

# AMERICAN CANALS

BULLETIN OF  
THE AMERICAN CANAL SOCIETY

BULLETIN NUMBER 100

Editorial Address—840 Rinks Lane, Savannah, TN 38372-9704

FEBRUARY 1997

## PRESIDENT'S MESSAGE

With this issue, the American Canal Society has reached a milestone. This is Bulletin Number 100, and we are 25 years old. And for all that time Bill Shank, one of the founders of the society, has been the publisher of *AMERICAN CANALS*. For a quarter of a century he has worked with our editors, with the printers, and with the post office to create a quality publication every quarter, and on time. Bill is a Professional Engineer with experience in producing newsletters and with a fascination with canals, so we couldn't have asked for more.

Bill has declared Bulletin Number 100 to be his last, and this is it. Now he can take some long vacations and forget about putting out bulletins on time. But he has agreed to keep on helping us as long as he can, with the vital but unsung chores which have kept us in business, such as being our man on the spot in York, Pennsylvania, where we use a mail service and enjoy a non-profit mailing status with the Post Office, thanks to Bill.

We will also be losing the services of our Editor, Denver Walton, who warned us that he would have to step down for family reasons. Before taking on *AMERICAN CANALS* in 1991 Denver, a chemist, had thirteen years of experience editing his plant's magazine and ten years with the Pennsylvania Canal Society's magazine, *CANAL CURRENTS*. He worked for over four years with Bill Shank to produce *AMERICAN CANALS* and we can all say that he did an excellent job, which deserves our thanks.

*AMERICAN CANALS* is our most important product, and the Editor has the most important position. When the society was formed 25 years ago the primary goal was to act as a medium of exchange of information for the local and state canal societies - to let everyone know what everyone was doing, for their mutual benefit. This means publishing a stimulating, informative, and interesting magazine, and it requires a good editor.

Fortunately, our society has very talented members and we have gained a new Editor, an old friend of the canal society, David F. Ross of Savannah, Tennessee. Dr. Ross was an official Contributing Editor to *AMERICAN CANALS* from 1987 to 1991, our Editor from 1991-92, and the Chairman of our Navigable Canals Committee since then. David will be both editing and publishing the bulletin so send him your articles, photographs, letters to

the Editor, last-minute announcements (especially the Canal Calendar) and anything else for *AMERICAN CANALS*. Original articles are *always* needed. And be sure that your canal society puts our new Editor on the mailing list if you want your news in *AMERICAN CANALS*. David Ross's address is 840 Rinks Lane, Savannah, TN 38372-9704.

We will also be changing presidents in October so I have been working closely with Terry Woods as we change editors and think about the future. You don't have to wait until October to send Terry your advice and suggestions! His address is 6939 Eastham Circle, Canton, OH 44708.

Bill Trout

## WRECKS ON THE I&M CANAL

by James E. Held

Few things are sadder than a dry canal. Last July, torrential rains of up to eleven inches fell west of Chicago on earth already saturated from heavy spring precipitation. Run-off transformed the pleasant Du Page River into a muddy torrent, building pressure against the sturdy dam at Channahon. Water overflowed the concrete structure onto the earthen embankment that acts as a feeder to the historic *Illinois and Michigan Canal*. Erosion undermined the foundation. Finally the dam burst. Damage done, the rains subsided, but the canal began to dry. Catfish, carp and bass desperately congregated in the remaining shallow pools. Mud dried into a maze of cracks under the hot Midwestern sun.

Optimists try to find the bright side of every situation. Herons and raccoons found a smorgasbord set to feast upon. The dry bed will also give the State Park a chance to dredge the channel of accumulated mud and silt. For archeologists, historians and canal enthusiasts, it became a golden opportunity to explore the Canal's past.

Old-timers around the town of Morris remember a series of wrecks. They had been abandoned before the opening of the Illinois Waterway in 1933 which rendered the narrow dimensions of the *I & M* obsolete. These sturdy crafts had laid there, forlorn and half-

(Continued on Page Two)

## YOUR NEW EDITOR-PUBLISHER

Dr. David F. Ross, your new Editor, starting with the May 1997 Issue of *AMERICAN CANALS*, is no stranger to members of the American Canal Society. He and I had worked together as Editor and Publisher before Denver Walton became our Editor. David is an excellent writer and takes fine pictures as well. When he sets out to explore a canal or waterway, he does it from the deck of his own cruiser.

He has written some splendid descriptions of various navigable rivers in Central USA, which have appeared with maps which he has also drawn personally, in *AMERICAN CANALS*, and also in the well-known *QUIMBY'S ANNUAL CRUISING GUIDE*, published by the Waterways Journal of St. Louis, Mo. In recent years he has served as Chairman of the ACS Navigable Canals Committee.

David will be fully responsible for the material which appears in future issues of *AMERICAN CANALS*. It will be my pleasure to offer him the full facilities of our printing and mailing services here in York, Pa., if he wishes to use them.

Bill Shank

## "SUPPORT YOUR LOCAL CANAL"

(Bumper Sticker)

Celebrate our 25th Anniversary, advertise the canal society, and support your own canal by sporting the enclosed SUPPORT YOUR LOCAL CANAL bumper sticker. The address on them is our traditional one, Bill Shank's, and he promises to tell anyone who writes about the local canal society as well as ACS. For one or two more stickers send a SASE to Bill Trout at 35 Towana Road, Richmond, VA 23226-3124. While they last we also offer to send your canal society enough for a mailing, one per member - let me know how many you need!

Bill Trout

NOTE new address for David Ross - use the Rinks Lane address for David Ross, not the old address with the box number. David F. Ross, 840 Rinks Lane, Savannah, TN 38372-9704.

# American Canals

BULLETIN OF THE AMERICAN CANAL SOCIETY

Incoming Editor and Publisher: **Dr. David F. Ross**, 840 Rinks Lane, Savannah, TN 38372.

Outgoing Publisher: **William H. Shank, P.E.**, 809 Rathton Road, York, PA 17403. 717 843 4035.

Outgoing Editor: **Denver L. Walton**, 968 Chapel Road, Monaca, PA 15061. 412 774 8129.

Contributing Editor: **Bruce J. Russell**, 240 Mt. Vernon Pl. (11-E) Newark, NJ 07106.

Contributing Editor: **David G. Barber**, 16 Ballou Road, Hopedale, MA 01747.

AMERICAN CANALS is issued quarterly by the American Canal Society, Inc. Objectives of the society are to encourage the preservation, restoration, interpretation, and use of the historic navigation canals of the Americas; to save threatened canals; and to provide an exchange of canal information.

Annual subscription to AMERICAN CANALS is automatic with A.C.S. membership. Send dues payment (\$15 minimum) to Sec'y/Treas. Charles W. Derr, 117 Main St., Freemansburg, PA 18017. Single copies may be purchased at \$3.00 from the publisher.

Manuscripts on subjects consistent with the objectives of the A.C.S. are welcome. They should be sent to the editor.

## WRECKS ON THE I. & M. CANAL

(Concluded from Page One)

submerged for years. Rather than totally go to waste, ice-skating parties of frigid youngsters had torn planks from the decks and superstructure poking above the ice. The sturdy oak burned well and warmed cold hands and feet nicely. Rot did the rest of the work until the hulks disappeared beneath the water surface into three feet of ooze and muck. However odoriferous, mud displaces oxygen needed for decomposition to form an excellent preservative. As archeologist Hal Hasen and Park Rangers continue their survey, they have discovered seven wrecks in various states of preservation and decay.

Morris is about two hours from Chicago and close to *Gebhard Woods State Park*, a popular spot to canoe or hike along the towpath. Because of the I & M Canal, the community grew into a manufacturing center, but little evidence of that early industrial era remains in the boat basin where the wrecks rested for decades. Even in a "dry" canal bed, archeological conditions are very challenging. Fruitless tedium and aching backs are typical in an archeologist's daily routine, but here, rain collects into puddles on slippery mud. With the approach of winter, the freeze will improve footing and stop water from seeping back into excavations but at the expense of

delicate work that uncovers fine and revealing artifacts. Add Midwestern snow and cold on top of that and obtaining *line drawings* of the wrecks is no simple task! Of the hundreds of vessels that plied the I & M, no plans exist, and precious little is known about their construction. These vessels will become the only documented Illinois and Michigan Canal boats. A few old photos and an 1880 Morris newspaper account names some vessels, and as work progresses and is fed into a computer, programs can be compared, speculate and perhaps identify an individual wreck.

With a sketchy survey on five boats completed, so far none are totally intact. After abandonment, anything of value was most likely stripped and salvaged. Freeze and thaws, decay, exposure and those ice-skating parties have done their work on planks, ribs and frames. It appears, they were mule-drawn vessels not steam boats they shared the Canal with. The wrecks are not identical either, as different types of rudder posts indicate different designs. Even the exact dimensions and tonnage are still unknown. With the gaps in their structures and artifacts missing or lost, the presence of seven wrecks should still give an excellent composite of how they appeared. Often on a dig, the discovery of small objects inadvertently lost in the distant past can be the most revealing about that era. If such small treasures that slipped through fingers or pockets into bilges do exist, they have yet to be discovered.

This National Heritage Corridor is a popular recreation area that includes canoeing. The original plans to reflood the Canal come spring put the archeologists on a tight time constraint, but a reprieve could be in the making. The year 1998 is the Sesqui-centennial of the I & M's opening. Rangers may wait until then to water the waterway and use 1997 to complete lock and aqueduct repairs, deepen the bed, shore up the banks and prepare for the big event. If so, archeologists can work systematically and thoroughly. Fortunately, because no funding or space exists to display one of the wrecks. Once the survey is complete, the Canal will revert to its normal wet state, and these historic vessels will be submerged again. But if water conceals them from human sight, their brief dry exposure in the late twentieth century will reveal secrets that will give us a better perspective and understanding of the fascinating era they represent.

James E. Held, 82 W. 12 St. #6A,  
New York, NY 10011

## New Jersey Canal Society Plans Busy Season

The Canal Society of New Jersey plans a Summer Tour, Saturday June 28th through Monday July 7th, 1997. Many canal sites in Pennsylvania, Ohio and Indiana, by bus, boat and train—Indian Mounds, Canal Towns and much more. Contact: Linda J. House, 214 North Bridge Street, Somerville NJ 08876 for full details, cost, and registration. The CSNJ Bulletin also reminds us of other field trips: (1) the Virginia Canals and Navigations annual meeting and tour along the C. & O.

## 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. 508 251 4971.

William J. McKelvey, Jr., 103 Dogwood Ln., Berkeley Hgts., NJ 07922  
908 464 9335.

**Secretary/Treasurer:** Charles W. Derr, 117 Main St., Freemansburg, PA 18017, 215 691 0956.

**Directors:** David G. Barber, 16 Ballou Rd., Hopedale, MA 01747.

Robert Barth, P.O. Box 2552, Branchville, NJ 07826.

John Burtiak, P.O. Box 304, Thorold, Ont. L2V 3Z3.

Thomas X. Grasso, 27 Fairfield Ave., Rochester, NY 14619.

Thomas F. Hahn, Box 310, Shepherdstown, WV 25443.

T. Gibson Hobbs, Jr., 3204 Landon St., Lynchburg, VA 24503.

David M. Johnson, 9211 Wadsworth Drive, Bethesda, MD 20817.

Frederica Kleist, 528 W. Cook St., Portage, WI 53901.

Keith W. Kroon, 2240 Ridgeway Ave., Rochester, NY 14626.

John M. Lamb, 1109 Garfield St., Lockport, IL 60441.

Roger W. Squires, 46 Elephant Lane, Rotherhithe, London SE16 4JD, England.

Arthur W. Sweeton, ILL, 6 Humphrey Rd., Canton Center, CT 06020.

Terry K. Woods, 6939 Eastham Cir., Canton, OH 44708.

### Committees:

A.C.S. Sales, Keith W. Kroon, chrmn., Canal Archaeology, Mark Newell, chrmn., USC-IAA, Georgia Archaeological Institute, P.O. Box 984, Augusta, GA 30901.

Canal Boat, William J. McKelvey, Jr., chrmn. Canal Operations and Maintenance, Charles W. Derr, chrmn.

Canal Parks, Elizabeth L. Hahn, chrmn. - 1453 Grandview Road, Arnold, MD 21012.

Historic American Canals Survey, William Dzombak, chrmn., 621 Spring St., Latrobe, PA 15650.

Navigable Canals, David F. Ross, chrmn.

**Other publications:** *The Best from American Canals*,

William H. Shank, editor and publisher.

*American Canal Guides*,

William E. Trout III, editor and publisher.

# VENICE - FLORIDA

In the last issue of *AMERICAN CANALS*, I gave you my impressions of Venice, California (near the infamous Santa Monica which we have been hearing so much about lately).

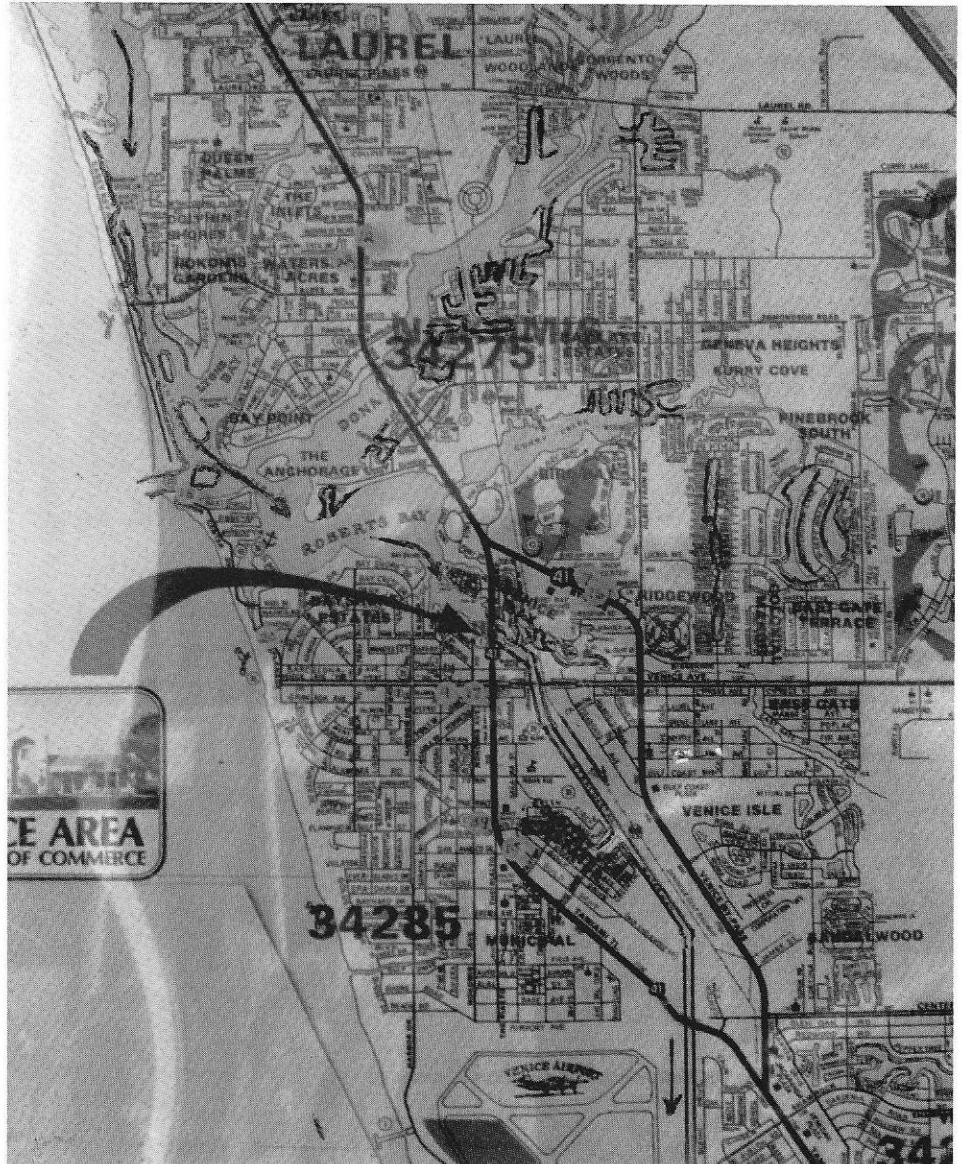
During my regular visit to Florida this Christmas with my Daughter, Nancy O'Dell and her new Grand-Daughter, Julie Elizabeth Raber of Sarasota, I decided to have a look at Venice, Florida, which is just a few miles south of Sarasota on the Gulf Coast.

A visit to the Venice Chamber of Commerce finally produced a woman who seemed to know something about the Venice, Florida "Canals". This individual referred me to the suburb just north of the city named "Nokomis" where a number of small estuaries off the Dona and Roberts Bay have apparently been designated as "Canals". On the accompanying map I have attempted to high-light some of these estuaries. Also, if you look carefully, you will see that I have marked with arrows the route of the "Intra-Coastal Waterway" through Venice and its suburbs. To me this looks more like a true canal than anything else nearby.

The main thrust of the local promotion appears to feature Venice, Florida as the "Shark-Tooth Capital of the USA", which seems to have little to do with canals. One thing I did learn from a local inn-keeper is that, in addition to the "Venices" in Italy, California and Florida, there is also a Venice, Illinois and a Venice, Colorado!

Perhaps some of our ACS members in the latter two states can tell us just what we are missing there? In the meantime, I have to cast my vote for Venice, California as being the most interesting and authentic "Venice of America" .....

Bill Shank



## The American Canal and Transportation Center

A number of people have asked me, since I announced that I was retiring as Publisher of the *AMERICAN CANAL BULLETIN*, whether I would also retire from the publishing of canal books in general. Far from it! With the help of my daughter, Nancy O'Dell of Annapolis, Maryland, we will continue to advertise, distribute and sell the large inventory of books which I have published personally and which occupy too much valuable space in my basement!

Tom Hahn and I formed a partnership shortly after the American Canal Society (a non-profit venture) was formed. We early discovered that, with the possible exception of Alvin Harlow's *OLD TOWPATHS*, very little really good literature existed on the historic canals of the United States. What did exist had been written by regional canal enthusiasts on local canals, with little effort to tie it all together. In this respect both the British and the Canadians were way ahead of us. They had not only made an effort to restore their historic canals; they had written a great deal of good literature about them.

When Tom and I first came to grips with this "vacuum" in our American canal history, we began buying small quantities of canal books, fact and fiction, many from England and Canada, and made their existence known to the members of the American Canal Society. The first formal name we gave out partnership was the AMERICAN CANAL CENTER, whose address was Lockhouse Number 6, C. & O. Canal, P.O. Box 638, Glen Echo, Maryland, 20768, Tom's residence after he retired from the U.S. Navy.

We began discovering some very old, and very good canal literature that had been published in the Nineteenth Century. One such publication was *MITCHELL'S COMPENDIUM OF INTERNAL IMPROVEMENTS OF THE UNITED STATES - 1835*. This little 3-1/2" x 6", 84-page directory was so informative and interesting that we felt it should be republished for canal buffs (and railroad buffs) in the USA. This became our first publishing venture!

Since that early date - 25 years ago - Tom Hahn and I between us have published

at least 40 some books, on the early history of canals, railroads, highways, bridges, inclined planes and early river travel in this country. We are both amazed at the interest generated by these books, and the rapidity with which they have sold out! Some we let go out of print and others we have continued to reprint. Tom's most popular books have been his series entitled *TOWPATH GUIDES TO THE C. & O. CANAL*. Mine have been the *AMAZING PENNSYLVANIA CANALS*, *VANDERBILT'S FOLLY*, and *INDIAN TRAILS TO SUPERHIGHWAYS*. Tom has also written and published a number of other books on the C. & O. Canal and related subjects in Maryland, Virginia and West Virginia.

Bill McKelvey, an experienced publisher (with his Canal Captain's Press) and Steve Humphrey with the publishing facilities of the Hugh Moore Park behind him, have both offered to take over my canal-book inventory and ACTC sales activities when I am no longer able to handle them myself, and I appreciate this greatly.

Bill Shank

# INNKEEPER AFLOAT

by Jeremy Scanlon

**66 Old Holyoke Road, Westfield,  
MA 01085, Tel./Fax (413) 572-9013**

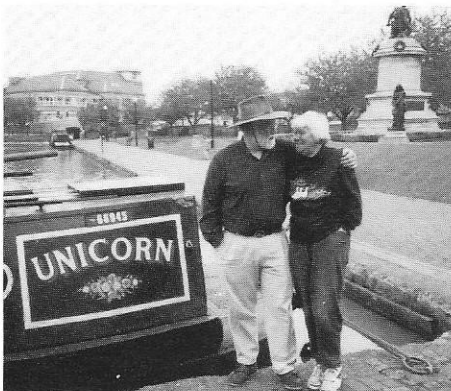
Mr. Denver L. Walton, I have been a member of the American Canal Society for a number of years, have had a letter or two published in *American Canals*, but not, I think, an article. Certainly I have not written one for you recently, and I think your readers might be interested in my life as a floating innkeeper on the English canals. Of course I also hope a few readers might be interested enough to book a cruise!

I have been published in a number of American periodicals and in England's *Waterways World*. I will be at the address above through 5 February; the telephone number is 413 562 9296. In England my address is Canal Cottage, Old Warwick Road, Lapworth, Warwickshire B94 6BA. The cottage phone number is 01564 782562, but a safer bet is 0973 483724, the mobile which moves with me from cottage to boat.

Jeremy Scanlon, Ph.D.



**The "Unicorn", all seventy feet of her, at the top of the Caldon Canal.**



**Dorothy and Jeremy, with the "Unicorn" at their usual mooring place in Stratford Upon Avon. The Shakespeare Monument is in the background, and the Shakespeare Theatre is close at hand.**

Wednesday morning is the anxious time. The boat is spic and span. Fresh flowers are in all the vases (which hang against the walls to save space and avoid spills) and I have donned the fresh shirt and carefully casual ascot which will, I hope, strike the right note with the guests. But what will they be like? Quarters on a narrow boat are, well, narrow. A week in close quarters with the wrong sort of guest can be distinctly unpleasant.

Fortunately, most people who elect this sort of holiday are reasonably compatible, at least in the short run, but the occasional exceptions are vivid in memory. Hence the anxiety. Once they are settled in, guests invariably ask how I got into such a curious way of life.

I discovered the canals thirty years ago. In England for the first time to pursue research for a doctorate in British history, I had just begun to realize that I would never round Cape Horn under sail, or make any of the other voyages dear to the imaginations of land-locked New England Anglophiles. Imagine my delight at finding that *inside* Britain one could hire a boat and make a real voyage even if celestial navigation and marine engineering were not ones strong suits!

In those days a week's hire was within the means of an impecunious grad student. Of course the little cruiser had none of the home comforts taken for granted by today's canal

voyagers, and the weather was relentlessly cold and wet, but a week up the magical Llangollen Canal, including the transit of Telford's extraordinary Pontcycyllite Aqueduct, hooked me properly. For life, as it has turned out.

A longer cruise two years later gave me the confidence to launch *England Afloat*: in 1972 a peaceful canal world where a "Yank" was a distinct novelty found itself invaded by four boat-loads of American college students doing a floating semester of English history and literature. The trauma incidental to 20 students managing 50' narrow boats for months on end can, fortunately, not easily be imagined, but nonetheless I was convinced I



**The "Unicorn" on the Stratford Canal Aqueduct.**

had found my place in life.

A permanent *England Afloat* would require better classroom and library space than hired boats could afford, so I designed a full length (seventy foot) narrow boat with an over-sized saloon and 100' of book shelving. *Unicorn* would also provide comfortable accommodation for the faculty (self and wife) as well as the paying guests we expected during academic vacations.

Unhappily, by the time *Unicorn* slid down the ways of Braunston Boats Ltd. the faculty partnership was in dissolution. *England Afloat* (academic) was indefinitely postponed, so *England Afloat* (guests) remained as the only hope of making the boat pay for itself and allow me to go boating every summer.

I was genuinely surprised when complete strangers proved willing to send money to an improbable address in Massachusetts and then come looking for a narrow boat at an even more improbable address in England. (Wootton Wawen? Wyre Piddle?) Twenty-three years later many of these trusting strangers are old friends; one has made 17 cruises on *Unicorn* and leaves her boating clothes.

In these years *Unicorn* has logged some 30,000 miles, and her skipper has gradually changed from an academic who did a little



Family and friend with the Scanlons in the "Unicorn" saloon.

For six months each year our mail is forwarded to *Unicorn*, somewhere "on the cut." Often we ourselves do not know just where that might be two weeks hence. When I began semi-commercial boating, it seemed that operating to a fixed schedule like the "proper" hotel-boats would lose much of the vagabond charm of canal travel.

I chose freedom over predictability, and have never regretted it. We are free to stop wherever and for as long as we please, never having to regret that while this village, pub, castle might be very appealing, the necessity of getting to X by Saturday precludes a stop. The goal of a canal cruise is the cruise itself, not the town at its end where our guests go regretfully ashore.

Not that these towns are without interest! *Unicorn* allows us to live in, rather than merely visit, major cities like London and Birmingham, as well as historic villages in lovely countryside. Our "home port", only 15 miles from Canal Cottage, is the canal basin in Stratford-on-Avon. We often meet new passengers there; on off weeks we are likely to settle into our favorite mooring about 75 yards from the theatre and catch up on the offerings of the Royal Shakespeare Company.

*Unicorn* had her bottom over-plated in new steel last year and should be good for another 30,000 miles. The same probably can't be said for the crew, but we're not inclined to abandon the cut yet awhile. If you'd like to visit, or just to chat about any aspect of the English canal scene, contact "England Afloat," 66 Old Holyoke Road, Westfield, Massachusetts 01085. Tel 413 572 9013. If I'm back in England, my family here can answer many questions, and supply my number in England if you'd like to phone there.

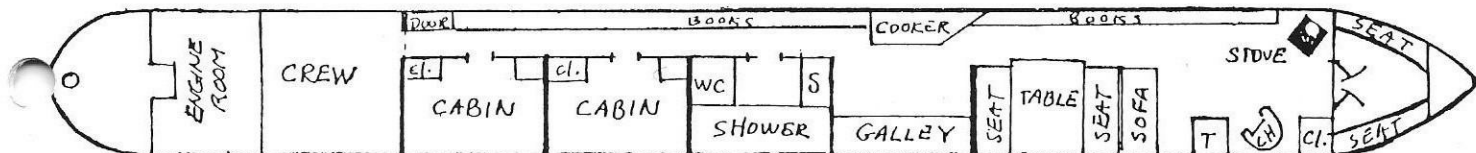


Jeremy Scanlon and his narrow boat on the Macclesfield Canal, preparing to pass under a "Roving Bridge". (In Pennsylvania we would have called this a "Winding Bridge," where the tow-path changes sides of the Canal. WHS)

boating in the summer to a boatman who does a little teaching some winters. I visit my native Massachusetts every year, but my official address is Canal Cottage, Old Warwick Road, Lapworth, Warwickshire, U.K. My wife was born in the cottage, daughter of the carpenter who built the lock gates for the Stratford Canal at its door.

## THE ITINERARY

*Unicorn* is not a miniature cruise ship with a rigid itinerary. Rather, she is a private inland yacht, wandering at will through England. Our guests help to defray expenses; they also share the freedom which is so delightful a part of this mode of travel. When you come aboard, we spread out the maps and guides and decide which way to go. Once under way, we are truly out of time, perfectly free, as the impulse strikes us, to stop at an attractive village or a friendly pub, and stay for as long as we please.



"Unicorn" Interior Arrangement

# WHEN HORSES PULLED BOATS

By Alvin Harlow

In this issue we conclude the 1936 booklet by Alvin F. Harlow entitled "When Horses Pulled Boats," written primarily as a grammar-school textbook.

Bill Shank

## CHAPTER VII THE CANAL AND THE FARMERS

When the canals were first dug, many farmers who lived near them built their own boats to carry their produce to market. Merchants and traders also had their own boats, in which they shipped cattle, furs, salt, and other freight. Many of these boats were made by men who had never done any boat-building before. The job was very poorly done. Some of the boats leaned to one side when they were put into the water; some were heavier at one end than at the other; some were very hard to steer. But the worst trouble with most of them was that their hulls leaked so badly that the cargo got wet, and some of the boats would sink every few miles.

When a boat sank, it did not go out of sight, because the water was hardly ever more than four or five feet deep. But when a boat sank, its cargo was likely to be ruined by the wetting. Other boatmen became very angry, too, when they came along and found a boat sunken, partly or wholly blocking the channel. Sometimes it took a day or two to get the water pumped out of a sunken boat, the leaky seams patched, and the boat raised again.

After the first year or two along a new canal, men learned how to build better boats, and the farmers were more likely to let the regular boatmen carry their produce.

When a farmer loaded his own boat and started for a town such as Utica or Harrisburg to sell his grain or hogs, he sometimes had one or two of his sons in his crew, or perhaps the hired man who worked on his farm, or one or two of his neighbors. If it was the first trip, probably none of these men had ever been very far from home before, and knew but little about the country through which they were passing. They would go along, asking other boatmen, "How far is it to Utica?" At night they would tie the boat to the bank, often just where it would be in the way of other boats, and they would go to sleep. At daybreak next morning one of them would cook breakfast, they would eat, and start on their way again.

A funny story is told of one of these boats. A farmer started for Harrisburg with his crop on his boat, going down the Pennsylvania Canal, which ran along the Susquehanna River. One night, after a hard day's work, his crew tied the boat to the bank, not far from a regular freight boat. They were very tired and slept soundly. During the night, the men on the freight boat slyly loosened the farmer's boat from the bank and turned it around, heading it upstream. The farmer and his crew did not waken.

Next morning, not noticing the change in



Gossip

their direction, they hitched up their horses and started right back over the canal through which they had passed the day before. After going several miles, they came to a small town. One of the men, looking about him in surprise, said, "Why, this looks just like a town we came through yesterday." Not until then did they learn of the joke that had been played on them.

## CHAPTER VIII WHAT THE BOATS CARRIED

Look at the boats coming from the farming country, going towards the cities on any of the canals. Down in Virginia they are creeping on towards Richmond. On the Chesapeake and Ohio Canal they are headed towards Washington. On the canals in Pennsylvania they are bound for Pittsburgh, Harrisburg or Philadelphia; and on the New England canals, for Boston, Providence, New Haven, or Worcester. On the Erie Canal they move towards Buffalo, Rochester, Syracuse, Oswego, Albany, and New York. On the middle western canals, they are going towards Cleveland, Toledo, Columbus, Cincinnati, Fort Wayne, Chicago.

These boats are loaded with the merchandise—most of it something to eat—which the farmers and workers in the small towns and villages have produced. Here is a barge full of wheat. Yonder comes another loaded with corn. Just behind it is one full of potatoes and apples and onions. Others carry oats or rye.

On yet others you find barrels of cider, barrels of vinegar, molasses, salt pork, or flour, bags of corn meal, crates of eggs. On another you will see hams and bacon; for these meats were not then made ready to eat in big factories, as they are now; in those days, they were smoked in little smoke-houses out on the farms.

Here comes a boat from which a strong odor blows out as it passes us. The captain tells us that it is laden with furs. The furs come from trappers—some of them white men, some Indians—who catch the animals far back in the deep forests surrounding the Great Lakes.

Another boat is nearly full of bags of wool, clipped from sheep which graze on the prairies of Indiana and Illinois. We see large rolls of leather, too, tanned by men who own little village tanneries. Some of them do most of the work themselves, and may not have more than one or two employees. One of these rolls of leather is very important to such a man, and he is very anxious about it until he hears that it has been delivered, and he receives his pay for it.

Listen to the squealing and grunting which come from that big boat over there! It is full of live hogs, going to the city, where the butchers will soon turn them into pork chops, roasts and sausage. A plaintive mooing in another boat tells us that it is loaded with cattle, which the city people will soon be eating in the form of steaks, roasts, meat pies

and hash.

And here in this boat—what an uproar of cackling and squawking and crowing is heard inside it! Its cargo cannot be anything else than live chickens on their way to market. Its boatmen look unhappy. It is no fun, riding for several days with a boat-load of chickens. One day, in 1825, an Erie Canal boat passed Albany with a thousand turkeys, ducks and geese on board. Just fancy the noise! These fowls were being sent to the West Indies.

From Syracuse, where there were great salt factories, you saw whole boat-loads of salt going this way and that. Rochester had several large flour mills, and many boat-loads of wheat came into that town, with many loads of flour going out. From cities like Boston, New York and Philadelphia came boats loaded with manufactured goods and things from foreign countries—machinery, tools, farm implements, hardware, sewing machines, sugar, coffee, dried fish, and many other kinds of freight.

Men who owned a stone quarry, a gravel pit, or a fine bank of sand close to a canal were fortunate, for those things could be sold readily in the days when towns were growing fast and many new buildings were being erected. Canal boats carried many tons of these things. Brick, lime, cement, lumber, and other things used in building houses were also carried in large quantities.

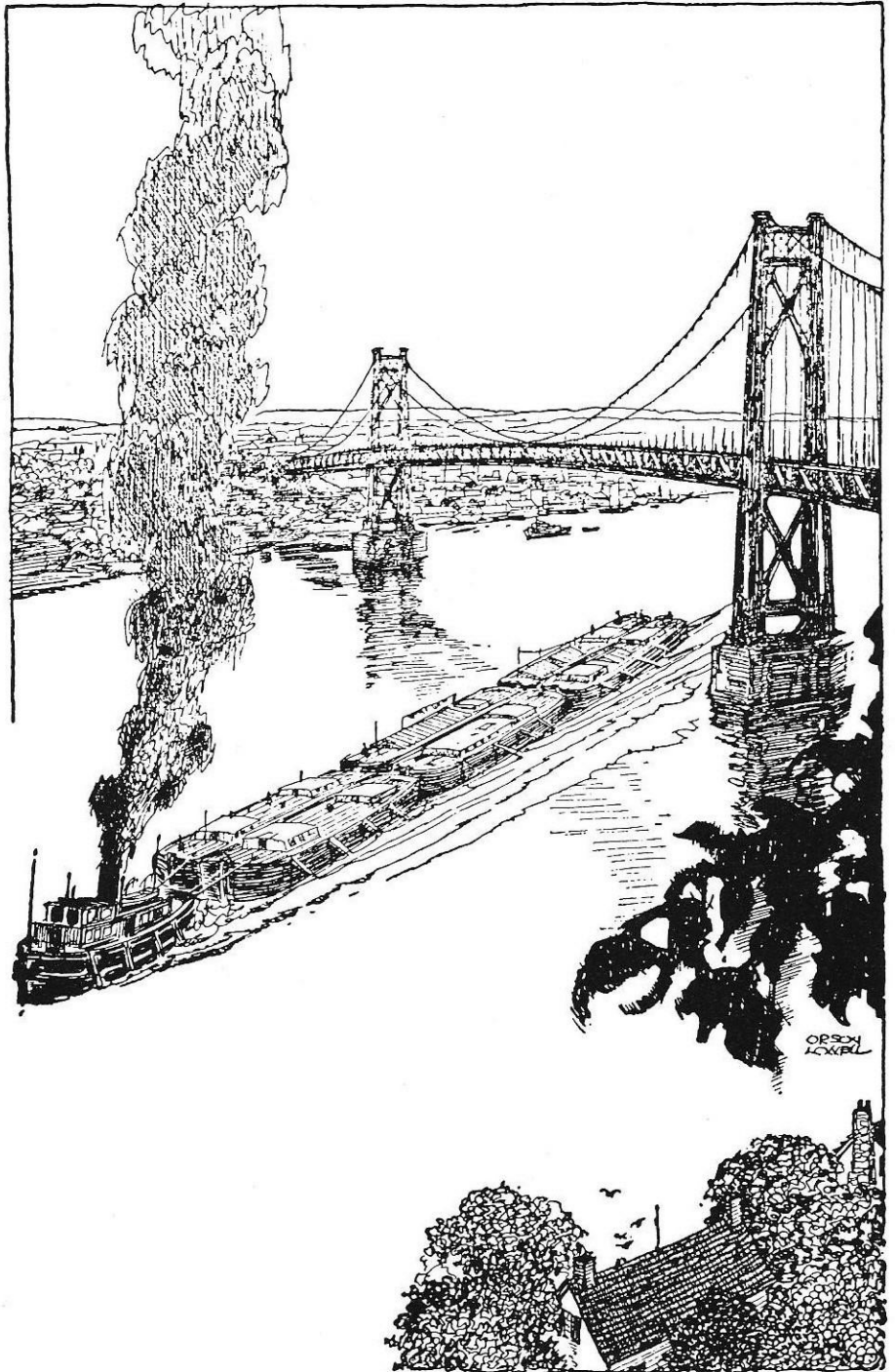
Now and then you might see some queer cargoes; boats, for example, loaded with nothing but ashes! Why were ashes being saved? Because they were used in making lye and soap—the strong, yellow-brown soap that was used in those days for washing clothes.

Before coal was discovered, everybody burned wood. It was used not only to warm homes, but to supply the fire for locomotives and steamboat boilers, in factories and potteries—wherever heat was needed. So thousands of boat-loads of wood were carried to the towns and cities. Poor people with baskets in their hands went about the docks where the wood was unloaded, picking up bits of bark and small sticks for their own home fires.

After anthracite coal became well known, most of the boats on the Delaware and Hudson Canal, the canals of eastern Pennsylvania and the two canals which crossed New Jersey from the Delaware River to New York harbor were busy hauling coal. But in the upper part of New York State, in New England, in Virginia, and in the middle west, wood was still the fuel which everybody used, and it still filled many canal boats.

## CHAPTER IX HOW THE CANALS HELPED BUSINESS

A great deal of the freight carried on the Erie Canal was going to or from New York City. From Albany, where the canal ended, the route was down the Hudson River to New York. Boats which came through the canal fully loaded with freight for New York, did not unload it at Albany, but were towed down the Hudson to New York by steamboat or tug.



### *A Tug-Boat Towing a Fleet of Canal Boats Down the Hudson River*

Here at Albany is a boat-load of flour from Rochester; another of salt and soda from Syracuse; another loaded with pork and potatoes and onions from some small town along the canal; another of live poultry, and all bound for New York. These four barges are tied together by ropes, making what is called a fleet, and a steam tug tows them down the Hudson.

When the boats are unloaded at New York, the captain or the owner of each boat tries to get a load of merchandise to take back. When he finds it, if it is going all the way to

Buffalo, at the other end of the canal, so much the better. But if times are dull, and the boat has waited several days without finding a cargo, it may have to be towed back to Albany empty. Then the owner will not earn much money on the trip.

When canals were first built in Ohio, Indiana and Illinois, where there were no large towns at that time, the farmers, the traders, the trappers, and the owners of little country flour and corn mills sent their produce all the way to Buffalo or Albany or New York by water. From Ohio or Indiana it trav-

elled by canal to Cleveland or Toledo, on Lake Erie. There it was loaded on steamships or sailing vessels, and taken to Buffalo.

Freight from northern Illinois, going to the cities on the Atlantic coast, travelled by the Illinois and Michigan Canal to Chicago, where it was reloaded into ships. It then went all that long way around through Lake Michigan, Lake Huron, and Lake Erie to reach the Erie Canal at Buffalo.

Farmers in those middlewestern states sometimes hauled their grain fifty miles to reach a canal. The people in those states who had goods to sell had no good market for what they produced before the canals were built. Their profits were therefore very small. With the canals in operation, they began to earn much more. They could sell flour for three times as much in New York as they could get for it in the towns near their homes, and find a market for many things which otherwise they could not have sold at all.

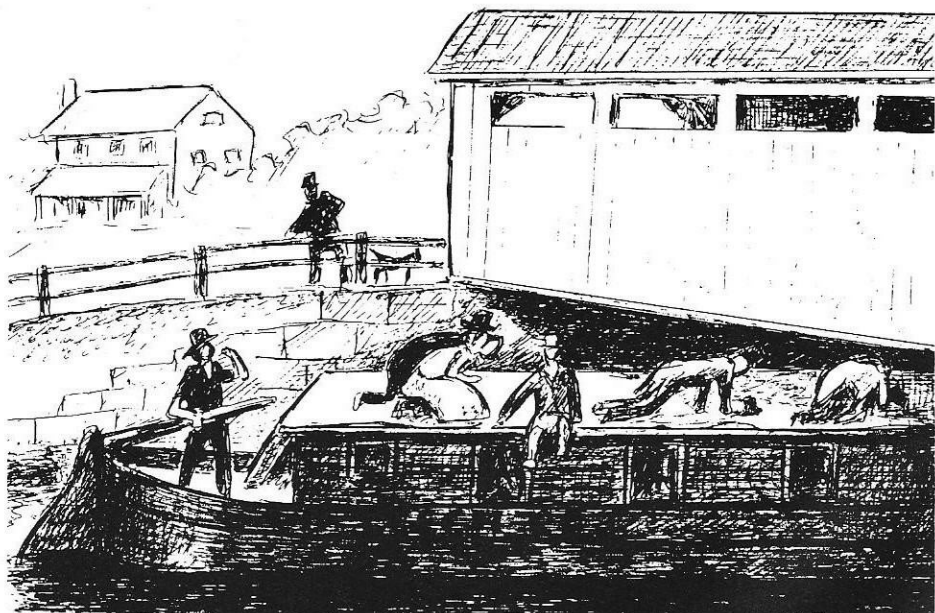


## CHAPTER X WISE MULES

Horses and mules did not work steadily all day long. If they had they would soon have been worn out. So they were unhitched from the boat every little while, and given a rest, with something to eat and a drink of water. When they were unfastened from the towline, another team of horses was hitched to it, and the boat went on its way. Teams could be changed in a minute, if the captain was in a hurry.

The boats which were owned by their own captains sometimes had their own horses and carried them on the boats when they were not working. Stalls for the horses were built in one end of the boat. Each team worked six hours; then it rested aboard the boat while the other team pulled for six hours. If the boat ran all night, each team would thus work twelve hours a day.

When boats on the Erie Canal had full cargoes for the city of New York, they were taken down the Hudson from Albany by steam tugs. When this happened, the horses would have a long, long rest. It might take a week or two to make the round trip, especially if the boat was held in New York while



## “Low Bridge, Everybody Down!”

waiting for a cargo. When you passed one of these boats on the Hudson and saw the horses munching hay, looking contentedly out of the windows of their stalls as the boat glided down the big river, you wondered whether they knew how much luckier they were than the horses which had to work every day.

Some other horses had a pretty busy life. There were public horse-stations, ten, twelve, or fifteen miles apart on the larger canals. These were great stables full of mules and horses, owned by men whose business it was to rent animals to canal boats. When a boat came to one of these stations and wanted a fresh team, there was always one ready. The team which had brought the boat would be unhitched, given a rest and a feed and sent back, towing another boat, a few hours later.

Then there were large companies which owned many boats on the canal, and some of these companies had their own horse stations.

The way in which canal boats going in opposite directions passed each other was interesting. There was a towpath on only one side of the canal, and the horses had to walk on the same path going in either direction.

When the two boats met, the boat going upstream had what is called the right of way. That was because it was a little harder to draw a boat against the current than to go downstream. So the team going downstream would walk to the outer side of the towpath—that is, the side farthest from the canal—and stop. The steersman on the downstream boat would steer his boat over to the side of the canal farthest from the towpath. With the team standing still, the tow-line would sink to the bottom of the canal.

The team and boat going upstream would come right along, passing between the downstream boat and its team. The upstream horses, walking close to the edge of the water, would carefully step over the other's tow-line where it lay across the path; and

their boat would pass over the part which lay in the water. This done, the downstream team would start again, their bells jingling musically; for nearly every canal boat team had at least one bell tied to a horse's neck, and sometimes more.

A smart team, with long experience on the canal, did not have to be told what to do when it met another boat—especially if it happened to be a team of mules. Many canal boatmen believed that mules were much more intelligent than horses. There is no doubt that a mule will learn to do a regular task more quickly and more accurately than a horse. A good team of canal mules knew when it was going downstream; and when it saw an upstream boat coming near, stepped to the outer side of the towpath and stopped without being told to do so by the driver. The other team knew equally well that it must keep going, and walk on the inner side of the towpath, close to the water.

## CHAPTER XI LOW BRIDGE

Even though the boat did not run all night, the day's work of the canal boatman did not stop at nightfall. The crew always lighted their headlight and lanterns, and pushed on for another two or three hours before they stopped and went to bed.

The headlight that they used was a big, square lamp set near the prow of the boat, with a wooden reflector behind it. Of course they had no electricity in those days, and this lamp was very much like the old kerosene oil lamps which some of us have seen. We did not have any oil wells in this country until about the year 1860. After that time, boatmen began burning kerosene oil in their headlights and lanterns. Before that, they burned either camphene, which is a sort of turpentine, or oil made from the fat of whales.



Canal boats did not often stop when storms came on; they just pushed right ahead. It was not pleasant for the driver and steersman when heavy rain was falling, wind blowing, and lightning flashing. Sometimes the wind and rain became really blinding. If the horses were facing it, they would stop without asking leave, and turn their tails towards the storm. They knew when they had enough. This did not often happen, for both horses and boatmen were used to bad weather. The boats did not run in winter, but early in the spring and late in the autumn there were some very cold winds—perhaps even snow—which made it very uncomfortable for the driver, and for the boatman who had to be outside for hours at a time.

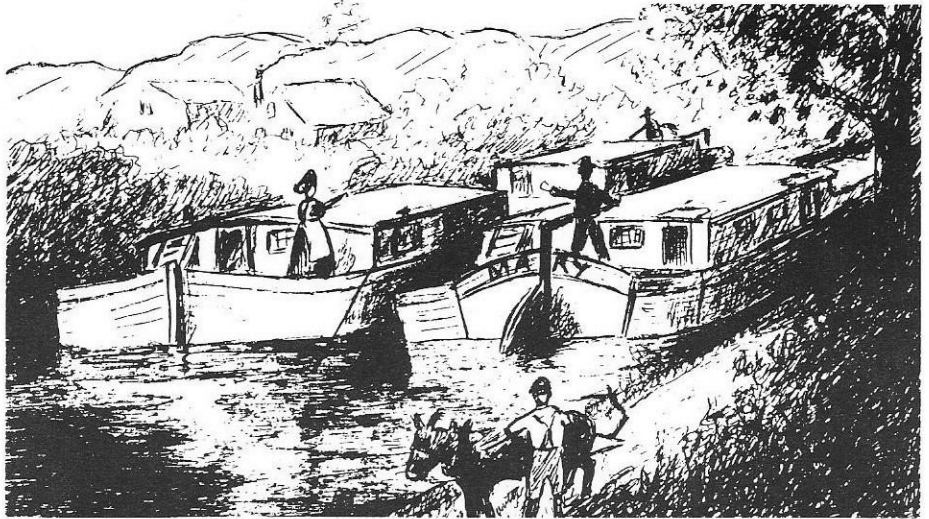
A storm at night was still worse. Sometimes a horse would stumble in the darkness and fall into the canal, dragging the other horses after him. Then there would be shouts of alarm from the driver and steersman. Some of the crew would leap to the bank, while others would plunge into the water, to help get the horses on their feet. If the horses happened to get tangled in the harness when they fell they might drown before they could be rescued. If the driver was a small boy, he often rode one of the horses instead of walking behind the team. When the horses fell, he was likely to go into the canal, too, and be in some danger, although canal boys could usually swim almost as well as ducks.

In level country, the people who built bridges for wagon roads across the canals often did not take the trouble to build them high enough above the water. There were many bridges so low that a man standing upon the deck of a boat could not pass under them; he had to stoop or crouch low to keep from being struck by the bridge. Indeed, some bridges were so low that men on the larger boats either had to go down into the hull or lie flat on the deck to pass under them.

Of course, men who had worked a long time on the canal knew where all the bridges were, and knew whether they were high or low. But if there was a new man who was not familiar with the canal, the steersman watched very carefully and called out "Low bridge!" at the right moment. Even the experienced men on the boats sometimes grew careless and forgot to watch until the steersman drew their attention by crying out, "Low bridge!"

Danger from bridges was especially great at night, and the steersman had to be very watchful, straining his eyes through the darkness, for it might be a very serious thing to be struck by a bridge.

Canal workers had hardships which we now find it hard to picture. But after all, they had a great deal of fun. On a fair day, if there were not too many locks to go through and no cargo to be loaded or unloaded, it was very pleasant to sit or lie on the deck of the boat and glide along with little to do, greeting friends on shore or on other boats, joking, telling stories and singing songs. The men had songs all their own. The most famous was one about the Erie Canal. These were some of its words:—



### Canal-Boat Neighbors

I've got a mule, her name is Sal.  
Fifteen miles on the Erie Canal.  
She's a good old worker and a good old pal,  
Fifteen miles on the Erie Canal.

We've hauled some barges in our day,  
Filled with lumber, coal and hay,  
And we know about ev'ry inch of the way  
From Albany to Buffalo.

*Chorus:* Low bridge, everybody down!  
Low bridge, we're going through a town;  
And you'll always know your neighbor,  
You'll always know your pal,  
If you ever navigated on the Erie Canal.

#### CHAPTER XII LIFE ON THE CANAL

Every canal boat had a name, and no two boats on a canal were permitted to have the same one. We may be sure that every canal had one boat named in honor of George Washington; and nearly all had boats named *Andrew Jackson* and *Daniel Webster*.

Boats owned by their captains often had the name of the captain's wife or some other member of his family. Now and then you saw a boat that was named for two people—such as *Hattie and Mattie*, *Cynthia and Sarah*, or *John and Annie*. There were others with such names as *Two Sisters*, *Four Brothers*, *Three Partners* and so on.

There were boats named for animals and birds, and even for some of the insects. You would not be surprised to see boats named *Lion*, *Tiger*, *Eagle*, *Bluebird* and *Dolphin*, or even *Elephant* and *Whale*; but who would expect to find boats named *Rat*, *Fly* or *Flea*? Yet there really were such names.

Each captain painted his boat according to his own taste. A basin full of boats would therefore show all the colors of the rainbow.

Canals in the northern part of the country did not operate during the winter. As soon as the weather became cold enough to freeze ice on the water, the boats had to stop running; for the horses could not pull the boats

if there was even a thin sheet of ice.

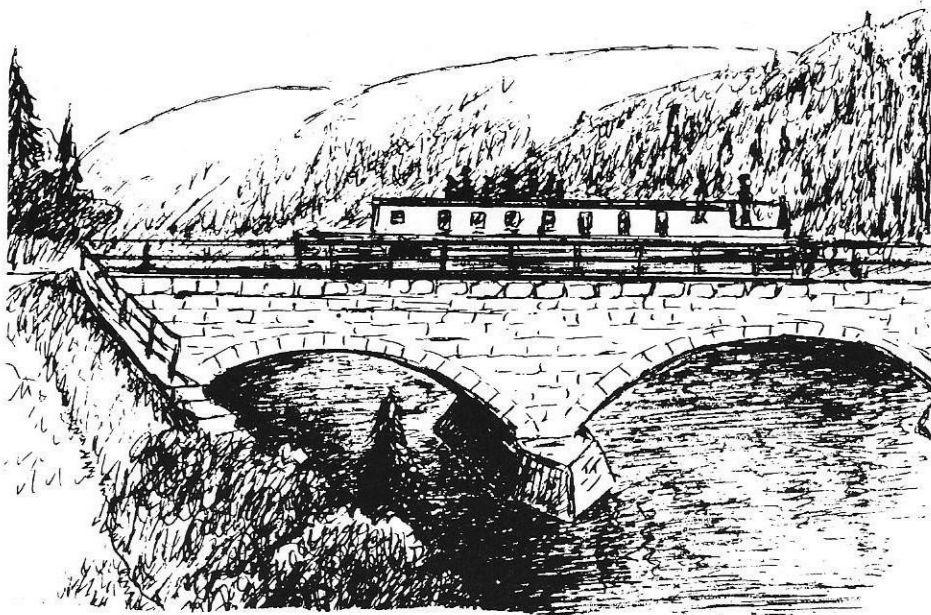
On most canals, the winter months were spent in making repairs. As soon as the boats ceased running, the water was shut off in the feeders, and the canal was drained. Then, when the channel was dry, the lock gates could be repaired and the aqueducts patched where they had begun to leak. Wherever earth or sand had been washed into the channel by heavy rains the channel would be cleaned out and made deep again. Cracks and weak spots in the banks were repaired and made strong.

When spring came, and there seemed to be no more danger of hard freezing, the water would be turned into the channel and you would read in the newspapers that the canal was open for business, and boats were moving once more.

The Erie Canal was usually closed from about the first of December to the first of April—four months. Sometimes it stayed open a little longer, but there were long, cold winters when it had to be closed for five months. Farther south, you found that the canals did not have to shut down for nearly so long. The Chesapeake and Ohio Canal, which ran along the Potomac River, and the canals in Southern Ohio, were often closed for not more than a month. There were winters during which the canal along the James River, in Virginia, did not have any ice on it at all.

Of course there was never any ice on the Santee Canal, in South Carolina. Things were so different there that the managers would close the canal for cleaning and repairs in July and August, which were the months when business was dull.

When a large number of boats were crowded together in a basin to spend the winter, they became a sort of village. There would be several captains who had their families with them on their boats. With their boats moored side by side, Captain A's wife would step right over to Mrs. B's boat for a call, so that they all became almost like one big family. The children went to school in the town near by; they played together on deck or



### *Packet Boat Crossing an Aqueduct*

went coasting and snowballing on shore. Meanwhile, the men would be making repairs on the boats, and getting other kinds of work to do if they could.

At last the cold winds of March would die away; the air would grow milder; only little patches of snow would be left in the shade on the hillsides. A robin would be heard singing one morning; buds on the trees would begin to swell, and little green plants would break through the moist earth. Then the news would come, "They are turning the water into the canal. It will be open next Monday." This was welcome news, indeed, for now the men would begin earning money again.

On Monday there would be a great bustle. Men now shouted back and forth as they untied ropes and pushed the boats with poles, getting them out of the basin and into the canal again. Women and children called out, "Goodbye!" to each other. The horses were hitched to the tow-lines and plodded away, the boats trailing slowly after. The year's work had begun.

### **CHAPTER XIII THE PASSENGER BOATS**

The packet boats, built for passengers only, were usually larger than the freight boats. They also had sharper prows, so that they could be moved faster. Each packet had at least three horses and sometimes four. The owners took much pride in their boats, and claimed that they were very fine and comfortable. They were pleasant enough to ride on in the daytime, if the boat was not too crowded. But at night, there was far less comfort.

There were large companies on each canal which owned lines of packet boats. Runners or solicitors from each of these companies would meet every traveler who stepped from a stagecoach in the large towns along the canal. Each runner would try to persuade the

traveler to buy a ticket by his line, loudly declaring that it had the finest, fastest and most comfortable boats, and served the best meals.

The packet boats had time-tables; they left each town on the canal at regular hours each day, just as railroad trains do. Perhaps it would be more correct to say that they tried to leave at regular times each day, for they were very often late. There were many things to hinder them—storms driving against the boat, heavy traffic on the canal, and traffic jams at the locks. A traveler over the Erie Canal in early days tells of having to wait two hours to get through a lock at Utica.

It was a law on the canals that whenever a packet came up behind a freight boat going in the same direction, the freight boat must let the packet pass. The freight team stopped, and the packet passed between the freight boat and its team, in much the same way that two boats passed each other when

they were going in opposite directions.

In the bow or front part of the packet boat there was a small room where the crew slept. Next came another small sleeping room, this one for the women passengers; and next, in the middle of the boat, was the main cabin, the largest room on the vessel. This was the dining room and parlor during the day, and at night the men slept in it. The sleeping space for the women and girls was much smaller than the men's because there were fewer women travelling than men. In the stern of the boat were the pantry and kitchen, where the food for the passengers and crew was cooked.

These cabins would seem very small to us now. The ceiling was not much higher than the head of a tall man. The passengers did not usually sit inside the boat unless the weather was cool, or unless it was raining or very windy outside. In cool weather the main cabin would be warmed by a tiny stove which burned wood.

In fair weather, it was more pleasant to sit on deck—that is, on the roof of the boat—talking and looking at the scenery as the boat glided along. Some of the ladies had their knitting and crochet work; some were reading. If the sun was very hot, some people raised their umbrellas. Canal travel was pleasant, indeed, at such times. The movement of the boat was smooth and steady. There were no bumps or jerks such as we have on railroad trains and buses. There was no smoke, no smell of gasoline, no noise of machinery.

Now and then some of the passengers would step ashore when the boat was in a lock, and enjoy a walk on the towpath. There were places where the canal was so crooked and curving that a walker could take a short cut across the curve, linger to gather wild strawberries, and still keep up with the boat.

If it was raining, or if the weather was cold, the passengers had to sit inside the cabin. There some talked, others read books or newspapers, ladies did their fancy work, and a group would sometimes gather around the little organ or piano which the packets usually carried, and sing.



### *The Old Canal Boat Gave Way to the Steam Locomotive, Then to the Automobile*



*Male passengers drew lots for bunks on the packet boats at night, "three high".*

#### CHAPTER XIV BEFORE PULLMAN'S DAY

The fare for passengers on the best packets was five cents a mile; and the boat supplied meals and berths for sleeping while you were aboard, without extra charge.

The sleeping arrangements were very queer. There were no separate berths with curtains in front of them, so that you could be private, as you are in a railroad sleeping car. During the day, you saw nothing which looked like a bed—though you might have noticed three or four rows of small holes in the walls, running all the way around the cabin.

But about nine o'clock in the evening, the crew would begin bringing the berths out of a storage closet and putting them in place. They were just like narrow cots, consisting of a piece of canvas stretched on a frame of iron rods. The rods at the head and the foot extended a few inches beyond the frame. The ends of these rods on one side were thrust into the holes in the wall, while on the outer side the cots were supported by strong ropes hanging from the ceiling. In each berth was a very thin pad stuffed with straw. This was called the mattress. There were at least three tiers of berths and sometimes four, one above another, all around the cabin.

We are told that the berths on most boats were less than two feet wide. Of course you had to be very careful when turning over in such a bed. Fat passengers, if they could not get a lower berth, often preferred to sleep on the floor. Some very heavy people could not squeeze themselves into the berths at all.

It often happened that there were more passengers than there were berths. At such times, one or two men would sleep—or try to sleep—on the dining table, while others lay on the floor.

Small ropes were stretched across the

cabin while the passengers were going to bed, and on these the passengers hung their clothing. This was such a bother and the space was so small that most men took off only a part of their clothes. The same scenes took place in the women's cabin as in the men's, where, since their room was smaller, they were likely to be even more crowded.

In every cabin full of passengers, there was sure to be some one who snored. He was always regarded by his fellow-travelers as a dreadful nuisance. The traveler who had to get off the boat at some town which was reached in the middle of the night also caused many unkind remarks as he stumbled and bumped around the dimly-lighted cabin, searching for his baggage. Now and then he would get entangled with the clothes-line or step on some sleeper who lay on the floor.

At six o'clock in the morning one of the crew would go around shaking all the men until they were awake, and telling them to get up, so that the berths could be put away and the room be made ready for serving breakfast.

These packet boats were always neatly painted; usually white outside, with red or green window casings. Their names were intended to show how fast or how fine they were. Such names as *Racer*, *Lightning*, *Swiftsure*, *Express*, *Whirlwind*, *Meteor* or *Greyhound* were given to boats that could not move more than four or five miles an hour. People who had traveled on a packet boat and endured its inconveniences, sometimes wondered why it was named *Splendid* or *Fashion* or *Palace*.

The packet horses were finer than those of the freight boats, and did not have to work so long at a time. On the main Pennsylvania Canal running between Pittsburgh and Johnstown, a distance of one hundred and three miles, the packets used thirteen teams.

Each team pulled the boat a little less than eight miles. The packet *Silver Bell*, on the Wabash and Erie Canal, in Indiana, was always drawn by three gray horses, with silver-mounted harness and silver bells jingling at their throats.

The mail was carried for many years on canal packet boats.

#### CHAPTER XV LINE BOATS AND HOUSE BOATS

The real packet boats did not carry any freight at all. But there were some second-class boats called *line boats* which carried both passengers and freight. They were not as comfortable to ride on as the packets, and the food served on their tables was not as good. But while the packets charged five cents a mile for passage, the line boats carried passengers for a cent and a half a mile. They charged extra for meals; or the passenger could take his own food with him if he liked.

The line boats were much slower than the packets. Their horses were slower, they did not have a special right of way over other boats, as the packets did, and they were often delayed while loading and unloading freight. They seldom travelled more than forty miles a day, even if they ran all night; while the packets could cover as much as eighty or ninety miles a day.

Persons who were moving from one town to another, or from one part of the country to another, and who hadn't much money, often used the line boats. These people could ship their household goods, spinning wheels, plows, and even, if necessary, the family cow and the horse, on the boat on which they themselves were traveling.

The canals had much to do with increasing the population of the states lying west of Pennsylvania, in the Ohio and Mississippi Valleys and around the Great Lakes. At the time when the canals were at their best—that is, between 1825 and 1850—thousands of people from the New England states, from New York, New Jersey, eastern Pennsylvania, and even from Maryland and Delaware, moved westward on the line boats every year. They were seeking new homes in the Middle West, where farming land was fertile and still very low in price, and where new towns were springing up, giving fine opportunities for merchants, artisans, attorneys, and doctors.

Thousands of immigrants were coming to America every year, too. Most of them in those days came from England, Ireland and Germany. Large numbers of them went to the Middle Western States, and nearly all of them travelled in line boats on the canals. Many times a day the people living near the canal saw boats move slowly by, their decks covered with these new citizens from beyond the sea, sitting patiently among their bundles of clothing and bedding.

There are many of our people now, living in the Middle West and elsewhere in America, whose ancestors moved westward on canal boats in those early days.

Some families in the East who wished to move farther west built their own little house

boats and lived in them while they were being towed through the canals. Such a boat could start at New York, for example, and be towed through the Delaware and Raritan Canal and the Delaware River to Philadelphia. From Philadelphia it could go by the Pennsylvania Canal to Pittsburgh. From there it might go by canal out into Ohio, or it could float down the Ohio River with the current, and might stop wherever the family chose, along the shores of Ohio, Indiana, Illinois or Kentucky. There a new home would be founded and the man would either start farming, go into business, or seek employment as a workman.

## CHAPTER XVI WHAT HAVE THE CANALS DONE FOR US?

The United States was a young nation when the canals were first built. They made it grow and prosper.

All classes of people were helped by the canals. Farmers could send their crops to better markets more cheaply than before. Merchants and manufacturers were able to send their goods easily to towns which could not be reached before, and the rates which the boats charged for carrying the goods were low. The cost of doing business was less, and there was more employment for workingmen.

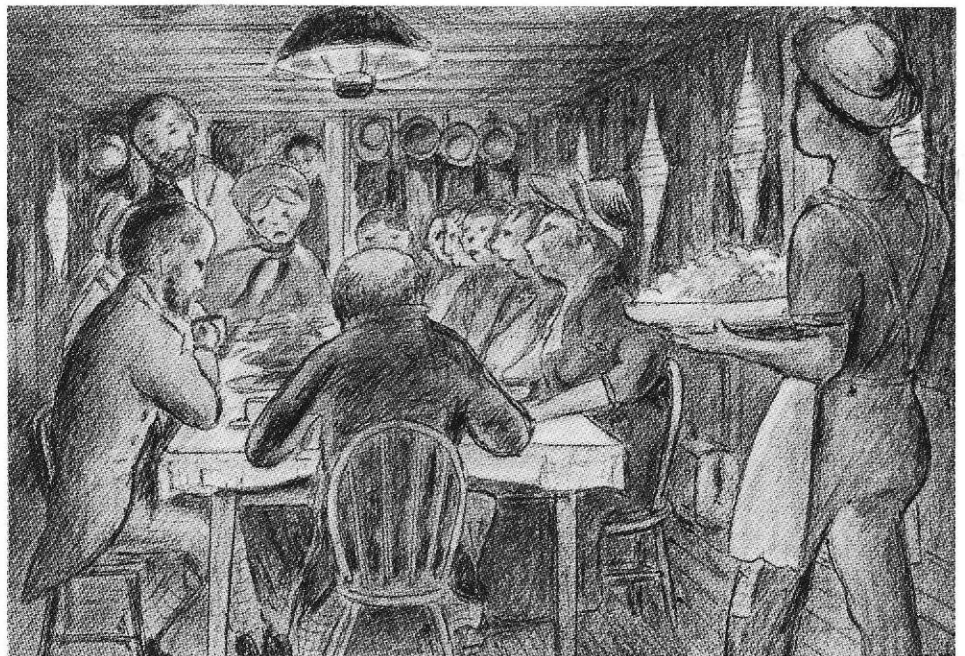
New towns were founded and became cities because they were on the course of some important canal. Buffalo, Rochester, Utica and Syracuse, all in the state of New York, are large cities today just because they were on the Erie Canal, and were thus given a good start. Cleveland, Toledo and Cincinnati in Ohio, Fort Wayne in Indiana and other cities were also aided by the canals that ran to them or through them when they were but villages or small towns.

But these inland canals had only just begun to prosper when the steam locomotive was invented. That hurt their business. When railroads were built, people wanted to travel faster, and to ship their goods more quickly than they could by canal. The canals, for many years, still continued to do business, for goods can always be sent more cheaply by water. But the packet boats soon disappeared, and only such things as coal, sand, stone, brick, and other low-grade freight was carried on the canals.

One after another these old waterways had to give up. Every now and then a canal would be flooded and its banks torn out, and the managers would decide that they could not afford to repair it again. So that canal would pass out of existence.

There were four thousand four hundred miles of canals built in the United States in the early years of its history, and only about four hundred miles of those same canals are in use now. Some of the canals have been so completely destroyed that you cannot always find the place where their channels used to run.

The Erie Canal was the greatest success of them all. While other canals were being



### *Meals on board the Packet Boats were pretty much the same fare — morning, noon and night.*

abandoned, it continued to prosper. In 1870 there were nearly seven thousand boats running on it; so many that the canal was just one big traffic jam. At almost any time in the day you could stand on a bridge across this canal and see a continuous line of boats, following each other closely, stretching away in both directions as far as the eye could reach. At nights their headlights looked as if a great torchlight procession was going by.

That crowding and slow movement of boats was a bad thing for the canal. The locks were doubled, so that boats could pass through them in both directions at once; the channel was made wider and deeper. Still it was too small. The railroads which ran alongside it carried freight much faster, and operated the whole year around. The canal must be closed for several months in the winter. In 1900 there were still two thousand boats on the canal, but its business was steadily growing smaller. Meanwhile it had paid the state of New York many, many millions of dollars in profits; it had made New York the *Empire State*, and it had been one of the greatest builders of the nation.

Soon after 1900 the state of New York began rebuilding it. It was greatly widened, many curves in the old canal were straightened, fine concrete locks with steel gates were built, and the waterway is now called the New York State Barge Canal. Steam tugs and steam canal boats run through it.

The last canal on which horses pulled boats was that one which follows the Lehigh and Delaware Rivers from Mauch Chunk down to Bristol, in Pennsylvania. The great mines at Mauch Chunk sent anthracite coal down that canal until 1931, when the boats ceased to run. After that, all the Lehigh coal was shipped by railroad. Only a few pleasure boats ever use that canal now.

It is sad to come across the ruined walls of an old lock, as we sometimes do, overgrown with vines and bushes, and to think of how

important it once was, and what busy, pleasant scenes took place there long ago. We should never forget how much the canals aided in making the United States a great nation.

Nor is the usefulness of canals wholly past. Today we hear but little of them as they were in the olden days. What we now hear about is such mammoth waterways as Panama, Suez, and Sault Ste. Marie. Here millions of tons of shipping and freight pass through each year, making a tale of giant forces by the side of which the old towpath waterways were but little children.

Alvin F. Harlow  
1936

## NEW BOOK

Colin K. Duquemin, former President of the CANADIAN CANAL SOCIETY, has just published a booklet, entitled "The Drivers Guide to the Welland Canal". A 5-1/2" x 8-1/4", 30-page paperback, it tells in detail how to enjoy the features of the WELLAND CANAL by auto, from Port Weller on Lake Ontario to Port Colborne on Lake Erie. Included are lift bridges *over* the canal and tunnels *under* the canal. All the single and twinned locks from Number One to Number Eight are included, also the Lock Three Viewing Stand and the St. Catharines Canal Museum. Three full-page maps make it easy to follow the Canal and its unusual features. Drawings and photos also aid in depicting the three Welland Canals (1824 to 1875) which preceded the present Canal, built 1913-1932, at different locations. Much interesting local history, over the entire canal period is presented. Cost: \$8.00 (U.S.) including postage. Make checks or money orders payable to Colin K. Duquemin, Norman Enterprises, 56 Highlanc Avenue, St. Catharines, Ont. Canada, L2F 4J1.