INDIANA

CANALS

JOURNAL OF THE CANAL SOCIETY OF INDIANA

Volume 6, Number 3.

Spring 1995

Cincinnatiand Whitewater Canal.

Laborers & Stone Masons wanted.

THE work on this Canal is again resumed, and the Company have determined to complete it during the present year. All the necessary arrangements to secure its completion having been made, public notice is hereby given that several hundreds additional Laborers, and 20 or 30 good Stone Masons, will find employment and prompt pay in cash, by application to the neveral contractors along the line of the Canal. Apply to

Messre Hamilton Ashby, at Dry Fork.

J&J Dickey, at Miami River, Muddy Creek and Rapid Run.

S & H Howard & Co. at the Tunnel at North Benda

Joseph Cooper, at Millcreek near the D. LAPHAM. Engineer.

May 31, 1841.

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CANAL CELEBRATION,

At Brookville on the 13th day of September.
ORDER OF THE DAY.

The procession will be formed under the direction of the Marshalls, on or near the public square, at precisely 10 o clock A. M. and March to the stand erected for the purpose, where the Oration will be delivered at halfafter 10. Then the ceremony of "breaking the ground" for the commencement of the White Water Canal will be performed by those selected, by the committee of arrangements, for that purpose. The dinner will be served up at precisely 12 o'clock M:

ORDER OF THE PROCESSION

let.

Marshall and Assistant Morshall, (mounted.) 2d.

Music and Military.

Orator and President of the day.

4th.
Vice Presidents of the day, (two and two.)
5th.

The canal commissioners & engineers, (two & two.) 6th.

The gentlemen who are to perform the coremony of breaking ground, (two and two.) with all the necessary implements.

7th.

Invited guests, and strangers from abroad.

Governors,—heads of departments,—methbors of Congress, and of the State Legisluture, and Judiciary officers, (two and two.)

Oth.

Committee of arrangements, and other committees, (two & two.)
10th.

Citizens, (two and two.)

Two assistant marshalls, (mounted.)

THE CANALS OF THE WHITE WATER VALLEY

During the Hoosier Canal era a number of canals were proposed, begun and constructed in the valley of the Whitewater River. The best known of these canals, the Whitewater Canal, actually consisted of three distinct canals. (Whitewater Canal, Whitewater Valley Canal and Hagerstown Canal) Combined they created a single canal running from Hagerstown to Lawrenceburgh. The Cincinnati & Whitewater Canal was built as a branch canal connecting the main line above with the city of Cincinnati. An additional branch line canal, the Richmond & Brookville or East Fork Canal, was begun to connect Richmond with the main line at Brookville. In the Indiana canal binge of the 1830s one final canal was proposed and surveyed to connect the Whitewater Canal with the Central Canal near Muncie.

In the present it is hard to see why the diminutive Whitewater valley was the subject of all this canal interest. In 75 miles it has a fall of nearly 500 feet and is subject to water level fluctuations in the extreme. But in the 1820s the Whitewater Valley was one of the most densely populated areas in Indiana. This resulted in political clout for the area and a need for cheap and easy transport of goods and people. Until the arrival of reliable railroads, canals seemed to offer the best means solving the transport problem.

As early as 1822, State Senator James Brown Ray of Brookville suggested the construction of a canal along the Whitewater River from Brookville to the Ohio River. To pay for the construction he suggested using the State's 3% Fund and a state lottery. This was before the Wabash & Erie Canal became a possibility and was not carried forward. In 1825, delegates from the Whitewater valley met at Harrison, Ohio and resolved to construct a canal. They called for a survey to be made and petitioned the state for a charter. The following year saw the formation of the Whitewater Canal Company to be capitalized with 40,000 shares of stock. The charter called for 7 directors who would commence the work within two years with the

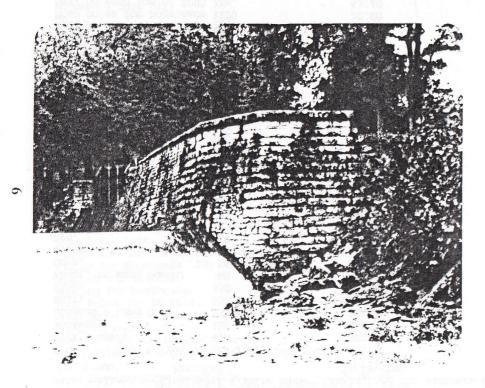
state reserving the right to purchase 1 of the stock and an option to purchase the entire canal in 1860. In June of that same year hopes were raised by the arrival of Colonel James Shriver in Brookville with a corps of engineers to survey a route. These hopes were just as quickly dashed when Governor Ray ordered the engineers to abandon their work in favor of a survey in northern Indiana. Residents of the valley were dealt another setback in 1829, when Colonel Howard Stansbury called the construction of a canal impracticable. Despite this, the residents of the valley persisted in pushing for a canal. In 1834, the Indiana Legislature ordered that a survey be made. In June of that year William Goodings and Jesse Williams surveyed a route from Wayne County to the Ohio River along the west side of the river. The result was a canal 76 miles in length with a drop of 6.41 feet per mile. The estimated cost was \$1,142,126.13. Although there would be problems, the final report recommended the construction of the canal. Positive results here led to proposals for a connecting canal up the East Fork of the Whitewater River to Richmond. In 1835, the Legislature ordered that this route also be surveyed. The report showed that a 52 mile long canal connecting Cambridge City, New Castle and Muncie was possible but not really practical.

Up until this time the canal effort had been a series of false starts and let downs. In 1836, this all changed with the passage of the Internal Improvements Act. With one stroke Indiana dedicated itself to a program of canals, roads and railroads. Number one on this program list was the construction of the Whitewater Canal with an appropriation of \$1.4 million. News of the passage of this act led to wild celebrations through the valley which resulted in at least one death as told in the accompanying newspaper article below. Soon after another canal survey under newly appointed resident engineer Simpson Torbert and Elisha Long was made down the east side of the valley. As a result, the location of the canal from Brookville to Lawrenceburgh was made and plans for a ground breaking at Brookville planned for September

13, 1836. (See accompanying article below) The details of this program were previously related in detail in Indiana Canals, Volume 2, Numbers 2 & 3. Prior to the ground breaking the first contract lettings were made in Brookville on September 6th. These included almost all the work between Brookville and Lawrenceburgh. As work on the canal was progressing agitation for the other works resumed. A series of meetings or conventions were held along the East Fork which resulted in the formation of the Richmond & Brookville Canal Company. In 1837 Torbert made a detailed canal survey for the East Fork Canal. This resulted in plans for a 331 mile long canal with 2731 foot lockage at an estimated cost of \$507.966. Stock subscriptions were made up and down the valley to raise the necessary construction funds. That same year the Board of Internal Improvements ordered another survey of the route connecting the Whitewater and Central Canals. A locating party from the southern section of the Central Canal tried three different routes and confirmed the earlier surveys results. A 52 mile canal was possible, but would cost \$2 million. The canal would be largely dependent on reservoirs as a source of water and would be 15 miles longer than a direct road. 1837 also saw the organization of the Cincinnati & Whitewater Canal Company in Ohio. The location of one of the Indiana feeder dams had taken the possibility of supplying this canal even before the Ohio plans were finalized. Darius Lapham's survey called for 25 mile long canal with the minimal lockage of 17 feet at an estimated cost of \$454,326. For the construction of this canal and the Whitewater Canal, it was necessary for the Ohio and Indiana Legislatures to allow the other state to locate a portion of their canal in the adjoining state. This formality was granted in both cases. On February 28, 1838, the first contract lettings were made on the Cincinnati & Whitewater Canal. That same year in Indiana surveys were made to extend the Whitewater to Hagerstown and additional contracts were let for work between Brookville and Cambridge City. When 1839 began things looked good for the valley's canals. On February 20th the final contracts were let on the Cincinnati canal.

In Indiana the Richmond & Brookville Canal Company was finally incorporated and stock subscriptions were opened on April 1st. In June, the Whitewater was opened from Lawrenceburgh to Brookville with the arrival of the Ben Franklin. By this time financial problems were resulting in the collapse of the entire Indiana internal improvements program. Before the year was out almost all the work on the projects was suspended. Despite this, the Richmond & Brookville company conducted their first contract letting on October 3, 1839. Six of the seven sections were let and work began on at least four of them.

Financial problems resulted in the suspension of work on all the projects. Still, there was a demand in the valley for continuation of the work. Work continued in Ohio at a slow pace and the completed line in Indiana tried to remain open without the cooperation of the Whitewater River. Continued agitation for completion of Whitewater Canal led to the formation in 1842 of the Whitewater Valley Canal Company. In return for the State turning over the completed line, the company would finish the line to Cambridge City. After 15 years the state of Indiana would have the option of re-purchasing the entire canal. Stock subscription was opened in April and new ground breaking ceremonies were held in Cambridge City on July 28, 1342. This apparent rebirth of the canal program continued with the completion of the Cincinnati branch by the end of 1843. Work on the Whitewater was completed with the arrival of the Belle of Indiana at Cambridge City on October 8, 1845. Soon after, the final canal in the valley came into existence with the formation of the Hagerstown Canal Company. With local money and mile canal was completed in 1847 labor an 8 connecting Hagerstown with Cambridge City. This final completion was shortly followed by a rapid Frequent floods continually wrecked decline. sections of the canal. This along with law suits from creditors led to abandonment of the canal for navigation. In 1865, Henry Lord purchased the canal and two years later a railroad was completed alongside its route from Cambridge City to Cincinnati.



LAUREL FEEDER DAM LAUREL

Serious Accident .- It is with sorrow that we learn that a very fatal accident occurred at Connoraville, on Monday ovening last in firing the cannon on the arrival of the news of the passage of the Internal Improvement Bill. We are informed, that in firing the cannon, not having been careful to swab before loading, it went off while in the act of ramming down the wadding, and killed a man by the name of Sexton, took off another's arm, and two others so much injured about the face, as to put out their eyes. These are the particulars, as they have been related to us. It is a solemn caution to those who engage in firing cannon. We have offten seen too much carelessness, and every 4th of July there are not generally less than fifty individuslakilled in the U. States, by carclesenes in loading or the bursting of cannon.

will be received at the office of the Richmond and Brookville Canal Company until Pifth-day, (Thursday,) the third day of October next, for constructing Sections Nos. 1, 2 and 8, near the Town of Richmond: Section 13, near Abington: Section 20, near Brownsville; Section 40, near Fairfield, and Section 52, near the Town of Brookville. The

Sections effered for contract, embrace a number of mechanical structures with some heavy bluff ex-

Richmond & Brookville Canal.

cavations. The mechanical structures are principally DAMS and LOCKS.

A particular description of the work will be posted up, one week before the letting, at Dr. Matchet's tavern in Abington; Dr. Mulford's in Brownsville; A. Duhois' in Fairfield; D. Hoffman's in Brookville, and at the Office of the Company in

By order of the Board.

Richmond.

W. M. LEEDS

TABLE

Showing the amount of tolls charged on the principal articles transported on the White Water Valley Canal from Laurel, to Lawrenceburgh, and also to Cincinnati, on the "White Water Valley" & "Cincinnati & White Water" Canals, and the distance by canal to each place.

Articles

To Lawrbgh.

To Cin.

	AL CICIOS	10 miningin.	TO CITI.
	Flour, on each barrel of 214 lbs.	6.89	8.16
	Pork & Beef, 333	12.25	13.79
	Whiskey, 330	13.66	14.75
	Linseed & Lard Oil, 330	13.66	22.18
	Salt, 350	11.27	11.59
	Fish, 330	13.66	14.75
	Wheat, on each bushel 60	2.21	2.48
	Corn, 56	1.80	1.85
	Clover & Flax Seed, 56	2.32	2.50
	Rye, 56	1.80	1.99
	Buckwheat & Barley, 45	1.45	1.60
	Oats, 83	1.06	1.17
	Potatoes, 60	1.93	1.99
	Mineral Coal, 80	1.10	1.19
	Lime, 80	1.47	1.85
1	Bacon & Lard, on each 100	3.68	4.14
	Wool, 100	4.14	4.47
	Merchandise, 100	9.20	11.60
	Iron, Nails & Castings, 100	6.90	8.70
	Brick, on each 1000	46.00	58.00
	Lumber, 1000 ft. B.M.	46.00	58.00
	Shingles & Lath, 1000 ft.	13.80	14.90
	Staves for bbls on each 100 of, 375	6.90	7.76
	Staves for hogsheads 450	8.28	9.32
	Heading for barrels, 450	8.28	9.32
	Heading for hogsheads, 560	10.30	11.59
	Hoop poles for barrels, 560	10.30	11.59
	Hoop poles for hogsheads 1120	20.60	23.18
	Hay, on each ton of 2000 lbs.	64.40	66.20
	Wood, on each cord,	33.60	41.80
	Rough stone, on each perch of 25 cubic feet,	18.40	24.45
	Cut stone,	27.60	38.55
	Distance from Laurel,	46 miles	58 miles
	T	ABLE	

Showing the amount of tolis charged on the principal articles transported on the White Water Valley Canal iron Brookville to Lawrenceburgh, and also to Cincinnati, on the "White Water Valley" & "Cincinnati & White Water" Canals, and the distance by canal to each place.

Showing the amount of tolis charged on the principal articles transported on the White Water Valley Canal from Brookville to Lawrenceburgh, and also to Cincinnati, on the "White Water Valley" & "Cincinnati & White Water" Canals, and the distance by canal to each place.

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	Artic	les	To Lawrbgh.	To Cin.
	Flour, on each barrel of	214 lbs.	4.64	5.91
	Pork & Beef,	330	8.26	9.80
	Whiskey.	330	9.21	10.30
	Linseed & Lard Oil,	330	9.21	17.72
	Salt,	350	7.60	7.91
	Fish,	330	9.21	10.30
	Wheat, on each bushel of	60	1.49	1.76
	Corn,	56	1.22	1.27
	Rye,	56	1.22	1.41
	Clover & Flax seed,	56	1.56	1.75
	Buckwheat & Barley,	45	0.98	1.13
	Oats,	33	0.72	0.83
	Potatoes,	60	1.30	1.36
	Mineral Coal,	80	0.74	0.83
	Lime,	80	0.99	1.38
	Bacon & Lard, on each	100 lbs.	2.48	2.94
00	Wool	100	2.79	3.12
	Merchandise,	100	6.20	8.60
	Iron, Nails & Castings	100	4.65	6.45
	Pig & Scrap Iron	100	1.55	2.40
	Brick, on each 1000		31.00	43.00
	Lumber, on each 1000 ft.	B.M.	31.00	43.00
	Shingles & Lath, 1000		9.30	10.40
	Staves for barrels on each	ch 100 of 375	4.65	6.45
	Staves for Hogsheads 100	0 of 450 lbs.	5.58	6.62
	Heading for barrels,	450	5.58	6.62
	Heading for hogsheads,	560	6.94	8.23
	Hoop Poles for barrels,	560	6.94	8.23
	Hoop Poles for hogsheads	1120	13.89	16.46
	Wood, on each cord,		24.60	32.80
	Hay, on each ton of 2000	lbs.	43.40	43.20
	Rough Stone, on each per-	ch of 25 cubic feet	12.40	13.45
	Cut Stone,		18.60	29.55
	Distance from Brook	ville,	31 miles	43 miles.
	mb - malla ama calculated		iths of cents.	

The Tolls are calculated in cents and hudredths of cents.

WHITE-WATER CANAL --- Notice to Bidders.

PROPOSITIONS must state a price for each item of work given in the estimates, which will be understood as covering all expenses.

The price bid for grubbing and clearing per chain, will be understood to include the whole width necessary to be grubbed.

The price bid for excavation will be understood to include all the various kinds of earth which may be found in the section, together with all detached rock which measures less than $\frac{1}{4}$ of a cubic foot each.

The price bid for detached rock will apply to such as measure one fourth of a cubic foot or upwards, and will include the cost of separating them from the earth and placing them on the berm side of the canal.

At the Bluffs, where the rock excavated will be required for protection on the same section, no rock excavation will be paid for, though it may be found within the trunk of the canal. In such cases the price bid for protection will be the only compensation for removing and placing the stone.

The price bid for embankment must cover the whole cost of the work under the following regulations, to-wit:

The bank will be measured in all cases after it has become fully compact; and where a bank is to be accepted before the earth is fully settled, the contractor will be required to raise it as much above the ordinary height as the Commissioner or Engineers may deem necessary. When the embankments can be formed from contiguous excavation, they shall not be paid for, unless the earth used be removed more than 100 feet, measuring in the direction of the canal. Embankments must be formed of the surplus excavation in adjoining portions of the canal, when it can be done without materially increasing the cost of the work. In full embankments where the ground is not more than four feet below the bottom of the cana;, the Engineer will place the banks so far apart as to give sufficient earth within them; and the contractor will be allowed to dig pits on the outside of the

banks only when the Commissioner or Engineer may direct it. No extra allowance will be made for the necessary grubbing to procure earth for embankment.— Embankments must in all cases be commenced at their full breadth on the base, and must be continued at full breadth as they advance in height, keeping the sides at least as high as the centre.

The Commissioner and Engineer must be understood as having the right to prescribe, in detail, the manner of forming embankments, and to give such rules in relation to placing the earth, as in their opinion will tend to increase its solidity and

safety.

The price bid for excavation culvert, aqueduct, or lock pits, must cover the cost of bailing or pumping water, when this may be necessary. On Sections 23, 30, 44, and 51, bidders will state a price of excavation of pits below low water and also above water. On all other Sections the same prices will apply to the whole quantity. At the Dams the excavation below low water will be paid for at the estimate of the Engineer in charge of the work- it being impossible now to determine what may be the fair value.

The price bid for lock masonry will include only the cost of the masonry itself—the foundation,

gates and facing being paid for in addition.

The price bid in gross for the lock gates will cover the cost of the cast iron paddle gates, together with every other necessary fixtures.

The price in gross for road bridge will cover all expenses necessary to fit it for the travel, excepting the embankment which is paid for by the

cubic yard.

The price bid for timber in the various mechanical structures will cover the whole cost of furnishing, delivering, counter-hewing, framing, raising, and trenailing.

The price bid for plank will include the cost of delivering it on the ground, jointing, laying, & c.

The price bid for iron will include the cost of furnishing, working, and driving, and will apply to every variety and form of iron work that may be

used in the various structures.

All stone work, whether laid as masonry or protection, will be estimated by the cubic yard.

All stone which may be excavated from the Canal will be the property of the State unless the contractor should need them for protection on his work.

Every part of the work connected with the canal will be subject to the most rigid inspection from the Commissioner and Engineers, and the contractors will be expected to conform in all respects to their directions.

Bidders, to whom locks, aqueducts, dams, or culverts may be assigned, if not themselves good mechanics, will be required to employ one to superintend their structures, who shall be approved by the Commissioner and Engineer.

The Commissioner reserves the right of making any alterations either in the canal line or level, or in the plans of the work which further observation may show to be necessary, and if such change shall increase the cost of the work, the amount of this increase shall be estimated by the Engineer and paid to the contractor.

The quantities of excavation, embankment, &c. may be upon a more careful examination, and measurement of the work, vary from those now exhibited, but this shall not furnish ground to claim an extra price per yard.

In cases where a contractor fails to prosecute his work in such a manner as to afford satisfactory evidence that it will be complerted by the time stipulated, the right is reserved to the Commissioner to place an agent thereon, who shall employ hands and complete the work; the expense of which being charged to the contractors.

Contractors will be held liable for the payment of all the labor done on their several sections, whether the laborers be engaged by the contractors themselves, or by sub-contractors; and the Commissioner expressly reserves the right to retain any monies due to the contractors for work done on any section, and pay the same to laborers who may have done work thereon, in all cases where the

contractors shall neglect or refuse to pay for such labor, on reasonable notice being given for that

purpose.

Contractors will be expected to superintend their works in person. The sub-contracting of any part of the work without the consent of the Commissioner, will subject the contractor to the liability of forfeiting his contract at his option.

Contractors must first endeavor to procure the necessary timber and stone by purchase; but should the individual owners of lands refuse to deliver materials, or suffer them to be taken at reasonable prices, the Commissioner or Engineer will, if they deem it necessary, authorize the contractors, under the provisions of the canal law, to enter upon such lands, and take therefrom whatever may be required for the construction of the canal, the contractors being liable to pay the amount of damage which may be assessed under said law.

In grubbing or clearing any part of the line, contractors will not be allowed to deposite timber, roots or brush on the adjoining lands, contrary to the expressed wish of the owner, but must burn all on the ground or place it within the outside stakes; nor will they be allowed to obstruct any public road without first opening a new one. The cost of the new road to be paid by the State.

Contractors will not be allowed to commence operations within any enclosure on which a crop is now growing, until sufficient time shall have elapsed for the removal of such crop, after it has become fit for gathering.

All mason work requiring the use of mortar or cement, must be laid between the 1st day of April and the 1st of October.

All work will be at the risk of the contractor until the job is finished and accepted.

Sections which may be finished later in the season than the 10th of November, will not be received until the 1st day of April next ensuing, at which time the injury which the banks or other parts of the work may have sustained during the winter, must be repaired at the expense of the contractor.

Bidders are notified that no extra allowance, in addition to the contract prices, can in any case be made, and are requested to give the work a close examination, so that they may judge correctly in regard to its value. The stone quarries named on the profiles are referred to in order to aid contractors in their examinations for stone. Should they prove insufficient, and the stone be hauled from more distant points, this circumstance will furnish no ground to claim an extra allowance.

It is expected that each contractor will so far as he can consistently with the successful progress of the work, discourage the use of spiritious liquors by the laborers engaged on his contract; and that he will promptly discharge any intemperate or riotous person when the good of the work or the peace of the neighborhood may seem to require it.

Each section now to be let must be commenced by the 20th October next, and completed by the first day of June, 1838. By order of the acting Commissioner. J.L. WILLIAMS, Prin. Eng.

Brookville, Sept. 9, 1836.

Taken from the Brookville American, Sept. 9, 1836.

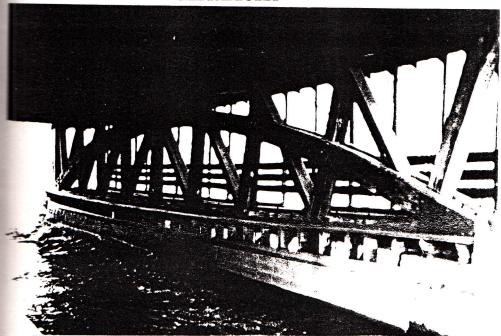
The Canal Open.-The first Canal Boat, (Ben Franklin) owned by Long & Westerfield arrived at this place from Lawrenceburgh, by the Canal, on Saturday evening last, on which occasion our citizens let loose to their feelings of joy, by the firing of cannons and other manifestations of pleasure, calculated to be experienced at the successful completion of such an enterprize. On Sunday morning the Packet Boat Little Western, owned by Wood & Woods, arrived, and in the afternoon of the same day, the packet Niagra, owned by Squire Watts arrived. They all left this place on Monday morning, for Lawrenceburgh. We believe it is the intention of some of these boats to ply regularly between this and Lawrenceburgh, but none of the owners have as yet authorized us to state the days or hours of their arrivals or departures.

Brookville American. June 14, 1839.

THE CANAL CELEBRATION.

On Thursday last, the first breaking of the ground on the White Water Valley Canal under the auspices of the company created by the last Legislature—was magnificently celebrated at the National Road, its northern termination in Cambridge City. Governor Bigger, was there, in fine health and spirits, and many strangers from abroad. The People of the Valley, and its vicinity, men, women 'and children, in mass; almost, seemed to be there. The dumber present was variously estimated from Seven to Fifteen Thousand souls. It was probably not far from Ten Thousand. By 10 o'clock. A. M. they were congregated around the Basin apparently by the acre. The ceremony of breaking ground was performed by S. W. PAR-KER of Connersville, and J. T. ELLIOT of New Castle. Mr. Parker opened and closed the ceremony with some brief and appropriate remarks. The fine music of three full Brass Bands, that were in attendance, and the frequent and re-iterated plaudits of the thousands of joyous spectators, gave great eclat to this part of the days proceedings.

DUCK CREEK AQUEDUCT METAMORA



WHITEWATER CANAL - STATISTICS

490 FT FALL - HAGERSTOWN - LAWRENCEBURG 7 FEEDER DAMS - 56 STONE LOCKS COST \$1,164,665

FROM	MILES	TO	DATE - OPENED
HAGERSTOWN	8	CAMBRIDGE CITY	1847 HAGERSTOWN CANAL
ii .			8 MILES - BY PRIVATE CAPITAL
CAMBRIDGE CITY	13	CONNERSVILLE	1846 WHITEWATER VALLEY CANAL
CONNERSVILLE	11	LAUREL	39 MILES - BY PRIVATE CAPITAL
LAUREL	7	METAMORA	
METAMORA	8	BROOKVILLE	
BROOKVILLE	17	HARRISON	1839 WHITEWATER CANAL
HARRISON	* 12	LAWRENCEBURG	29 MILES - BY STATE OF INDIANA
	* 68	* 7 MILES IN OHIO /	61 MILES IN INDIANA

TOTAL MILEAGE	76	WHITEWATER CANAL	
	====		
HARRISON	25	CINCINNATI, OH	1843 CINCINNATI & WHITEWATER
			25 MILES - BY PRIVATE CAPTIAL