

AL-I-C-006

PAW PAW TUNNEL

C & O Canal .6 miles north of Route 51  
1836 - 1850

The Paw Paw Tunnel was constructed between the years 1836 and 1850 and was the single most costly project of the Canal. It was engineered by G. B. Fisk whose name appears on the keystone on the west end arch. The tunnel is 3118 feet long. It is faced in a combination of sandstone and limestone and is lined in brick. A four foot wide tow path with a wooden railing is located along one side of the interior of the tunnel.

MARYLAND HISTORICAL TRUST

0101094407

AL-I-C-006

INVENTORY FORM FOR STATE HISTORIC SITES SURVEY

**1 NAME**

HISTORIC

Paw Paw Tunnel

AND/OR COMMON

**2 LOCATION**

STREET & NUMBER

.6 Miles North of Md. Route 51 near Paw Paw, W. Virginia

CITY, TOWN

CONGRESSIONAL DISTRICT

VICINITY OF

Sixth

STATE

Maryland

COUNTY

Allegany

**3 CLASSIFICATION**

| CATEGORY                                      | OWNERSHIP                                  | STATUS   | PRESENT USE   |
|---|--|--|---|
| <input type="checkbox"/> DISTRICT             | <input checked="" type="checkbox"/> PUBLIC | <input type="checkbox"/> OCCUPIED              | <input type="checkbox"/> AGRICULTURE <input type="checkbox"/> MUSEUM            |
| <input type="checkbox"/> BUILDING(S)          | <input type="checkbox"/> PRIVATE           | <input checked="" type="checkbox"/> UNOCCUPIED | <input type="checkbox"/> COMMERCIAL <input checked="" type="checkbox"/> PARK    |
| <input checked="" type="checkbox"/> STRUCTURE | <input type="checkbox"/> BOTH              | <input type="checkbox"/> WORK IN PROGRESS      | <input type="checkbox"/> EDUCATIONAL <input type="checkbox"/> PRIVATE RESIDENCE |
| <input type="checkbox"/> SITE                 | <b>PUBLIC ACQUISITION</b>                  | <b>ACCESSIBLE</b>                              | <input type="checkbox"/> ENTERTAINMENT <input type="checkbox"/> RELIGIOUS       |
| <input type="checkbox"/> OBJECT               | <input type="checkbox"/> IN PROCESS        | <input type="checkbox"/> YES: RESTRICTED       | <input type="checkbox"/> GOVERNMENT <input type="checkbox"/> SCIENTIFIC         |
|   | <input type="checkbox"/> BEING CONSIDERED  | <input type="checkbox"/> YES: UNRESTRICTED     | <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> TRANSPORTATION     |
|   |  | <input checked="" type="checkbox"/> NO         | <input type="checkbox"/> MILITARY <input type="checkbox"/> OTHER                |

**4 OWNER OF PROPERTY**

NAME

National Parks Service

Telephone #: 202-343-1100

STREET & NUMBER

C Street, Between 18th & 19th Street, N. W.

CITY, TOWN

Washington, D. C.

VICINITY OF

STATE, zip code

**5 LOCATION OF LEGAL DESCRIPTION**

COURTHOUSE,  
REGISTRY OF DEEDS, ETC.

Allegany County Courthouse

STREET & NUMBER

30 Washington Street

CITY, TOWN

Cumberland,

STATE

Maryland

Liber #:

Folio #:

**6 REPRESENTATION IN EXISTING SURVEYS**

TITLE

DATE

FEDERAL  STATE  COUNTY  LOCAL

DEPOSITORY FOR  
SURVEY RECORDS

CITY, TOWN

STATE

**7 DESCRIPTION**

**CONDITION**

EXCELLENT  
 GOOD  
 FAIR

DETERIORATED  
 RUINS  
 UNEXPOSED

**CHECK ONE**

UNALTERED  
 ALTERED

**CHECK ONE**

ORIGINAL SITE  
 MOVED DATE \_\_\_\_\_

**DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE**

The Paw Paw Tunnel is located on the C & O Canal 155.78 miles up from the Tide Lock and 27 miles below Cumberland, Allegany County.

The Tunnel is 3118 feet long. The mouth is approximately 24 feet high and 22 feet wide. The entrance is constructed of coarsed limestone and conglomerate sandstone. It features a semi-circular arch with a keystone that is surrounded on both sides by projecting sandstone steps and topped by a fillet strip. The interior of the tunnel is lined in bricks which covers the natural rock facing. A four foot wide brick path with a wooden railing was located on one side of the interior of the tunnel.

The Tunnel is in fair condition and is currently being restored by the National Parks Service.

CONTINUE ON SEPARATE SHEET IF NECESSARY

**8 SIGNIFICANCE**

| PERIOD  | AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW |   |   |  |
|---|--|---|---|--|
| <input type="checkbox"/> PREHISTORIC          | <input type="checkbox"/> ARCHEOLOGY-PREHISTORIC  | <input type="checkbox"/> COMMUNITY PLANNING     | <input type="checkbox"/> LANDSCAPE ARCHITECTURE | <input type="checkbox"/> RELIGION                  |
| <input type="checkbox"/> 1400-1499            | <input type="checkbox"/> ARCHEOLOGY-HISTORIC     | <input type="checkbox"/> CONSERVATION           | <input type="checkbox"/> LAW                    | <input type="checkbox"/> SCIENCE                   |
| <input type="checkbox"/> 1500-1599            | <input type="checkbox"/> AGRICULTURE             | <input type="checkbox"/> ECONOMICS              | <input type="checkbox"/> LITERATURE             | <input type="checkbox"/> SCULPTURE                 |
| <input type="checkbox"/> 1600-1699            | <input type="checkbox"/> ARCHITECTURE            | <input type="checkbox"/> EDUCATION              | <input type="checkbox"/> MILITARY               | <input type="checkbox"/> SOCIAL/HUMANITARIAN       |
| <input type="checkbox"/> 1700-1799            | <input type="checkbox"/> ART                     | <input checked="" type="checkbox"/> ENGINEERING | <input type="checkbox"/> MUSIC                  | <input type="checkbox"/> THEATER                   |
| <input checked="" type="checkbox"/> 1800-1899 | <input type="checkbox"/> COMMERCE                | <input type="checkbox"/> EXPLORATION/SETTLEMENT | <input type="checkbox"/> PHILOSOPHY             | <input checked="" type="checkbox"/> TRANSPORTATION |
| <input type="checkbox"/> 1900-                | <input type="checkbox"/> COMMUNICATIONS          | <input checked="" type="checkbox"/> INDUSTRY    | <input type="checkbox"/> POLITICS/GOVERNMENT    | <input type="checkbox"/> OTHER (SPECIFY)           |
|   |  | <input type="checkbox"/> INVENTION              |   |  |

SPECIFIC DATES 1836 - 1850

BUILDER/ARCHITECT G. B. Fisk

**STATEMENT OF SIGNIFICANCE**

The Paw Paw Tunnel is 3118 feet long and is located 27 miles east of Cumberland. It was the single most costly project of the Canal. Plans for the Tunnel were first drawn up early in 1836 by G. B. Fisk, Engineer. (The Keystone at the top of the west end arch bears his name). The contract was given to Mr. Lee Montgomery, a Methodist Minister, in March of 1836. The projected date of completion was July 1, 1838. However, that was based on the hope that the men could dig approximately 9 to 10 feet a day. In reality they were able to dig only 10 to 12 feet a week. The Tunnel was constructed by digging two shafts approximately 200 feet deep through the mountain top. Men and machinery were lowered into the shafts in order to dig outward from the center of the mountain. Since dynamite was unavailable, the men depended on hand drilling and black powder. By 1840 the majority of the work on the Tunnel was complete; however, the brick facing on the interior was not finished until 1850, when the Canal first opened for continuous navigation. The bricks for the interior were hand made and fired at the construction spot.

The Paw Paw Tunnel was undoubtedly one of the most important engineering feats in the life of the C & O Canal, which was in operation from October 1830 until 1924. At present the Tunnel is part of the C & O National Park and is being restored by the National Park Service. The Park Service had previously done repair work on the Tunnel at a cost of \$500,000 in 1956.<sup>1</sup>

<sup>1</sup> All the above gathered from an interview with National Park Service Historian for the C & O Canal, Seneca, Maryland 9/7/76

CONTINUE ON SEPARATE SHEET IF NECESSARY

**9 MAJOR BIBLIOGRAPHICAL REFERENCES**

Allegany County Land Records, Cumberland, Maryland

CONTINUE ON SEPARATE SHEET IF NECESSARY

**10 GEOGRAPHICAL DATA**

ACREAGE OF NOMINATED PROPERTY \_\_\_\_\_

**VERBAL BOUNDARY DESCRIPTION**

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE \_\_\_\_\_ COUNTY \_\_\_\_\_

STATE \_\_\_\_\_ COUNTY \_\_\_\_\_

**11 FORM PREPARED BY**

NAME / TITLE

John Nelson, Joan Baldwin, & Steve Beale

ORGANIZATION

Allegany County Historic Sites Survey

DATE

9/2/76

STREET & NUMBER

507 National Highway

TELEPHONE

777-8991

CITY OR TOWN

LaVale.

STATE

Maryland

The Maryland Historic Sites Inventory was officially created by an Act of the Maryland Legislature, to be found in the Annotated Code of Maryland, Article 41, Section 181 KA, 1974 Supplement.

The Survey and Inventory are being prepared for information and record purposes only and do not constitute any infringement of individual property rights.

RETURN TO: Maryland Historical Trust  
The Shaw House, 21 State Circle  
Annapolis, Maryland 21401  
(301) 267-1438

INVENTORY NO. ~~XXXXXXXXXX~~ **A1-I-C-006**

DATE: 8/4/76

RECORDING: Drastic, moderate, minor

NAME OF PROPERTY: Paw Paw Tunnel

LOCATION OF PROPERTY: .6 miles north of Md. Rt. 51 near Paw Paw, W. Va.

DIRECTION DWELLING FACES: N.E. + S.W.

NAME OF OWNER: National Parks 202-343-1160

ADDRESS: C St. Between 18th + 19th St. N.W.  
Washington, D.C.

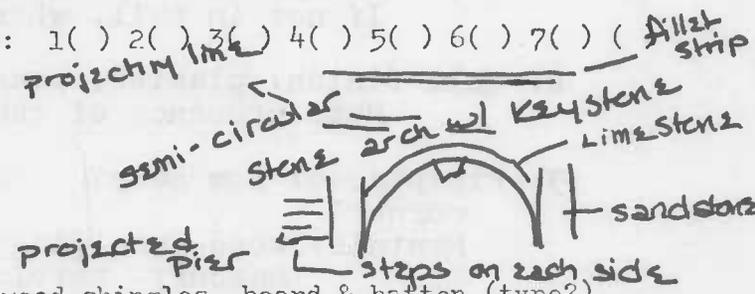
STORIES: 1( ) 2( ) 3( ) 4( ) 5( ) 6( ) BAYS: 1( ) 2( ) 3( ) 4( ) 5( ) 6( ) 7( ) ( Arch strip)

WINGS, ADDITIONS:

Dwelling Shape: (square, cross, rectangular)

WALL CONSTRUCTION:

- ( ) FRAME: Bevel, clapboard, weatherboard, wood shingles, board & batten (type?)
  - ( ) BRICK: Bond type- common, English, Flemish. Sketch variants.
  - (  ) STONE: Bond type- rubble ashlar (random or regular), quoins-plain, rusticated
  - ( ) LOG
  - ( ) Other: Coverings
- Handwritten notes:* coarsest limestone w/ brick lining inside  
+ conglomerate sandstone



WALL FEATURES: BELT COURSE, PILASTERS, OTHERS

FOUNDATIONS: HIGH, LOW, BRICK, STONE

WATER TABLE: NONE, PLAIN, BEVELED, MOULDED BRICK

WINDOWS, TRIM, SHUTTERS: 1/1( ) 2/2( ) 6/6( ) 9/6( ) 9/9( ) other( )  
pegged( ) nailed( ) wide( ) narrow( ) mitred( ) pediment( )

ENTRANCE, DOORS: LOCATION: \_\_\_\_\_  
HARDWARE: original( ) replaced( )  
FAN LIGHT, TRANSOM, SIDE LIGHTS, PLAIN  
Paneled, Verticle, Horizontal Boards

CORNICE, BARGE, EAVES: (crown, fascia, soffit, bed)  
original( ) replaced( ) Rafter Ends, Modillions, Dentils, Frieze, Architrave

ROOF: GABLE FRONT, GABLE FLANK, HIP, SHED, MANSARD, GAMBREL, FLAT, DORMERS # \_\_\_\_\_  
MATERIAL: wood shingles, slate, tin, asphalt original( ) replaced( )

PORCHES: SHAPE OF ROOF - shed( ) hip( ) gable( )

CHIMNEYS: NUMBER \_\_\_\_\_ BRICK( ) STONE( ) CORBELLED( ) original( ) replaced( )  
LOCATION: Flush end( ) Inside end( ) Outside end( ) Central( ) Interior( )

ARCHES: Door and window: Keystone, Flat, Segmental, Semicircular

COMMENTS:

Use - No Longer Used  
Significance - Arch  
Date Constructed - C.B. Fisk - engineer  
Condition - Good

Henry Glassie  
Patterns of Folk Culture  
in Eastern U.S.  
U. Penn Press

Write: Hist. Am. Engineering Record - Allen Comp. Hist. 1160 St. Wash.

## Key points regarding interior architecture.

## 1. Floor plan

No through hall--How many rooms long and deep?  
Where is stairway? Straight or winding?

With through hall--Rooms on both sides? How many?

Rooms on one side only? How many?

Is stair in through hall?

Open or enclosed? Straight--one run. Straight--landing

How many? Curved.

If not in hall, where is stair?

## 2. Wall finish: plaster, paneled, board partition

Note presence of chair rail, cornice, etc.

## 3. Fireplaces: How many? Parallel to walls or diagonal in corner?

Mantels: wood--mouldings, pilasters, columns  
masonry--marble(what color? ), brick

## 3. Doors: on the inside of exterior doors, note the presence of applied flush boards and their direction (diagonal, vertical, horizontal). In general are doors paneled or ledge or other?

## 4. Door and window trim: plain, architrave; fluted, reeded; pilasters

## 5. Kitchen: Where is original if extant or known (marked by very large fireplace)? Separate building; wing to principal dwelling; within principal dwelling? On which floor of any of the above?

2. NOISE PERFORMANCE OF WALLS (IF ANY) ON ANY WIDEN AREAS PERMITTED

# THE PAW PAW TUNNEL

By Thomas F. Hahn

The Paw Paw Tunnel is the major feature of the Chesapeake and Ohio Canal, built as a bypass to some very difficult terrain along the Potomac River in the Paw Paw Bends. Here the river makes a series of gargantuan loops; the tunnel route cutting across a large double loop extends one mile where the river travels 5.4 miles. While the tunnel route involved cutting thru 3,118 feet of solid rock the Maryland shore along the river route contains some impressive cliffs coming right down to the river. To have followed the river with the canal would have required either a crossing to the (West) Virginia shore and back and hacking out the canal along those cliffs; damming the river at the lower end of the bend to form a slackwater and cutting a towpath along the cliffs; or putting the towpath on the West Virginia side of the river.

The alternatives were thoroughly debated within the canal company and, due largely to the enthusiastic advocacy of their newly-appointed engineer, Charles B. Fisk, the tunnel plan won. Even when work was well advanced the board of directors seriously contemplated the abandonment of the partially-completed tunnel in favor of a dam. A decision was made to proceed with the tunnel in February 1836, with the completion date set for July 1838. In actual fact, the tunnel was not completed until 1850, though it was holed thru in 1840. Two other men responsible for building of the tunnel were Fisk's assistant, Elwood Morns and the general contractor, Lee Montgomery.

Montgomery, a Methodist minister with previous tunnel-building experience (he built a 729-foot tunnel on the Union Canal near Lebanon, Pennsylvania), contracted to build the tunnel in the spring of 1836. He appears to have been a rough, tough customer, but energetic and not unimaginative. Bricks were scarce in the area, so he brought in a patented brickmaking machine from Baltimore and set up his own brick works, unsuccessfully though it turned out. Much of the tunneling work involved cutting through rock and the construction of sophisticated brickwork and masonry. The Irish laborers who built much of the canal were not particularly skilled in some of the things to be done, so Montgomery brought in English masons and English and Welsh miners and local Pennsylvania and Maryland "Dutch" masons and laborers.

Those moves, rational as they seemed, were later to contribute to his downfall. Montgomery



View through the upstream (south) portal of the tunnel. Note the towpath to the left with its railing to prevent the mules from falling overboard. (Photo by Alan Franklin)

accepted the contract at much too low a cost. On all sides the optimism was great as to the ease and speed with which the job could be done. The rock formation through which the tunnel was to be dug was a natural arch of shale, thought to protect against cave-ins; the same formations easily slid and drastically slowed the work. It was estimated early that "a single hand can bore from seven to eight feet per day . . ." whereas in actual fact the rate of progress for an entire crew at each tunnel face was 10-12 feet per week. The tunnel was a large undertaking, employing up to 44 men at a time.

Morns played a significant part as the principal liaison between the canal company and the contractor. Montgomery was not around at the finish. Against all sorts of odds, some of his own making, Montgomery succeeded in driving the tunnel through, though not in finishing the entire job. Grossly overextending his credit, he was finally caught in one of the periodic financial crises of the canal company and went under. The tunnel he had built was acclaimed "A Wonder of the World," while he was tossed aside, a sacrifice to

creditors to whom he had indebted himself trying to fulfill his contract.

During 1836 there were riots among Irish laborers working on other portions of the canal, but Montgomery managed to keep his work force going without interruption. In early 1836, however, unrest among his own men over the pay situation and rivalries among the various national groups finally exploded into violence. The Irish terrorized work camps and drove off British workers for a time. More riots occurred in 1838, Irish versus English and "Dutch." The tavern at Oldtown was destroyed and workmen's shanties were burned. A general strike occurred in May, 1838, along the whole line of the canal, based on failure of contractors to meet payrolls. Local militia, who by this time strongly sympathized with the workers, turned out reluctantly to restore order. Montgomery fired and blacklisted 130 men and work was resumed. More rioting broke out in 1839, this time at Little Orleans and once again the militia was called in.

Somehow, despite failing finances and violent unrest, work continued through 1840 and 1841, but in 1842 the canal company collapsed and work on the entire canal ceased. The canal was completed and operating up to Dam Number Six, about 20 miles below the tunnel. In addition, much of the stretch above the tunnel to Cumberland had been finished. Montgomery, who now disappeared in a maze of lawsuits, his personal fortune sunk in the abortive attempt to finish the tunnel, had actually driven it through, but a great deal of work remained. North of the tunnel the deep cut, plagued by a slide, was not fully cleared, and the canal in this cut also had to be completed. The tunnel itself was not yet completed and still had to have brick lining installed. Morns found that Montgomery and his patented machine made poor bricks. Fortunately means were found to raise enough money to resume work under a new contractor in 1847. The tunnel and canal were finished and opened to traffic in October 1850.

The construction was an impressive feat. It involved not only 3,118 feet of tunnel, but also 200 feet of deep cut at the southern end and 890 feet at the northern. In order to speed up the work, two sets of vertical shafts (one at 122 feet and one at 188 feet) were dug down from the hill overhead (two shafts per set to provide ventilation) until the tunnel level was reached, and then digging was carried out in each direction.



An interesting "posed" photo of the Excursion Boat OAK SPRING entering the north portal of the Paw Paw Tunnel. Passengers must have been more agile in those days, as evidenced by the crowd atop the masonry sill.

(Continued on Page 26)

AL-1-C-006

Hahn, Capt. Thomas F, Ed.-in-Chief

1980 The Best from American Canals. York, Pennsylvania: The American Canal Society  
Incorporated.

# PAW-PAW TUNNEL

(Continued from Page 25)

The digging of the tunnel was done by blasting out big pieces of rock with black powder and then reducing them with sledges and picks. Spoil was hauled up the shafts by winches and carted to spoil heaps in the ravines by (probably horse-drawn) rail cars, or else hauled out of the portals by rail to spoil heaps, mostly on the river side of the canal. Those heaps are still visible, particularly above the towpath, downstream of the tunnel.

There are many tales and legends about the tunnel. One involves an Irishman who operated a sort of an elevator at one of the vertical shafts as the tunnel was being dug, bringing loads of rock to the surface and lowering men and supplies, and his mule. The Irishman and his mule shared one characteristic - a very short temper. They quarreled more and more as the work went on, until one day the mule kicked the Irishman where it hurt. Incensed, the Irishman kicked back, only unfortunately, the mule was standing at the edge of the shaft. Down he went, to land angry, but unhurt at the bottom (this is the hard part to swallow as the shafts were 400 feet deep). Only now there was no way to get him to the top again, so the Irishman, in addition to his other duties, had to lower bales of hay and buckets of water down the shaft to the mule until the workers could link up the tunnel coming in from a portal to get him out.

At the tunnel entrance the tunnel lining is dressed stone and from then on to 26 feet below the south upstream portal it is brick four courses thick except under the vertical shafts where it is six courses thick. The tunnel has a 12 foot radius set on 11-foot vertical walls. The towpath runs on a ledge about four feet wide and equipped with a taut railing a little better than waist high. The top rail is a square stout beam, in many places showing deep ruts burned into it by tow ropes of mule drawn boats. There are wooden railings or bumpers on both inner sides of the tunnel to keep boats from scraping the brick walls. The height of the tunnel is 24½ feet, and clears 17½ feet above the water. Approximately 82,000 cubic yards of rock was taken out of the tunnel. The greatest depth is forty-four feet, and the tunnel is seventeen feet wide.

"Weep Holes" were occasionally placed at the spring line of the arch to prevent seepage water from building up and coming directly through brick, an admirable precaution, but one sees that it does not seem entirely effective as a great many patches are visible in the lining. The Park

Service did a thorough renovation of the interior of the tunnel in 1966; in 1979 it remains in excellent condition. The two sets of vertical shafts from the surface of the hill overhead are fairly easy to locate by the extensive seepage of water coming through the brick lining from them.

The upstream portal of the Paw Paw Tunnel has stone steps on each side, by which one can climb to the top. Some of the exposed strata (mostly shales) at the top and running down the berm side, contain fossil shells. The engraved keystone is marked "C. B. Fisk, Engineer"; without whose enthusiasm (some say "short-sighted,") the tunnel would most probably have never been built!" He was the canal company engineer who pushed through the tunnel project from the beginning, and who was Chief Engineer when it was finished in 1850.

Bitter arguments would go on when two boats would meet in the middle of the tunnel. A boy was sent ahead to post a lantern at the other end, so that an oncoming boat would know that the tunnel was already occupied and would wait turn. This didn't always work, however, and from time to time canal boats, with their stubborn captains, would meet in the middle. On one memorable occasion, neither side would back down for days. Boats piled up for miles, bets laid and company accountants tore out their hair. Legend has it that

# CANAL BOOK REVIEW



Facsimile of a 1867 stock certificate issued by the Chesapeake and Delaware Canal Company, sent us by John Trush.

## "The Chesapeake and Delaware Canal: Gateway to Paradise"

by Edward J. Ludwig III

Some of the world's most important canals are the shortest. Connecting major rivers, lakes, bays, and seas across narrow fingers of land, their very brevity and convenience have made these compact channels immune to the competition of road and rail. As vital links in the maritime network, they will continue to be of economic and strategic value as long as ships sail the seas.

Less than fifteen miles long, the Chesapeake and Delaware Canal commands importance today as a crucial part of the Atlantic Intercoastal Waterway. When it was first opened in 1829, it fulfilled the dreams of many of the early settlers in the area who had envisioned a shortcut from the Chesapeake Bay to the Delaware River. Built at the beginning of the nation's biggest canal boom, the C & D went on to become one of the most successful artificial waterways in the Middle Atlantic States. Widened and deepened several times, it was purchased by the United States government in 1919 and rebuilt, becoming a sea-level ship canal in 1927 that was deepened and widened again twice thereafter. One of the locks on the original canal can still be seen at Delaware City (no longer the eastern terminus) and the remains of a feeder canal that predate the opening of the first C & D channel are still to be seen near Glasgow, Delaware. Best of all, the Army Corps of Engineers maintains an impressive canal museum at the original lock pump-house in Chesapeake City, housing the gigantic

finally the section superintendent could stand it no longer, went out to nearby farms and bought all the green corn he could find and then at the upwind end of the tunnel he built a roaring fire as he threw on green cornstalks. With remarkable speed the dispute was settled and the tunnel cleared.

(Tom Hahn, a professional industrial archeologist, is the Editor of *American Canals* and President Emeritus of the American Canal Society.)

thirty-seven-foot wooden lift wheel, the largest of its kind, that was used from 1852 to 1927 to supply 130 tons of water per minute to the canal.

Edward Ludwig's brief history and appreciation of the C & D reflects his intimate acquaintance with the canal, its people, and its environs. There is a balanced blend of historical narrative and canal lore, along with guides for the contemporary tourist, that serve well its purpose as a handbook for yachtsman, canal enthusiast, and Delmarva aficionado. Based on reliable secondary sources, local records, and personal interviews, Ludwig's survey gives us a competent history of the canal enhanced by a wealth of otherwise unavailable details, ranging from the servicing of navigation lights to the farmers who collected dead fish from behind the lock gates at Back Creek to use in making fertilizer. The author even notes that the crew on passenger boats compensated for the listing caused by uneven passenger distribution by rolling barrels of water around the lower decks. Ludwig identifies many of the people who worked on the canal, the names of numerous canal craft, and the types of cargo carried through the channel over the years. His account of the salvage of the tanker "F. L. Hayes," which sank and burned in 1952, is particularly striking. Information on the Adams Floating Theater is also noteworthy, and this unusual barge is featured in one of the book's thirteen photographs.

Though his story is accurate, judicious, and well-told, Ludwig's book could have profited from professional editing, not to shorten it but to bring better order to the presentation of material, eliminate a few irrelevant musings and overblown flourishes, and add an occasionally-needed hyphen. Lack of an index makes reference difficult. But none of these shortcomings detracts enough to dismiss the book. In addition to telling the canal's complete history, the value of this short study is enhanced by its attention to recent controversies such as the battle with B. F. Goodrich and the on-going problem with shoreline damage caused by excessive speed in vessels using the canal. Given its price, this staple-bound 56-page book is a true bargain. Copies may be ordered directly from the author at 150 East Main Street, Apt. 213, Elkton, MD 21921.

(Reviewed by Ernest H. Schell, ACS, a Ph.D. candidate in American history at Temple University.)

AL-I-C-006

Hahn, Capt. Thomas F., Ed.-in-Chief

1980 The Best From American Canals. York, PA: The American Canal Society, Inc.



AI-L-C-006

AI-L-C-006  
Paw Paw  
N. of Paw Paw W. Va.  
USGS - Paw Paw Quad  
1:24,000  
1<sup>st</sup> Ed. Revised

POTOMAC

Paw Paw  
Bevan Hill  
Water

Cherry Orchard  
Camp  
Baltimore  
Ohio

Bevan

Bevan Bend

Anthony  
Sandy Ridge

Swan Springs  
Lumber

Pipeline

Ridge East



Paw Paw Tunnel

AL-I-C-006

.6 miles North of Md. <sup>Rt.</sup> 51 near

Paw Paw, W. Va.

John Nelson

8/4/76

NORTH