

AMERICAN CANALS

BULLETIN OF
THE AMERICAN CANAL SOCIETY

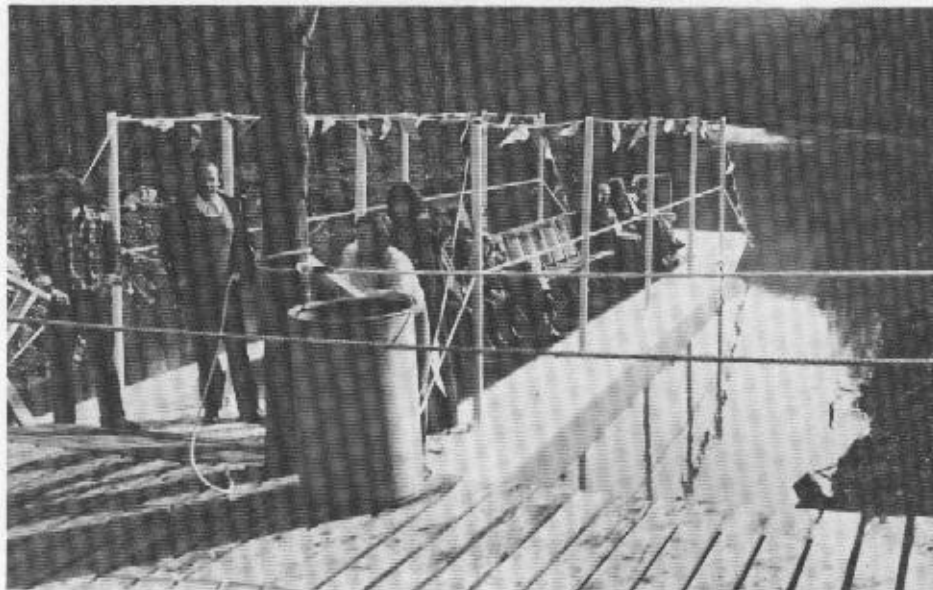
BULLETIN NUMBER 11 EDITORIAL ADDRESS - P. O. BOX 638, GLEN ECHO, MD. 20768 NOVEMBER, 1974

HISTORIC PENNSYLVANIA CANALS RE-ACTIVATED

Banner newspaper headlines and "prime-time" television coverage heralded the re-opening of a quarter-mile section of the old Pennsylvania "Main Line" Canal at Lewistown, Pa., during the Juniata Valley Fall Foliage Festival, October 24-27.

For the first time in nearly seventy-five years, it was possible for passengers to ride a mule-drawn barge on the canal route between Philadelphia and Pittsburgh. Hundreds of people lined up to await their turn on the Knox-designed barge in the Granville area, just west of Lewistown.

The restored "Main Line" Canal section is a private project of David and John Knox, brothers and partners in the John C. Knox and Sons contracting firm of Lewistown. "We were impressed with the historic value of this 275-acre site along the Juniata River when we first purchased it in 1956", said David Knox. "The well-preserved state of the one-and-one-half miles of old canal bed led us hopefully to plan for full restoration. The first stage is now complete." Knox said it took them only about three weeks to dredge out the 40-foot wide channel and pump water into it from the nearby Juniata River. The old clay lining at the bottom of the channel, uncovered in the dredging, still proved



Canal barge on the Pennsylvania "Main Line" Canal at Lewistown, during opening ceremonies last month. Dave Knox, one of the operators of the project, is second from the left.



The newest replica of an old canal boat is the A. EMERSON operated by the Canal Campsites Co. on Route 16 at White Mills, Pa. on a 1600' section of the Delaware & Hudson Canal restored below Lock #34 (Lonesome Lock) about 4 miles from Honesdale. The boat was reduced in size from the original specifications at the Senate House in Kingston, N.Y. from 90' to 45+' and is a replica of Boat #1107, the last boat to leave Honesdale on 5 November 1898 with Capt. Hensberger. The boat weighs 13 tons, has a 10" draft, carries 50 passengers, has a concrete ballast of 14-1/5 ton for a total (passengers and all) of 30.95 tons with a 24" loaded draft. It is made of redwood and took 800 man hours to build. Seven days a week (in season), 12-7. Adults \$1.00, children 50¢. Group rates for 20 or more; night party rates. Phone 717-253-1713 for reservations and information. (Submitted by Alfred A. Howell.)

its ability to prevent more than token leakage during the week preceding the formal opening ceremonies. The Knox brothers plan to get into full operation next summer, with a more authentic barge design and regular schedule of operation. Inquiries for "canal parties" may be directed to John C. Knox and Sons, P.O. Box 388, Lewistown, Pa. 17044.

Pennsylvanians are becoming much more aware of their canal heritage through such commendable enterprises as these. This is the second such canal restoration project to be completed in the State this year. The first was the re-opening this summer of a 1600-foot section of the Delaware and Hudson Canal on Route 16 at White Hills, Pa., about four miles from Honesdale, where the old D. & H. Canal terminus was located. Historically the D. & H. transported coal directly from the upper Pennsylvania anthracite coal region directly into the Hudson River and down to New York City. A fully-authentic canal boat is now operating on this section of the Pennsylvania canal system.

And, of course, the third location in Pennsylvania where the ardent canal buff may enjoy the tranquility of a canal-barge ride behind a mule team is at New Hope

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American Canals

BULLETIN OF THE AMERICAN CANAL SOCIETY

AMERICAN CANALS is issued quarterly by the American Canal Society, with headquarters at Lockhouse #6, Chesapeake and Ohio Canal, P.O. Box 638, Glen Echo, Maryland 20768. Objectives of the Society are to encourage the preservation, restoration, interpretation and use of the historic canals of the Americas; save threatened canals; and to provide an exchange of canal information.

Annual subscription to "AMERICAN CANALS" is automatic with a minimum ACS dues payment of \$6.00. Individual copies may be purchased at \$1.00.

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ACS Vice President, Secretary and Production Editor — William H. Shank, P.E. 809 Rathton Road, York, Pa. 17403.

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

Chairman, Canal Bibliography Committee, ACS Director, Harry L. Rinker, 39 West Springettsbury Ave., York, Pa. 17403.

PA. CANALS RE-ACTIVATED

(Concluded from Page One)

Pa., on the Delaware Division Canal. This old canal section is the only one in Pennsylvania that has never been completely dry since its abandonment as a commercial operation in the 1930's. The State now maintains the locks, feeder dam, and channel in the approximately sixty miles of canal between Easton and Bristol, and a private enterprise has for years been operating canal barge rides along several miles of the old channel, north of New Hope.



ACS Vice President, Bill Shank, represented our society at the opening of the Knox "Main Line" Canal Project in Lewistown, Pa. on October 24-27. He is shown with his wife Ruth, after their first ride on the canal barge. (Mule and driver at left).

"CAPTAIN'S CORNER"

ACS DIRECTORS MEETING

In the last AMERICAN CANALS I had intended to say something about the first meeting of the Directors of the Society held in May in Syracuse, N.Y., but copy was lost in the mail. Attending the meeting were: John Atkinson, England; Bill Naftel, Canada; Bill Trout, California/Virginia; Tom Hahn, Washington, D.C.; Harry Rinker, Pa.; and Arnold Barben, Grace Elliott, Frank Thomson and Peter Stott, all of N.Y. Other Directors found the distance too far for the meeting. A reception given by our host Frank Thomson, held at the Canal Museum, provided a nice touch in getting everyone, including the Canal Museum's staff and supporters, a chance to get acquainted.

The meeting was held following dinner at the University Club. The main theme was to determine: Where we had been; where we were; and where we were going. No earth-shaking decisions were made, but the conclusions reached, seemed to me to be: That after two short years of existence, we had in fact an active, growing organization concerned with the preservation and restoration of American Canals; that in spite of inadequate financing the group recommended raising dues and complete dependence on volunteer labor were surviving and providing useful services; that in the absence of a Canadian Canal Society we would place emphasis on all North American canals and that we would encourage the formation of a Canadian Canal Society and give it our support when needed; that we should be the informational point for the canals of all the Americas; that we should strongly support local, state and area canal organizations and rely on them to lead in the preservation of canals within their individual areas; that we would be aggressive in the fight to save threatened canals and canal structures where no canal organization existed; that an interesting publication was essential for good communications between the American Canal Society and its members; that research in the indexing, description and mapping of American canals should continue; that research work on individual canal structures should be carried out with existing canal organizations; and that we should continue to support and encourage a Canal Research Manual and an American Canal Guide.

In addition to the above, we recognized that we needed a more formal or orderly organization and a set of by-laws, so that we could formalize our tax exempt status as a non-profit educational and scientific organization. To that end, a Rules Committee was appointed under the Chairmanship of Frank Thomson, with instructions to have recommended by-laws distributed to the Directors prior to our next Directors Meeting, probably in April, in conjunction with the Canal Symposium.

Going into our third year, I encourage you to rejoin the American Canal Society and to encourage your friends to do likewise. As you know I have made several appeals for some 'angel' to help us out financially. I have requested that someone undertake the cost of printing of an issue of AMERICAN CANALS. I have tried to get more Patron type members. So far the only 'angels' are the three principal officers of the Society, who periodically (and temporarily) dip into their pockets to bail out the Society. I do not mention this as a complaint, but as a realization that we are a volunteer organization and that we shall have to depend on our own membership for support. The financial task of the Society would be so much easier if we had more members like Aiden Gould of Nashua, N.H. and Fort Myers, Fla. who has to my personal knowledge recruited at least 10 new members for ACS. How about each of you either asking a friend to join the American Canal Society or sending us his or her name for a sample mailing? We wouldn't use your name unless you preferred us to do so.

CANALING IN THE UK

Once again we spent part of our summer on the canals of the United Kingdom. A variation this year was a trip on the Welsh (Llangollen) Canal and study of the Forth & Clyde and Union Canals in Scotland. Our trip of almost three weeks in John Atkinson's MARY JANE took us on many canals, a journey of 310 miles through 209 locks. The experience had much meaning, but I am not sure exactly what. The situation is so different from what we have here. A trip to London with John Barratt, Chairman of the Inland Waterways Amenity Advisory Council, to a meeting of that body, was very informative and interesting. Things are moving in the United Kingdom in a big way as far as canal restoration and use is concerned. We have much to learn from that country.

I shall look forward to working with all of you in the coming year. I just wish that I had more time to devote to the things we are, or should be, doing, but — that is always the problem with volunteers! Happy canaling.

Tom Hahn

GOULD NEW DIRECTOR

Alden W. Gould, 558 Palm Beach Blvd., Lot #114, Fort Myers, Fla. 33905, was recently appointed a Director of the American Canal Society. Mr. Gould will have specific responsibilities for the State of Florida, but will continue with his research and reporting work on both Southern and New England Canals. He has been a driving force in the work of the Canal Index Committee and is currently assisting with the southern section of the American Canal Guide. He and Mrs. Gould spend 'summer' at Nashua, N.H.

"STOPPER HITCHES" ON THE ALLEGHENY PORTAGE RAILROAD

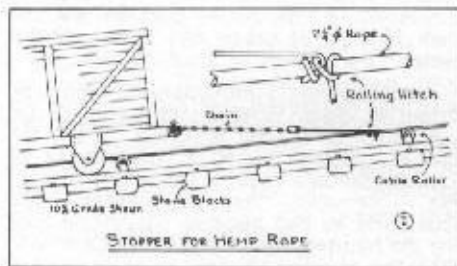
By Robert S. Mayo

The Allegheny Portage Railroad was built in 1834 to carry freight over the mountain from the ends of the canal, located at Holidaysburg and Johnstown. It was 36 miles long and reached the summit of the mountain at 2700 feet above sea level. There were ten Inclined Planes, five on each side of the mountain. These were numbered #1 to #10, beginning on the west side.

These planes were of different lengths and steepness. Number 2 was the flattest with a grade of 7½%. Number 3 was the shortest being 1408 feet in length with a grade of 8.8%. Number 8 was the longest and steepest, it was 3117 feet in length with a grade of 9.8%. The rope for #8 was 6600 feet in length, or 1¼ miles.

At the head of each plane was a reversible 35 H.P. steam hoist, which by a system of gears and big sheaves operated the haulage rope which lay on the center line of the two tracks. These were generally operated "in balance" so that the weight of the descending train counterbalanced the ascending train.

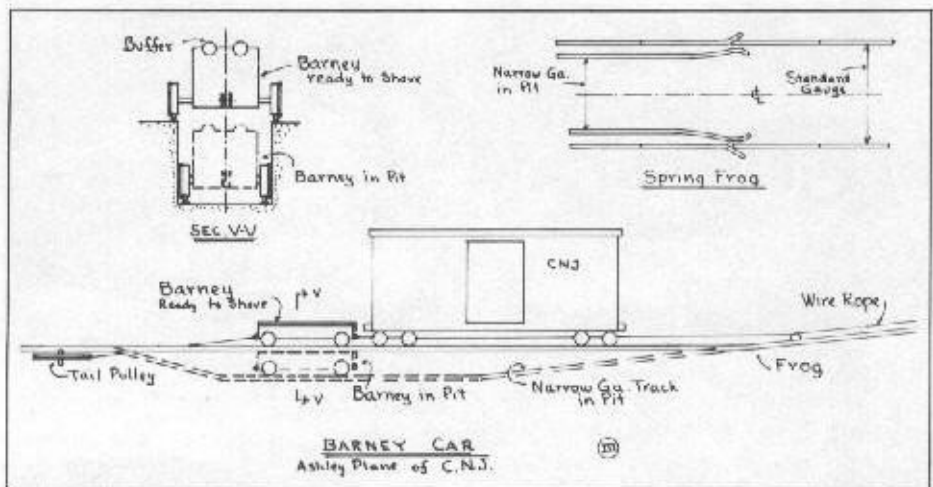
Cars were hauled up and down by hemp ropes, 7 in. in circumference, or 2¼ in. in diameter. Sylvester Welch, in his report of 1833, stated that a hemp rope of this size had a working strength of 9,800 lbs., or five tons. They must not have used the same factor-of-safety as we use today. Today, a manila rope of this diameter would be good for five tons, based on a factor-of-safety of five. Manila rope is much superior to a hemp rope; during the wartime shortages in 1942 we had to use hemp, and we called it "grass rope". These ropes laid out in the sun and rain all summer and their safe life was said to be only two years.



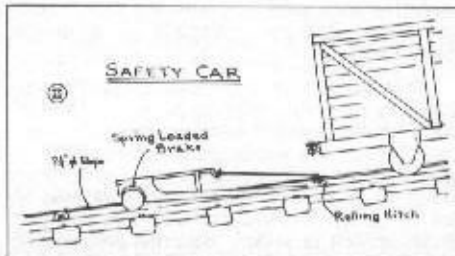
The train was attached to the haulage rope by a "Stopper Hitch", Fig. 1. This is the Rolling Hitch, a sailor's knot, which is used to hold the anchor rope when changing from the windlass to the bits. I have used this knot in heavy construction and, frankly, I don't trust it. It is a simple looking knot but it takes an expert to tie it.

A Safety Car, or "Buck", was developed by the master mechanic, as illustrated in Fig. II. This was hitched to the haulage rope immediately behind the train. If the rope broke or the hitch slipped, the rear car would run up onto the skate of the Buck, which would set the brake and, hopefully, stop the runaway train.

In 1841, John Roebling (builder of the Brooklyn Bridge) introduced wire rope on plane #3. It was so successful that by 1849 wire rope was in service on all the planes. This rope was one inch in diameter and of course was made of wrought iron because that is all they had in those days,



and it had been spun on a home-made rope-walk at Roebling's farm near Saxonburg. Today, a one inch diameter wire rope, made of improved plow steel, would have a working strength of 8 tons. We could assume today that Roebling's rope, a pioneer product in the United States, would have only had a strength of six tons. But it was much superior to hemp rope and most important, did not deteriorate. I have seen an old piece of Roebling's wire rope on an incline of the Delaware & Hudson Canal that looked, after 100 years, almost as good as new.



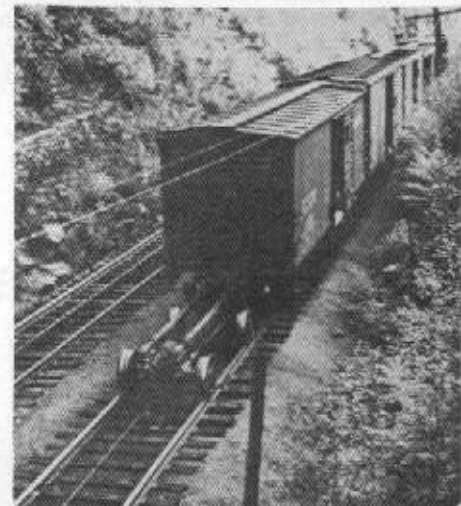
Of course the Rolling Hitch was very liable to slip on wire rope. I have tried this myself: I have made two hitches in series and then tied the end of the hitch rope with a piece of twine, but they are still liable to slip on a greasy wire rope. In 1844, John Tittle, Master Mechanic for the State Railroad, invented the "Iron Stop" for wire rope. I don't know what it looked like but I imagine that it was a grooved steel forging with two U-bolts, something like today's cable clamp.

I have seen one Inclined Plane in operation: this was the Ashley Plane, near Wilkes-Barre, owned by the CRR of N.J. It was 2½ miles in length, double-tracked, with a grade of 10%. When I saw it, it was operated by a steam hoist and was handling three and four car trains. After over a hundred years of service it was abandoned in 1948 and trains now run over a 12½ mile section of track with heavy grades.

Here they used "Barney Cars" for pulling the trains up or letting them down the hill. The Barney was a four wheeled car which normally ran on the standard-gauge track. But it had sliding axles and the wheels had outside flanges so that as it came down the hill and hit the frog, it would narrow the gauge until the Barney could pass underneath the cars waiting at the foot of the plane. It could then be pulled out of the pit and up behind the cars waiting to ascend.

I suppose that this was the "last word" in Stopper Hitches for handling trains on Inclined Planes.

(Bob Mayo, P.O. Box 1413, Lancaster, Pa. 17604, ACS is a well known tunnel engineer and rail and canal enthusiast.)



Jersey Central's famed Ashley Planes were abandoned in 1948 after more than 100 years of continuous operation. Freights now use the 12½ mile mainline section to replace the 2½ mile planes.

LACHINE CANAL

(Montreal) Federal Transport Minister Jean Marchand announced the long sought restoration of the eight-mile-long Lachine Canal should begin next year. Transformation of the abandoned waterway into a recreational park would begin following a \$100,000 study and development plan. Marchand said the restoration of the 150-year-old canal reflects the new federal land management policy adopted by the cabinet last year by which surplus land is to be developed for the public good.

A part of the plan would be to renovate and rehabilitate industries fronting along the canal. The federal ministry of Indian Affairs is also considering a plan to rebuild a key Hudson's Bay Company trading post at the western end of the canal. Since the canal was closed to ship traffic in 1965, it has fallen into disrepair. (Submitted by Arthur Price, ACS, from the Montreal Gazette.)

THE NEW DELAWARE & RARITAN CANAL PARK



Our thanks to Bill McKelvey, Jr. for this historic photo of the D. & R. Canal at Griggstown Lock. Note turn-gate signal.

On October 10, Governor Byrne transferred the D & R Canal into a state park, thus giving it protection from commercial encroachment. The main route of the canal from New Brunswick to Trenton is virtually intact, except for the final stretch going into Trenton. Canal enthusiasts can thank the Delaware & Raritan Canal Coalition under President Lee Bullitt as the prime mover.

Excluded from the park is the final stretch of the waterway from the Landing Lane Bridge to the canal's northern terminus near Memorial Parkway in New Brunswick. This final section was deleted to allow construction of the Route 18 extension to cross the canal and the Raritan River near the Landing Lane Bridge. (See AMERICAN CANALS #9, May 1974.) A public information meeting was held by the National Advisory Council on Historic Preservation on 18 September. The President of ACS was invited to attend but unable to go, though he sent the following letter to the Advisory Council to represent the views of the Society:

"I am writing to you with regard to the Public Information Meeting to be held tomorrow, 18 September, on the alignment of Route 18 (proposed) as it affects the Delaware and Raritan Canal. I wish that I could be in attendance at that meeting, as the issue is extremely important and certainly goes much beyond the boundaries of the State of New Jersey. One of the quirks of the democratic process in the form of public information meetings is that it takes time and money to be present at them—something volunteer organizations have little of, when most of us are concerned citizens with professions which can't be neglected for travel, though we can be assured that those opposed to historic preservation will be present in great numbers and in many instances supported by the tax dollars of the very citizens who are opposed to their views! I am, therefore, grateful that the democratic process also includes the provision to have views represented by mail—and I appeal to you to give those views equal representation with those who are present."

"For the record, I have had considerable correspondence and conversation with the Delaware and Raritan Canal Coalition, the Canal Society of New Jersey, The Rutgers Student Committee on Route Eighteen and the Rutgers Student Committee on the Bicentennial Year, and as the chief representative and spoke person for the American Canal Society, I support in principle their views."

"The future of the Delaware and Raritan Canal is of great concern to all citizens of the United States and citizens of other countries of the world, as it represents one of the chief achievements of mankind in the field of canal technology. It is one of the very few historic canals of the United States which is intact, watered and serves a present-day usefulness. To save all but the last 6,000 feet of the canal would be extremely ill-advised. The wholeness of the canal would be lost if its exit is destroyed. Surely an alternative to the transportation difficulties (a real problem) can be found. Please do not allow this engineering treasure to be lost as we lost the first three locks of the historic James River and Kanawha Canal in Richmond, Virginia to highway construction earlier this year."

Captain, T. F. Hahn,
President

Unfortunately, the public information meeting was held in a hostile atmosphere, and much of the 'audience' acted in a very undemocratic manner. As Lee Bullitt wrote to Tom Hahn, "It was a lucky thing you didn't come all the way up here because it was a total shambles. The construction workers . . . shouted down anyone who was against the present alignment." And, from Captain Cooper Bright, Advisor to the Rutgers Students, "Enclosed news articles describe the Donneybrook that took place at the meeting in the New Brunswick High School when the students who were the first to speak tried to present their comments. . . . Actually the disorders reacted in favor of the students. Prior to the meeting they had the respect of the officials in Washington, now they have their sympathy."

THE HOME NEWS TODAY reported that. "Crowded into the New Brunswick High School auditorium, the audience spent 4½ hours making points, engaging in shouting matches, yelling catcalls and alternately cheering and booing, depending on the point of view being expressed. Mrs. Ann Webster Smith, chairperson of the meeting and the federal council's director of compliance, had to restore order on several occasions as representatives of various building trades occasionally shouted down speakers opposing the project. A letter was written to Mr. Charles Marciano, President of the New Jersey State AFL-CIO by Jeffrey Rannoy, President of the Rutgers Student Groups, protesting the behavior of some of the participants, part of which is quoted herewith: ". . . Students from Rutgers University testified for preserving the historic Delaware and Raritan Canal, which would be destroyed should the proposed Freeway Extension to Route 18 be constructed. These students found themselves abused verbally and menaced physically by a group of about 20 men during the hearing. The students, in reaction to such blatant, un-American violations of their First Amendment right of Freedom of Speech, sought out the Nazi-like, undemocratic individuals responsible and found much to their dismay that they represented AFL-CIO member unions. Had these misguided and misinformed labor union members listened to the student testimony they would have realized the lack of validity in their fears of lost employment if current plans for the extension of Route 18 aren't pushed ahead. In fact, the student testimony supported building an alternate route to the extension of Route 18 which should give them employment now and does not destroy the Delaware and Raritan Canal . . . The students of Rutgers University would welcome the opportunity to present to you the Alternate Highway Bridge Plan for Route 18 so that labor might see that the protection of New Jersey past will not rob their families of bread and butter on the table."

As the public information meeting was called to obtain further information to be submitted to the U. S. Coast Guard for use in judging the N. J. Department of Transportation's request for a bridge permit to construct the new Raritan River span, and as that became impossible during the hearing, the D & R Canal Coalition, with the backing of the American Canal Society, has requested a hearing in Washington, D. C., explaining that it was impossible to receive a fair hearing in New Brunswick.

The battle for historic preservation will be won or lost through public bodies in the courts of our country. The American Canal Society is pledged to fight the battle on the side of historic preservation.

ACS SEW-ON BADGE

Our ACS sew-on badge continues to get attention wherever we go. One does not have to be an ACS member to buy it or wear it. Any profit from selling the badge goes directly to the American Canal Society. Buy several and give them to your friends and at the same time support your canal society. \$1.00 each, payable to ACS Treasurer Bill Trout, 1932 Cinco Robles Dr., Duarte, Ca. 91010.

Extra-Terrestrial Canals??

18 February 1974

Dear Mr. von Daniken,

Your work on the possibility of visitation by extraterrestrials is most impressive! I hope that you have stimulated some good research with your thesis in mind.

Since I am very much interested in the history of canals I wanted to ask you if any canals had been proposed as possible evidence of visitors from space. Do you have anything in your files of interest to canal enthusiasts? Could you direct me to someone who might? Our society members would be most interested!

How about the "natural" Casiquiare Canal linking the Amazon and Orinoco river systems? I know little about it, but it is surely a convenient navigable connection, the only one like it in the world. I would not think that mere exploration of it would be enough to determine whether it is natural or man-made. Jungle growth, erosion, and channel meandering would have obscured any dams and channelization. Perhaps, however, at the head of the canal, near La Esmeralda, excavation or remote sensing would show artificial embankments. Do you know of anyone who has some information about this canal? Is anyone planning to visit it who would take me along?

Regards,
Dr. William E. Trout, III
Vice President
American Canal Society

(Translation of letter from Erich von Daniken dated 11 March 1974 by W. Trout and T. Hahn)

8906 Bonstetten, Zurich
11 March 1974

Dear Dr. Trout,

Thank you for your letter of February 18 and the kind expression of interest in my work.

A great number of canals are known from antiquity. The further back we look, the more curious and mysterious their origins become. We know of canals constructed by the Sumerians and later by the Babylonians; by the Incas and Mayas; in the Near East (Catal Huyuk); and finally in historical times by the Greeks and Romans.

Even in the third millenium B.C. we know of the beginnings of canalization of the Mohenjo-Daro in India. In the case of these canals, the primary concern was water distribution.

One of the technical masterpieces of the ancient world is undoubtedly the great dam at Marib. This dam stretches across the Wadi Dhana about 5 kilometers above Marib. It served the people of Saba for over 1000 years. Today the dam has almost completely disappeared. At one time enormous sluice towers were constructed at each end. They stand directly upon bed-rock in the Wadi and are made of carefully articulated ashlar masonry.

This dam of the ancients made it actually possible for ships to navigate the Wadi. (Marib is in southern Arabia.)

The curious water distribution system of Tiahuanico - 4000 meters above sea level - I have discussed in *Gods from Outer Space* and *Meine Welt in Bildern*.

Unfortunately time does not permit me to go into more details and concrete ex-

"HEY-DAY" OF THE ERIE CANAL



Terminus of the Erie Canal — Erie Street, Buffalo, New York. (This picture was taken by THE IROQUOIS, a Buffalo newspaper, about 1910.) The boats alongside of the dock are a steam canal boat fleet being made up in preparation to leaving Buffalo for New York City. It consists of the steam canal boat WM. E. CLEARY and ahead of it the push boat. Alongside of the dock are three boats together. On the stern of the last boat is my father, John Baker, who owned the fleet of boats. He is securing some lines there, which led to two more boats — the bow of the first boat is just visible. When leaving, the steam boat and push boat start out with a hauser of 250' length to the three boats alongside of the dock, then from them to the last two boats is another 250' hauser. When underway each boat must be steered independently. The other boats you see there are a fleet of boats which are drawn by mules, which are not visible. The boats are loaded with a cargo of wheat. (Frank Baker, ACS, 437 58th St., Brooklyn, N.Y.)

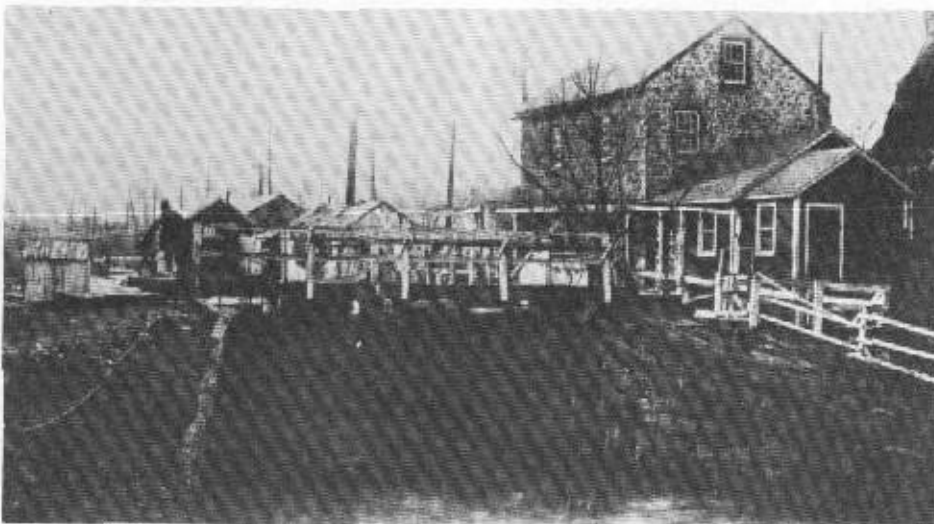
amples. The literature is too extensive.

With friendly greetings,
Erich von Daniken
W. Dannelberger, Secretary

(Translator's note: For more about the Marib Dam see *A History of Dams* by Nor-

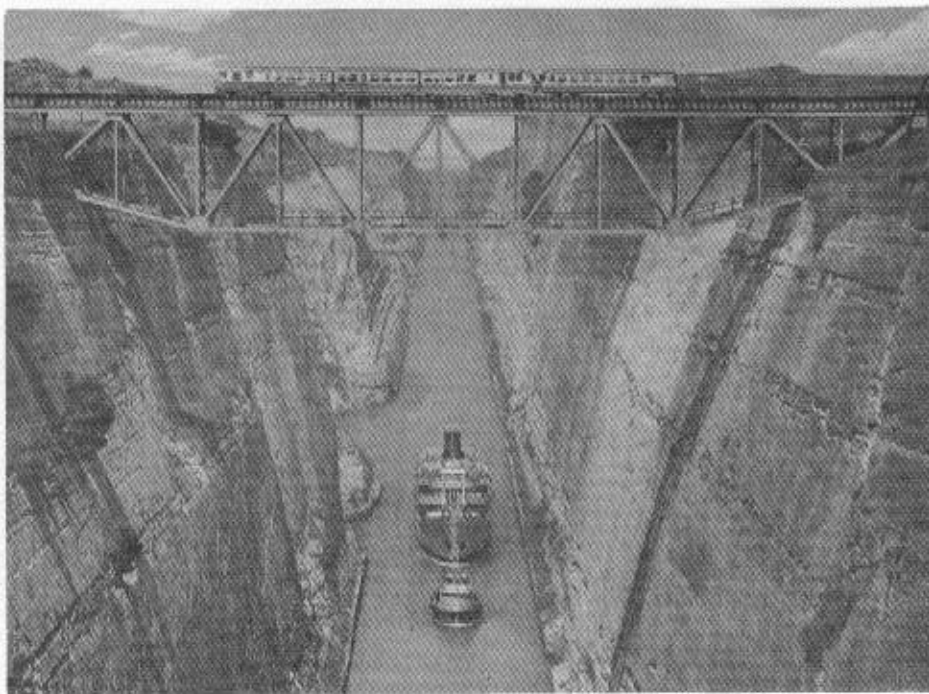
man Smith (Peter Davies, Pub., London, 1971). For a discussion of the origins of ancient canals see Volume 4 part 3, pp. 365-378 of Joseph Needham's *Science and Civilization in China*. Does anybody know anything about Catal Huyuk, the Mohenjo-Daro, Tiahuanico or the Casiquiare Canal?)

TROUBLE ON THE LEHIGH CANAL



This old Lehigh canal Lock-keeper's House at Lock 44 is in a new dilemma. Not only has the house become dilapidated in recent years, but now that John Siftar is attempting to restore the historic canal structure, new problems face him, Charles Derr — Freemansburg Councilman and others interested in the Lehigh Canal and its structures in Freemansburg, Pa. For one thing, recent burglars removed half the plumbing, gas piping, waste pipe and the kitchen stove. Now legal problems face Siftar, who had planned to donate the house at the completion of his work. All of a sudden, heirs of the last lock-keeper produced an unrecorded deed from the Lehigh Coal and Navigation Co. Siftar claims there is some family sentiment that they would rather see the house torn down rather than go to the borough. We prefer to believe that the family has a sense of pride in the house and the historic area in which they live and that an amicable arrangement can be made in the matter. ACS members desiring to help should address letters to: Mr. Charles Derr, Lehigh Canal Park, Borough of Freemansburg, Pa. 18017, expressing the view that the preservation of this lock-house is of interest to Americans everywhere and appealing to the family heirs to make this possible.

CORINTH CANAL--AN 1800-YEAR PROJECT



The original concept of a canal through the narrow isthmus at Corinth, Greece, dates back nearly four thousand years. The great Greek Warrior-Leader, Agamemnon, first dreamed of this short-cut to the long voyage around the Peloponnesian Peninsula, making a four-mile connection between the Ionian and Aegean Seas. The Roman Emperor Nero actually began work on it, using slave labor, about 66 A.D. With Nero's death, work stopped. It was recommenced by a French company in 1881, but it was not until a Greek company, with a Hungarian engineer in charge, took over the work that the canal was finally opened to ship traffic in 1893. Vertical cuts, through solid rock, averaged 180 feet (285 at the deepest point). Width at the bottom, 75 feet; average water depth, 26 feet; length, 6939 yards. (Photo obtained by ACS Vice President Bill Shank during a recent visit to Greece.)

ILLINOIS-MICHIGAN CANAL

On 15/16 June 25-30,000 people turned out for the Lockport Old Canal Days Festival, which next year will be 21/22 June. The State of Illinois, through the Lockport Historic Preservation Council, has granted seed money for local volunteer work to improve the canal for recreational use. Various local civic groups have been working on a bicycle-hiking path, building a canal footbridge and a canoe docking site and repairing a picnic shelter built by the CCC in the 1930's (built on the site of the basin depicted in AMERICAN CANALS No. 10, August 1974). Another local project is fund raising to construct a canal boat. The State of Illinois Dept. of Conservation has budgeted about \$400,000 to improve the towpath between Channahon and Morris. This is part of the \$8 million program to restore the canal over the next 12 years. Most of the work planned for now is directed toward upgrading the towpath for hiking and biking and the canal for canoeing. (John M. Lamb, 1109 Garfield St., Lockport, Ill. 60441).

A CITIZEN'S VOICE

Organizations which enjoy special privileges of tax exemption, may not advocate or oppose legislation to any substantial extent.

Individual citizens of a democracy, however, enjoy the right and share the responsibility of participating in the legislative process. One of the ways citizens of a democracy can take part in their government

at state and federal levels is by keeping in touch with their representatives in the legislature; by writing, telegraphing, or telephoning their views; by visiting and talking with their representatives in the national capital or in the home town between sessions. Every American has two senators and one congressman with whom he may keep in contact in this manner.

The best source of information for such purposes is the official CONGRESSIONAL DIRECTORY, which can be bought for \$5.50 through the Government Printing Office, Washington, D.C. 20402. It tells you who your senators and congressmen are and lists the membership of the various Congressional

LETTER TO THE EDITOR

No doubt, you will receive many replies to the questions raised by Carrel I. Tod in ROBERT LOUIS STEVENSON, CANAL TRIP, in Bulletin #10. The basic principle of the chain or rope towing system described by R. L. S. was in use on the continent in the early 1800's and, at least until very recently, was still employed on some German rivers. A good historical background may be found in WATERWAYS AND WATER TRANSPORT, J. S. Jeans, London, 1890, pages 395-399. The cable on the canal bed idea was tested at least once in this country, circa 1880, on the Erie Canal between Buffalo and Tonawanda. Details of this may be found in SHIP-BUILDING INDUSTRY IN THE UNITED STATES, Henry Hall, Washington, 1882, page 229. This volume was a part of the Tenth Census Reports. (Lew Richardson, Director ACS, Route 2, Box 246, Gainesville, Ga. 30501.)

Restoring British Waterways

The Transport Act of 1968 divided the waterways comprised in the undertaking of the British Waterways Board into: 300 miles 'commercial' waterways; 1100 miles of 'cruising' waterways; and 600 miles of 'remainder' waterways. The commercial waterways are principally available for the commercial carriage of freight. The cruising waterways are principally available for cruising, fishing and other recreational purposes. Following the drive and energy of the British Waterways Board, the Local Authorities and the voluntary bodies, many miles of remainder waterways have been or are being restored to cruising waterway standards.

The Inland Waterways Amenity Advisory Council (of which ACS Director John Atkinson is a Member) has recommended to the Secretary of State for the Environment the upgrading of 145 miles of Britain's waterway system to 'cruising waterway' status. Lengths of 'remainder' waterways that have been or are being restored to full navigation with the assistance of Local Authorities, who have pledged financial support to ensure their continued availability for recreational cruising are: Ashton Canal, Birmingham Canal Navigations, Caldon Canal, Erewash Canal, Kennet and Avon Canal, Monmouthshire & Brecon Canal, Peak Forest Canal and Slough and Welford Arms of the Grand Union Canal.

The Inland Waterways Amenity Advisory Council is a statutory body established under the Transport Act whose members are appointed by the Secretary of State for the Environment from all fields of water amenity and recreational interest. Its very capable Chairman is John Barratt, a member of the American Canal Society.

(The Report, "Upgrading of Remainder Waterways" is available for loan to ACS members — send \$1.00 for mailing to Editor, AMERICAN CANALS.)

CANAL CALENDAR

Nov. 15 — English trip talk by Bill McKelvey (ACS) and British canal film. Canal Society of New Jersey, Macculloch Hall, Morristown, N. J. at 8:00 p.m.

Nov. 16 — Chesapeake & Ohio Canal Association, Geology Study Hike. Meet 9:30 a.m. at Oldtown (Lock 70), Md. Bring lunch. Camping optional.

Dec. 14 — C & O Canal Association, Natural Study Hike. Meet 9:30 a.m. at Great Falls Tavern (Lock 20). Bring lunch.

April 9-11 — CANALS AS LIVING HISTORY II, Working Sessions. ACS and Canal Museum. At Canal Museum in Syracuse, N. Y.

April 11-13 — CANALS AS LIVING HISTORY II: Summary and Special Program honoring 150th Anniversary of Completion of the Erie Canal. Director Frank Thomson, Weighlock Bldg., Canal Museum, Erie Blvd. E, Syracuse, N. Y. 13202.

Spring 1975 — Ohio & Erie Canal from its original terminus at the Cuyahoga River near Lake Erie north to Peninsula. HQ at Cleveland.

"Canals as Living History-II"

In April this year the Canal Museum of Syracuse, New York and the American Canal Society sponsored the first American Canal Symposium, featuring Canals as Living History. Canal authorities came from various parts of the United States to join in a three-day session exploring and discussing what was taking place on the American canal scene. This year, Frank Thomson, Director of the Canal Museum and Captain Tom Hahn, President of the American Canal Society have announced the first International Canal Symposium — CANALS AS LIVING HISTORY II. The first three days of the symposium April 9, 10, 11 will be working sessions, details of which will be announced later. The contents of these sessions have not been established as yet. Your ideas and participation in the planning and execution are welcome! Write to either Frank Thomson (address in Canal Calendar) or Tom Hahn (address on page 2 of AMERICAN CANALS). The second part of the symposium (April 11, 12, 13) will be a Summary of the Working Sessions and a Special Program honoring the 150th Anniversary of the Completion of the Erie Canal. Participation or correspondence pertaining to the second half of the program should be addressed to Frank Thomson. The overlap of the two sessions is intentional so as to involve participants of each session who may be able to attend only one session or the other.

LEHIGH CANAL

Four contracts have been awarded by Allentown (Pa.) for the development of the Lehigh Canal into a new municipal recreation facility. The abandoned canal property is to be improved from Hamilton Street Dam to the Bethlehem city line, a 2.7 mile stretch, to make it available for hiking, bicycling, boating and picnicking. Pointing to similar projects downstream in Bethlehem, Bethlehem Township and Easton (and the Borough of Freemansburg-Ed.) Mayor Daddona foresees the day when the canal strip will be in recreational use from Allentown to the Delaware River at Easton. (Submitted by Charles Derr, Freemansburg, Pa., ACS, from the Allentown THE MORNING CALL.)

BAILLIE-GROHMAN CANAL

Dr. Bill Trout, a canal enthusiast and a Vice President of the American Canal Society, stumbled across the story of the Baillie-Grohman Canal project by accident and paid a visit to the area last year. (See AMERICAN CANALS No. 7, November 1973 for article on the Baillie-Grohman Canal.) On a return trip this spring he suggested a park project to preserve the site for public benefit. Although much of the wooden locks has disappeared with age and part of the canal is dry, Dr. Trout feels the area is of particular interest. He said an elaborate park area is not needed, but simply a trail along the mile-long route, with signs pointing out areas of interest.

Dave Kaye of the East Kootenay Historical Association said it is a little known fact that there is a large spring bubbling in the canal near where the locks were once built. He said although some may dispute it, others feel that this is the actual source of the Columbia River. (From the Cranbrook THE DAILY TOWNSMAN)

ALTERATIONS TO OHIO & ERIE LOCK #40



Recent photo of O. & E. Canal Lock No. 40, near Republic Steel's Cleveland plant. (Courtesy Bruce Anderson and Gary Course.)

New lock construction on the Ohio and Erie Canal? This was the question that entered the minds of two canal buffs, Bruce Anderson and Gary Course, when they discovered construction work on old Eight Mile Lock (Lock 40) near Granger Road and U.S. 21 in Cleveland back in October 1973. An earthwork cofferdam had been bulldozed into location to allow the lock to be pumped dry (to the point that the original bottom timber was drying out — an act to be avoided as a small amount of water needs to be retained for wood preservation) and canal water was diverted around the cofferdam. The usual practice on this section of the canal is for water to be bypassed at the locks by concrete sluices (bypass flumes); the flume had been removed here. Part of the lock stones had been pointed and the rest faced with concrete over steel mesh. A concrete ramp had been built from the lower gate pocket to the upper gate pocket, to a height above the mid-point of the height of the lock (See photo). The wicket (pad-

dle) gates in the upper portion of the ramp appear to give very little control to the water now intended to flow through the lock rather than through a bypass flume.

Why was this work done? Detective work on the part of Anderson and Course determined that an interstate highway overpass was to be built over the old flume. As canal water is used for industrial use, a decision was made to adapt the lock to carry the water needed. Though we regret the need to eliminate the flume and alter the appearance of the old lock, the lock at least has been retained in a fairly recognizable state instead of being eliminated by a more functional structure. Perhaps the concept of adaptive use is spreading. Perhaps also, if more of our historic canals were watered and the water put to good use, there would be less of a tendency to destroy lock structures, such as was wantonly done on the James River and Kanawha Canal in the Richmond, Va. area. (Adapted from material provided by Bruce Anderson and Gary Course.)

NEW CANAL LITERATURE

Eugene M. Scheel has made a very good historical map of Fauquier Co., Va. which shows the remains of the RAPPAHANNOCK NAVIGATION in that county. \$2.50 ppd. from the Fauquier National Bank, Warrenton, Va. 22186.

THE COLUMBUS AREA CANALS, a booklet prepared for the Canal Society of Ohio's spring field trip, is available for \$1.00 from TOWPATHS, 2416 Clarendon NW, Canton, Ohio 44708.

CANALS, A Journal of Canal Information, published by the Canal Museum Associates, Weighlock Bldg., Erie Blvd. East, Syracuse, N.Y. 13202, had its first viewing at the Canal Symposium I — Canals as Living History (sponsored jointly by the Canal Museum and the American Canal Society) in April 1974. This first issue (Volume 1 Number 1), 30 pages in length, contains the following articles: On CANALS: The First Issue — and After; Whitford on Whitford; American Canal Parks;

The Canal and the Stagecoach; A Sketch History of the Western Inland Lock Navigation Company; Bibliography; Reviews and Comments.

THE AMERICAN CANAL GUIDE

Part one of the American Canal Guide covering the West Coast of Canada and the United States (four pages) has just been published and will be distributed free to new ACS members and old members who renew their membership for 1975. Additional copies are available from ACS Treasurer, Dr. Bill Trout at 50¢ each. The guide contains a brief history, description of present condition, location maps, photos, etc. of the canals of British Columbia, Washington, Oregon and California. Most credit for this section of the guide goes to Bill Trout. Section two, The South is being written and should be available for \$1.00 by the beginning of 1975.

ALEXANDRIA CANAL LOCK



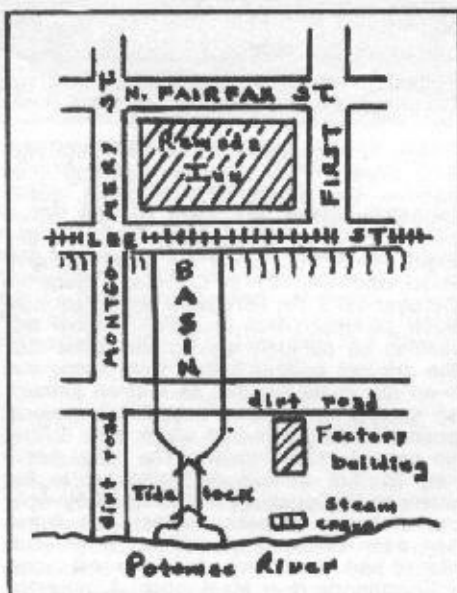
Potomac Aqueduct of the Alexandria Canal near its junction with the C. & O. Canal in Georgetown, D.C. (Date of photo undetermined.)

The Alexandria Canal, opened in 1843, was seven miles long and linked Alexandria with the Chesapeake and Ohio Canal via the famous Alexandria Canal Aqueduct over the Potomac River, and a flight of four stone locks in Alexandria.

Since its abandonment almost a century ago the canal has almost entirely disappeared. All but one pier (near the Virginia shore — upstream of Key Bridge) and one abutment (on the District of Columbia shore) have been destroyed, most of the canal bed has been obliterated by parkways and the locks have been covered up.

Fortunately, the lowermost lock, the Alexandria Canal Tide Lock, is according to all evidence still intact but buried beneath three or four feet of earth in the low grounds between First and Montgomery Streets in Alexandria, between the Ramada Inn and the Potomac River. This stone lock should be the most interesting of the four because it was the entrance lock to the Alexandria Canal and was designed to accept boats at any stage of the tide.

This lock, similar to those on the C&O Canal, should be easy to dig out again, to serve once more as a landmark on the Alexandria waterfront. Wooden lock gates could be installed, which could be opened by visitors without disturbing anything, because water no longer flows through the canal. Between the lock and Ramada Inn there was a basin, wider than the lock, which may still have its stone walls intact. This basin could be dug out again and floored with gravel or grass to show where the canal used to go. It would provide



some three-dimensional relief to the waterfront and could be used as a park, with the opening to the lock fenced off if need be for safety. If the floor of the basin turns out to be so low that tidal water would enter, then it could serve as a basin instead, the lock gates holding back water between tides. The lock chamber and perhaps the basin could also be used as a mooring point for river craft, especially if water could be pumped into the basin. An excavation and survey should help determine which of these or other alternatives would be best.

The Alexandria Tide Lock clearly has the potential of becoming one of the most memorable and valuable features of the Alexandria waterfront. It should not be forgotten or ignored because it is covered up. Other locks have been dug out and put to good use. In any event, the fact that this historic site exists on the Alexandria waterfront should be taken into consideration by anyone helping to determine the fate of this area.

TOM HAHN,

Captain, U.S.N. (Ret.); President
The American Canal Society

From the WASHINGTON POST

(The above letter was written in collaboration with ACS Vice-President Dr. Bill Trout, III.)

CLASSIFIED ADVERTISEMENTS

Support ACS in paying for AMERICAN CANALS and help yourself through our ads. Classified ads are 10¢ per word, \$3.00 minimum, limited to canal-related material. Write to Editor, AMERICAN CANALS for rates on larger ads. We can also include your mailing. The charge for an 8½ x 11 inch flier or similar is ½ the normal rate of postage for AMERICAN CANALS, currently about \$30.00.

AMERICAN CANAL AND TRANSPORTATION CENTER

LEHIGH COAL AND NAVIGATION COMPANY COMMON STOCK CERTIFICATES — Dated 1938. Excellent condition. Vignettes of original (1830's) founders. \$4.00.

THE POTOMAC — By Frederick Gutheim. A Rivers of America Book. Beautifully illustrated (including Monocacy Aqueduct — C & O Canal and Washington City Canal in 1860's and beautifully written: 436 pages. Info on Potomac and C & O Canals. 1974 paperback edition. Bibliographical notes, index. \$4.95.

INTRODUCTION TO WATER TRAILS IN AMERICA — Outlines for canoe trips on rivers and streams within 125 metropolitan centers: by region and state. City-Trail index. \$2.95.

THE BLACKSTONE VALLEY LINE — Story of the Blackstone Canal Company and the Providence & Worcester Railroad. Of great appeal to the canal/rail enthusiast. Over 100 illustrations, including several maps. 80 pages. Soft covers \$3.95.

HOFFMAN PA. CANAL SLIDES — Kodachrome slides of colored drawings by engineer the late artist Phil Hoffman. \$1.25 per set of five slides.

Set #1 Early Pa. canal scenes.

Set #2 Allegheny Portage RR scenes.

SPECIAL REDUCTION:

MITCHELL'S COMPENDIUM OF CANALS AND RAILROADS — 1835. Facsimile of the rare, 84-pp handbook. Description of canals and railroads in 26 states, Wisconsin Territory and Canada. Was \$2.95 NOW \$1.95.

In Pa. add 6% sales tax. 10 page catalog of world-wide canal publications available upon request. Checks payable to Amer. Canal & Trans. Center, 809 Rathton Rd., York, Pa. 17403.

D & H CANAL PARK

The Neversink Valley Area Museum is now at work studying development of the Delaware & Hudson Canal Park. Tract 415-acre park located in the town of Deerpark includes the abutments of the Roebing Aqueduct (across the Neversink River), a feeder and a lock site. The lock was the famous 'Pie Lock' where boatmen would wait in line for pastries, the most popular being rice pie. Active membership \$5.00; Neversink Valley Area Museum, Van Ave., R.D. #2, Box 64, Port Jervis, N.Y. 12771. (Submitted by ACS Director, Grace Elliott, 300 Ohioville Rd., New Paltz, N.Y. 12561.)

1975 DUES NOW PAYABLE

With this Issue of AMERICAN CANALS we are enclosing (for most of you) a dues statement for 1975. The new dues structure is indicated on the invoice form. Note that prompt payment of this invoice will bring you (as a bonus) the first section of Dr. Bill Trout's excellent "Practical Guide to the Historic Canals of the United States and Canada". If a dues invoice is not enclosed, it means your dues for 1975 have already been paid. If there are any questions about your current status please check with the Secretary — Bill Shank, 809 Rathton Road, York, Pa. 17403.