Buffalo, June 20th, 1992: Bill Trout (seated), President of the American Canal Society and David Stevenson, National Chairman of the Inland Waterways Association, United Kingdom. (Photo, courtesy Roger Squires.)

Panelists at the International Meeting in Buffalo, June 20th, 1992. Left to right: John Jackson, David Roas, Roger Squires, David Stevenson, Terry Woods, Bev Morant and Frederica Kleist. (Photo, courtesy Roger Squires.)
THE REMARKABLE CORINTH CANAL

By Bruce J. Russell - Contributing Editor

Each year over two million Americans travel to Europe and among them are canal and inland waterway enthusiasts. While the English and to a lesser extent the French and German canals are the prime attractions, Europe has other waterways which are also worth visiting. One of these is Greece's CORINTH CANAL now approaching its centennial.

The Isthmus of Corinth is a 4.1 mile wide sliver of land connecting the mainland of Greece with the Peloponnesian Peninsula. On its western side is the Ionian Sea and on its eastern flank is the Aegean. Since antiquity it has served as a natural obstacle preventing the passage of ships from one to the other. Here vessels powered by sails and oarsmen (often slaves) were forced to dock at either side of the isthmus and unload their cargoes which were subsequently hauled overland by animals, slaves, or a combination of the two until the opposite shore was reached. The goods were then reloaded onto other ships and the journey resumed. By 500 BC the Greek city of Korinthos or Corinth had become wealthy by providing men and materials for this essential service. Taxes and other levies were imposed upon ships docking at its port, and during countless wars it was a military objective. Control of Corinth meant control over a substantial share of the ancient world's commerce.

In 136 BC the Romans conquered Greece and turned their engineering skills to the situation at Corinth. The Romans initially constructed a road across the isthmus over which complete ships mounted on giant rollers could be moved. An abundance of slave labor provided sufficient manpower to move the wooden ships from one shore to the other. It must be remembered that the ships of antiquity rarely exceeded 200 feet and were made of wood held together by iron clamps. Thus the process of moving one might easily be accomplished during the course of a day even if the rollers traveled at the rate of only a half or quarter mile per hour.

The Roman emperor Nero in AD 67 made the first serious proposal to excavate a ship canal at Corinth to connect the two seas. History records that a team of engineers studied the situation and actual work commenced. Unfortunately for the Romans the Corinthian isthmus consists of solid rock beneath a light cover of topsoil and the invention of dynamite and blasting powder was over 1500 years in the future. Nevertheless they did succeed in excavating some stone and their cuttings remained visible until modern times. They were ultimately obliterated once work began on the present waterway.

During the 1600s and 1700s as ships became larger the practice of transshipment became impractical and the alternative of sailing an extra 210 miles around the Peloponnesian Peninsula became accepted practice.

Modern Greece evolved in 1825 following independence from the Turkish Ottoman Empire, after a bloody struggle. Once the new nation became organized thoughts turned to internal improvements. Foreign engineers - French, German, and British - were invited to come to Greece and study the problem of breaking through the 4 mile wide Isthmus of Corinth. Most shook their heads and said it could not be done. In their opinion the sheer volume of heavily faulted limestone which had to be removed was prohibitive. By 1870 nitro glycerine, black powder, and dynamite had been invented and all were being employed to construct long railway tunnels beneath such formidable mountain ranges as the Alps in Switzerland. This impossible slowly began to enter the realm of feasibility and the Greeks pressured on with their notion of a trans-isthmus waterway.

In the mid-1870s a decision was finally reached to proceed with digging a sea level canal between the Gulf of Corinth and the Saronic Gulf. This was the narrowest point and was, according to historians and archeologists, where the Romans used to move their vessels using rollers. Foreign engineers as well as Greek ones determined that one of the biggest hurdles would be physically carting away the debris of stone after blasting had taken place. Millions of cubic feet of rock and rubble would have to be removed once the dynamite and nitro glycerine had done their work.

Fortunately for these late 1870s canal builders railroads and steam powered shovels had been invented. By sinking down temporary tracks it was possible to shovel the residue from each round of blasting into railroad cars and have trains take it away to be used elsewhere as fill. The French designed construction locomotives and side dump
Gulf there exists a permanent and swiftly moving west to east flow of water. This creates hazardous conditions for small boats.

Once it opened, the CORINTH CANAL provided a significantly quicker route for Italian-Greek shipping. Furthermore, it became an inspiration for engineers in other nations who proceeded to excavate canals at Kiel in Germany and at Manchester in Great Britain. In the early years of the present century minor improvements were made such as deepening it and installing night time illumination. The greatest threat was always considered to be an earthquake but fortunately none have struck in the vicinity of the waterway.

The CORINTH CANAL, along with the rest of Greece fell into German hands during World War 2. The remains of concrete pill boxes housing anti-aircraft batteries are still visible at various points alongside of it. Both the Germans and Italians used it to send ships laden with men and material to the various fronts and it was a natural bombardment objective for Allied warplanes. Their goal was to disable it and possible sink a ship during its transit, thereby rendering the channel useless. Allied commandos likewise considered planting dynamite charges inside its walls and detonating them by radio. Fortunately World War 2 ended before such a scheme could be implemented.

Following ending of hostilities and a return of prosperity during the postwar years pleasure cruising began to develop in Greece and the eastern Mediterranean. The sailing plan of many Aegean and Ionian cruises now includes a passage during daylight hours through the CORINTH CANAL, regarded by many as the most spectacular canal ever built with its towering and almost vertical rock walls. Cruise ships entering the waterway from either side are pulled through by tugs whose captains are familiar with the often unpredictable west-east flow of water. Meanwhile, 300 feet above, tourists stand on the sides of a highway bridge and marvel at the ships making their transit.

American canal enthusiasts, if planning a tour of southern Europe, should inquire about trips through the CORINTH CANAL. Several moderately priced 3 and 4 day cruises include it in their itinerary, especially if they are heading from Piraeus to the island of Corfu adjacent to Albania. The Greek National Tourist Office in New York City can supply information. If time for a nautical journey is not available take a short train or bus ride from Athens to Corinth and spend time watching ships pass. During the busy summer season continuous activity is assured, and during the remainder of the day Corinth's ancient ruins and archaeological sites can be visited.

**CANADIAN HAPPENINGS**

John Jackson and Sheila Wilson's latest history of St. Catharines, St. Catharine's — Canada's Canals City, was recently launched at the St. Catharines Museum at Lock 3. While not solely a canal history, it contains a liberal amount of canal data and illustrations. Another book, intended as a companion piece to their extremely popular The Welland Canals — The Growth of Mr. Merritt's Ditch, is Roberta Styan and Rob Taylor's Mr. Merritt's Ditch — A Welland Canals Album. Both books are "musts" on the bookshelves of canal enthusiasts. The authors have selected a wide range of photo, illustration, and map material to illustrate their latest book, as well as having undertaken new research which is literally rewiring some of the past thoughts on the Welland Canal. The book was officially launched on Canada Day, July 1st, at the Welland Canal Viewing Complex at Lock 3 in St. Catharines. And lastly, as part of a special series of meetings with business and industry, Seaway President Glencot P. Stewart gave his views on the future of the St. Lawrence Seaway. The event suitably took place on August 6th, in St. Catharines, the 60th anniversary of the Official Opening of the Welland Ship Canal.

Arden Phair
The big news in Europe is the official opening of the 106-mile Main-Danube Canal through the beautiful Bavarian countryside in southern Germany, September 26, 1992. This canal, completed after nearly thirty years of work on the part of the German government, is the final link in the system of major inland waterways across Europe to connect the North Sea with the Black Sea. Large barges carrying 2400 tons of bulk cargo, not to mention sizable passenger ships, will now be able to travel from Rotterdam to Istanbul, without taking the long voyage around France, Spain, Italy and Greece in the Atlantic and Mediterranean. The entire inland system, involving the Rhine, Main and Danube Rivers, with full canalization where necessary, has been planned and under construction intermittently since 1921. For many it is a "dream come true". (For others it is a threat to the environment of central Europe.) For the first time, river ports on the Rhine River will be directly accessible to river ports on the Danube, by water.

The Main-Danube Canal climbs from Bamberg, close to the upper reaches of the Main River, over a summit 1332 feet above sea-level, higher than any other major waterway in Europe. It utilizes eleven huge locks up the north-west side of the summit and five locks down to Kelheim on the Danube, on the south-east side. The locks are 39 feet wide, 623 feet long and some have a lift of 100 feet.

For a full description of this modern miracle of canal engineering read the August 1992 issue of National Geographic, pages 3 through 31.

Chairman's Report

The Deutscher Kanal- und Schifffahrtsverein Rhein-Main-Donau e.V. (German Rhine-Main-Danube Canal and Shipping Association) has been committed for more than 90 years to linking the divergent rivers Rhine and Danube. This goal is now near at hand; the Main-Danube canal is scheduled to reach Kelheim in 1992, which will close the last gap in the route between the North Sea and the Black Sea. This waterway will then link up 13 European countries along the courses of the Rhine, Main and Danube. The German

Canal and Shipping Association was founded on November 6, 1892, in Nuremberg. Its members include 29 cities and municipalities, 13 chambers of commerce and other commercial institutions, as well as 266 firms and individuals—an extensive forum for publicizing the age-old concept of a link between Main and Danube.

As protagonist of the complicated and protracted project of the Main-Danube waterway, the Association has had to face up to critics again and again and to ward off attacks against the project with sound arguments. Even now, shortly before completion of the final stretch between Nuremberg and Kelheim, this situation still prevails. While in the initial phase the engineering planning pushed ahead by the Association played a major role, its current activities are distinguished by two studies initiated and substantially financed by the Association. At the end of the nineteen-sixties, when some uncertainty became apparent at home and abroad as to the future legal status of the Main-Danube Canal, the Association commissioned a study of the status of the future Rhine-Main-Danube waterway under international law. The findings of that study, i.e. the Main-Danube Canal is a national waterway, have meanwhile met with general acceptance.

In the early nineteen-eighties, when the controversy between advocates and opponents of the canal became ever more confusing, the Association retained the Ifo Institute, Munich, to analyse, evaluate and assess the factual content of arguments and counterarguments.

This study of the Main-Danube Canal clearly established that the waterway has a positive cost-benefit ratio and should be completed if only on account of its advanced state of construction.

Since the once-in-a-lifetime project of a waterway connecting Main and Danube is attracting increasing international attention, it seems fitting to publish a description in English. It is presented here by the German Canal and Shipping Association, with the kind assistance of the Rhein-Main-Donau AG and other institutions.

Chairman of the Board
Deutscher Kanal- und Schifffahrtsverein Rhein-Main-Donau e.V.

Construction on one of the final, level sections of the Main-Danube Canal, below the Berching Lock. (Photo by Roger Squires, May of 1990.)

An elevation chart of the many locks on the Rhine-Main-Danube navigation system, built over the past seventy years.
LOUISVILLE & PORTLAND CANAL CONSTRUCTION

Louisville and Portland Canal

[The following notes are from the journals of Increase A. Lapham who, while in his teens, was employed as a surveyor and draftsman in the construction of the original Louisville and Portland Canal. This material is excerpted from S.W. Thomas and E.H. Conner (eds.), Journals of Increase A. Lapham (1827-1830), Louisville: George Rogers Clark Press, 1973, and is republished here by permission of Samuel Wilson Thomas, president of the G.R. Clark Press. It was brought to our attention by A.C.S. member William Dzombek, who also provided the identification of "Mr. Henry."]

Nov. 21 Wednesday [1827]

Mr. Henry* wrote a letter to Collins Chapman &c. after copying it into the book of records I went up the canal and witnessed an experiment made in the excavation of earth on the plan of Mr. Oliver Phelps of the Welland Canal. It is described by D. Lapham in the following words: "His machine is simply a wheel placed on the bank, the axis of which is at right angles with roads down the bank, and a railway of timber is placed for the wheels to run on in going up the slope, furnished with a rope and a hook at each end. When a train is loaded in the canal, the hook is made fast to the tongue of the wagon and an empty team is coming in at the same time and the rope is made fast on the hind end of the wagon going down. The empty team draws the loaded end up. Likewise, the team going up draws the same as before without the machine."

Jan. 12th [1829]

Commenced upon a plan of a wooden lock with only a breast of masonry opposite the upper hollow. The rest of the lock is only a floor [time] of form work [framework] without any embankment behind it.

Jan. 19th, Monday. [1829]

Mr. Canvass White* & lady accompanied by Mr. Henry went down the river in the steam boat Hurteress, the former are going to New Orleans and Mr. Henry to the mouth of the Ohio to see about some cypress timber for the lock gates.

Wed. March 25th, 1829

I spent most of my time today at work on the canal, setting stakes for rock cutting at the lower end, and attending to the laying out of the patterns for the elliptic arch in the bridge. This is done with a tram, and the joints of the voussoirs are got by bisecting the angle formed by lines drawn from the foci and intersecting each other on the periphery.

April 7th [1829]

A load of cypress timber from the mouth of the Ohio arrived today. It is intended for the lock gates on this canal, and is supposed to be superior to any other wood.


May 21st [1829]

Worked on the canal this forenoon, setting stakes for the top of bank for Southland's & Adams, who have the job of excavating the earth at 27 cent per cubic yard. When we went up to the bridge [over the canal] we found that Mr. Peter Carney, one of the contractors for the masonry on the canal, had fallen from a platform built for the use of the cranes attached to the bridge, about 10 ft. in height, and fell on his head among the rocks. He was not killed but very badly injured. In the afternoon, I went up to the bridge, and just as I got there another accident occurred. A man wishing to come down from the post of a crane, and seeing a rope hanging before him, thought he would climb down that; accordingly, he jumped from the post and caught the rope, which as it happened was not fastened at the top, and fell down a distance of about 10 feet but was not seriously injured.

I stayed at the bridge an hour or so and witnessed another accident, though of less importance. A mason, in turning a large stone, got one of his fingers caught between it and another large stone, injuring it considerably.

When I went to the bridge next day I was told that last evening, after I left there, a man fell from the top of the middle centre [of a 3-arch bridge], which is about 50 feet above a small pool of water below, but happily had presence of mind sufficient to catch hold of one of the braces near the top; from which position he was released by the other men, without injury to his person.

May 25th, 1829

Having drunk too freely of "Lemon aide" I was taken sick in the night, vomited up all my supper, and was hurried out of bed this morning with the dysentery. Felt quite unwell all the forenoon.

Later I helped to do some work with the level along the canal. Our guard lock walls are 50 feet apart, 42 feet high, and 26 feet thick at the head. In each wall on the inside is a recess two feet deep at the ends and 3 feet in the middle, having a regular curve or arch.

Now if a person stand near one of the walls, with his face towards the opposite end, at the middle of one of these recesses and make any quick, and loud sound, it will be echoed from the opposite recesses ten or twelve times in a manner which is very curious and delightful as well as distinct.

ST. HELENA III COMMISSIONED

The christening and maiden voyage of the concrete ST. HELENA III lured a crowd of about 1000 spectators to Community Park, Canal Fulton, Ohio, May 2, 1992.

The Canal Fulton Heritage Society celebrated the boat's first day of operations by making three of the two and a half mile trips from the park to Lock 4 and back.

The long awaited event was the culmination of nearly three and a half years of work for the volunteers of the Heritage Society.

The boat was christened by Peg Kilbride with the help of her son Randy Kilbride who is vice president and was boat project manager.

Also on hand for the christening were U.S. Rep. Ralph Regula and State Rep. David Johnson.

(From the July 1992 issue of The Canal Society of Ohio newsletter.)
1792 BATTEAU RECREATED

The "Discovery" — replica of an Eighteenth Century Batteau, such as used on the Mohawk River and early waterways west of Albany. Overall length: 30 feet, 4 inches. Maximum width at the gunwales: 7 feet, 3 inches. Carrying capacity: 1.5 tons.

ALBANY, N.Y. — New York State Museum technicians are building the first replica ever constructed of an 18th century Mohawk River batteau as part of a two-year statewide celebration of the birth of the Canal Era in New York. The batteau, named DISCOVERY, will be on exhibit at the Urban Cultural Park Orientation Center at the Schenectady Museum throughout the summer, and will participate in reenactments and living history programs planned at towns along the modern Barge Canal.

"Batteau" is a French term for "boat" which came to signify, 200 years ago, any flat-bottomed, shallow-draft vessel that was pointed at both ends. This vessel was the mainstay of inland shipping, particularly for the military, until the end of the 19th century.

Batteaux (the plural) came in different sizes, known generally as 3-handed, 4-handed or 5-handed according to the crew needed to propel them. There were undoubtedy many variations in design, but all were characterized by a flat bottom made up of pine boards laid lengthwise, with battens nailed across to hold the bottom together. Oak frames, usually made from natural crooks, fastened the bottom to the pine planks that formed the sides of the vessel.

These craft were propelled by poles and oars, with a small sail used when the wind permitted. The Mohawk River batteaux built in Schenectady were apparently smaller and lighter than most, because of the shallow and often obstructed channel they had to navigate and the several portages around which they had to be carried on their way west.

For the past several years the State Museum has been researching the contributions made by the Western Inland Lock Navigation Company (1792-1820) to the opening of westward transportation in New York. This private company was chartered by the New York Legislature in 1792 to find ways to improve the inland water route from Schenectady to the Great Lakes. Among the improvements made were the creation of several short canals, with dams and locks, that bypassed obstructions to navigation, thus issuing in an age of canal travel decades before the better known Erie Canal crossed the State from Albany to Buffalo.

The core of the Museum's research — known as "The Durham Project" — has been the discovery of archaeological remnants of these historic engineering works and the development of a plan for their preservation. Publications will result from this research when it is completed. In the meantime, this educational program is designed to bring some of the research findings to public attention during the bicentennial years of the building of the works which were the true beginnings of the Canal Age in New York.

In order to enhance public interpretation of this era of inland transport, a typical commercial batteau of the type built in the 1790s in Schenectady for the Mohawk/Oneda route has been recreated. Using archaeological remains of earlier military batteaux in State Museum collections, historical accounts and drawings, and general technical data on small boats of the period, a prototype design was determined. Construction duplicates original materials and techniques where possible.

This vessel is meant to represent the new, 3-handed batteau purchased on August 20th of 1792 by the Western Inland Lock Navigation Company from a boatyard in Schenectady for the survey of the Mohawk River, which was the first field operation of the newly formed company. The replica will serve as a "vehicle" for several bicentennial programs staged on the modern Canal, including a reenactment in Schenectady of that 1792 Mohawk expedition. It will also be incorporated into exhibits and programs at various regional museums during the bicentennial.

MARGUERITE II WORK UNDERWAY

From the CSG Newsletter July, 1992

From October 4 to 18 Ohio will witness one of the more interesting historical reenactments ever staged in the state when the Delphos Canal Commission undertakes the voyage of the Marguerite II from Toledo to the Tall Slacks 92 in Cincinnati.

The boat will be a true canal boat, modified to meet contemporary transportation standards. The boat is to be a recreation with much lumber from period sources using oak, ash, locust and walnut in many places. Among her deck boards will be an actual plank from the original Marguerite, a passenger packet which sank in Delphos. The remains of the original boat were recovered in 1987 by boys and girls from Delphos.

Construction of the replica boat has begun and is being built in Delphos. A travel crew will accompany the new boat to not less than seven original canal cities, stopping to "dock" the boat for local tours, especially for school children. Among the stops on the voyage will be International Park in Toledo, Carlton Park in Dayton and Sawyer Point in Cincinnati. Defiance, St. Marys, Piqua and Middletown/Lockland will also be sites for stops.

The Delphos Canal Commission anticipates that up to a half million people will see the boat during its four-day stay at the Tall Slacks 92 event in October in Cincinnati.

For further information on the Marguerite II write the Delphos Canal Commission, P.O. Box 256, Delphos, Ohio 45833.

AMERICAN CANALS, NO. 82 - August 1992
CANAL GHOSTS ON THE OHIO & ERIE

By Terry K. Woods

I think perhaps all 19th Century Americans believed in ghosts, if only to relieve the monotony of their rather dull, uneventful lives. Though most 'Tow Jakes' assumed a canal boater's life was more eventful and exciting than their (and boaters all agreed), it wasn't really all that exciting. Boaters believe in ghosts, too. Ghosts were just something a boatman might run into anytime. Listen to a story Wick Ludenbercher, driver of his Dad’s boat, BOLIVAR, in 1904, told us some years ago.

"There was just the Old Man and me one night. We was runnin' light come'n from the Papermill in Akron an' we was try'n to get back down to Bolivar before we went over, so we was runnin' after dark. Well, I was out there on the towpath. An' we had a light on the bow, just a big Kerosene lantern with a reflector on it. It didn't cast no more of a beam than ya could spit. And all of a sudden I saw this big white thing com'n on the towpath as we was com'n round a bend. Well, GHOST, I thought, I was sure it was a ghost. The Old man, he didn't do nuthin. I was driv'n Big Jack, (ya could pull a light boat with one horse, ya know) Well, he kept ploddin' along as if there was nuthin' there. I don't know if horses can see ghosts or not.

"So I got up on Big Jack and sort of hunkered down behind his head. I figured if horses couldn't see ghosts, maybe ghosts couldn't see horses. I was all shiver'n and shak'n as we got closer and closer and - this ghost got bigger, stood up, and - 'Eh! Eh!' It was a damm, big white cow! It had been lay'n on the towpath an' we'd disturbed her. I was so relieved. We didn't see another ghost that whole trip."

Ghosts were just part of the natural order of things. Wick's brother Ben told me one day that Lock #4 was haunted. When asked why, he paused, looked puzzled and answered, "I don't know. Maybe somebody saw a ghost there once."

So Lock #4, south of Canal Fulton was haunted — not so much the lock as an old frame building that stood near the lock when the boys boarded with their Father and Mother in the late 90’s. Neither of the boys actually saw a ghost there, but they'd heard enough stories to ensure that they wouldn't be found anywhere near Lock #4 after dark.

Lonesome Lock (Lock #29 north of Akron), a good two miles by canal through desolate country from Peninsula, was also haunted. In fact, some of the older boatmen called it "Haunted Lock." It wasn't so much that ghosts had been seen there as that it just should have been haunted. Everyone know the stories of how, in the "golden times" robbers had laid in wait for unsuspecting crews here at this lock, without so much as a tavern to provide support, to set upon them, rob them, murder them, and throw their. mangled bodies into the canal. Of course, no one you ever met had actually seen any of this carnage. It had all happened long ago. But you knew that whole area was haunted. You practically held your breath until your boat had passed this spot and was near Boston Mills, and Ohio's Civil War.

A more conventional ghost story concerns "Amy," an old white brick tavern on the bank of the canal some eight or ten miles south of Roscoe. Shortly after the finish of the Civil War, "Amy," (ghosts never seem to have last names), left Cleveland in a canal boat. She was to meet her fiance, a Capt in the Union Army who had just been released from a Confederate prison, at this tavern. They were then to be married, go out west somewhere, and live happily ever after. Unfortunately for "Amy," and fortunately for the story, she was followed by a rejected suitor. He found her at the window of an upper room in the tavern, gazing down from the canal hoping to catch a glimpse of her lover's craft as it brought him to her. The crazed suitor sneaked up behind "Amy," and, reaching around her, slit her throat with a large knife he carried. She died there, her blood staining the window sill, her eyes still staring down the canal.

It isn't clear what happened when "Amy's" fiance arrived and found her dead. Some accounts have him chasing her murderer north and killing him on sight. Others have him wandering off in the moonlight, driven mad at the sight of his murdered loved one. Whatever happened to the fiance isn't important. What is important is that "Amy" is still at the tavern, as a ghost. She inhabits that front, second-story room. Many people have seen her face at the window, still gazing down from the canal. Many people have heard her in that room, smashing things. (She has a temper, for a ghost.)

No one could stay in that room without sensing her presence, and having his (or her) belongings strewn about the room. Much later, in the 1970's when that old tavern briefly became a restaurant, the owner showed me the "bloodstains" still on the wooden sill. And I talked with waitresses who, after a few sessions of spiced food and smashed dishes, refused to serve any more meals in that room. "Amy," it seems, is a spiteful ghost. It's hard to say what became of "Amy." The Tavern is vacant again — has been for years. "Amy" is a hard ghost to live with. I can't help but wonder if she was any easier to live with when alive, and whether her face might have had the better of it all.

All ghosts, it seems, were stay-at-homes. Unable or unwilling to leave their haunts. This proved fatal to a group, no one knows how many, who haunted a cluster of abandoned canal boats in a basin just south of Barberton after traffic had come almost to a standstill. Local residents were annoyed and awakened nearly every night by the shouting, screaming, and blood-curdling yells coming from these boats. But when the neighbors and police investigated, no matter how quickly they responded, there was never anyone to be found — nor any evidence that human beings were at all involved. Obviously, "prankish ghosts!" And the pranks continued. One group of local residents finally had enough. One dark night, when the ghosts were particularly noisy and objectionable, these residents stealthily approached the abandoned craft by rowboat, and set everything in the basin ablaze. From the safety of the far shore, the residents watched in fascination as the flames leaped higher and higher, consuming everything; and listening in growing horror to the groans, screams, and finally whimpering, as the lashing flames consumed every boat in the basin to the waterline. Rather drastic measures perhaps, but the local residents were no longer kept awake night by rowdy ghosts.

These are a few 'canal ghosts' stories from my collection. Can any of the readers of AMERICAN CANALS top these?

TRIALS AND TRIBULATIONS

By Bill McKevey

The following is excerpted from the 1866 proceedings of the New York State Court of Appeals. Under the heading "John E. Stone versus the Western Transportation Company, Opinion of the Court, per Mason, J."

Mason J. This action was brought to recover the value of a quantity of hay and oats, some wagons, harnesses, farming utensils, etc. This property, at the time it was destroyed by fire, was in a barn in the possession of the plaintiff, in which a number of horses belonging to the defendant were being wintered, under a written contract between the plaintiff and the defendant, in which the plaintiff agreed to keep twenty horses for the defendant during the winter, and to furnish and supply said horses with good and commodious stables and yard room, and to furnish an abundance of hay for food, and salt for use of the horses, and to furnish sufficient straw for bedding, and to keep constantly a sufficient supply of water conveniently situated for the use of said horses, and to furnish lamps, oil, and all tools which may be requisite or necessary in grooming or taking care of said horses, and to furnish a man and team to assist in leading the said horses to the tow-path of the canal in the spring, or when said horses may be required by said company. The plaintiff also agreed to board a man for the said defendant at two dollars per week, in case the defendant may require a man to take care of said horses. I think it pretty clear, taking this contract as a whole, that it contemplated the defendant should furnish a man to take care of the horses.

It is true the plaintiff agreed to keep these horses for ninety cents per week for each horse. But here are the positive undertakings specifically provided, to furnish hay for food and straw for bedding, and such quantities of salt as may from time to time be required for the use of said horses, and lamps, oil and tools which may be requisite or necessary in grooming or taking care of said horses, and to keep constantly a good and sufficient supply of water conveniently situated for the use of said horses.

There is no agreement to furnish a man to feed and groom the horses, but there is an agreement to board the defendant's man for two dollars per week, if the defendant should require it. And there is also an agreement to furnish a man and team to assist in sending the horses to the canal in the spring. The parties contemplated that the defendant would furnish a man to feed and take care of the horses. Be this as it may, however, the contract gave the defendants this right, to put the horses in charge of their own man to feed and groom, and the plaintiff agreed to board him for two dollars per week. This man must be deemed the servant of the defendants and not the plaintiff.
BOATING ON THE JUNIATA CANAL

“The team” of the Juniata District Mennonite Historical Society, who put the Annual Meeting program together. Noah Zimmerman (Chairman) is to the extreme left. Dave Knox, owner of the canal boat, is fourth from the left, with cap. Dave is responsible for dredging, restoring and rewatering a 1-1/2-mile section of the old Juniata Canal.

During the annual meeting of the Juniata District Mennonite Historical Society July 11th, 1992 at the Lost Creek Church, Oakland Mills, Pa. the main event was a ride on a canal boat replica on the old Juniata Canal. Approximately 100 people from Snyder, Millin and Juniata Counties attended the all-day affair, which included a genealogical survey of the area by Varden Lesa and a slide-lecture by Bill Shank on the Pennsylvania Canals.

At the close of the morning lectures, the group traveled in two buses to the Locust Campground west of Lewistown, Pa., where they had lunch and boarded a canal boat, built by Dave Knox, to travel along a restored and rewatered section of the old Juniata “Main Line” Canal. Noah L. Zimmerman of Richfield, Pa., was chairman of the affair, assisted by a large committee, shown in the accompanying photo.

A RARE APPEARANCE

For years we've been hearing about a canal boat buried in the mud along the Beaver River, a slackwater section of the Beaver and Erie Canal.

Now, at last, it has come to light.

The picture above, contributed by Pat Vandel- ti, of Ellwood City, PA, shows part of the boat, exposed in the Fall of 1991 when the river level was very low. Reportedly, this is the first time the boat has been exposed for 40 years.

Unfortunately, it is covered by water again now. Wooden boats are well preserved as long as they are under water, but they deteriorate rapidly when exposed to air.

D.L.W.

CANAL CALENDAR

Sept. 16, 1992 — Joint Meeting of the Canal Society of New York and Canadian Canal Society — probably in St. Catharine's, Ont. Contact Anita Cottrell, 7308 Jamesville Road, Manlius, NY 13104. Phone (315) 472-0668.


Sept. 19, 1992 — Second Annual “Swamp Sweep” at Biggin Swamp. Meet at Old Santee Canal Interpretive Center. Contact Mary Bell, Old Santee Canal State Park, 900 Stony Landing Road, Mounds Corner, SC 29461 or phone (803) 889-5200.

Oct. 3-4, 1992 — Canal Days, Metamora, Indiana, on the Whitewater Canal. Visit the historic canal town, with hundreds of booths with crafts & antiques. One of the largest festivals in the mid-west.

Oct. 4-18, 1992 — Voyage of the “Marguerite”, Toledo to Cincinnati — “Tall Stacks”. Contact Delphos Canal Commission, P.O. Box 256, Delphos, Ohio 45833. Phone (419) 690-7737.


Oct. 15-18, 1992 — Ohio & Erie Canal photos & artifacts exhibit, Massillon Museum, 212 Lincoln Way, East, Massillon, Ohio, sponsored by the Ohio & Erie Canal Corridor Coalition, P.O. Box 436, Canal Fulton, Ohio 44614.

Oct. 19-21, 1992 — International Conference on Historic Canals, Clifton Inn and Conference Center, Harpers Ferry, W.Va. A number of local field trips and three full days of conferences included. Special ACS meeting, Sunday, 7:30 p.m. at the Cliftside Inn. Contact Dave Johnson (301) 530-4778.

Oct. 24-25, 1992 — Fall Tour of the Canal Society of Indiana, Wabash & Erie Canal from Logansport to Peru. Canal Stone House Museum and Hiking Tour. For details contact Canal Society of Indiana, 302 E. Berry, Ft. Wayne, IN. 46802.