OHIO RIVER STAIRWAY COMPLETED

The Corps of Engineers, which started navigation improvement of the Ohio River 150 years ago "with dredging over sandbars and removal of snags," has just about wrapped up a $1.75-billion modernization of the totally canalized 961-mile river. Started in 1956, the massive facelifting involved the replacement of 46 old locks and dams with 19 gated dams and locks bigger than those in the Panama Canal. Eight of the new 110 x 1,200-ft locks are in operation with their new dams and others are well along in construction. This profile of the Corps' new stairway to Pittsburgh shows how fewer locks cut lockage time by at least 50 hours. (Engineering News Record. Submitted by ACS Director Wilber Hose.)

CANAL BOAT REMAINS FOUND

The most exciting thing to happen in a long time as far as canal boat relics are concerned is the discovery of canal boats in a quarry in North Hampton Borough, Pennsylvania.

The Lehigh Canal, one of the last to close down in this century, closed down in 1952. One of the problems attending the closure was where and how to dispose of a number of abandoned canal boats. A cement rock quarry partially filled with water in North Hampton Borough on land now owned by the Martin-Maxwell Cement Company, provided the solution. The towpath of the Lehigh Canal was breached and boats were floated from the canal to the quarry, where they were sunk.

There have been estimates of from 13 to 60 boats in the quarry, but the best guess at this point in time seems to be about 20. Attempts are being made to raise one or more of the boats. If successful, we hope to have a photo available for the February issue of American Canals. The condition of the boats is unknown, though one report by a party entering the cable of one of the boats was that "it was a little damaged."

(Submitted by Charles Derr, ACS, from articles in the Bethlehem, Pa. Globe Times.)

CHAMPLAIN CANAL PLACED ON HISTORIC REGISTER

Garry F. Douglas, Historian of the Village of Waterford, New York, and Chairman of the Waterford Canal Action Committee, has announced the recent placement of the 1823 Champlain Canal from Waterford to Whitemare on the National Register of Historic Places. The effort to achieve Register status for the canal was begun three years ago in Waterford as one step in the hope for rehabilitation of the historic waterway.

The Waterford section of the canal remains in an excellent state of preservation thanks to the fact that it is still maintained and used as a surge basin for the R.Y.S. Barge Canal system. A group of Waterford residents and the Hudson-Mohawk Industrial Gateway, a Troy based organization concerned with industrial preservation, have seen in the Champlain Canal an opportunity to create a low cost recreation area. In the fall of 1975 a recreational development study of the canal was commissioned and completed by Saratoga Associates, planning consultants.

(Concluded on Page Six)
SAM CASH ON TOUR

Many of you have read in American Canals of our ACS Member and model builder, Sam Cash, who is in Dartmoor Prison in England. The good news is that Sam will be released from prison in 1979 and will be coming to the United States on a goodwill canal tour. His presentation, slides, and canal talk about the British canals in the spring of 1978.

Sam needs to work up his tour by the end of the year and asks that any organization (it needn't be a canal society) that would be interested in booking him for a talk. The details of timing can be worked out later, but Sam has to justify his trip based on invitations for a visa. Address your invitation to him as follows: Sam Cash, c/o Ruby Fenton, 58 Balfour Crescent, Blackheath, Berkleilie, RG 12 54H, England.

Sam has been building canal models for several organizations in the U.S. If your canal organization would like to have a model, write to Sam and talk about it. The cost for materials and shipping is $15.00—Sam's labor is done free with his best wishes for the organization desiring the model.

ERIE CANAL MEDAL

Last year the American Canal Society sponsored the medal minted by the Franklin Mint (Special Commemorative Series) commemorating the 150th year of the completion of the Erie Canal. The obverse is the scene of the opening of the Erie Canal in October 1825, and the reverse is the logo of the American Canal Society depicting the Western Hemisphere. The medal is bronze, 39 millimeters in diameter. This is the last opportunity to buy the medal at the price of $3.50 plus $5.00 mailing; it is not for sale elsewhere and the die has now been destroyed. There are only a limited number available; the original price applies only through December. Order from ACS Treasurer, Dr. Bill Trout, 1992 Cinco Robles Drive, Durante, CA 91010.

CAPTAIN'S CORNER

I would like to remind each of you that the American Canal Society is a non-profit scientific and educational institution. Our existence depends on your membership to the society. You can help the society financially by renewing your memberships on time. Our billing and mailing is done by volunteer, slave labor (the Shank and the.Halms) and it is time consuming and expensive to the society to have to rebill you. What would be even more helpful would be to order a copy of American Canals to anyone whose name you send to me. If we are going to survive the increased costs of our times, we must continue to expand the membership of the society. So far we have just managed to keep our noses above water.

We will continue to have a need for interesting material for American Canals. Particularly needed are canal historic/Keeler, but good modern views are also welcome. The size of the photo is not particularly important, but it must be a good, clear photo with a glossy finish. Photos can be returned, if desired, through the mail, we only ask that you specify which photos you do not want. A brief description in a clear, concise script without illustrations is asked in a clear, concise script without illustrations. We would also welcome the personal experiences of those of you who are on the canals or whose parents or family members were. Another category which could be shared is your visit to a canal site and what you found there—particularly sites not commonly visited.

I hope all of you have had a good fall and that you will take advantage of the coming winter months by visiting the old canals remains which are easy to view without foliage (or snow or poison ivy or the heat). And for those who can't or just don’t want to, I hope you find a good canal book or two to enjoy the long evenings coming up.

Tom Hahn, Editor

CANAL RELATED ORGANIZATIONS

The Great Lakes Historical Society maintains a museum with a collection of books, maps, manuscripts, marine relics, paintings and photographs dealing with the history of the Great Lakes. The Genevieve J. Meadell Library in the museum houses an outstanding collection of both published and unpublished documents. The society publishes an illustrated quarterly journal, Inland Sea. Membership in the society gives admission to the museum and use of the library, a subscription to the journal and admittance to several programs during the year. The museum is located at 480 Main Street in Verrillman, Ohio 44089, the south shore of Lake Erie, and is open in the afternoons daily, except for winter months when it is open afternoons on the weekends. Admission is $5; adults, children 22c. Family memberships are available for $10.

The Blackstone River People’s Public Park System, Inc., 207 Meriden Pk. Cambria, RI 02814 has been organized to build parks alongside the Blackstone River from Pawtucket, RI to Worcester, Mass. Donations (including membership) are available from the society.
A LOOK AT THE SUEZ CANAL (Part Two)

By J. WAYNE HALSEMA

(The conclusion of an article begun in the August 1976 issue of American Canals)

In the late afternoon, we left Port Said for Ismailiya, mid-way point on the Canal and our stop for the night. On the way there we passed over the same and similar devastation as we had seen on the way up. This time, however, the peculiar scenery was mellowed somewhat by a spectacular sunset.

Ismailiya was started from scratch in 1859 as a residential area for the Canal Company's then mostly European employees. The town is located on the banks of Lake Timsah (Alligator Lake). Before the Suez Canal was built, the lake was a deep marsh, possibly the one created where the Red Sea by the ancient Egyptians, through which the children of Israel may have passed on their way to the Promised Land. Today the lake provides a scenic backdrop for one of Egypt's most beautiful little towns. In addition, the width of the lake provides Ismailiya with natural protection from whatever warfare may be going on in Sinai. From June 1967 to December 1972 Ismailiya was fortunate enough to be located in one of the few places along the Canal where Egyptian and Israeli troops did not face each other at point blank range. The town was protected from the fighting by several miles of water.

Just north of the city is the Nile side of the Canal, a well preserved section of the Bar Lev Line, the Israeli fortifications built between 1967 and 1970 by an Israeli general bearing the same name. The line is a well constructed string of fortifications along the entire length of the Suez Canal from just east of Port Fouad all the way south to Suez City. The line provided protection for the Israeli position in occupied Sinai until October 8, 1973 when it was withdrawn by the Egyptian Army. The result of this attack on the Bar-Lev Line was that the Israelis were pushed into pulling back to the mountains of central Sinai. This gave Coptic control of both sides of the Canal and allowed the Canal to be reopened.

On our way out of Ismailiya toward Suez City we were stopped by a well armed policeman. "You cannot use this road!" Why not? "It is forbidden" was the reply. "But we have permission" I said, "Pass him" and off we went, with a salute to speed us on our way. The only thing about this and other encounters along our route was that not once did any of the officials involved actually ask to see our permission.

The road from Ismailiya south to Suez passes along the short stretch of the Canal between Lake Timsah and the Great Bitter Lake. At the village of Deversoir on the northern end of the Great Bitter Lakes the road bears sharply right to skirt the edge of the lake.

In the Deversoir area very little above the height of two feet remains standing with the possible exception of a well built harbor which still has the character and atmosphere of a well built harbor. Deversoir was the site of an Israeli counterattack which consisted of the west bank of the Canal at that point and started a hard drive towards Suez City at the end of October, 1973. In spite of this, the area to the south of Deversoir along the western shore of the Great Bitter Lake is a beautiful scenic place. After leaving the bank of the canal the road passes through an area of bright green vegetation. Combined with the bright blue lake, the black desert mountainous to the west and the distant convoys of ships on the lake it is truly a delightful sight.

Unfortunately about the only people allowed to enjoy this area are the Canadian, Polish, Finnish and Senegalese soldiers of the United Nations Emergency Forces who have their base camp a few miles south of Deversoir. The UNEF forces in their blue uniforms are everywhere in the Canal Zone. Their primary function, however, is to patrol an 18 mile wide swath of the Sinai Desert between the Egyptian and Israeli armies.

The UNEF strip separates the Egyptian and Israeli armies. In December 1972 the United Nations were allowed to observe the Canal. The United Nations observers are the only people in the world who are permitted to drive straight through from Cairo to Tel Aviv, the respective capitals of two bitter enemies.

South of the Great Bitter Lake both the Canal and the fortifications begin again. In this sector the island mountains which rise on both banks of the Canal are still occupied. Fortunately for visitors, both sides are now held by the same army. Tanks, armed personnel carriers and professional looking troops were everywhere. Every few miles there was a hole in the line and a ferry to the Sinai side. Most of the passengers appeared to be United Nations soldiers.

About ten miles south of the Great Bitter Lake the Suez road comes out in front of the mounds of fortifications to run right alongside the canal. The road holds this position all the way to Suez City. It is one of the few places on the waterway where the visitor gets the sense that he is visiting a great world crossroad instead of a great world battlefield. Ship convey goods and people to and from the oil fields. Most are freighters loaded to the brim with pre-packaged containers of freight in stacks. A few of the ships are armed by the government, not quite so but getting close to that scale. While with the freighters it seems as if one can reach out and touch the tankers that is almost literally true. At one point a tanker passed us on the road. Her gunners were less than half a mile away. The canal is too narrow to accommodate all but the largest of the super tankers.

That another war is still a possibility is demonstrated dramatically in the area between the Great Bitter Lake and Suez. The scenery can be summed up in two phrases: heavy armed and heavily damaged. The front line troops of the Egyptian Army stationed in this sector of the Canal look professional and in all probability are the front troops Egypt has to offer. The Israelis are only 30 to 40 miles away in this area and they have stood on this very spot. In October 1973 after breaking through the Egyptian lines at Deversoir, General Sharon's Israeli troops met fierce resistance in this sector of the Canal on their way to Suez. For the first time the Egyptians and the Israelis found their positions reversed. The former were on the Sinai side and the latter were fighting the Egyptians from the Egyptian side of the Canal. As a result of this bloody contest nothing stands in an area which I can recall as being both occupied and prosperous in 1966. Despite all the talk in the Egyptian and World press we saw no evidence of recon
Hi, Canal Watcher! Hope you had a wonderful time this last Summer, 1973 inspecting locks and canals.

How does one enjoy this hobby? If you are new in the wonderful historical-archaeological field as am I, have a good friend or friends who can talk canal lore with you, then study for the fun of learning about the early waterways of the U.S. and Canada. As a canal stripe join the American Canal Society to keep abreast of some wonderful canal happenings and projects.

All the above are fun, but the most fun is traveling from one canal and lock area to another in search of interesting artifacts. What does one look for? If you are near a really old canal lock, look for wood. Is the gate made from wood only with a few parts of iron? Is the lock wired with wood or at least part of it? Is there wood along the canal bank holding the soil in place? If there is wood you are looking at a very early lock and area. Of course ask the local people about the canal and locks. Would you not be surprised if this happened to you?

Next, look for a balanced beam gate. This means that the very heavy beam at the top of the gate extends over the edge of the gate so the gate may be pushed open or closed by hand. A later gate opening device was the rack-and-pinon operated by the lock keeper as he walked a circle around the capstan pushing against a lever, the pinion gear making the gear-turn-draw-bar move the gate open. After the boats were in the lock the lock keeper walked the lever on the capstan in the other direction until the gate was closed.

The balance beam is by far the simplest way to open a gate lock. The pinion gear and rack-and-draw-bar gives a better leverage. This was especially so when the lock gates grew older, the gates warped and the bearings wore. The extra jamming of the gate was overcome with this newer gate opening method.

Older locks of the towpath days have another interesting feature to look for. At the edge of the look you will find a number of long U shaped steel plates that separate the towpath from the water. Some of the best examples of this type of wear are at the old Erie Canal Flight of Five locks at Lockport, New York. Here you can easily see the rope wear on the edge of the old stone blocks. Look at the old iron fence and you will see the rope wear there also. Here is true history and with very little imagination you can see the old mule and tow boat slip into the lock.

You can enjoy the above as you hop from canal to canal. Question? Do any of you know if there was ever a towpath along side of any Canadian Canal?

By Rev. W. Morant, Chairman, Navigation Committee, 61 W. Botella, Sierra Madre, CA 91024.

A LOOK AT SUEZ

(Concluded from Page Three)

struction in this area two and a half years after the destruction took place. Even the Canal signal operators are working out of tents pitched next to their ruined signal houses. It is almost as if the people of this area of the Canal Zone are expecting another war.

Entering Suez City was the climax of our trip. The drive into the city is dramatic since on both sides of the road which leads into the northern suburbs lie the hulks of burnt-out tanks, Russian and American. One of these can be seen lying on its side in a public marketplace, ignored by crowds of people bargaining for everything from oranges to carrots in the traditional manner.

Aside from this grim reminder of the past it is clear that this city at the southern terminus of the Suez Canal is back in business. The main street was so jammed with people, traffic and construction that it took us twenty minutes to negotiate 500 meters. The town is not impressive despite its fame. With possibly 100,000 inhabitants the best that can be said is that Suez is a typical Egyptian provincial town, hospitable to curious--but not really caring what they think.

The town of Suez is removed a mile or two from the Suez Canal itself. It is the oldest city in the Canal Zone, having served from ancient times as Egypt's principal Red Sea port. The physical setting of Suez City is dramatic with the Gulf of Suez shining in the distance at the foot of the vast blankness of Canal Ataka which rooms in the distance.

A few miles to the southeast lies Port Tewfik. Port Tewfik, directly opposite the Suez Canal, was at one time the complete antithesis of Suez City. At one time middle classes, prosperous and cosmopolitan, Port Tewfik is today completely destroyed. Above the ruins at the southern entrance to the canal all one sees today are huge billboards in English and Arabic directed at the ships on the waterway. Their messages vary. One tells "EGYPT WELCOMES YOU AT THE CROSSROADS OF THE WORLD." Another proclaims "WE HAVE OPENED THE CANAL FOR ALL TO USE IN PEACE AND FRIENDSHIP!" This is not necessarily an insincere claim. Since his visit to Washington in the fall of 1973 President Sadat of Egypt consistently refused to answer questions about Israeli cargoes using the Suez Canal. Fluror in Egypt has it that Israeli cargoes are indeed traveling the canal secretly to avoid disturbing Egyptian domestic tranquility. Other exhibit the bank of the canal at Port Tewfik are run by tank with Israeli markings topped by a huge sign announcing the Arabic equivalent of "WE DID IT." A half mile away is still another billboard with the advertising Egyptian canned fruit products.

We finished our tour of the Suez Canal by driving to the southern entrance of the canal, located at the tip of Port Tewfik. Locking out over the Gulf of Suez we saw at least 80 ships forming up into convoys. The entrance itself is marked by a huge stone monument to soldiers of the British--led Indian Army who died defending the Suez Canal from the Turks in World War One and the Germans in World War Two. The top of the limestone column has been shattered by artillery fire.

The Suez Canal is once again open and beginning to flourish. Ships pass through the cities of Port Tewfik and closed the area even returning to their ruined homes. Industrial projects begun with foreign help are beginning to bring a fair amount of modest wealth to the area. Beyond the future of the Canal is very uncertain. After nearly thirty years of war, including two closings of the Suez Canal, peace is still in sight. The rules of past battles and the preparation for future wars are still all over a visitor to the Canal. The soldiers in the area are still tense and the locals in the area are quite suspicious. I suspect that it will be many years before the Suez Canal Zone becomes anywhere near normal. The people of the Canal have a very hard road ahead of them.

J. Wayne Haltema is the Middle East correspondent for American Canals.

Port Tewfik mural commemorating the 1966 nationalization of the Suez Canal, with Nasser facing the torch. Shot up from far side of the canal in 1956-70 war of attrition by the Israelis.
ARTIST PUBLICIZES ROANOKE CANAL

Vivian Wong, a talented artist in Arcadia, California, has just created a beautiful oil painting of the Roanoke Canal Aqueduct, to help publicize local efforts to preserve the 7-mile Roanoke Canal corridor beside the falls of the Roanoke River in North Carolina. This delicate painting is on a lace plate almost a foot in diameter and was painstakingly done, requiring five separate firings in a kiln. Color slides of the plate have been made and two full-sized framed color photographs have been prepared, one for presentation to the town of Weldon, and one for display in the James River and Kanawha Canal Library in Richmond, and at canal talks. The original plate will be used only for special occasions to reduce the chance of damage, since it is a real museum piece. Readers of AMERICAN CANALS and the AMERICAN CANAL GUIDE know how the Roanoke Canal is for a linear riverside park between Roanoke Rapids and Weldon. We hope that local efforts to secure adequate funding for such a park or nature preserve will be helped by Mrs. Wong's painting. (Contributed by Bill Trout)

TRENTON DAM SITE

One of the important sites of the early iron and steel industry was in Wareham, Massachusetts, located in the southeastern part of the state. The early settlers found that if the black muck found in the surrounding swamps and marshland was burned in a certain way, they could obtain bog iron.

The Trenton Iron Works was one of the companies which processed bog iron here, being organized in Boston on March 29, 1845. As water power was the prime source of power at that time, the company built in 1845 a large dam on the Wareham River to power its various mill operations, including plate and roller mills and open-hearth furnaces and ore-cooking boilers. This dam was 200', long, 50' wide at its crest, about 20'-25' high and impounded a pond of about 1,790,000 sq. ft. of surface, with a fall of 16' of water. An elaborate system of brick tunnels and culverts distributed water throughout the complex, but the exact layout and function of each does not seem to be known at the present time, providing a rich field for study for the industrial archaeologist.

The Trenton Nail Company and other companies were also located at this site during this time. The Old Colony Railroad opened two spur lines to this site, one running the full length of the dam. The site was abandoned by the iron and steel industry in 1924, and machinery being moved two years later, followed by the dismantling of buildings. What remains today are the foundations and other underground portions of the complex.

A hydroelectric plant was built at the dam in 1923 to utilize the water previously impounded for the iron and steel industry. The plant was operated by the Plymouth Electric & Power Company to light the streets of Wareham until 1959.

This historic site is now under study through federal and local funding, with emphasis on the foundations of the former mill buildings with their brick tunnels and the canal network. The area is being cleared of undergrowth, with plans for a park.

(Submitted by Alden W. Gould, ACS Director, 501 Alamo St., San Mateo, CA 94401.)

GOOSE CREEK BILL SIGNED

The Goose Creek (Virginia) Scenic River bill has been signed, making that the state's second Scenic River, and, of course, just as full of old locks as the Rappahannock. Of the six remaining locks sites the last one easily accessible to the public is about half a mile below the Fairfax County Dam. On route 7, just east of the Goose Creek crossing, for 3 miles and turn right on Rt. 642 at the City of Fairfax water treatment plant, to the dam at the end of the road, and walk down the river bank to the lock. Take your measuring tape along to see for yourself why the records mention that two Goose Creek boats could have locked through the Chesapeake and Ohio Canal River Lock on the Maryland side of the Potomac River. This experiment was probably never tried, however, since as far as we know only one boat was ever built for the Goose Creek and Little River Navigation, and that one once, to Evergreen Mills and is still rotting away there.

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NO CANAL, MR. SPEAKER!

by L. W. RICHARDSON

We are accustomed to reading contemporary speeches, both for and against canal projects, phrased in the flat and repetitive rhetoric of the early nineteenth century. The following is an outstanding example of a very popular method of destroying an opponent's position—through the use of rural humor and exaggeration.

In the 1815-1825 Georgia Legislature, a bill was introduced, for reasons now obscure, proposing a canal in North Georgia. This waterway would divert the Chattahoochee River, whose waters flow to the Gulf of Mexico, to the Oconee River and thence to the Atlantic Ocean. A representative, John Seabrook, who lived on the lower Oconee, spoke on the proposal, in part as follows:

"What, Mr. Speaker, will become of me and my family, when the Chattahoochee, three miles wide, a thousand feet deep, and ten miles higher than the sea, is turned loose at the rate of forty miles a minute, on lower Georgia? Why Sir, it will wash away one of us, and if we do not get drowned, we will wake up some morning and find ourselves a-straddling of logs floating about in the Atlantic Ocean. Yes Sir, the mountains of northern Georgia will come tumbling down here, and knock our State House into a cocked hat, and people will look out of their top windows to see if old Father Noah is sailing around in his big ship. Besides all this, Mr. Speaker, if we turn the vast volume of water that is in the Chattahoochee from the channel where God made it to run, the Gulf of Mexico would go dry, and the fishes, whales, alligators and storks in it would sink so that nobody could live in 10,000 miles of its shore."

The Bill was never again heard from.

AMERICAN CANALS, NO. 19 — November, 1976
“AQUEDUCT BRIDGE” TO BE DEDICATED

Champlain Canal
(Concluded from Page One)

The study report divided the Waterford section of the canal into five zones, each with its own potential. In general, the study recommends a more intensive type of development involving cleanup work, clearing of the original towpath for use by hikers and cyclists, and the erection of historical markers to attract visitors to the canal's history. The State of New York has assured Waterford that it will cooperate and assist in the project whenever possible with the loan of equipment, manpower and the use of surplus materials. The State has already completed the erection of two authentic 19th-century type bridges over the canal in the Village of Waterford.

The Waterford Canal Action Committee is continuing to work with the Town and Village of Waterford in seeking potential funding sources to implement the proposed park development, while also planning to organize volunteer work efforts in the spring to promote interest and involvement.

According to Douglas, the committee has no illusions about the ambitious nature of the project or the current financial difficulties involved in implementing it. But he emphasized that a comprehensive plan has at least been completed and interest has been raised, and notes that if necessary a slower step-by-step implementation can be pursued as practical. He termed the National Register listing of the canal, however, as a "great distinction for this historic waterway and an important step towards the eventual realization of the canal's recreational potential."

Middlesex Canal

The famous Loammi Baldwin Mansion (1661-1803) has been moved to its new location on the Middlesex Canal (1793-1853) at Woburn, Mass. The house and the adjoining portion of the canal are being restored with initial funds from the city, a federal grant and donations from citizens. (Photo by Alden Gould)

NORWAY'S TELMARK CANAL

Our correspondent from Frankfurt, West Germany, Kaplan Konrad Nussbaum, writes: "Last year I made a trip on the Telemark Canal, the only inland waterway in Norway that can be reached from the sea. Maybe you and your readers will be interested in it, so I send you some folders on the canal."

The folders describe the route via steamboat between Skien and Dalen, a distance of 138 kilometers. In addition to the canal and 17 lift locks, the boat goes via a series of beautiful lakes.

For maps and descriptive literature, write to A/S TUVEST-Trafikk, N. Hjelle, 18,5730 Skien, Norway, mentioning that you are a member of the American Canal Society.

(Kapt. Nussbaum's address is: 6 Frankfurt 60 Gr. Spillingagasse 21, West Germany.)

This is available for 175 Belgian Francs plus 25 B.F. per package (about $5) from the General Secretary, PIANG, Residence Palaces: Querliet Jordannes - Rue de la Lice 135, 1040 Brussels, Belgium.

HOW TO TELL A HAHN FROM AN UMLAUF

Some of our members may be interested in joining The Permanent International Association of Navigation Congresses, known as PIANG. The membership brochure notes that PIANG "exists for the purpose of studying and improving inland and maritime navigation by organizing International Navigation Congresses and by publishing papers, proceedings and other documents. The word 'Navigation' in the title is used in the oldest sense, that is, in the sense that canals used to be called 'navigations' and the men who built them 'navigators.' The Association was established in 1865 under the surge of the Belgian Government and has its headquarters in Brussels. Although its activities were confined initially to inland navigation problems, they were quickly expanded and have included ocean navigation as a second section ever since the 1900 Congress. Membership is $15 a year but during a Congress year new membership is much more, so join in 1978 since the next Congress will be in 1977 in Leningrad. We have a few membership brochures, available from Bill Trout for 24c in stamps, or write directly to the American Section, PIANG, c/o Board of Engineers for Rivers & Harbors, Kingsman Building, Fort Belvoir, Va. 22060.

One of the most interesting publications from PIANG is Ch. B. von Locks, of their multi-lingual Illustrated Technical Dictionary, where you will not only see all the parts locks and equipment labeled in English and American, but you will clearly differentiate between a hahn and an umlauf (or the same thing, a kran from a rivet).
THE HENNEPIN CANAL (Part One)

by MARY M. YEATER

(This article is the first of a series on the Hennepin Canal, formerly the Illinois-Mississippi Canal. The first two articles under the title of "The Hennepin Canal" appeared in the planning stages before actual construction. Mary Yeater is a historian working for the Illinois Department of Conservation in the historical research of the Hennepin Canal Foundation. The idea for the articles was initiated by Neil Rengan, Ranger, Hennepin Canal Parkway.)

The idea of a Hennepin Canal connecting the Illinois and Mississippi Rivers (on a line approximately parallel with what is now the Western half of the Illinois section of Interstate 80) has its roots in the River of High Speculator (as it was swept through Illinois in the 1830s). The land speculators who bought, platted, and sold the "paper townes" of the State were convinced that Illinois's soil, climate, and vast territory could be profitably exploited if inhabitants and enterprise were provided. Most of the adventurers, like Dr. Augustus G. Langworthy who owned extensive property along the eventual route of the Hennepin Canal, argued that these two needs could be met by a liberal system of State internal improvements.

The local interest improvement schemes urged by the land speculators in the 1830s found support in the Illinois Legislature, especially among the "Long Nine" of Sangamon County (seven Representatives - including Abraham Lincoln - and two Senators). They wanted to transfer the State Capital from Vandalia to Springfield in Peoria County to Springfield in Sangamon County and they threw their considerable power behind internal improvement legislation in a logrolling effort. To pull Representatives from Northern Illinois in their debt, the Illinois Land Company, among others, was formed. The legislation related to the proposed Illinois and Michigan Canal connecting Lake Michigan via the Des Plaines River to the Illinois River (on a line parallel with what is now the Eastern half of the Illinois section of Interstate 80). Their promotion of this canal also fostered support for the change of capital among Representatives of the lower Illinois River Valley all the way from Peoria to just north of St. Louis because the new canal would put their constituencies in a through-water route from the Great Lakes to the Gulf of Mexico.

In the midst of all this wheeling and dealing Joseph Geler, a former construction superintendent on the Erie and Ohio Canal, arrived in Illinois as a settler. As he later recalled, "In September 1834, I took my blanket and gun and viewed the country from Hennepin to the Mississippi River, near Rock Island, and thought it a natural site for a canal, as the River is navigable all the way across with high land on either side. . . .hunting on my showing him the advantages that would accrue to him if it was carried out, having property at Indian Town, now Islewa, he began to see that there would be dollars and cents in it, and so he joined with me. . . ." The two men called a meeting of local citizens at the Court House in Hennepin where advantages of their proposed canal were discussed. It was stressed that a Hennepin Canal would be, in effect, an extension of the Illinois and Michigan Canal (that is a canal version of Interstate 80 opening a direct commercial link with the Upper Mississippi Valley).

Although in both their printed circulars and lobbying efforts the Hennepin group tried to couple the already established support for the Illinois and Michigan Canal, they were not very successful.

The town of Galesburg, Illinois, is often called "the Gateway to the West." It was the gateway to the West to the eastbound emigrants who used the Illinois-Mississippi Canal to reach the Mississippi River. During the Civil War, when the Union and England were at loggerheads over the issue of slavery, the Union Government saw the canal as a potential military asset. The Union Government encouraged the use of the canal for military purposes, and the canal was used for the transport of troops and supplies.

The canal was also used for commercial purposes, particularly for the transportation of goods from the Midwest to the East. The canal was a major factor in the growth of the Midwest, and it played a significant role in the development of the United States.

A NOTE FOR NON-U.S. MEMBERS

Our bank is charged a large fee for processing checks on foreign banks written in dollars. So please either (1) write checks in your own currency, at the current exchange rate; or (2) have the bank issue a check in dollars to a U.S. bank (which might be expensive to you); or (3) use paper money, either yours or dollars. If you want to risk it. (ACS Treasurer)

World's Highest Lift Locks

This photo was snapped by Tom Hahn this past summer at Peterborough, Ontario, Canada — showing the world's highest lift locks in operation, on the Trent Canal. Boats are raised and lowered from one level to another by means of these counter-balanced, hydraulically-operated pairs of huge water chambers, which fit snugly into the upper and lower levels of the canal. Water-tight gates are closed at both ends of the chambers, as well as the lock ends of the canal when the mechanism is in motion. This is something you have to see to believe!
U.S. Grant Goes to West Point

U.S. Grant, later General and President, received an appointment to West Point Military Academy in the Spring of 1839. Grant grew up in Georgetown, Ohio, about 36 miles east of Cincinnati and 10 miles north of the Ohio River. This 17-year-old youth was sent to West Point, apparently much against his will, by steamboat, canal boat and railroad. He tells about this trip in his Personal Memoirs.

I took passage on a steamer at Ripley, Ohio, for Pittsburgh, about the middle of May. 1839. Western boats at that day did not make regular trips at stated times, but would stop anywhere, and for any length of time, for passengers or freight. I have myself been detained two or three days at a place after steam was up, the gang planks, at all but one, drawn in, and after the time advertised for starting had expired. On this occasion we had no vexatious delays, and in about three days Pittsburgh was reached. From Pittsburgh I chose passage by the canal to Harpersburg, rather than by the more expensive stage. This gave a better opportunity of enjoying the fine scenery of Western Pennsylvania, and I had rather a dread of reaching my destination at all. At that time the canal was much patronized by travelers, and, with the comfortable packages of the passengers, the mode of conveyance could be more pleasant, when time was not an object.

From Harpersburg to Philadephia there was a railroad, the first I had ever seen, except the one on which I had just crossed the summit of the Allegheny Mountains, and over which canal boats were transported. In travelling by the road from Harpersburg, I thought the perfection of rapid transit had been reached. We travelled at least eighteen miles an hour, when at full speed, and made the whole distance averaging probably as much as twelve miles an hour. This seemed like annihilating space.

"I stopped five days in Philadelphia, saw about every street in the city, attended the theatre, visited Girard College [which was then in course of construction], and got a room on the corner afterwards, for dallying by the way so long. My sojourn in New York was shorter, but long enough to enable me to see the city very well. I returned at West Point the 26th or 31st of May, and about two weeks later passed my examination for admission, without difficulty, very much to my surprise." (Contributed by A.C.S. member Robert S. Mayor of Lancaster, Pa.)