The Early Years Upriver

By Donald C. Gaby

Visitors in the 19th century described the Miami River as the principal stream along the lower east coast of Florida and as a stream of rare beauty. It served the native Tequesta Indians for centuries before and after the arrival of the Spanish, and it served the Seminoles and others after Florida became a United States Territory in 1821. The river forked about three miles above its mouth at Biscayne Bay and the north fork of the river terminated in a famous rapids or falls at its source only one mile farther on. The south fork also had a rapids, but with much less of a fall, and persons entering the Everglades customarily used it. Persons coming from the Everglades to Miami normally used the north fork, either shooting the rapids or going around them to join the main stream of the river. Early visitors and residents often referred to that piece of land bounded by the north and south forks of the river, and by the Everglades on the west, as an “island.” Indeed it must have appeared so before the Everglades were drained, especially during the rainy season when the Everglades stretched like an inland sea behind the high coastal ridge.

There were no man-made changes to the river and few residents until the coming of the railroad and the founding of Miami in 1896. C. L. Norton wrote in *A Handbook of Florida*, published in 1892, that the Miami River:

> For about four miles from the bay the stream is 150 to 200 feet wide, and may be ascended by sailboats. It divides into the north and south forks about three miles from its mouth, both of them swift, clear streams. The north fork has impassable rapids, but the south fork can be ascended in small boats to its outlet from the Everglades... The grasses and other aquatic plants that cover the bottom of the stream are wonderfully beautiful in their varied color and graceful movements as they are swayed to and fro by the clear rushing water.

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James Ingraham crossed the Everglades in 1892 and arrived at the rapids of the Miami in early April, in the dry season. He described the rock appearing prominently at the rapids and walked around the rapids through the pine timber, while others in his party shot the rapids in a canoe and canvas boat. Hugh Willoughby crossed the Everglades in 1897 and wrote that:

*We soon saw ahead the well known gap in the cypress trees on the edge of the Glades at which the Miami River takes its rise.*

Miami River rapids falling over limestone ridge.
Whether the woods near the rapids were mostly pine or cypress is a question. Probably both species were abundant. Several cypress trees grow on the south fork of the river below its former rapids, and one old cypress grows near N.W. 21st Terrace and 29th Avenue, near the site of the old pumping station and Everglades farm.

Figure 1 is adapted from a sketch by A. L. Knowlton, C. E., in January 1897, with features added that pertain to the period before May 1909. It provides a reference for the discussion that follows. Knowlton exaggerated the width of the river.

Figure 1
A - The Rapids of the north fork of the river.
B - Ferguson's mill, built 1845.
C - Richardson's Grove, established 1896, a/k/a Musa Isle Fruit Farm
D - City of Miami water pumping station, built 1896-97.
E - Indian Trading Post, ca. 1901.
F - Phipp's farm and packing house by landing, old pumping station, railway, etc., ca. 1902.
G - Watson's grove and farm, ca. 1906.
H - Sallie Observatory (Tower), built 1907.
I - Original bridge across north fork of the river, built 1908.
L1 - Landing for Richardson's Grove.
L2 - Landing for pumping station, later for Phipp's farm.
L3 - Landing for Sallie Observatory (Tower).
The rapids were an important feature of the river. On the North Fork of the Miami River they were located approximately between today's N.W. 29th and 31st Avenues. There was a fall of about six feet in the course of about 450 feet, the current flowing as swiftly as 15 mph during the rainy season. Below the rapids was a deep and narrow channel between rock banks. The Everglades opened out above the rapids.\(^5\) The water flowing over the rapids was clear but with a slight color from the vegetation in the Everglades. However, above, around, and below the river were numerous subterranean springs whose water was perfectly clear and mixed with the water from the Everglades. There was a considerable variation in the amount of the flow according to the season. (The rapids are indicated by the letter A of Figure 1.)

After 1821, settlers began to come to the Miami River area in increasing numbers. However, none were known to settle near the rapids, and those who settled downstream fled with the outbreak of hostilities in the Second Seminole War. The massacre of Major Dade's expedition in central Florida in December 1835 soon was followed by the massacre of settlers on the New River in Fort Lauderdale and the burning of the Cape Florida Lighthouse on Key Biscayne.

With the end of hostilities in 1842, settlers returned to the Miami River. In 1845 the brothers Thomas J. and George W. Ferguson settled near the rapids. They built homes for their families, and a water-powered starch factory and saw mill (B of Figure 1) over a branch of the river just east of the rapids, drawing water from above the rapids which was held by a dam. At one time they came to employ 25 people and did a $24,000 per year business in the production of coontie (arrowroot) starch from the native Zamia plant that grew profusely in the pine woods. An Indian scare in 1849 caused them to abandon their mill.\(^6\) The army briefly reoccupied Fort Dallas at the mouth of the Miami River in 1849 and stationed a detachment of six men, under the command of Auson J. Cooke, at the Ferguson mill. Cooke wrote from what he dubbed "Fort Desolation," at the edge of the Everglades, where he was ordered to guard from the Indians one man making coontie starch. He commented that the mill had been built for a sawmill, and complained about the host of mosquitoes and shaking and noise caused by the machinery.\(^7\)

The Fergusons returned to find their place taken by someone else, probably because it had not been properly recorded. Thomas had struck gold in California and moved to Baltimore. George began a new operation downriver on 40 acres, building a home and store, an
ingenious horse-powered mill, beautiful grounds, wharf, etc. As late as 1855 the old mill was still referred to by his name. During the Third Seminole War, in 1855, a Lt. Robertson came up the river by boat to "the dam at Ferguson's mill." In 1858, George Ferguson became postmaster of the Miami post office which opened in December 1856. Since the mail boat came only once a month, that position no doubt left time for other activities. The Third Seminole War, much less bloody than the Second, lasted from 1855 to 1858.

In 1876 an Indian War veteran, "Long John" Holman, lived at the site of Musa Isle (C of Figure 1) on the south bank of the river well east of the rapids. Holman walked from Fort Capron to Biscayne Bay in the 1850s during the Third Seminole War. He was an early "barefoot" mailman, carrying the mail down the coast to Fort Dallas (today's Miami). A flurry of activity came to both ends of the Miami River in 1896. Henry Flagler's Florida East Coast Railway reached the north bank of the river in April and the young city of Miami began to grow around its mouth. A good supply of pure water would be needed, and the Flagler interests decided to take the water from a spring located just above the rapids where the water was nearly soft, gushed three feet above the surface, and was perceptibly colder than nearby springs. They built a pumping station (D of Figure 1) east of the spring and partly over the branch of the river on which the Fergusons had their mill. A gasoline engine powered the pump, and to haul the fuel they constructed a narrow gauge railway running from the north bank of the river. Gasoline was brought up the river on lighters to the landing (L of Figure 1) at the foot of the railway, loaded on the railway car, then pushed to the pumping station. They drew water from the spring in the pool shown in Figure 1. The pump pushed it four miles from the pumping station to the city in a large pipe laid underground. This arrangement lasted only about one year, after which they moved the pump downtown to draw the water rather than push it to the city.

One of the factors in Flagler's decision to bring his railroad to Miami in 1896 was the great freeze of the winter of 1894-95 which destroyed the citrus industry in the northern parts of Florida but did not hurt the area around and south of the Miami River. When news of his decision to bring the railroad to Miami and build a grand hotel spread across Florida, many people headed south to seek their fortune in a warmer climate. Among those was Otis Richardson who lost his citrus grove near Bronson in the great freeze. In 1896, at the age of 77, he moved to
the Miami River, establishing Richardson’s Grove on the south bank of the north fork near today’s 25th Avenue (C of Figure 1) at a place that would become known as Musa Isle. The following year his son, Charles Otis Richardson, settled in Miami after a career on the stage as an actor and manager of traveling troupes appearing in the U.S. and Canada. At the age of 40, he joined his father upriver. Father and son developed Richardson’s Grove, famous in the early years for the quality and variety of the fruit grown there.15 Otis Richardson died in September 1901.16 C.O. Richardson built a tropical preserve and guava products plant, shipping his goods to England and France as well as all over the United States. He changed the name to Musa Isle Fruit Farm, Musa being the botanical name for the bananas that grew at the entrance to the farm.17 It was the favorite stop up the river for visitors and residents alike. Among his many celebrated guests was Henry Flagler, who visited Musa Isle in 1903 and was quite favorably impressed.18

Many other farmers and growers were with the Richardsons on the Miami River. In 1898 The Miami Metropolis listed R.C. May who arrived before the railroad, built a home on the south side of the river west of today’s 27th Avenue, and grew mostly grapefruit and lemons. J. A. McCrory lived south of the river just east of today’s 27th Avenue, adjacent to Richardson’s Grove, and like Otis Richardson grew tomatoes and eggplants.19 Of these men, only the Richardsons are well remembered.

Right on the north bank of the river, east of and adjacent to today’s 27th Avenue, stood a mystery building (E of Figure 1). A photograph in the Florida State Archives shows this building labeled “Indian Trading Post - 1901.” It was a beautiful square building, board and batten, with a hipped shingle roof, surmounted by a square cupola-like structure at its peak. It is seen in a number of photographs taken before the 27th Avenue bridge was built in 1908, and as late as 1913. Probably it dates from the late 19th century and it may well have been a trading post, more convenient to Seminole customers than others downriver. It may have catered to Indians who did not care to venture into the city.

As early as 1902 the Rev. Wm. H. Phipps had a farm known as “Everglade Edge” extending from the north bank of the river to the former pumping station and beyond (F of Figure 1). He extended the narrow gauge railway of the pumping station to encircle his farm, evidently returning to his landing (L2 of Figure 1) by way of a westerly route near the branch of the river where the Fergusons once had a mill. Three cars, each with comfortable seats capable of carrying a dozen
passengers, were pulled by a powerful black man, George, who was "the whole thing," conductor, power and all. For 10 cents visitors could ride to a two story house by the pumping station where Phipps built a second floor observation room for viewing the Everglades. A return trip to the landing by the same route was free, but for an extra 15 cents one could take the extended route back which gave a more extensive view of the river and the rapids. Guests also could take a small boat into the Glades for the bass fishing or to shoot the rapids into the river. Tomatoes, potatoes, beans, lettuce, onions, radishes and other vegetables grew in the rich soil, as well as roses. He built a packing house by the landing. Prior to those improvements, visitors to the "Everglades Railway" were taken to the old pumping station on a single car pulled by a mule, as illustrated in a famous old photograph.

Captain Wm. L. Burch, retired from the Benner Line, built the launch Sallie, and in 1903 began regular excursions up the river to the rapids. Although not as large, the Sallie bore a striking resemblance to today's Island Queen which also plies the river. The Sallie left the old Avenue D (today's Miami Avenue) dock at 9:15 a.m. and 2:15 p.m. each day. The principal stop was at Richardson's Grove Landing (L2 of Figure 1) so visitors could tour the grove and buy fruit and guava jelly which was a specialty of the place. The boat also stopped at Rev. Phipp's Everglades Landing (L1 of Figure 1) for a ride on the Everglades Railway which was near the rapids.

Sometime after 1905, John W. Watson, Sr. came from Kissimmee, built a home downtown, and established a 20-acre grapefruit grove and
farm near today’s N.W. 20th Street and 27th Avenue (G of Figure 1) on
the river’s north fork. (He was three times mayor of Miami, a state
senator, and 40 years a legislator). He raised sugar cane at the south end
of the property and sold syrup for $1.50 per gallon. He said that after the
Miami Canal and Everglades drainage, “you couldn’t raise an um-
brella.”

The severe hurricane that caused so much damage and loss of life on
the Oversea Extension of Flagler’s Florida East Coast Railway in
October 1906 passed directly over Miami. It did extensive damage to
Richardson’s Grove, uprooting many trees. Although he replaced or
repaired the uprooted and damaged trees, and built a two story preserv-
ing and marmalade plant the following year, this event appeared to mark
a turning point in the fortune of the grove. It remained a favored tourist
stop for only a few more years.

In 1907 an unprecedented drought occurred in the Glades and Miami.
By mid April dead fish by the thousands caused a sickening stench that
brought a warning from the Board of Health. Old settlers said they never
saw the water so low in the Glades. The Indians were unable to use their
canoes. The rapids were so dry that not a drop of water flowed over
them. (Note that this severe drought occurred two years before the
start of the Miami Canal when digging on the New River in Fort
Lauderdale had only just begun. Also, reports by military parties during
the Seminole Wars document similar, if less severe, periods of low
water in the Everglades. Therefore, although drainage of the Ever-
glades has without doubt changed our climate to some degree, it has not
been the cause of all subsequent droughts in South Florida.)

In 1907, Capt. Burch did Rev. Phipps one better. At the head of the
river, above the rapids, some 300 yards from the boat landing (L of
Figure 1) and connected with a rustic plank walk, he erected a sixty foot
observatory (H of Figure 1) for the free use of his guests. After climbing
the winding stairway the visitor could see a perfect view of the
Everglades, and back down the river. From the top of this tower,
known as the Sallie Tower, someone took a series of panoramic
photographs preserved in postcard form. One of these shows the view
back down the north fork of the river with the plank walk along the south
shore. In the distance, around a bend in the river and standing above the
other trees, are two royal palms, clearly near the location of Richardson’s
Grove at Musa Isle.

In January 1908, C. O. Richardson sold his Musa Isle Fruit Farm to
J. C. Baile in a transaction that caused some bad press. Richardson
wrote an open letter to *The Metropolis* explaining that his grove was in poor condition and there was a boundary line dispute that was not told to Baile by the realtor. A Mr. (John) Roop was commissioned by Baile to look after the factory stock in reference to purchase.28 (In later years Roop would own the farm himself.)29 In his open letter, Richardson stated that:

*The Musa Isle Fruit Farm was sold at half its former price because a large percentage of the older grapefruit trees had become diseased, because most of the avocado pears were dead, because after ten years of dearly bought experience I became convinced that the location (subject to overflow from the Everglades) was unfit....*30

Certainly early descriptions of the grove praised both its beauty and its bounty. Perhaps the combination of the hurricane in 1906 followed by drought in 1907 had been too much. Richardson then returned to the theater business. He acquired the Alcazar movie theater and attempted Miami’s first air-conditioning by boring holes in the raised floor of the theater under each seat, filling the raised space with blocks of ice, and using an electric fan to force the cooled air through the holes.

Gov. Napoleon B. Broward ran for office on a promise to drain the Everglades for settlement and agriculture. He sent a telegram in July 1906 announcing, "First dredge is digging mud." A second dredge joined it on the New River in Fort Lauderdale in April 1907.31 During 1907, while digging was underway on the South New River Canal, the Trustees of the Internal Improvement Fund (IIF) decided against providing a dredge for a Miami River canal. By mid December 500 citizens petitioned Gov. Broward and the Trustees to provide a dredge.32 In January 1908 the Governor and Trustees agreed to the dredge for the Miami Canal.33 Much speculation as to the route the canal would take and when digging would begin filled the remainder of the year. The governor and many distinguished visitors came to have a look. Meanwhile, the *Sallie* continued to ply the river with regular stops at the Musa Isle Fruit Farm and the "Everglades," now surely meaning Capt. Burch’s landing for the Sallie Observatory Tower.34 In February, a competitor on the river, the *Leo*, began operating from the 12th Street bridge (today’s Flagler Street) with departures at 9:15 a.m. and 2:15 p.m. With their departure times the same, but leaving from much farther upriver, the *Leo* had a distinct advantage. Also, it was described as a real river boat with two decks, nicely cushioned seats, and room to
walk around. It stopped at the Everglades Railway landing and left passengers only five feet from the cars.\textsuperscript{35}

In September 1908, J. C. Baile announced that a road would be built to "Circle The Glades Near To This City," with funds solicited from merchants and individuals. Bridges were to be constructed across the south fork of the river at today’s 22nd Avenue and across the north fork at today’s 27th Avenue.\textsuperscript{36} This original rock road allowed motorists a nice drive through farms and groves on both sides of the river without having to retrace one’s path. In December 1908, the bridge across the north fork (I of Figure 1) opened, being the only bridge on the main stream upriver from today’s Flagler Street.\textsuperscript{37} It was a fixed wooden bridge that appears in many early photographs of the “headwaters” of the river. It probably kept the \textit{Leo} from completing its former run, although the \textit{Sallie} could continue to pass through.

Figure 2 is adapted from a sketch by A. L. Knowlton in January 1897, with features added that pertain to the period after May 1909.\textsuperscript{4}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure2.png}
\caption{Figure 2}
\end{figure}

\textbf{Figure 2}
\begin{itemize}
  \item U - Junction of Miami Canal with Miami River, begun 1909.
  \item V - Junction of Ferguson’s mill branch with Miami Canal.
  \item W - First drawbridge across the Miami Canal, built 1910.
  \item X - Bridgetender’s house.
  \item Y - Cardale Resort skating rink, opened 1912.
  \item Z - Cardale Resort observatory tower, 1912.
\end{itemize}
Much of the speculation about the proposed canal during 1908 and early 1909 was unfounded. Some wrote that the canal would be dredged from the head of the river with easy digging and little rock, others that it might be dredged from the south fork. More sober consideration brought the realization that a dredge could not make its way to the headwaters without digging out the river itself. Construction and delivery of the dredge would be plagued with delays. Finally, in November 1908, the dredge *Miami* was launched in Tampa, the third dredge built for the Everglades drainage work. It had a steel hull eighty feet long, forty feet beam, and drew seven feet of water at the bow, five and a half feet at the stern. Its dipper mechanism had a two and a half cubic yards capacity. Accomodations included: sleeping apartments, a dining room, kitchen, and baths. Actual commissioning was delayed because some of the machinery had not been built according to contract.

In January 1909, more than a year after the IIF decision not to provide a dredge for the Miami Canal, it appeared that this again was the plan. As a result, a committee of prominent citizens left Miami for Tallahassee to meet with the IIF trustees. By early February the IIF agreed to provide the dredge on condition that the citizens first obtain a release from all damages that might result from any change in the volume of water as a result of the work, next that a right-of-way 150 feet wide be granted along with dumping privileges.

The dredge finally left Tampa under tow in late March and arrived in Miami in early April. However, another month would pass before actual digging began in early May 1909.

The Miami Canal excavation began at the north bank of the Miami River near today’s 24th Avenue (U of Figure 2), just below Musa Isle. Specifications were for a canal 60 feet wide and 10 feet deep. The dredge headed west-northwest on a bearing of about 305° to a point just past the extension of today’s 29th Avenue, then on a bearing of about 311° well into the Everglades before turning sharply toward Lake Okeechobee. That initial bend of only about 6° may seem slight, but it later appeared dramatically obvious when photographed from the top of the tall tower at Musa Isle which by chance or design was almost exactly in line with the canal.

By late May the dredge was within sight of the “county road”, today’s 27th Avenue. The captain thought there would be sufficient water to float the dredge without constructing dams. Evidently that was the common belief of many experienced persons because by September, W. I. Huffstetler, one of Miami’s prominent boat builders, built a 55 foot
canopied launch expressly for the tourist passenger business between the city of Miami and the state dredge working on the Miami Canal.\textsuperscript{44} Peters mentions a trip up the Miami River and Canal right to where the dredge was working in October 1909, and regular runs by the Sallie and Lady Lou.\textsuperscript{45} Clearly the center of interest among visitors and residents alike was shifting from the vicinity of the rapids to the excitement attending the dredge’s progress into the Everglades, although the Sallie also continued her regular run to the rapids into the 1910 season.

Miami River and Canal at site of today’s 27th Avenue Bridge.

During March 1910 the Dade County Commission opened bids for the construction of a drawbridge (W of Figure 2) across the state drainage canal on the county road, today’s 27th Avenue. The Champion Bridge Co. of Georgia won the contract.\textsuperscript{46} It was a steel bridge with a draw to permit the passage of boats in and out of the canal. It opened to the public in September 1910.\textsuperscript{47} A bridgetender’s house (X of Figure 2) built at the southeast corner is seen in early photographs.

In time a dam to contain sufficient water to float the dredge became necessary. Exactly when it was built is not known. By July 1910, the state had dug only four and a quarter miles of the Miami Canal before turning the work over to the Furst-Clark Construction Co. of Baltimore.\textsuperscript{48} By that date the dredging had progressed about three miles
beyond the point where the dam eventually was built, near today's 35th Avenue or about one and a half miles upstream from where the canal joins the river near 24th Avenue. That location was almost a mile northwest of the rapids. The course taken cut through the branch stream (V of Figure 2) upon which the Fergusons built their mill, and passed north of the spring fed pool from which the City originally obtained its water. (Today that branch stream runs west of a mobile home park and joins the canal through a culvert beneath N. W. South River Drive.) Probably the dam was built in the spring of 1910 when the low water normal during the dry season proved insufficient to float the dredge. The first known mention of the dam was in September 1910 when a party from Kansas had a look at the country and the dredge at work. They went by boat to the dam, and then walked a considerable distance to the dredge. By then the dredge was working night and day. By November the dam was holding up the water to the extent that thousands of acres of farm land were flooded. Newspaper accounts noted that Comfort & Huyler’s private dam on the south fork and the new dam on the canal caused the flooding with backed-up water seven feet above the level below the dam. As early as December 1910 a lock was planned to replace the dam. “The lock,” noted The Miami Metropolis, “will make an interesting place to visit when completed”. It was not finished until 1912. As late as November 1911, Comfort was complaining that he could not proceed with sugarcane planting due to poor drainage of his land.

Not all of the interest was on the new drainage canal! In early January 1912, the new Cardale Resort with a skating rink and tower (Y and Z of Figure 2) opened at Musa Isle, the former site of Richardson’s Grove, on the south bank near today’s 25th Avenue. On opening night the boat Cardale left the Avenue D (today’s Miami Avenue) bridge at 8:30 p.m. Round-trip fare was 25 cents and included admission to the skating rink. “The trip up the river to the pretty pleasure resort is always a delightful one,” The Metropolis reported, “and with the promise of a merry evening, excellent orchestra music, instructors in the skating art for those who do not know and the chance of seeing the finest rink in Florida....” Soon the Cardale was making three trips daily: The day trip was 50 cents round-trip except on Friday which was children’s day. For only 25 cents, more boys and girls could go to the rink. The night trip was 25 cents. The buildings were surrounded by acres of grapefruit and orange trees and beautiful palms.

During April an article stated that at Cardale the next evening the
cup would be awarded to the winner of the two and a half mile race for the “Championship of Florida.” In June, the “Society” page of The Metropolis mentioned “the large crowd at the Cardale dance.” Every Wednesday night lovers of the dance assembled at the rink for several hours, some of Miami’s social set motoring out as well as going up by boat. The Kaufman orchestra provided excellent music, etc. The remoteness of the Cardale Resort, four miles up the river or by rock road from the city, must have made an outing there an adventure as well as fun.

Although a tower was noted as being only a short distance from the Cardale landing, no description of it was given. It must have dominated the scene and provided spectacular viewing. Photographs show it adjacent to the skating rink and almost at the south bank of the river. It was about 90 feet tall with two observing decks at the top. A photograph in the Florida State Archives (Library of Congress, Detroit D4-072404) from January 1912 shows a wonderful view from the top of the Cardale Tower looking up the north fork of the river to the Everglades and including the old Sallie Tower, the original 27th Avenue bridge, Indian trading post, Phipp’s packing house, the new Miami Canal, etc. What became of the tower is yet a mystery. In December of the year the Cardale Resort opened, it was sold to a company composed of E. S. Frederick and Mrs. M. M. Eastman for $16,000. Included in the purchase were 10 acres of land, a six room house, “an observation tower two hundred and fifty feet high said to be the highest land tower in the state,” and the Cardale Grove. (The height claimed for the tower must have been an exaggeration.) Hiring of a new general manager, a skating instructor, and dancing school were announced, with a (new) grand opening scheduled for early December. That opening was attended by several hundred persons. By mid month the planned purchase of a 150’ high Ferris wheel for $4,000 was announced. The “Society in Miami” page of The Metropolis reported continuing success with 47 couples on the dance floor at once, sightseeing cars packed with passengers, and the river landing crowded with launches. But the newspapers during January and February 1913 made no further mention of Cardale. A photograph taken from the Cardale Tower in March 1913 (13-558-27) and others indicate that the tower was still there. Yet an article in The Metropolis of late March 1913, describing “the rubberneck” tour bus route, devoted several paragraphs to Musa Isle without mentioning the tall tower. A postcard
in the author’s collection shows the Cardale Tower at the “Dr. Thompson Place.” What happened? Perhaps it was lost to fire. When the Musa Isle Indian Village opened in 1919 there was no mention of the tower. Hempstead, who frequently towed down the Miami Canal, made no mention of it in his RECORD begun in January 1924.65

As early as June 1911 it seemed as if a lock to replace the dam on the Miami Canal would soon be built, since supplies and timber were reported at the site. The lock would be constructed of reinforced concrete with wooden doors, being of the double-lock type. It was designed to pass vessels as large as 122 feet long with 22 feet beam, drawing as much as three and a half feet of water.66 However, bits and pieces put together appear to indicate that the job was delayed almost a year because of a decision to bring the dredge Miami out to sea via the Miami Canal instead of by some other route such as by the North New River Canal which connected with it. The lock contract was awarded to the George H. Crafts & Co. of Georgia, to be completed within 180 days. The lock was built near today’s 33rd Avenue, about three-quarters of a mile northwest of the rapids.67 Not until March 1912 was the dam removed as the dredge Miami cut its way out of the canal it had dug. Upon reaching the 27th Avenue bridge it was necessary to remove eight to ten feet of the bank opposite where the draw was left standing open. On an evening in mid March 1912 the dredge Miami passed through the two downtown bridges and out.68 In late April a grand celebration of the opening of the Miami Canal was planned with the governor and other distinguished visitors coming from all parts of the United States.69

Removal of the dam in the Miami Canal allowed water to flow unrestricted out of the Everglades, permanently lowering the water level by several feet as planned. One result was that water ceased to flow over the rapids. Another was that natural springs all over the area, down the river, and along the coast began slowly to dry up. Presumably the lock was completed within the contracted time, that is, by August 1912. With completion of the lock, the water level in the Glades could be controlled better, to the great satisfaction of the area’s farmers and residents. However, not until April 1913 would the Miami Canal be completed all the way to Lake Okeechobee.70 Incidentally, the author recently was shown where water still trickles naturally from the ground just above the former rapids. Whatever else one might say, draining the Everglades was second only to the railroad in changing the face of South
Florida.

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NOTES

7. Letter, Auson J. Cooke to his wife, written at "Fort Desolation" or Ferguson’s Mill, 1 November 1849, mailed at Fort Dallas, 8 November 1849, Private Letter.
8. Mrs. A.C. Richards, "Reminiscences."
10. Letter, Lt. Robertson, 1st Artillery, to Headquarters, re trip up the Miami River, 1855, National Archives. RG 393.
12. Richards, "Reminiscences."
Some old-timers are prone to remember how "inexpensive" things were without recalling how little they earned at the time. D.L. Chandler, in his biography *Henry Flagler* (New York: Macmillan Publishing Co., 1986) mentions that the 1906 dollar ($1) was worth $13 in 1986 currency, and that the national average pay for non-skilled labor in 1909 was just $1.10 per 10 hour day.

The author believes that those two royal palms are the same as the two taller royals standing today by the river at the Musa Isle Senior Center. Although the height of the Sallie Tower was reported as 60 feet, the author believes that it was probably no higher than 40 feet.
An unpublished study by the author of relative dollar values indicates that an appropriate multiplier for the decade of the 1900s would be at least 12 conservatively. Thus, a 25 cent boat ride in that decade would cost between $3.50 and $5.00 in today’s money.

57. Ibid., 4 April and 20 June 1912.
58. Ibid., 4 January 1912.
59. The Miami Metropolis, 3 December and 6 December 1912; Miami Herald, 4 December 1912.
60. The Miami Metropolis, 7 December 1912.
61. Ibid., 16 December 1912.
62. Ibid., 27 December 1912.
63. Historical Association of Southern Florida photographic collection, Miami, Florida.
64. The Miami Metropolis, 29 March 1913.
65. Weston Franklin Hempstead, Sr., Record, being a personal daily record maintained from January 1924 through 1935, loaned to the author by Wes. Hempstead, Jr., 1986.
66. The Miami Metropolis, 7 June and 23 June 1911.
67. Ibid., 8 February 1912.
68. Ibid., 12 March and 15 March 1912.

70. Minutes of the trustees of the Florida Internal Improvement Fund (trustees), 1909-1913, Florida State Archives, Tallahassee.