



— from *The Raging Canal*, P. Morris, New York, 1884.

★ ★ ★ ★ ★

THE GRAND CANAL NEW YORK'S FIRST THRUWAY

by
Eric Brunger and Lionel Wyld

Buffalo is to be the point of beginning, and in 50 years it will be next to N. York in wealth and population. We have looked at all the difficult points, ascended the mountains, penetrated the forests, descended into wide-spreading and deeply excavated ravines. . . . The result is most satisfactory. The work can be easily effected, and the utmost cost will not exceed our calculations. The public sentiment is also fixed in our favor. There is scarcely a dissident in this vast country.

DEWITT CLINTON wrote this letter to a friend in 1816 just a day or so after his visit to Buffalo. It reflects his optimism about the proposed Erie Canal. But it is important in another way too. It marks the real beginning of enthusiasm for the great undertaking in western New York.

Prior to Clinton's visit, western New York canal interest was lukewarm at best. There was some concern, of course. Peter B. Porter of Black Rock was interested. A canal would definitely affect his Porter, Barton, and Company with its monopoly of trade west via its Niagara Portage. The location of the proposed canal was important to him.

The Holland Land Company was interested because of the impact on land values that a canal would produce. Joseph Ellicott and his boss, Paul Busti, rather doubted that the canal, if begun, would ever be finished, or finished within any reasonable period of time, but they were willing to help. The route of the canal was of concern to them. To aid the Holland Land Company, the canal should pass through their land. Some were proposing that it run from Albany to Oswego, with the westward leg being Lake Ontario. If this were the final route, the benefits to the Holland Land Company would be much smaller than if the canal ran through its holdings from the Genesee westward.

General interest in a water route to the west was of long standing in the history of the Empire State. Back in colonial days, in 1700, the Earl

of Bellomont, Governor of New York, told His Majesty's Chief Engineer, Colonel Romer, to make a map of the Indian Territory of the Five Nations. He wanted Romer to note especially what should be done to improve transportation by clearing obstructions from the streams. Another colonial governor, in 1768, urged improvement of inland navigation. In 1791 Governor George Clinton, DeWitt Clinton's uncle, had a survey made and a year or two later a lock was built on Wood Creek.

Two private companies had been chartered in 1792, the Western Inland Lock Navigation Company and the Northern Inland Lock Navigation Company. They were responsible for building short stretches of canal at portages around falls or rapids. One of these was at Rome, where the waters of the Mohawk River were connected with Wood Creek. This canal stretch was 1½ miles long with a lock at each end. The eastern lock lifted boats 10 feet and the western lock 8 feet. Connected with this canal were four other locks on Wood Creek about five miles from Rome. These lifted boats 25 feet to the western lock of the 1½-mile canal.

The artificial waterway was bothered by low water in time of drought. But a reliable observer of the traffic estimated the number of boats passing the lock annually at about 300, carrying a total of 1500 tons of goods. This is about the same as three modern-day railroad box cars, so the traffic was still restricted. The cost was so great that traffic was figured in hundredweight, not in tons. From New York City to Oswego, on Lake Ontario, the freight charges were about \$2.35 per hundredweight. More than half of this cost was on the leg from Utica to Oswego which included Wood Creek lockage.

The honor of suggesting the waterway from Lake Erie to the Hudson River has been given to many. Cadwallader Colden, Christopher Colles, Elkanah Watson, George Clinton, Gouverneur Morris, Jesse Hawley, and James Geddes all share a claim to the honor. Morris dreamed of a water level canal without locks, from Erie to the Hudson. Jesse Hawley first pointed out the advantages in print through a series of letters published under the name "Hercules" in the *Genesee Messenger* from October 27, 1807, to April of 1808. On February 4, 1808, Assemblyman Joshua Forman from Onondaga introduced a resolution at Albany for a canal, and the legislature ordered a survey which was conducted by James Geddes.

Once the larger project was conceived, there was debate about the route. Two plans received most serious consideration. One route was from Albany to the junction of Seneca and Oneida rivers, just north of Salina (now Syracuse), thence up the Oswego River to Lake Ontario, and westward to the Niagara River at Lewiston. The other was to follow an inland route all the way west, either between Lake Ontario and the Niagara Escarpment, or above the escarpment itself, that is farther south from the Lake Ontario shore. The first route would mean the transshipment of goods halfway west, at Oswego, from barges to lake

vessels. Opponents of this plan feared that eastbound cargoes would by-pass New York State entirely and go to Canadian ports on Lake Ontario. The second route involved more complete exploration of the land westward from the Seneca River. It faced such obstacles as the Montezuma marshes, the Genesee River, as well as smaller streams, and the Niagara Escarpment itself, which presented the problem of raising and lowering boats some 75 feet.

Geddes made his report to Surveyor-General Simeon DeWitt in 1809 and favored the inland route. In 1810 things progressed to the point of appointing a board of Canal Commissioners: Gouverneur Morris, Stephen Van Rensselaer, William North, DeWitt Clinton, Thomas Eddy, Peter B. Porter, and Simeon DeWitt. Their report the following year covered all phases of the proposal including the suggestion that the State apply to the Federal government for aid. President Jefferson had previously encouraged such projects for internal improvements but at the end of his second term as President turned down as "madness" a New York State request for aid. President Madison turned New York's request over to the Congress but no help was forthcoming. Finally, in 1812 the legislature authorized the floating of a loan for five million dollars in order to begin. At this point the War of 1812 intervened. While delaying the project for three years, the war demonstrated clearly the need for some form of cheap transportation from eastern New York to her western boundary.

In 1815 the state legislature was flooded with petitions from all parts of the state urging it to begin the canal. These were largely the work of Jonas Platt, Thomas Eddy, and DeWitt Clinton. From this point onward Clinton was fully devoted to the goal. The legislature passed a bill on April 14, 1815. According to the plan of state government at the time, it had to be approved by the five-man Council of Revision. The Council was divided 3-2 against the proposal. At a crucial point in the meeting, before the formal vote, the ex-Governor of the state and then Vice President of the United States, Daniel "Farmer Boy" Tompkins walked in. He announced his opposition to the canal, stating that there would be a war with England again within two years. James Kent, New York's great lawyer, who was opposed to the bill, asked Tompkins if he really meant it, and when the Vice President re-



Jesse Hawley.



Governor DeWitt Clinton.

plied yes, Kent said in that case he would change his vote and approve the law to begin the Erie Canal. It seemed fateful in a way, that even the opponents of the project should help move it forward by speaking at the wrong time and in the wrong way.

When the Canal Commissioners met in 1817 DeWitt Clinton was elected president. Myron Holley of Canandaigua was chosen treasurer; thus a western New Yorker became very active in the project. The Commissioners selected Charles Brodhead as engineer for the eastern section (Rome to Albany), Benjamin Wright for the central section (Rome to the Seneca River), and

James Geddes for the western section (Seneca River to Buffalo). The last hope for federal aid was smashed on March 3, 1817, when President James Madison vetoed the Bonus Bill which would have provided New York with 1½ million dollars.

The Holland Land Company became actively engaged in the project when William Peacock, the company's sub-agent at Mayville, was instructed by Joseph Ellicott to survey the route from Buffalo to the Genesee River by way of the summit between Tonawanda Creek and Black Creek. The company had offered the state about 100,000 acres of land in Cattaraugus County to encourage the building of the canal. Ellicott was very much interested, and the Canal Commissioners, particularly Clinton, were impressed with the detailed account of the southern route, complete with maps, which he provided.

The route of the canal in the west presented problems. The commissioners wanted to use Lake Erie waters if possible and this meant solving the problem of the escarpment. The survey by Peacock reached a point which was 75 feet above the level of Lake Erie. Another survey, conducted by Valentine Gill, produced an even more difficult summit, south of Peacock's, of 90 feet above the level of Lake Erie. Finally engineer David Thomas surveyed a more northerly route which avoided both of these and kept the canal below the level of Lake Erie. James Geddes carried the survey from Tonawanda Creek 163 miles to the Seneca River. George Geddes, writing of the canal later, said that finding this route was the key to the success of the whole project in western New York. It became especially important when the canal was partially finished for there was sentiment at that time for ending at Rochester. The discovery of Thomas' route, enabling the engineers to use Lake



Buffalo on Lake Erie 1827.

Erie waters in the west was of key significance to the area.

The second problem produced a good deal of bitter feeling. This was the question of the western terminus. The two rivals were Black Rock, the chief port on the lake, and Buffalo, at the mouth of Buffalo Creek. Today these two are merged, partly at least due to the urban expansion produced by the canal itself, but in the second decade of the nineteenth century they were separate villages.

Under the original survey the Canal Commissioners had decided to connect the canal with Lake Erie at Buffalo. In their report of February 15, 1817, they gave their reason. The farther up the lake the connection could be made the higher the water level would be. This would greatly reduce the cost of excavation in digging the canal eastward. Further than this, the Holland Land Company's offer of land had been based upon the understanding that Buffalo Creek would be improved as the harbor for the transfer of goods from canal to lake boats.

The legislature required that the county furnish a survey and map for the harbor project and engineer William Peacock presented this in 1819. His report incorporated a stone pier of 990 feet to improve the harbor. Several leading citizens of the Buffalo Harbor Association were authorized by the state to establish security for a \$12,000 loan by the state to make improvements. In February 1820 engineer Thomas also reported in support of the Buffalo project. All the engineers were not agreed on the best site, however. James Geddes and Nathan S. Roberts both preferred Black Rock, the former believing that Buffalo would never be large enough for all the future traffic on the canal. Benjamin Wright, another of the key engineers, favored the site at Buffalo Creek.

The citizens of Black Rock were not willing to accept a decision in favor of their rival without a fight. At this time their village was the

chief lake port in western New York, the total tonnage at Buffalo being only 377 and four vessels. In the words of James Barton of Black Rock, "I, with all the rest of our citizens, thought we had a right to retain this commerce if we could." Black Rock residents felt the Buffalonians had a great advantage in presenting their case to the public with the *Journal* and the *Patriot*. Accordingly, in December 1822 the Black Rock *Beacon* appeared under the editorship of Lewis Hoffman. Porter, Barton and Company had important commercial interests in Black Rock and General Porter became the leading advocate for that port. As a former Congressman, a military hero of the War of 1812, and a substantial citizen with his control of the Niagara Portage, he exercised considerable influence in state circles. When the Canal Commissioners decided in favor of Buffalo in 1817, he went to work.

In 1822 the legislature authorized construction of harbors at both places. In Buffalo Samuel Wilkeson, Charles Townsend, and Oliver Forward had already put up security for the \$12,000 loan from the state and had commenced work. The new loan withdrew a privilege originally granted the Buffalonians of charging tolls on the vessels using their port when it was finished. The new law of 1822 had provided for a free port at Black Rock. Obviously ships would not stop at Buffalo and pay tolls when they could stop at Black Rock free of charge. This decision by the state intensified already bitter feelings.

Samuel Wilkeson, the Buffalo champion, met Peter Porter, the Black Rock champion, in a head-to-head struggle before the Canal Commissioners that same year. Again the decision was Buffalo Creek, and again the Black Rock adherents refused to accept defeat. Rumors circulated that the commissioners had changed their minds and the Buffalonians raised a fund to provide canal navigation on the margin of the Niagara River. This action by the anxious Buffalonians postponed the decision for another year. This would give both groups an opportunity to demonstrate their plans for the proposed western terminus.

Each village had obstacles to good harbor development. In the case of Buffalo, it was the sand bar across the creek where its waters met the lake. The pier suggested by Peacock was built under the leadership of Samuel Wilkeson, but the pier did nothing to remove the sand bar. Wilkeson conceived an ingenious plan to make the creek itself solve the problem. A strip of land separated the creek from the lake running parallel to the newly built pier. By damming the creek, Wilkeson proposed to divert its waters in such fashion as to force it to cut a new channel through this strip of land. After considerable effort in which he overcame the lack of suitable apparatus (he devised a pile driver from an old mortar), and even the fury of nature herself who threatened to destroy his dam, the scheme was successful. The dammed-up creek waters, let loose under control, actually dug the new channel to the lake. More work would be needed to enlarge the new channel and erect the necessary harbor facilities but the crucial obstacle had been overcome.

The basis of the Black Rock project was a suggestion by James Geddes in his report of February 1821. This was the construction of a mole from Bird Island to Squaw Island and thus to the main shore of the Niagara River. In effect this would create a dam across the part of the river, raising the water in that section to a level with that of Lake Erie. The citizens of Black Rock went to work and constructed their mole from Bird to Squaw Island. Engineer David Thomas raised many questions about this proposal. He noted that to shorten the canal by the $4\frac{1}{2}$ miles from Black Rock to Buffalo by lengthening the lake offered no real advantage.



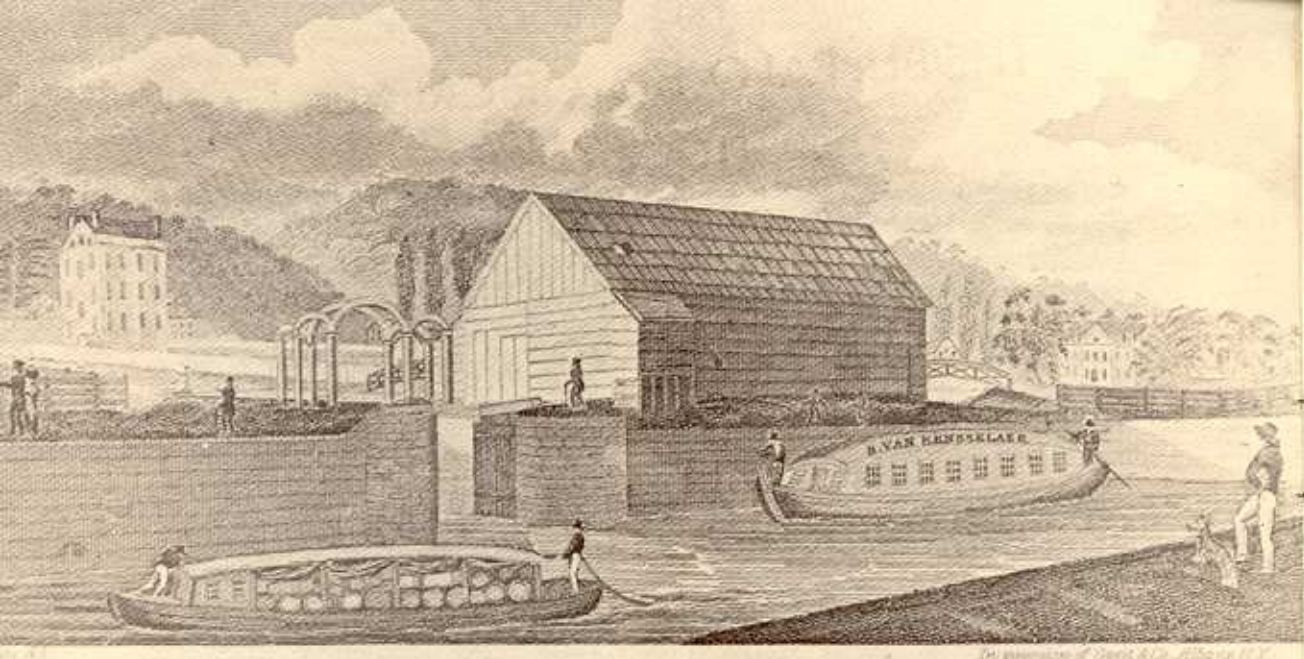
Samuel Wilkeson.

Furthermore, he pointed out the serious drawback in the location of Black Rock. It was situated in such a way that the boats leaving it would have to move against the prevailing westerly winds. For a long time boats at Black Rock had used the "horn breeze"; animals towed the boats up the Niagara River to the lake. Sheldon Thompson used several yoke of oxen (Lewis Allen of Black Rock said 20-30) to pull the *Walk-in-the-Water* from Black Rock to the lake. Thomas also pointed out the dangers of the spring ice flood in the Niagara to the harbor, the fact that its upper end would be open to the winds and swells from the lake. Black Rock did not have as much good anchoring ground with its rocky bottom as did Buffalo with the clay bed of Buffalo Creek. He raised a question of a different sort. Wouldn't the damming of the river raise the water level at this end of the lake and thus engage us in quarrels or law suits with our Canadian neighbors?

The battle ceased in 1823 when the engineers Benjamin Wright, David Thomas, Nathan S. Roberts, and Canvass White decided unanimously that the western terminus of the canal ought to be near the mouth of Little Buffalo Creek. The final chapter in this rivalry was written in 1853 when the new city charter of Buffalo incorporated Black Rock and its harbor became part of the Buffalo complex.

Actual initial construction on the Erie Canal had begun some years before the Black Rock-Buffalo digging. On July 4, 1817, the first earth was moved on the Rome-Utica section and on October 29, 1819, the first boat moved over the canal and the state began its collection of tolls. Before work was even begun on the western section the state had collected \$85,500 from traffic on the partially-completed canal.

Contracts for the western section were granted by the acting commis-

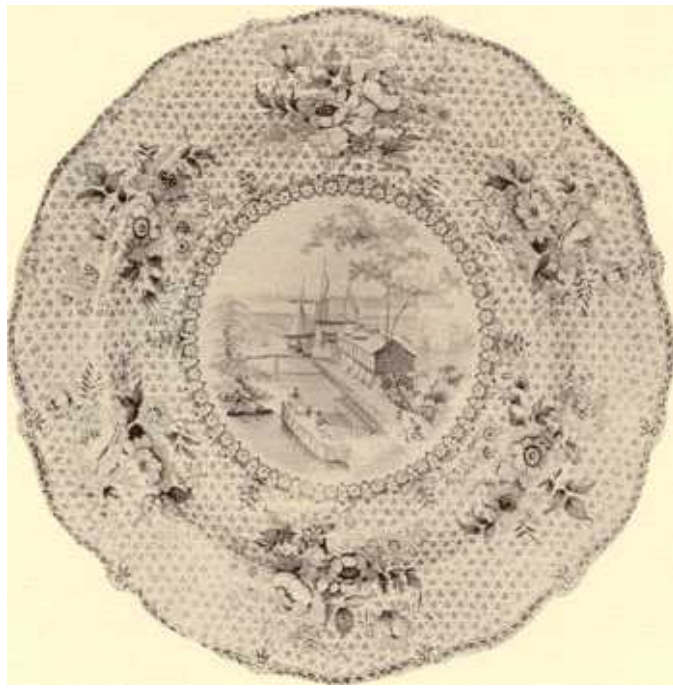


ENTRANCE OF THE CANAL INTO THE HUDSON AT ALBANY

sioner, Colonel William C. Bouck, on August 2, 1822. The first actual work, outside of the harbor activity, began on Friday, August 9, 1823. That morning the citizens of Buffalo assembled in front of the Eagle Tavern and marched through the village to the bend of Little Buffalo Creek. There they hoisted Old Glory on an improvised flagstaff and placed a little cannon on a nearby high spot of ground. The Catholic and Protestant ministers, Elon Galusha and Miles Squier, offered prayers. Some of the long-time residents of the village, Vincent Grant, Major Wells, Colonel Chapin, Judge Barker, Ebenezer Walden, and Benjamin Hodge had the privilege of turning the first spadefuls of earth. The happy contractors then provided liquid refreshment, and on the strength of these, the Grand Canal, western division, was considered suitably launched.

Unforeseen difficulties soon appeared which showed that the cost of excavation was going to be greater than planned. There was no guarantee that the state would pay the contractors for the additional cost. At once the work stopped, in the same month as it had gloriously begun. Again Buffalo's leaders went to work. Samuel Wilkeson, Albert Tracy, Oliver Forward, and Reuben Heacock got up a petition guaranteeing completion of the project by October 1, 1824, if the state would reimburse them up to \$30,000. The Canal Commissioners were favorably influenced by the determination and integrity of these men. Work began again and was rushed through by the time the Lockport locks were ready. The *Buffalo Patriot* noted that the record earthmoving was 203 cubic yards in one day.

At last the great day dawned. On October 26, 1825, seven years after it had been started, this greatest of public works yet undertaken



Staffordshire china c. 1825-1830 reflects worldwide interest in the canal. This plate shows an Erie Canal boat with the Buffalo harbor in the background. — from the collection of the Buffalo and Erie County Historical Society.

in the United States was formally opened. Forgotten was all the bickering about "Clinton's Ditch." Forgotten was all the doubt raised by the ever-present engineering problems. Forgotten was the pessimism which said that the "ditch" was an outlandish idea that would never be completed.

In Court House Park, the grand procession began. The canal engineers, the Canal Commissioners themselves, the people, the band, the militia, and finally the grand champion himself, DeWitt Clinton, began the march to the west and the *Seneca Chief* lying in the canal basin. After suitable speeches, a cannon was fired, its boom taken up by another and another all the way to New York City. In eighty minutes, people in New York knew the opening cargo from Buffalo was on its way. The process of booming cannon was repeated from New York westward and the people of Buffalo knew their friends in the east had begun their celebration of the great event. One month later the *Seneca Chief* returned with a keg of water from the Atlantic Ocean and on November 25th this was poured into Lake Erie. The wedding of the waters had taken place and the Empire State had its first thruway.

Westward from Albany 350 miles, this mainline waterway was a ditch 40 feet wide at the top, 28 feet wide at the bottom, and 4 feet deep. The soil and rock removed would cover one lane of the present Thruway six feet deep. But the earth and stone removed tells but a small part of the story. All of the work had to be done by hand. Such machinery as there was had to be developed on the job. The engineering problems had to be solved the same way, and by men whose engineering training and experience was limited at best. Of all the engineers, only Canvass

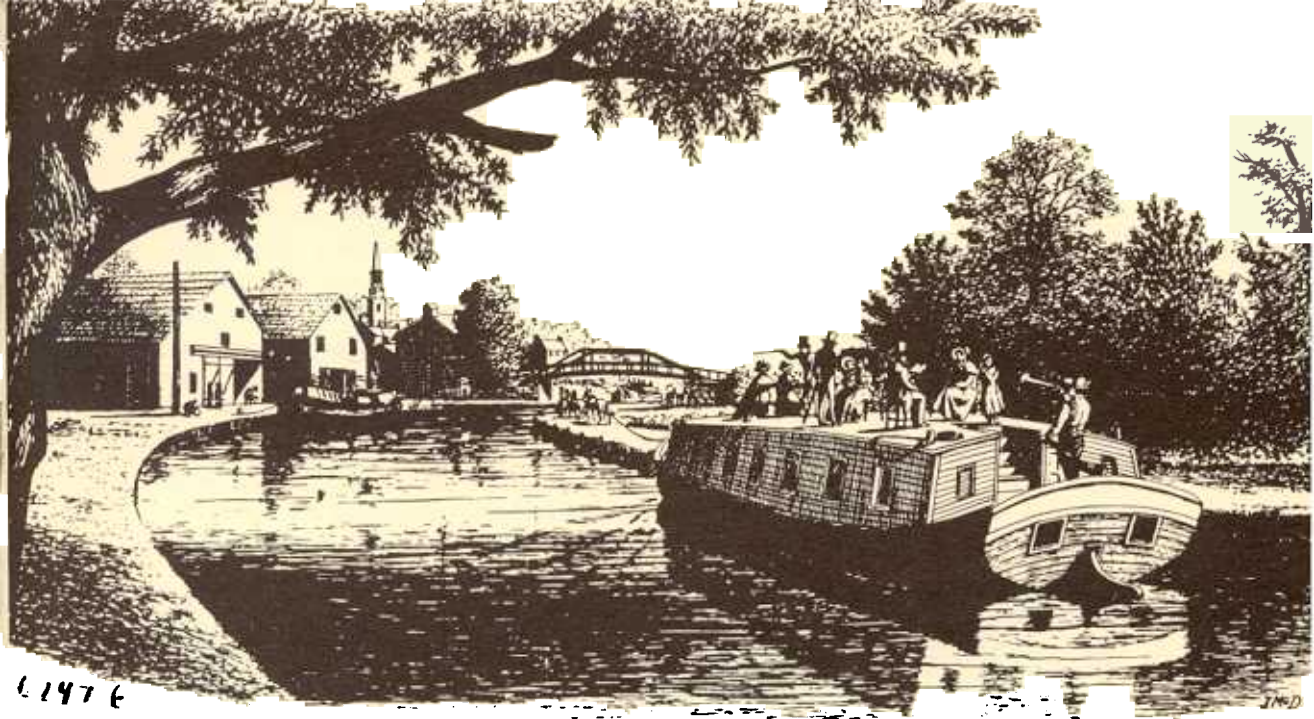
White had seen completed canals. On a visit to England in the fall of 1817, White had traveled some 2000 miles of England's canal network inspecting, observing, and learning. Besides the basic problem of moving the earth and stone, there were rivers to cross, locks to build, swamps to conquer, and forests to push through.

Most of the work was accomplished through sheer muscle power, the muscles of men and mules, horses, and oxen. Machines were developed on the spot. One of them was a stump-puller which operated by seven men and a team could move 30-40 stumps a day. Another was a cable and endless screw device. Attaching the cable to the top of a tree and turning the screw, a single man could fell the tallest tree. Still another was an unusual dumping wheelbarrow. The new blasting powder of DuPont was the answer to cracking the Lockport dolomite, a very hard limestone. One of the most difficult tasks proved to be the removal of the mud in the Montezuma marshes west of Syracuse. Here an attempt was made to dig the canal in winter when the mud was frozen. Malaria, ague, and typhus fevers added to the difficulty by bringing hundreds of men down with illness during canal construction in such swampy places.

The crossing of rivers produced spectacular aqueducts. The canal was an artificial waterway in which the water level could be controlled. Where a river or a stream crossed the path of the "ditch" something had to be done. In some places primitive control dams were built across the natural stream. But in other places this would not answer. The canal could not intersect the stream because that would drain the water out of the canal, set up a current, and bring the waters of the stream into the canal. This would make the water level dependent on the stream and nature rather than on the canal and man. The stream would wash sand, gravel, and mud into the canal in spring flood time. It would drain the water from the canal in dry seasons, especially in the fall. The aqueduct would avoid these problems by avoiding the stream. Several long aqueducts were built, one over the Genesee River of 802 feet, and two over the Mohawk of 748 feet and 1188 feet.

The problem of lock construction was a tough one. Wood was the easiest material to use but would rot and cause endless problems. Stone was best but at the time the canal was built the only suitable hydraulic cement was made in England. Importing was very expensive. Canvass White, one of the best engineers the canal produced, discovered a limestone near Chittenango from which, with the help of others, he developed a cement suited to the task. The importance of this discovery can be seen when the number of locks is realized. The Erie had 83 locks, each of which was 90 feet long and 15 feet wide. All of these were built of stone with wooden lock gates.

When the expenses were totaled, the original Erie Canal cost \$7,143,-798.86. This was about two million dollars more than the estimate made in 1817. Yet it proved to be one of the most profitable of all public projects for New York State. Most of the money to build the canal came



Ink sketch of an 1825 canal boat showing passengers sitting and standing on the cabin roof, the steersman signalling of the approaching town by his canaller's horn.—from Effner collection, City Historian's office, Schenectady, New York.

from bonds. These were bought by New Yorkers of substantial means but not extremely wealthy. Even the small saver invested through the purchase of bonds by the bank where he deposited his savings. The Bank for Savings in New York City was the best example of this. Not until after the middle section was complete did others become interested. English capital, often considered the most important, did not really become significant until about 1822 when the canal had demonstrated its value. Tolls helped also. By the time the canal was finished the state had already collected better than one million dollars. In fact, toll income was so substantial that the people of the state came to look to income from the canal to pay all the general expenses of government.

So successful a project meant increased traffic and this in turn demanded that the canal be enlarged. The first enlargement began in 1836 and was completed in 1862 at a cost of nearly 32 million. This canal had a widened channel to 70 feet on the surface and 52½ to 56 feet on the bottom. It was made seven feet deep as against the original depth of four feet, had 32 aqueducts, and reduced the number of locks to 72. In the 1890's a second enlargement was made. The third and final enlargement occurred between 1905 and 1918. This created the present Barge Canal System, of which the Erie formed the main element.

Throughout the western New York counties traversed by the Canal, owning or operating a canal boat in the early days carried a kind of distinction. Socially as well as economically, canal men were looked up to. This was especially true of the packetboat captains, who often dressed in nautical attire and wore impressive stovepipe hats. Many a lad dreamed of the time when he could become a real boater and wear

the proud stovepipe hat of a canalboat captain. Later on, especially in the latter part of the nineteenth century, when the day of the sleek packet boats and other passenger craft had waned, canallers were more often than not considered a rowdy lot and a coarser breed.

"The Barbary Coast of the East" was a fitting name given to a part of Buffalo during the notorious heyday of the Canal in these later years; and, interestingly enough, Watervliet, at the other end of the Erie, was called the same thing by boaters and newspapermen. At these terminal points, boaters found themselves with their trip's wages in their pockets and they uproariously enjoyed the release from confinement the long canal trips often represented. Canalside scenes of fighting and general mayhem-making were common. As late as the 1890's the Buffalo press



Unloading a mule from night-stabling on a canal barge.

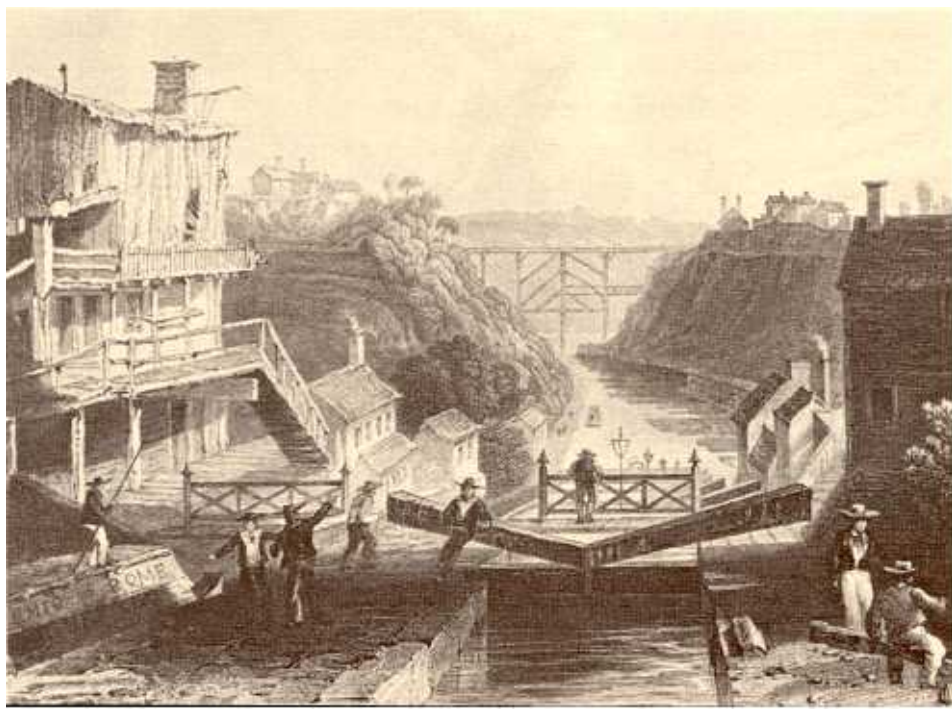
spoke in awesome terms of the western terminal's "Barbary Coast" with its tenantry of vice and crime but added, somewhat philosophically, "There was a time when it was more openly wicked even than now."

Erie Canal boats were by actual as well as by folk tradition mule (or horse) drawn, but the time came when technology took over. Downstate the General Electric Company at Schenectady experimented with electric power but the "electric mules" (as they were dubbed) did not prove out satisfactorily. One of the first gasoline-powered craft on the Erie, the *John F. Dean*, had for many years been in the fleet of canal boats owned by Buffalonian William Warwick. Like the others it had been a three-mulepower craft, until her owner had an automobile engine installed on the afterdeck. The skipper of the 240-ton craft felt proud of the new *John F. Dean*, which swashed along at a right good clip — better riding than the "chug-chug carts," as he called the automobiles of the day, because he didn't have to wear big green goggles like the automobilists. "What dust they is on the water is mud," the skipper told a newspaperman, "and can't get into a feller's eyes."

The name of the “motorized” *John F. Dean* was unimaginative compared with many of the names canallers gave their boats on the Old Erie. The average canaller considered himself as much a sailor as any regular seaman, and his nautical attitude was reflected in such canalboat names as *Spray*, *Seaman’s Fancy*, *Western Wave*, and *Sea Mist*. Other names included *Rambler* from Rochester and the exotic-sounding *Breath of Cashmere*. The three chief boats which participated in the opening cavalcade in 1825 that rode the Erie Canal from Buffalo to Albany and then went down the Hudson River to New York were named *The Seneca Chief*, *The Young Lion of the West*, and *Noah’s Ark*. The proudest boats on the early Erie were the passenger-carrying packet-boats, which (despite the fact that canal boats on the Erie Canal were limited by law to a speed of four miles per hour) were called “packets” after the sleek Atlantic Ocean vessels. Passengers were also carried, along with freight, on lineboats, and there were Durhams and other freighters which hauled grain and similar cargoes.

The Erie Canal inspired a considerable body of literature and created its own folklore and traditions. The tall tales and stories, to say nothing of songs and ballads, form very much a part of “the Erie story.” Nearly everyone has heard versions of the old song that begins “I’ve got a mule and her name is Sal, fifteen miles on the Erie Canal.” Literary figures like novelist William Dean Howells, who describes impressions of canal boat travel in Rochester in one of his books, helped give the canal a place in literature. Mark Twain, who lived in Buffalo 1869-1871, was inspired by the old canal ballad, “The Raging Canal,” to write his own version, which he called “The Aged Pilot Man.” In the twentieth century, novels like *Erie Water* by Walter D. Edmonds and short stories like those in Samuel Hopkins Adams’ *Grandfather Stories* deal with the Canal in western New York. Adams’ *The Erie Canal*, although a book

View of early Lockport on the Erie Canal.



ERIE BALLADS

I've just come down from Buffalo
Upon the great boat *Danger*;
Had a long trip on the Erie
And I feel just like a stranger.

Chorus:

Haul in your bowlines,
Stand by your saddle mules,
Don't dodge your head for low bridge,
Don't act so like a fool!
Keep up your courage, boys,
We'll land you safely in,
And when we get to Buffalo, boys,
We'll roll in barrels of gin.

* * *

The cook we had upon our deck
Stood six feet in her socks —
Her hand was like an elephant's ear,
And her breath'd open the locks.

Chorus:

For it's tramp, tramp, tramp
And tighten up these lines.
Just watch the playfull horse flies
As o'er the mules they climb.
Giddap, giddap, whoa!
Forget it I never shall,
When I drove a pair of spavined mules
On the Er-i-ee Canal.

Verses such as these have been collected across the state and the second one is known to have been sung in theatres in Buffalo in the 1870's. Harold Thompson in *Body, Boots & Britches*, has numerous versions of some of these canal songs.



Ticket on Packet Boat on Erie Canal. Boat ran between Albany and Buffalo between 1840 and 1850.

for boys and girls, has become a standard introduction for readers of any age unacquainted with the Erie. Adams Basin, a small community between Brockport and Rochester, once the home of Washington's drummer boy, Alexander Milliner, was named for Adams' grandfather, who helped dig the "Big Ditch."

The folklore record includes many tales of oversize fish, giant vegetables, and rabbit-size frogs growing in or near the old canal. Like the Mississippi River boatman Mike Fink, the average Erie canaller was "chuck full of brag and fight." Some of the canallers themselves are veritable Paul Bunyans in their exploits, like that of the canaller who drove his mules right off the canal near Rochester one foggy night and never knew he was hauling his boat on fog until the sun came up next morning as he approached Sea Breeze on Lake Ontario!

Western New York got into canal songs also. Various vaudeville performers sang Erie songs in places like Buffalo's Commercial Street Theatre in the second half of the nineteenth century, and the famous Christey minstrels used canal material. But long before that, one finds songs and ballads in the folk tradition inspired by the canal life. Allusions to local commodities like "Black Rock pork" and "Lackawanna coal" were heard, and in other songs terms like "Lockport laker" and "Tonawanda scow" give evidence perhaps of the fact that boat building was a leading industry in this area.

The impact of the Erie Canal on the state and nation was so great that a simple enumeration of its influences seems an exaggeration. There are some things for which the canal was solely responsible, and there are still more for which it was partially, perhaps largely, responsible. The rise of the port of New York City was attributed to the canal, although this great port development was well on its way before the Erie was built. It is necessary to examine this Erie impact carefully in order to understand it correctly.

The influence of the Erie Canal came in two stages. The first was the boom created by the actual work of construction itself. The second stage was the more lasting effect produced by the use of the canal after its completion. In some cases these were directly related and the con-

struction boom merged with a commercial boom along its route. In other cases, the construction boom was the only effect, and after it had passed the area lapsed back into quiet again.

Lockport provides an excellent example of these two phases. When Esek Brown opened his unfinished tavern in 1820, Lockport was a clearing in the forest numbering less than 100 people. By the end of the next year it had boomed to over 2000 inhabitants. Teamsters, carpenters, blacksmiths, masons, merchants, lawyers, all were drawn by the task of building the great flight of twin fives, the locks over the escarpment. Irish workers built "Irish town" and the village was a study in noise and confusion. The building of houses and stores, the dull boom of blasting powder, the fine hopes expressed in the naming of unsettled streets, all of these contributed. After the first rush the village settled down. Many felt that it would become a sleepy way-stop on the canal after the great lock construction was over. Some could see a moderate amount of business serving the canal boats while they waited to pass through the locks. However, Lockport continued to grow in importance. In 1822 it became the county seat of Niagara and the post office was established. It had its own newspaper, the *Lockport Observatory*. By 1829 it had steadied its population at about 2100. This is the first impact of the canal, the creation of a village based upon a major construction task.

The second phase is more fundamental. As a commercial port, Lockport did not have the advantage of a terminal position on the canal like that of Buffalo. Nor did it have the established industrial base to make it grow like Rochester. But the Erie had given it potential, not in water for transportation, but in water for power. The surplus water came from the operation of the locks and, using this as a source, enterprising men began the building of Lockport industry. The state legislature passed a bill in April 1825 permitting the sale of water rights to the highest bidder. Several men recognized the importance of this power and a dispute of several years duration arose between Lyman Spaulding, William Kennedy, and Junius Hatch, and a group of men known as the Albany Company, which included Charles Dudley, Benjamin Knower, Thomas Olcott, William Marcy, and Lott Clark.

In 1829 the Albany Company secured the lease and also purchased Spaulding's land around the canal. From this time onward industry made great strides. In 1835 there were flour mills, lumber mills, a wool carding factory, five boot and shoe factories, and several breweries. In addition, many commercial businesses had developed to serve the young industrial center.

Such growth continued and the products shipped from Lockport increased in volume, dollar value, and variety. Among these were lumber products, castings and iron ware, barrel staves, barley and malt, apples, spirits, flint enamel and crockery, stone, lime, and clay. In 1845 the Lockport Canal Office figured the value of products shipped at better than \$750, 000. In 1867, the peak year, it recorded nearly \$5½ million,



View of the Upper Village of Lockport.

though the traffic declined rather steadily thereafter. Lockport was known as the power center of Niagara County. This title was based upon the Erie Canal surplus waters. Until the harnessing of Niagara Falls at the turn of the century, these waters made Lockport the key industrial center of the county.

Not all villages along the Grand Erie were as fortunate. Many of them declined after the construction period and became typical sleepy way stops on the canal with, perhaps, a lock grocery and a small industry or two using the canal. Many of them served as distribution centers for the farmers of the area. Such towns as Gasport, Medina, Middleport are examples of this. Medina had an important quarry industry based upon her sandstone which is used in the state capitol in Albany, but this was not developed until near the end of the century. Farm products like wheat, corn, and especially hay, were shipped on the Erie, as was cheese, in large quantities. But it is Lockport that illustrates better than any other village in western New York the double impact of the canal.

The economic influence of the canal shown in the growth of towns is obvious perhaps. The role of the canal in the changing basis of the state economy is less so. When the canal was constructed, and for a quarter century after its completion, New York was basically an agrarian and commercial empire. When the railroads were begun they followed the towns established along the route of the Erie Canal. When industry grew it located along these transportation arteries. Cheap transportation is a key factor in the location of such industry and the canal played its part here. One has but to look at the state today to see the line of industrial cities on, or very near, the canal route. It proved to be the backbone of industrial New York.

The Canal had great social influence as well. It was a key factor, through its need for labor, for bringing settlers out along its route. The Irish are the most numerous of these and their settlements along the canal in such places as Lockport and Buffalo provide evidence of the growing cosmopolitan population of the Empire State during the nineteenth century. Yankees from New England and Yorkers from this state



Canal steamboat "William Newman" of Buffalo as she appeared on November 5, 1873, on her arrival at Buffalo from Troy, after running a distance of 345 miles through 72 locks in four days and twenty-two hours.

used the canal as a migration route and affected the population pattern in the old Northwest Territory. Further, many villages grew in areas near the canal to serve farmers. These farms were developed as commercial producers after the canal lowered the cost of receiving supplies and sending goods to market. The value of lands in western New York and in the Northwest Territory was considerably raised by the completion of the canal. Particularly affected was the Western Reserve section of Ohio, and, to a lesser extent, western Pennsylvania. Travelers took the Erie to Buffalo and then embarked on lake vessels for Ohio, Illinois, Michigan, and other areas in the northwest.

The Erie Canal was built as a transportation artery and it was the development of this service that people watched as a guide to the prosperity of the state. Canal tolls were collected as soon as traffic began to move over the Rome-Utica section. By 1825 they had reached a total of nearly half a million dollars yearly. As the canal did not open for a full season's traffic until 1826 it is clear that the tolls were still from partial use of the route. In the case of Buffalo especially, the full impact was not to be known until the full route was in use.

Attention to tolls and traffic as a proof of Buffalo's prosperity is misleading in the early years. Much of the traffic was between Rochester and the east. Up until at least 1826, the chief impact of the canal on western New York was from construction activity. The development of Buffalo as a port and as an industrial center was slower and more solid than is generally believed. The terminal activities as the jumping off point for the west were very valuable to the community and its merchants. They began as soon as the canal was completed and open for traffic the entire distance. But the great commercial and industrial growth was delayed.

James Barton and Samuel Wilkeson had a large fleet of boats on the canal and on Lake Erie. Although the boats were small, Barton noted that they had trouble getting western freight. Usually the boats would

take a partial load to Rochester and fill up there with wheat for the eastward passage. Most of the freight on the canal was westbound at first. Much of the surplus grain in northern Ohio actually went to Illinois and Wisconsin settlers while they were clearing their lands.

The first cargo of wheat to come eastward to Buffalo, 2500 bushels in 1828, could find no buyer. Canal tolls as late as 1840 rarely exceeded \$300,000, while by the end of the century they were nearly \$3,000,000. All the corn, wheat, and flour shipped eastward from Buffalo in 1835 totaled only slightly over a half million bushels.

Land fever began to grow; there was a real boom in 1835. James Barton had purchased lots at Black Rock for \$250. Upon his return to Buffalo after a two months absence he was promptly offered \$6000 for them. Continuing his walk to his office he was approached by several persons, each of whom made a higher offer. In the matter of several blocks walk he finally sold them for \$20,000. This was at the time of the Rathbun promotions and shortly thereafter came the collapse of the market and the panic of 1837. Barton felt that the real turning point in canal prosperity for Buffalo came in 1845 when Buffalo received 15 million bushels of grain.

One of the results of the Erie's success was the stimulation of canal building in other states. This, in turn, stimulated traffic on the Erie. A good example of this is the completion of the Ohio Canal, inspired by the Erie, which increased traffic on the New York Canal. Many more miles of canal were built in the Empire State as well. In 1859 these totaled 872. The chief one in western New York was the Genesee Valley Canal between Rochester and the Allegany River, a distance of 124 miles, with 112 locks. None of these laterals, or feeder canals into the main Erie, were as successful and were abandoned about 1880.

Six years after the opening of the canal, the first railroad train made the run between Albany and Schenectady. This was the Mohawk and Hudson railroad and its first locomotive was called the DeWitt Clinton. The name of the canal hero was sported by the first challenger of canal traffic, a steam locomotive. Eventually this new mode of transport would rival that of the Grand Canal, but that was far in the future. In 1825 the romance between the people of New York and their Grand Canal was just beginning.

What was the effect of building the canal? All of these things. It stimulated land settlement both in New York State and the lands west; it raised land values; it produced new towns and made others larger; it provided the pressure to encourage related mechanical developments; it inspired the first organized study of the state's geology; it provided the impetus for the state's first engineering college at Troy, Rensselaer Polytechnic Institute; it produced a great number of canal engineers; it added to the ever-growing collection of folk song and story; added words to the language, got people elected to office, and influenced the course of history in New York and in the United States.

SUGGESTED ADDITIONAL READING.

Non-fiction

- Boardman, Fon W. Jr. *Canals*. New York: Henry Z. Walck, 1959.
A brief introduction to canals in pictures and text, with Chapter I dealing with the Erie.
- Bobbe, Dorothe. *DeWitt Clinton*. New York: Milton, Balch & Co., 1933.
One of the early and better monographs on "the father of the Erie Canal."
- Buehr, Walter. *Through the Locks. Canals Today and Yesterday*. New York: G. P. Putnam's Sons, 1954.
Chapter III treats "Early American Canals."
- Harlow, Alvin F. *Old Towpaths. The Story of the American Canal Era*. New York: D. Appleton and Co., 1926.
The standard introduction to canals for students and general readers.
- Hislop, Codman. *The Mohawk*. New York: Rinehart & Co., 1948.
A volume in the "Rivers of America Series" which provides background on the area through which much of the Erie Canal passed.
- Merrill, Arch. *The Towpath*. Rochester: The Democrat and Chronicle, 1945.
A newspaperman's informative and nostalgic report on canal towns in western New York.
- Thompson, Harold. *Body, Boots & Britches*. Philadelphia: J. B. Lippincott Co., 1940.
A highly interesting chapter on "canawlers" in this book by New York's most well-known folklorist.
- Wyld, Lionel D. *Low Bridge! Folklore and the Erie Canal*. Syracuse: Syracuse University Press, 1962.
The influence of the Grand Canal on culture, folklore, and literature.

Fiction

- Adams, Samuel Hopkins. *Canal Town*. New York: Random House, 1944.
Palmyra in the days of the opening of the Erie.
- *Chingo Smith of the Erie Canal*. New York: Random House, 1958.
A Rochester waif becomes captain of his own canal boat.
- *The Erie Canal*. New York: Random House, 1953.
A landmark book that has become a standard introduction for readers of all ages.
- *Grandfather Stories*. New York: Random House, 1955.
Stories told by the author's grandfather who worked and loved the Grand Erie.
- Berry, Erick. *Lock Her Through*. London: Oxford University Press, 1940.
Sabrina, a 15-year-old girl, in a story involving an immigrant driver boy on the canal.
- Edmonds, Walter D. *Erie Water*. Boston: Little, Brown and Co., 1933.
The building of the Canal, with much of the setting in western New York.
- *Mostly Canallers*. Boston: Little, Brown and Co., 1934.
Short stories of canallers and their lives.
- *Rome Haul*. Boston: Little, Brown and Co., 1929.
Canallers in the 1850's when the railroads began to "take over."
- Langdale, Hazel M. *Mark of Seneca Basin*. New York: E. P. Dutton and Co., 1942.
A hero from Wayne County and "Rochesterville" who ranges far and wide and finally becomes a guest on the *Seneca Chief* in 1825 celebration.
- Meadowcroft, Enid LaM. *Along the Erie Towpath*. New York: Thomas Y. Crowell Co., 1940.
Two orphans aid their cousins in adventures along the canal.
- *We Were There at the Opening of the Erie Canal*. New York: Grosset & Dunlap,
One of the "We Were There" series dealing with the celebration of 1825.

EDITOR: Thelma M. Moore