

# APPENDIX.

## Message of the Governor.

Submitted to the Legislature, Wednesday,  
May 3, 1905.

Gentlemen of the Senate and House of Representatives:

I desire to submit to you the following information in regard to the present status and future prospects of the trust reposed by the Legislature of 1855 in the Trustees of the Internal Improvement Fund of the State of Florida, in relation to the swamp and overflowed lands, granted to the State of Florida, by the Act of Congress approved September 28, 1850, and vested irrevocably in the Trustees of the Internal Improvement Fund by Act of the Legislature of Florida, approved January 6, 1855. I respectfully call to your attention the acts mentioned as quoted below:

Chapter 84. An Act to enable the State of Arkansas and other States to reclaim the "Swamp Lands" within their limits.

Be it Enacted by the Senate and House of Representatives of the United States of America, in Congress Assembled, That to enable the State of Arkansas to construct the necessary levees and drains to reclaim the swamp and overflowed lands therein, the whole of those swamp and overflowed lands, made unfit thereby for cultivation, which shall remain unsold at the passage of this act, shall be, and the same are hereby, granted to said State.

Section 2. And Be it Further Enacted, That it shall be the duty of the Secretary of the Interior, as soon as may be practicable after the passage of this act, to make out an accurate list and plats of the lands described as aforesaid, and transmit the same to the Governor of the State of Arkansas, and, at the request of said Governor, cause a patent to be issued to the State therefor; and on that patent, the fee simple to said lands shall vest in the said State of Arkansas, subject to the disposal of the Legisla-

ture thereof: Provided, however, That the proceeds of said lands, whether from sale or by direct appropriation in kind, shall be applied, exclusively, as far as necessary, to the purpose of reclaiming said lands by means of the levees and drains aforesaid.

Section 3. And be it further enacted, That in making out a list and plats of the lands aforesaid, all legal subdivisions, the greater part of which is "wet and unfit for cultivation," shall be included in said list and plats; but when the greater part of a subdivision is not of that character, the whole of it shall be excluded therefrom.

Section 4. And be it further enacted, That the provisions of this act be extended to, and their benefits be conferred upon, each of the other states of the Union in which such swamp and overflowed lands known and designated as aforesaid, may be situated.

Approved September 28, 1850.

Pages 519 and 520, United Statutes at Large, Vol. 9.

## LAWS OF FLORIDA.

### Chapter 610—(No. 1.)

An Act to Provide for and Encourage a Liberal System of Internal Improvements in this State.

Whereas, the Constitution of this State declares "That a liberal system of internal improvements, being essential to the development of the resources of the country, shall be encouraged by the government of this State, and it shall be the duty of the General Assembly, as soon as practicable, to ascertain by law, proper objects of improvement in relation to roads, canals and navigable streams, and to provide for a suitable application of such funds as may be appropriated for such improvements," therefore:

Section 1. Be it Enacted by the Senate and House of Representatives of the State of Florida in General Assembly Convened, That so much of the five hundred thousand acres of land granted to this State for internal improvement purposes, by an act of Congress, passed the third day of March, A. D. 1845, as remains unsold, and the proceeds of the sales of such of said lands heretofore sold as now remain on hand and unappropriated, and all proceeds that may hereafter accrue from the sales of said lands; also all the swamp land or lands subject to over-

flow, granted to this State by an act of Congress, approved September 28, A. D. 1850, together with all the proceeds that have accrued or may hereafter accrue to the State from the sale of said lands are hereafter set apart and declared a distinct and separate fund, to be called the Internal Improvement Fund of the State of Florida, and are to be strictly applied according to the provisions of this act

Section 2. Be it further enacted, That for the purpose of assuring a proper application of said fund for the purposes herein declared said lands and all the funds arising from the sale thereof, after paying the necessary expenses of selections, management and sale, are hereby irrevocably vested in five trustees, to-wit: In the Governor of this State, the Comptroller of Public Accounts, the State Treasurer, the Attorney-General, and the Register of State Lands, and their successors in office, to hold the same in trust for the uses and purposes hereinafter provided, with the power to sell and transfer said lands to the purchasers and receive payment for the same and invest the surplus moneys arising therefrom, from time to time, in stocks of the United States, stocks of the several States, or the Internal Improvement bonds issued under the provisions of this act, and drawing not less than six per cent. annual interest; also, the surplus interest accruing from such investments, and to pay out of said fund, agreeable to the provisions of this act, the interest, from time to time, as it may become due on the bonds to be issued by the different railroad companies under authority of this act; also, to receive and demand, semi-annually the sum of one-half of one per cent. (after each separate line of railroad is completed) on the entire amount of the bonds issued by said railroad company, and invest the same in stocks of the United States, or State securities, or in the bonds herein provided to be issued by said company. Said Trustees shall also invest the surplus interest of said sinking fund investment as it may accrue. Said Trustees shall also demand and receive from each railroad company named in this act the amount due to the Internal Improvement Fund from said railroad company, according to the provisions herein contained, on account of interest on the bonds issued by said company, and a refusal or neglect on the part of the president and directors of any railroad company herein named to comply with

the provisions of this act, as to the payment to said Trustees of the amount due and payable to the fund, as provided in Sections 11, 12 and 13, on account of interest and sinking fund, the individual property of each and all the directors shall be liable in an action of debt to said Trustees for the amount due and unpaid, with 20 per cent. interest until paid.

Section 4. Be it further enacted, That a line of railroad from the St. Johns river at Jacksonville, and the waters of Pensacola bay, with an extension from suitable points on said line to St. Marks river, or Crooked river, at White Bluff, on Apalachicola bay, in Middle Florida, and to the waters of St. Andrews' bay, in West Florida, and a line from Amelia Island, on the Atlantic, to the waters of Tampa bay, in South Florida, with an extension to Cedar Key, in East Florida; also a canal from the waters of St. John's river, on Lake Harney, to the waters of Indian river, are proper improvements to be aided from the Internal Improvement Fund in manner as hereinafter provided.

Section 16. Be it further enacted, That the Trustees of the Internal Improvement Fund shall hereafter fix the price of the public lands included in the Trust, having due regard to their location, value for agricultural purposes, or on account of timber or naval stores, and make such arrangements for the drainage of the swamp or overflowed lands, as in their judgment may be most advantageous to the Internal Improvement Fund, and the settlement and cultivation of the land, and the said Trustees shall encourage actual settlement and cultivation of said lands by allowing pre-emptions under such rules and regulations as they may deem advisable: Provided, That in no case shall a pre-emption for more than one section of land be granted to any one settler.

Section 29. Be it further enacted, That the alternate sections of the swamp and overflowed lands, for six miles on each side, may be granted by the General Assembly to such railroad companies, to be hereafter chartered, as they may deem proper, on their compliance with the provisions of this act, as to the manner of constructing the road and drainage, and the sale and transfer of the alternate sections thus granted shall be in accordance with the provisions of this act.

As bearing upon the intention of Congress in this act, the following quotation from various reports, then before them as a basis of their action, are called to your attention.

Gen. Thomas S. Jessup, writing to Hon. J. D. Westcott, U. S. Senator, dated February 12, 1848, says: "From my own observation, when commanding the army operating in that country (southern Florida) ten years ago, as well as from reports made by, and information derived from, intelligent officers who operated near and explored the Everglades, and the large Lake Okeechobee north of them, I have no doubt the glades are about 30 feet above the level of the sea. The practicability of draining, I take for granted. The effect of the measure would be to reclaim many hundreds of thousands of acres, without including the bed of the Everglades, now subject to inundation for several months in the year. Were the surface of the lake and the glades lowered, these fine lands would be reclaimed and would soon be converted into valuable sugar plantations, as rich as any in the world, etc.

Buckingham Smith, in a report to the U. S. Senate, June 1, 1848, on the feasibility of draining the Everglades, used the valuable information conveyed in a letter written by Gen. W. S. Harney, U. S. A., Jan. 23, 1848: "During the Seminole war I was repeatedly in the Everglades, and on the rim or margin at different points, and crossed it from Miami to Stark river. Of the practicability of draining them, I have no question. That such work would reclaim millions of acres of highly valuable lands, I have no doubt. My plan for doing the work would be to dig a large deep canal from Okeechobee into the Caloosahatchee, on the west side, and smaller canals from the glades into the head of the Rattones, Little River, Arch Creek, Miami, Shark river and other outlets on both sides of the peninsula. I am satisfied that these canals and drains once opened, the glades would become dry. \* \* \* \* \* It is my opinion that it would be the best sugar land in the South, and also excellent for rice and corn. It could, in that latitude be made valuable for raising tropical fruits—and it is the only region of the present Southern States in which they can be raised. \* \* \* \* \* do not know of a project that I would regard as more calculated to benefit the country than this. \* \* \* \* \*

It affords the Union the best kind of cultivated land that is wanted to render us, to a great extent, independent of the West Indies."

From these reports and the action of both the Congress of the United States and the Legislature of Florida, in the years between the grant of Congress in 1850, and the act creating the Trustees of this land, it is very clear that the very great value of these lands to the State were fully appreciated, and the possibilities of their future development and reclamation realized. I would call to your attention the following statement, showing the various legislative enactments and expressions, as well as the messages of the executives, bearing upon these vast interests of the people of the State, during this period, and the judicial interpretations of the various phases of these acts, which have been brought before the courts.

Under Act of Congress approved September 4th, 1841, the State of Florida became entitled to 500,000 acres of land, which were granted under the provisions of said act for the purpose of internal improvement, and it was in said act provided that the net proceeds from the sale of said lands should be faithfully applied to objects of internal improvement within the State, viz: "Roads, railways, bridges, canals, and improving water courses, drainage and swamps."

Under Act of Congress, approved September 28, 1850, the whole of the swamp and overflowed lands made unfit thereby for cultivation were granted to the State of Florida "to enable it to construct the necessary levees and drains to reclaim the swamp and overflowed lands therein." And it was in said act provided that a patent should issue to the State and on that patent the fee simple to the lands should vest in the said State subject to the disposal of the Legislature thereof. And it was in said act provided. "That the proceeds of said lands, whether from sale or by direct appropriation in kind, should be applied exclusively, as far as necessary, to the purpose of reclaiming said lands by means of the levees and drains aforesaid." 9 U. S. Stats. at Large 519. The condition upon which these lands were granted to the State was that it would so dispose of the lands, by sale or otherwise, as to drain and reclaim them.

1.—On January 24, 1851, the Governor of this State ap-

proved an act, Chap. 332, Laws of Florida, to secure the swamp and overflowed lands lately granted to the State. Said act created a Board of Internal Improvement for the State of Florida, to consist of the Governor, Attorney-General, Treasurer, Comptroller and Register of Public Lands and one member from each judicial district of the State, to be elected by the general assembly to serve two years and provided that said Board should hold an annual meeting on the first Monday in December of each year. 3. That the Treasurer should keep a separate and distinct account of all moneys or bonds received from the sales of all swamp lands and should make an annual statement of the same to the Governor to be laid before the General Assembly at their regular session. 4. Nothing appears to have been done by this Board of Internal Improvement.

On January 10, 1853, the Governor approved an act, Chap. 496, Laws of Florida, by which the third section of the act approved January 24, 1851, was repealed and, as a substitute, created a Board of Internal Improvement for the State of Florida, to consist of the State Engineer, as president, and eight commissioners to be elected by the General Assembly, to-wit: Two of said commissioners from each judicial district, to hold for four years, and provided that the engineer, with two commissioners of each district should be a board to determine upon and recommend plans for the reclamation of swamp lands and recommend plans for local works of internal improvement, to be laid before the general assembly for its action, 1.

In his message to the Legislature on November 24, 1854, House Journal, p. 15, the Governor, referring to the Constitution of 1838 then in force which directed, Art. XI, Prgh. 2, that it should be the duty of the General Assembly, as soon as practicable, to ascertain proper objects of improvement in relation to roads, canals and navigable streams and to provide for suitable application of such funds as might be appropriated for such improvements, wrote "the time has probably arrived when our duty to ourselves and our constituents requires us to fix upon and adopt a State system and determine the extent to which we can, as a government, aid in its construction" and on December 22, 1854, House Journ. p. 133, with a special message, the Governor transmitted the report of

the Board of Internal Improvement, accompanied by a bill to carry into effect their recommendations. They designated certain lines of railroad as a system, and recommended the grant of alternate sections where the roads passed through State lands to the extent usually granted by Congress, p. 141, expressing the belief that the enhanced value to the fund by the construction of these roads would well justify the contribution proposed and suggested that it might be well to reserve to the State the power to do the same in the case of charters not falling within the system then proposed, p. 142. They reported that they had prepared a bill to carry out the views they presented and submitted it with their report. In conclusion they recommended that the Board, being no longer necessary, if the proposed plan was adopted, be abolished as a board, p. 148. The bill submitted by the Board of Internal Improvement was adopted by the General Assembly, approved by the Governor on the 6th day of January, 1855, and became Chap. 610 of the Laws of Florida, and on December 16, 1854, by Res. No. 1, the General Assembly directed the State Treasurer to pay the members of the Board of Internal Improvement the same rate per diem and mileage allowed members of the General Assembly. Thus the Board of Internal Improvement created by Chaps. 332 and 496 ceased to exist.

By the adoption of the bill submitted, Chap. 610, the General Assembly created a trust fund, composed of the Internal Improvement lands proper and the swamp lands and declared it to be a distinct and separate fund to be strictly applied according to the provisions of that act, and declared that the said lands and all the funds arising from the sale thereof, after paying the necessary expenses of selection, management and sale, are irrevocably vested in five trustees, to-wit: The Governor, Comptroller, Attorney-General, Treasurer and Register of State Lands, and their successors in office, to hold the same in trust for the uses and purposes therein provided, with the power to sell and transfer to the purchasers and receive payment for the same and invest the surplus moneys. The trustees were charged with the duty of fixing the price of the lands included in the trust, having due regard to their location, value for agricultural purposes or on account of timber or naval stores and of making such arrangements for the drainage of the swamp lands

as in their judgment may be most advantageous to the fund and the settlement and cultivation of the lands; and the said Trustees were further charged to encourage actual settlement and cultivation of said lands, section 16. The General Assembly reserved the right to grant the alternate sections of swamp lands for six miles on each side, to such railroad companies as might be thereafter chartered, as the General Assembly may deem proper, on compliance with the provisions of said act as to the manner of constructing the road and drainage, section 29.

On January 9, 1855, three days after the approval of Chap. 610, the Governor returned, without approval, to the General Assembly, House Journal p. 300, "An act for the relief of purchasers of swamp and internal improvement lands from the United States," assigning as his reason therefor that the bill approved on the 6th inst. was specially designed to vest this whole fund irrevocably in trustees, and certainly commits to them the power to sell and transfer; that the act under consideration sought to withdraw this power from them in a certain class of cases and confer it upon the State Register; that if the power exists in the General Assembly to withdraw any portion of the fund it exists to withdraw the whole and may be used to defeat the objects of the trust; that such, he was sure, was not the design of the General Assembly. The vote on the passage of the bill over the Governor's veto was ayes none, nays all, p. 306.

On January 12, 1855, House Journal, p. 324, the Governor returned, without his approval, an act incorporating the Florida and Macon Ry. Co., for the reason that in granting lands to the Trustees the General Assembly only reserved power, as is shown in Pgh. 29, to grant alternate sections of swamp lands to any subsequent charter; and this only on condition that it conform to the provisions of that act in the manner of constructing the road and drainage.

On November 24, 1855, the House Journ. adj. sess. p. 21, the Governor returned, without approval, two acts granting swamp lands in aid of construction and gave as his reason that the act approved January 6, 1855, vested the whole fund in Trustees and divests the General Assembly of all title, and the fund cannot be applied to objects other than those specified in that law.

The House Committee on Internal Improvement re-

ported, House Journ. adj. sess. 1855, p. 133, on a bill to amend the act of January 6, 1855, that they could not recommend the passage of the bill; that if the Legislature had the power to control the Trustees this fund would be left to abide the result of the ever fluctuating legislation of the succeeding general assemblies; that the fund is placed beyond the reach of legislation and in the hands of trustees who are amenable to the courts for the proper discharge of their high trust; that the General Assembly has not power to control these Trustees and they, therefore, recommend in lieu of the bill proposed, the passage of a resolution expressing the sentiments of the General Assembly on the subject. The resolution recommended as a substitute for the bill, by the committee, was adopted in lieu of the bill, p. 139. At the same session the Senate Committee on Internal Improvement reported, Sen. Journ. p. 88, that the Legislature had vested the lands in trustees and have no power to relieve the party applying; but recommend him to the trustees for relief, which report was received and concurred in.

On December 14, 1855, Chap. 734, was approved enacting that, as the details of construction specified in the act of the 6th of January, 1855, can only be modified by and with the consent of the State of Florida, the Trustees, the several companies, and all others having vested interests under the said law, all the details of construction, except those in the 6th section, may be modified by and with the consent and approval of the Trustees.

A special committee reported to the Senate, Journ. 1893, p. 971, recommending that every means at their command be used by the Trustees to encourage the settlement of the lands and for the benefit and protection of those already located thereon, p. 983.

Thus it will be observed that the title to the lands referred to vested in the Trustees of the Internal Improvement Fund irrevocably, for the purposes and trusts expressed and set forth in Chap. 610, Laws of Florida, approved January 6, 1855, at which time the State parted with its title to all lands of the character designated by both acts of Congress, Chap. 16 and Chap. 84, above referred to, that had been patented to the State or that should be patented to the State thereafter under provisions thereof. And the State having parted with its title to the lands in 1855, the Trustees should accept the several

trusts made and expressed in said law which trusts may be enumerated as (1). The construction of a system of railroads, certain bridges and one canal as expressed in said act.

(2) A trust to pay certain coupons and interest on bonds referred to in said act.

(3) The main trust of the fund, viz: the drainage and reclamation of all swamp and overflowed lands in Florida, the primary purpose of the act of Congress granting large domains to the State of Florida, and likewise the main object and purpose and trust created by the act of Legislature, approved January 6, 1855.

It is confidently contended that the trusts expressed in Chap. 610, Laws of Florida, have not been discharged or completed. It does not appear that all of the coupons and interest on the bonds have been fully paid and this trust discharged, nor has the main trust been discharged nor completed, but on the contrary, has scarcely been begun. There have been twenty million acres of land patented to the State of Florida by the United States government, which area is equal to or greater than one-half of the territory of Florida. In addition to this vast domain, all that remained at the date of the act of 1855 of the Internal Improvement lands proper, granted under Chap. 16, Acts of Congress, approved September 4, 1841, which was revocably vested in the Trustees for the express purposes and trusts aforesaid, and the combined wisdom and efforts of the Trustees have for a half century failed to accomplish the gigantic task imposed. The Trustees accepted the trust which has been a continuing trust; efforts have been made from time to time to drain and reclaim the lands by means of canals and drains and otherwise, the Trustees having sold large areas of land, applying the proceeds to the purposes of said act in efforts to drain and reclaim the lands by means of canals and drains. They have entered into contracts from time to time, granting lands to contractors in payment and for the consideration of digging canals in their efforts to drain and reclaim the swamp and overflowed lands. Canals have been cut in the territory adjacent to the Tohopekaliga Lake, Lake Cypress, Kissimmee Lake, Lake Flirt, Lake Hicknochee, Lake Okeechobee and Lake Worth and along the eastern coast, aggregating 150 miles of canals, which have been cut by means of dredges, the

depth ranging from three to ten feet and the width from seventy to forty. The effect, however, of the efforts made is so small compared with the magnitude of the undertaking and the trusts and duties imposed upon the Trustees, it can only be referred to in passing.

The acreage so drained and reclaimed by means of canals and drains and otherwise through the efforts of the Trustees of the Internal Improvement Fund, under the trusts aforesaid, and out of the fund and the twenty million acres of lands conveyed for this purpose will not exceed as estimated one hundred thousand acres. It is my opinion that there are over six million acres of land undrained and unreclaimed that are subject to the trusts and that it is the duty of the Trustees to drain and reclaim it. Chap. 610, Laws of Florida, referred to, together with the trusts therein expressed, have been uniformly sustained by the courts, subject only to the reservations contained therein.

Trustees Internal Improvement Fund vs. St. Johns Railway Company, 16th Florida, 541-543. 4th Wallace United States Court, 155.

In a more recent case in the Supreme Court of this State, a learned justice, in determining matters before him concerning the construction of the Internal Improvement Act (Chap. 610, Laws of Florida), used this language: "The Internal Improvement Fund is a public fund vested in the Trustees for certain specified purposes and cannot be diverted to other purposes or made responsible for damages accruing to holders of the railroad bonds caused by neglect of duty on the part of the Trustees." A careful consideration of the entire Improvement act and decisions construing it. (Trustees Internal Improvement Fund vs. Bailey, 10th Florida, 112; S. C. 81, American Decisions 194; State of Florida vs. Anderson, 91 U. S. 667; Vose vs. Reid, 54 N. Y. 567), satisfy us that the views as above expressed are entirely correct." (Text, page 119. 43 Florida.)

The early history of the Fund, prior to the act of 1855 and subsequent thereto, clearly sustains the act and the trusts therein expressed and the powers and duties imposed upon the Trustees. It will be observed that the

Governors in 1855 and 1856 vetoed every bill that passed the Legislature, affecting the lands or touching the powers and duties of the Trustees of the Internal Improvement Fund up to and including the year 1879, and that each and every of said vetoes were sustained by overwhelming majorities in each House of the Legislature to which the same was referred; and that the first act attempting to grant lands to railroads, or for other purposes than those expressed in the act of 1855, was approved in 1879 but not until said act was made subject to the indebtedness, expenses of management and all of the trusts set forth in Chap. 610, Laws of Florida. That in 1879, and subsequently thereto, alleged land grants have been made from time to time by the Legislature, granting 12,003,402.66 acres other than alternate sections within 6 mile limit to construct railroads, and many other grants that have not been perfected, carrying many million acres more under its provisions, subject however, to the trusts expressed in the act of 1855.

Some idea of the present status of the lands of this Fund may be gained from the following:

|   |               |
|---|---------------|
| Number of acres swamp and overflowed lands patented to the State to Aug. 6, 1904.....                                   | 20,113,837.42 |
| Number of acres deeded and conveyed under legislative enactments .....  | 8,242,317.69  |
| Number of acres deeded to canal and Drainage companies.   | 2,252,816.96  |
| Number of acres deeded (E. N. Dickerson in 1867 for coupons on Florida R. R. bonds, which fell due prior to 1866) ..... | 248,602.98    |
| Number of acres deeded (Wm. E. Jackson in 1866 for coupons on Florida, Atlantic & Gulf Cen. R. R. ....                  | 113,664.80    |
| Number of acres deeded in Diss-ton sale .....   | 4,000,000.00  |
| Number of acres deeded other than under legislative enactment as above stated.....                                      | 2,200,130.31  |
| Total disposed of prior to August 6, 1904 .....   | 17,056,932.74 |

Leaving balance on hand Au-

During recent years special efforts have been made to concentrate the remaining lands and funds to the purposes of the act, and especially to the drainage and reclamation of the swamp and overflowed lands in line with the main trusts of the Internal Improvement act. These efforts have been thwarted and delayed by suits having been instituted on behalf of claimants under the alleged railroad and canal land grants. In certain of said suits injunctions have been obtained enjoining the use of certain moneys on hand in the Treasury of the Trustees, and in the use of the lands, claiming and demanding that the Trustees deed the remaining lands now on hand and deliver the moneys in their treasury to the claimants under said railroad and canal land grants. This, the Trustees have declined to do, and are defending the fund in the courts.

There are six important suits now pending in which the Trustees are either complainants or defendants, and these suits involve all the lands (3,000,000 acres) on hand and legal questions of vital interest to the Internal Improvement Fund and the citizens of the State of Florida. The title and nature of the suits briefly stated are as follows:

“In the Circuit Court of the United States,  
For the Northern District of Florida.  
The Louisville & Nashville Railroad Company,  
versus  
The Trustees of the Internal Improvement Fund  
of the State of Florida,  
and  
The Atlantic Lumber Company, Neil G. Wade, and  
John A. Henderson—Intervening Defendants.  
W. A. BLOUNT of Pensacola,  
Solicitor for Complainant.  
W. R. McGARRY, of Chicago,  
W. W. HAMPTON, of Gainesville, and  
T. L. CLARKE, of Monticello,  
Solicitors for Interveners.

The bill of complaint in this suit, filed April 19, 1902, alleges that the Louisville & Nashville Railroad Company

is entitled to 1,447,321 acres of land under the provisions of Chapter 3335 of the Laws of Florida, in addition to the 1,772,679 acres heretofore conveyed to it, and denies any liability on its part for any portion of the indebtedness existing against the lands of the trust at the time of the passage of the land grant to the Pensacola and Atlantic Railroad Company, and have an injunction against the Trustees in the disposal of certain moneys now in the Treasury of said funds.

In the Circuit Court Second Judicial Circuit  
of Florida, in and for Leon County.

The Florida East Coast Railway Company,

versus

The Trustees of the Internal Improvement Fund of  
the State of Florida.

FRED T. MYERS of Tallahassee,  
Solicitor for Complainant.

The bill of complaint in this suit, filed November 12th, 1903, alleges that the Florida East Coast Railway Company is entitled to 2,040,000 acres of land under the provisions of Chap. 4260 of the Laws of Florida, and seeks to have the Trustees enjoined from using the land granted to the State by the act of Congress of September 28, 1850, for the purpose of drainage and reclamation as required by said act of Congress.

The Trustees caused to be filed in their behalf, among other pleadings in the above entitled cause, a plea to the whole of the bill, setting forth in effect the two acts of Congress granting lands to the State and the provisions of the Internal Improvement act (Chap. 610, Laws of Florida.) The acceptance of the trust, which has continued from that date to the present, the Trustees have continued to exercise the rights and duties vested; that said act is now in full force and effect as to all the rights and duties of the Trustees that have not heretofore been discharged or performed; that there are now swamp lands undisposed of and unreclaimed and undrained; that the Trustees are now in possession and control of said swamp lands with the rights vested and duties imposed upon them by said act of the Legislature; that the Trustees are endeavoring to discharge the duties imposed upon them; that the Trustees have never been called to account in the

courts, nor their acts questioned by the State; that said act of the Legislature constituted the contract executed at the time of its approval; that the act of the Legislature, approved May 31st, 1893, purporting to grant large quantities of the aforesaid swamp lands to the complainant railroad and corporation was and is in violation and contravention of the constitution of the State of Florida, (Section 17, Declaration of Rights) and of the Constitution of the United States (Article one, section ten), providing that no law shall ever be passed impairing the obligation of contracts, and to that provision of the Constitution of the State of Florida limiting the power of the Legislature to donate public lands only to actual settlers, and then not to exceed eighty acres to any one person, (Article sixteen, section five), and is therefore void and of no force as against these Trustees.

Therefore, these defendants do plead the said constitution in bar to the said complainant's bill and pray the judgment of this Honorable Court whether they should be compelled to make further answer to said bill, etc. This plea was sustained by the court February 28, 1905.

In the Circuit Court,  
Second Judicial Circuit of Florida,  
In and for Leon County.

The Florida Coast Line Canal and  
Transportation Company,

versus

The Trustees of the Internal Improvement  
Fund of the State of Florida.

Cooper and Cooper of Jacksonville,  
Solicitors for Complainants.

The bill of complaint in this suit, filed June 6, 1904, alleges that said company is entitled under the provisions of Chapter 3641 and Chapter 3995 of the Laws of Florida to 3,840 acres of land per mile for the entire distance from St. Augustine to Biscayne Bay and seeks to enforce its alleged rights by injunction.

They obtained temporary restraining order against the Trustees from handling or otherwise disposing of the lands claimed, which aggregate 523,408.23 acres in addition to the 595,778.69 acres heretofore deeded to said company.

Circuit Court of the United States,  
For the Northern District of Florida.  
Matilde O. Kittel, individually and  
as Executrix of the last will and testament

of Joseph J. Kittel, deceased, Complainant,  
versus

The Trustees of the Internal Improvement  
Fund of the State of Florida.

FRED T. MYERS, of Tallahassee, and  
STRALEY and HASBROUCK, of New York,  
Solicitors for Complainant.

The bill of complainant in this suit, filed December 14, 1904, alleges that the said Matilde G. Kittel, individually and as Executrix of the last will and testament of Joseph J. Kittel, deceased, is entitled under the provisions of "An Act granting aid for the construction of the Thomasville, Tallahassee and Gulf Railroad," approved February 7, 1883, to 72,349.18 acres of land, and seeks to compel the Trustees to convey to her 72,349.18 acres of the land granted to the State by the Act of Congress of September 28, 1850, with prayer for injunction, etc. And obtained temporary restraining order enjoining the Trustees from disposing of the lands described in the bill.

In the Circuit Court,  
Second Judicial Circuit of Florida,  
In and for Leon County.

The Trustees of the Internal Improvement  
Fund of the State of Florida,  
versus

Matilde G. Kittel, as executrix of the  
last will and testament of Joseph J. Kittel,  
deceased, and as sole devisee under said will.

STRALEY & HASBRUCK of New York, and  
FRED T. MYERS, of Tallahassee,  
Solicitors for Defendants.

These proceedings were commenced for the reason that the defendant was claiming and asserting ownership of about 40,000 acres of the land granted and patented to the State under the Act of Congress of September 28th, 1850, the title to which had not passed out of the Trustees. Bill filed November 23, 1904. On January 14, 1905, this suit was transferred to the United States Court for the Northern District of Florida.

The next is :

In the United States Circuit Court,  
For the Northern District of Florida.

The Louisville & Nashville Railroad Company,  
versus

The Trustees of the Internal Improvement Fund  
of the State of Florida.

W. A. BLOUNT, Solicitor for Complainant.

This is the second suit commenced by the Louisville & Nashville Railroad Company against the Trustees. The bill of complaint was filed March 23, 1905, to compel the Trustees to execute the deeds under provisions of Chap. 3335, Laws of Florida to the 1,447,321 acres of land in addition to the 1,772,669 heretofore conveyed and more fully the purposes of the original suit as above mentioned.

From this review of the history of the Trustees of the Internal Improvement Fund, and their powers and duties under the act creating them and vesting them with the lands, I am convinced that it is their duty and within their powers to drain and reclaim the swamp and overflowed lands now left in the fund. The question then is:

Is the lowering of Lake Okeechobee and the drainage of the Everglades feasible?

The question has been decided in the affirmative by many authorities of the highest standing.

In 1880 and 1882 a line of levels was made by Gen. Gilmore under the direction of the United States Senate. These and other surveys by Col. Charles Hopkins, Major Wirts, V. P. Keller and J. W. Newman fix the elevation of the Everglades at from 21 to 23 feet above tide water level. The difference in these figures is accounted for by the depth of the water on the glades when the surveys were made.

In 1891 a survey made by W. H. Caldwell, Assistant United States Engineer, fixed the level of Lake Okeechobee at 20.42 feet above tide water level.

There are seasons of the year when a large portion of the glades are dry. I have been in Lake Okeechobee twice within the last six months. Once with Mr. B. H. Barnett and Mr. Wm. M. Bostwick, Jr., of Jacksonville, on the steamer Naomo of Ft. Myers or Kissimmee, commanded by Capt. Hall. During the first part of February of the present year, with Attorney General Ellis and State

Treasurer W. V. Knott, and State Chemist, Capt. R. E. Rose, and ex-Governor W. S. Jennings. On the last trip we boarded a steamer at Ft. Myers, proceeded up through the Caloosahatchee river and several canals into Lake Okeechobee, and investigated two canals leading out of Lake Okeechobee south into the Everglades, then along the east side of the lake about three-eighths of a mile from the shore going ashore once, until we arrived at Taylor's Creek, on the north end of the lake, where we replenished our supply of wood.

I took frequent soundings of the water for about twenty miles, and found the water to be uniformly 18 feet deep at three-eighths of a mile from the east shore. Once when about a mile from the shore, I found the water to be twenty-one feet.

I find Lake Okeechobee to be a beautiful body of clear water, with clearly defined shores, no lily pads or hyacinths, and except in times of freshets, the water remains within its rim or banks, and can be lowered six feet and have ample water left for the purpose of navigation over the lake and quite near the shores. I would judge from the soundings made that the bottom and sides of the lake may be likened to that of a saucer; if the water was lowered from three to six feet, there would be a white sand beach around the lake. On the east side of the lake, after passing over a narrow rim of sand beach, which was about two feet above water one would enter a swamp of cypress, gum and other woods, with some palmetto trees which follow the shore line of the lake to about the center of the north end; then some pine land and oak hammock is visible with a few houses occupied by fishermen.

From where the Kissimmee river enters the lake, there is a wide expanse of muck and saw grass, extending to the north and west for eight to ten miles; on the west side the pine land approaches the lake to where low prairies from the lake shore down to where the Caloosahatchee river enters it, where a broad expanse of saw grass again commences and except for a sparse fringe of custard apple and cypress trees, continues around the entire south and southeast sides of the lake. After passing through this fringe of custard apple and cypress trees, by the way of the Rita river canal south, a vast sea, as it were, of saw grass comes into view, which extends as far

as the eye can reach in every direction, with a few inches of water over the mud, upon which the saw grass grows. The saw grass extends in a southerly direction a hundred miles or more, and is from forty to sixty-five miles wide, interspersed by a few small wooded islands.

The acreage that will be affected by the drainage or lowering of Lake Okeechobee will aggregate more than 6,000,000 acres. That one may more easily comprehend the vastness of 6,000,000 acres of land, I will say that it is more than six times as great as is the entire cultivated acreage of Florida, including gardens as well as farms. Of the six million acres, nearly if not quite 3,000,000 acres, of it is covered only with grass, most of it saw grass, no trees or bushes. Once in a decade—the water, on account of continuous rains, raises out of the bed of the Everglades and overflows a large part of the pine lands adjoining. Along the Caloosahatchee river on the west, it is impracticable to cultivate the land above Ft. Thompson, which is 16 miles or more in a direct line west from Lake Okeechobee. Orange groves that were ten or twelve feet above the normal height of the water have been drowned out in this vicinity, as far as La Belle.

Notable among the groves that were destroyed was the grove of Capt. Hendry of La Belle who for many years represented Lee County in the Legislature, and two miles above his place the grove of Mr. George Hendry, his son, was covered by water, so I am informed, for a period of six weeks almost entirely destroying his grove. I here give an extract from the message of Gov. Jennings to the Legislature of 1903, showing damage done by the water to this country east of the Everglades:

“Again, those who are now undertaking to reclaim, in a small way, the most elevated tracts, and utilize them by cultivating vegetables that grow and mature during the driest season of the year, and of short crop seasons, hazard their entire year’s work and expenses by undertaking to plant and grow crops in the most selected spots under present conditions, as the experience of the past few weeks bear witness. It is reported that from seventy to ninety per cent. of the entire crop planted within this region has been destroyed within the past month by high water, which is a loss to the citizenship of that portion of our State, and falling upon those who are not able to bear the loss of their all, amounting to more than a half

million of dollars in value. This of itself would justify the expenditure of an amount necessary to complete the drainage and reclamation of the Everglades to protect the small acreage already under cultivation."

The lowering of Okeechobee, not exceeding four feet, would give protection from this overflow to these crops and groves and would not cost more than the loss above mentioned by Governor Jennings.

Considerable discussion has been had at different times as to the climatic effect upon the glades and adjacent lands, if the same were drained. The fear has been expressed that the climate would be colder, on removal of the vast body of water off the glades. This reasoning would probably be correct, if the body of water in the glades was not a very shallow and cold body or if the large body of warm water in Lake Okeechobee was to be materially affected.

To lower Lake Okeechobee six feet, the maximum amount contemplated, would leave a body of warm water averaging twelve feet deep, over an area of one thousand square miles. This lowering of Lake Okeechobee would remove the shallow cold water off the glades, leaving a dry warm soil radiating heat which now absorbs heat from the warm airs off Lake Okeechobee.

While a large body of deep water to the northwest is certainly a protection from cold in Florida, a marsh or shallow body of water on the northwest is a menace; this has been so frequently illustrated that argument is unnecessary.

The drainage of the glades would certainly not increase the danger of frost, on the contrary, it would have the opposite effect. This position I believe will be sustained by all scientific, as well as practical men familiar with the conditions.

The Trustees have already conveyed 1,652,711.80 acres of these valuable lands to the Disston drainage project, for which was cut about eighty miles of canals, about Kissimmee and into Lake Okeechobee, the greater part of which would be made available by a canal from Lake Okeechobee to the St. Lucie river lowering Lake Okeechobee.

You will perceive, by referring to the report of Col. Kraemer quoted below, that he expected to make all the canals of the Disston Company available by completing the Rita river canal, as outlined in the said report.

By digging twenty-two miles into the St. Lucie a navigable canal, which can be quickly done, then by digging ten miles from Tomoka river into Haw creek, which empties into Dunn's lake, which empties into St. John's river above Palatka, or by digging from the head of North river into Julington creek, a distance of eight or ten miles, we can open for transportation and connect through St. John's river, with North and Matanzas rivers, with the Halifax and Indian rivers, St. Lucie river with Lake Okeechobee, which has a coast line of one hundred and thirty miles, and three hundred and nine miles of the Kissimmee and Caloosahatchee rivers, and into the Gulf of Mexico at Ft. Myers. Thus by digging thirty miles of canal we will prevent Okeechobee overflowing its banks, and at once make "lowlands" instead of "overflowed lands" of the Everglades, and connect by this thirty miles of cutting all of the above waterways, which would become by this means a waterway across the State from Ft. Myers to Indian river, and would also connect Indian river with the St. John's river, so that freight steamers from Jacksonville and Indian river, as well as steamers from the Gulf of Mexico, via Ft. Myers and Caloosahatchee river, and also steamers from Kissimmee, via Kissimmee river, could all pass through Lake Okeechobee, and do business throughout the 740 miles of inland waterways that would by this thirty mile of cutting be connected together. The remainder of the work would be merely the digging of ditches, or small canals, which would be done at a little cost per mile, and as to cost of digging I refer you to the report herein made by Col. Kraemer, and printed herewith.

The report of Col. James M. Kraemer, chief engineer of the Okeechobee Drainage Company, made in 1886, says: "The surface of this soil is at times exposed, and it is only during, or subsequent to, a heavy rainy season that it is possible to penetrate with a light skiff, and then advantage must be taken of the natural drains of the vast area. If there was any absence of the dense saw grass, no difficulty would be experienced in traversing the country in any direction. A four foot reduction of the surface of the waters of this region would be sufficient for cultivation. The surface of the lower glades is well elevated above tide level, but, due to the rim of out-cropping lime-

rock extending along the Gulf and Atlantic borders, the waters are in a great measure impounded and retained at varying elevations above the tide. Levels and measurements taken at Lake Worth establish the surface of the fresh water of the Everglades to be  $10\frac{1}{2}$  feet above the tide water of the Atlantic and that a canal 1,100 feet long would be entirely feasible to cut the rim at frequent intervals and permit the impounded waters to flow into the Gulf or Atlantic. This would result in exposing great tracts of soil now practically valueless."

#### REPORT ON MAIN DRAINAGE CANAL FOR LAKE OKEECHOBEE.

Agreeably to the request of the Executive Committee of the Disston Land Company of Florida, I herewith present a brief report covering the question of supplementing the partial drainage of Lake Okeechobee effected by the A. & G. C. C. & O. L. Co. by constructing a large canal or canals which it is believed will afford positive drainage for the lands bordering Okeechobee lake, and thus render the said lands cultivatable and thereby give a specific value to the muck land of the Disston Land Co., in that vicinity, which, said lands are at present in a condition unfit for tillage and without value for agricultural purposes.

As Chief Engineer of the A. & G. C. C. & O. L. Co. I have frequently recommended the construction of drainage canals throughout the district controlled by the operations of the drainage company, which canals, would, if completed, have afforded relief for a very large percentage of the marsh lands and effectually reclaimed at a moderate expense all of these rich lands which could be brought into successful cultivation.

In this connection it was urged that a proper system of drainage be given the lands adjacent Lake Okeechobee.

In recognition of these recommendations three small canals leading from Lake Okeechobee have been constructed; two of which connect with Lake Hicknochee and thence by a canal of cross section equal to the combined area of the two canals noted, the drainage is carried into the upper Caloosahatchee river at Ft. Thompson. The third canal is partly completed and is cut from the southern margin of Lake Okeechobee, beginning at a favorable

point on Rita river and penetrates in a due southerly line for a distance of 10.5 miles and empties into the western margin of the Everglades, this drainage reaching the Gulf via Harneys and Shark rivers.

Due to the fact that before the completion of the canal on southern route the A. & G. C. C. & O. L. Co. completed its contract with the State of Florida; it was not deemed expedient by the drainage company to still further prosecute the work of drainage in the Okeechobee basin, and as a consequence the great area of rich land in that vicinity is at present in a state unfit for cultivation. Exhaustive surveys have been made to determine the most practicable, efficient, and in cost of construction, economical route for a large drainage canal for the permanent lowering of Lake Okeechobee.

Lines of drainage to the St. Lucie river, Lake Worth, New river, Miami river and the Bow Legs Landing route, via the western margin of the Everglades, have been carefully considered.

Further drainage through the Caloosahatchee river is barred from the fact that the capacity of the upper Caloosahatchee river at Ft. Thompson is fully taxed at present to carry the water reaching that point via the drainage canals already constructed; and the residents of that region are petitioning the I. I. Board to provide relief during and subsequent the rainy season by closing the canal at a point just west of Lake Hickpochee.

The presence of the sand and lime rock rim extending for many miles from the Atlantic Coast towards Lake Okeechobee renders the cutting of a drainage canal on any of the lines named east from Lake Okeechobee very costly. In addition to the presence of difficult material in excavation the lines from Lake Okeechobee to Lake Worth, New river and Miami river are respectively ten, twenty-eight and thirty-two miles longer than the route south from Rita river via Row Legs Landing Route.

This last named route is twenty-four miles long, the New river route being fifty-two miles long.

In 1883 Col. C. F. Hopkins, Deputy U. S. Surveyor, was engaged by the drainage company to accompany the New Orleans Times-Democrat expedition on a reconnoissance from the south shore of Lake Okeechobee, in a line due south through the Everglades to a point about opposite the north end of the Ten Thousand Islands, and thence in

a southwesterly direction to the head waters of the Shark or Harneys river.

In addition to other instructions, Col. Hopkins was directed to carefully note the depth of muck on the line of travel.

In his report he clearly states that he made daily soundings and no rock or sand was encountered at any point on the line of travel at a depth of ten feet below the surface until the party reached a distance of thirty miles south of Lake Okeechobee, when rock was found at a depth of eight and one-half feet below the surface of the muck, which showed that the surface of the underlying rock at that point was practically at tide level.

During the year 1887 a line of levels was run southward from Lakes Bickpochee and Okeechobee on the western margin of the Everglades to ascertain the possibility of securing a feasible route for drainage in that direction. It was found that on the margin of the marsh in the north range of sections in township 48 S. of R. 34 E., the elevation of the muck was 12.76 feet below the surface of Lake Okeechobee, and distant therefrom 24 miles; the level of Lake Okeechobee being 22 feet above tide level.

A careful study of this problem clearly demonstrates that the Bow Legs Landing Route is the shortest possible distance in which effective drainage can be secured. That the material to be excavated is entirely of pure muck and that the effective discharge of this canal would be greater than a canal of like cross section on any other route named and that the cost of construction of the canal on the Bow Legs Landing Route will be 60 per cent. less than the New river route under the most favored conditions.

The canal proper already completed south from Rita river is fifty feet wide and ten and one-half miles long.

Including labor, fuel, repairs and all extraordinary charges, due to break downs, etc., the present canal cost an average of 1.6 cents per cubic yard. This does not include cost of dredges or general superintendence.

The Bow Legs route for the same cross section of canal will discharge from ten to thirty per cent. more water than of the other routes named.

It is proposed on the lines of Bow Legs Landing route to construct a canal 150 feet wide and ten feet deep at Lake Okeechobee and six feet deep at its terminus 24 miles distant and having a gradual gradient on its bed.

The canal from Lake Okeechobee to Lake Hickpochee and from Lake Hickpochee to Sugar Berry Hammock have been in successful use since 1883. They were constructed through precisely the same grade of material as is found on the Bow Legs Landing route. These canals already constructed have not only at all times remained free and open and clear of all deposits, but they have by scour enlarged in cross section, both in width and depth. They were originally cut five and one-half feet deep, they have scoured to the bed rock and in many places are eleven feet deep. They have also become wider, due to erosive action of the current.

A stream running with the velocity of one-third of a mile per hour will transport soft clay.

A velocity of half a mile an hour will carry sand as large as linseed.

A velocity of two-thirds of a mile an hour will sweep along fine gravel and a mile and a half an hour will roll along round pebbles.

Disintegrated muck is much more easily transported than clay or sand.

There has never been any muck deposit formed within the canals leading from Lake Okeechobee.

The initial current through the Bow Legs canal will be at a rate of 1.876 miles per hour, which is sufficient to roll along large pebbles and will sweep every vestige of muck from within the confines of the canal margin.

The efficiency of the canal west from Okeechobee indicates that a canal cut on the same general lines will be equally effective.

It is proposed, therefore, to construct the canal on the Bow Legs Landing route on the same plan as adopted at Okeechobee and Hickpochee canals.

The Bow Legs canal will have a cross section 150 feet wide at the narrowest point and be ten feet deep at Okeechobee Lake and six feet deep at its terminus, 24 miles distant. Or it may be deemed desirable to construct two or more parallel canals whose combined cross section would equal that of the main canal just proposed. At least two powerful excavators should be used on the work.

In view of the increased distance for transporting fuel and other possible contingencies I set the extreme cost of excavation at two cents per cubic yard. A canal 150 feet

wide by 8 feet deep and 24 miles long would represent 5,631,858 cubic yards, at 2 cents per cubic yard the cost will be \$112,637.00, deducting the cost of canal already constructed \$12,101.00, the completed Bow Legs Landing route would cost \$100,536.00. To this should be added the cost of two dredges and barges and necessary outfit, which in round numbers would amount to \$50,000.00 additional.

The above information is compiled from reliable and specific data and clearly shows that of all possible routes for a canal to permanently lower the waters of Lake Okeechobee and render the adjacent muck land cultivatable that the length of canal to be built, favorable material in excavation, economy of construction and effectiveness of drainage the Bow Legs Landing route is preferable to any other which could possibly be selected.

The accompanying map shows the location of the several canals named:

Canal to St. Lucie river is marked No. 1.

Canal to Lake Worth is marked No. 2.

Canal to New river is marked No. 3.

Canal to Miami river is marked No. 4.

Canal to Bow Legs Landing Route is marked No. 5.

I also submit for your inspection a profile of the New river and Bow Legs Landing route which clearly shows the advantage claimed for the Bow Legs Landing route for the drainage of Lake Okeechobee.

Yours respectfully,

Signed: J. H. KREAMER,

Chief Engineer A. & G. C. C. & O. L. Co.

August, 1896.

The fact that we would have open waterways in three directions from Lake Okeechobee large enough for transportation purposes, connecting with three lines of railroads, at Ft. Myers, Kissimmee and Stuart, will aid in making the land reclaimed valuable at once. For the production of sugar there is no other such available and desirable land in the United States. There is consumed annually in the United States, 2,844,626 tons of sugar, of which there it produced in the United States of beet sugar, 163,126 tons, of sugar cane sugar, 275,000 tons, which shows that there is imported upon which a tariff is

paid 2,406,500 tons, which at 5c per pound is worth \$240,000,000. The adaptability of the Everglades when drained for the growth of sugarcane, as to climatic condition, soil and productiveness is well shown by the following extract from a paper read at the Cane Grower's Convention, at Jacksonville, May 6th, by W. L. Van Duzor; and also by the extracts from "Success," contributed by James E. Ingraham, Vice President of the Florida East Coast Railroad Company, and also a report by Prof. H. W. Whitley, Chief Chemist, United States Agricultural Department.

### HEALTHFUL REGION.

The healthfulness of a region is of the utmost importance to any enterprise, and especially is this true when the operatives must become permanent residents. It can be positively stated that the reclaimed lands of the Kissimmee Valley are free from malaria. The employees of the Drainage Company were white men exclusively. These men were recruited from all parts of the country. Many of them entered into the service of the company before they became acclimated. During a period of over eleven years the company never employed a physician or lost an employee from death, never did any of the men leave the service of the company from the fact they could not stand the climate.

Malaria and chills are absolutely unknown.

Within a radius of twenty miles of Kissimmee is an area of at least 30,000 acres of excellent sugar lands, in tracts of from 500 to 2,000 acres, which possesses every requisite in points of elevation, components of soil, and the natural facilities with which they can be put in cultivation. These rich sugar lands are admirably located, a greater part of them bordering on the beautiful lakes of that region, extending from Lake Hart to Lake Kissimmee, thus affording pleasant farm and plantation sites, insuring an abundance of water for irrigation when necessary, and an elevation of about seventy-five feet above tidewater. It has also sufficient natural grade, by which easy subdrainage is afforded.

The following analysis of muck will be found interesting to those familiar with the subject of sugar culture:

|  |       |
|--|-------|
| Moisture .....                         | 16.84 |
| Organic matter and combined water..... | 75.65 |
| Silica and insoluble silicates.....    | 0.91  |
| Oxide of iron .....                    | 1.47  |
| Lime .....                             | 3.17  |
| Magnesia .....                         | 0.18  |
| Potash .....                           | 0.13  |
| Soda .....                             | 0.38  |
| Phosphoric acid .....                  | 0.18  |
| Sulphuric acid .....                   | 0.51  |
| Chlorine .....                         | 0.43  |
| Nitrogen (in organic matter) .....     | 2.17  |

The chemical analysis has been substantiated by practical experience. Muck lands have been found to be suitable to a great variety of crops, especially sugar cane.

#### ROSE'S WORK.

Captain R. E. Rose, who is now Chemist of Florida, was superintendent of the Drainage Company's operations the first few years of its operations. In the fall of 1889 he planted the first sugar-cane planted on reclaimed muck land in Florida at South Port, which is located at the south end of Lake Tohopekaliga, twelve miles south of Kissimmee. The land planted had been permanently inundated up to February of the same year. Captain Clay Johnson had charge of this farm.

The sugarcane grown at South Port was exhibited at the New Orleans Cotton Centennial during February and March, 1885, taking first premium over Cuba, Louisiana and Mexico. A delegation of Louisiana sugarcane planters visited South Port in March, 1885. They brought with them Dr. Sands, an expert sugar chemist, who reported sixty-five tons of sugarcane per acre, with 17 per cent saccharose and but 1-2 per cent glucose.

#### YIELD TESTED.

Captain Rose ground this crop in April and May, 1885. South Port farm is still producing enormous crops of vegetables and about fifteen acres devoted to sugarcane.

In March, 1902, I personally tested the yield of cane on this farm, by measuring the land, cutting and topping

the cane as it would go to the mill and by actually weighing it found the yield to be over sixty-three tons to the acre. The samples of cane taken at the same time and tested by the agricultural department at Washington showed 12 to 13 per cent sucrose, which Prof. H. W. Wiley stated would yield two hundred pounds of sugar to the ton of cane, or twelve thousand and six hundred pounds to the acre. This marvelous yield, after a continuous cropping for twenty years without one pound of fertilizer of any description. This farm is also growing fifty bushels of choice corn to the acre and one of the thriftiest young orange groves in the State is growing on a portion of this farm, bearing heavy crops of choice fruit.

In 1885 Captain Rose purchased the tract of muck, which afterwards became the great St. Cloud Sugar plantation.

In 1886 and 1887, 110 acres of cane was ground making an average of 4,800 pounds of granulated sugar per acre with a very inferior mill. Soon afterward Captain Rose disposed of his interest to Mr. Hamilton Disston. The mill was rebuilt and a first class roller process mill was installed. The crop of 1888 and 1889, 374 acres of cane was ground, making 1,200,000 pounds of granulated sugar, and 200,000 pounds of second sugars. This plantation continued to produce good crops of cane each year after until the death of Hamilton Disston, when operations ceased, and muck lands and the sugar interests in Florida lost their greatest friend and champion. His faith in the great value of this fertile soil never wavered.

My knowledge of muck lands and their adaptability for growing various crops comes from association with the Drainage Company as its superintendent from 1889 until the completion of its contract in 1893, and the sale of its land. And by the actual cultivation of muck for the last twelve years. Many others attest to the fertility and productiveness of muck lands who are much better known to the agricultural world than myself.

#### PROFESSOR WILEY'S VIEWS.

Professor H. W. Wiley, chief chemist of the United States Department of Agriculture, states that "these lands are new to agriculture, and superior to any other

soil in their capabilities for heavy crops." He also says further: "In conclusion, it may be said that the crops that can be grown upon the sands and muck soils of the Southern Florida peninsula include, first, all kinds of vegetables for early market; second, fruits of every description, including all the citrus fruits, and especially peaches, which grow in the greatest profusion and are ready for the market in May; third, the staple semi-tropic crops of sugarcane and rice; fourth, the cassava and corn, which grow upon the sand lands; and fifth, bananas, cocoanuts, etc., which are essentially tropical plants."

Messrs. Aug. Voelcker & Sons, agricultural chemists of London, refer to the high percentage of vegetable and nitrogenous matter and character of the new lands.

Professor D. Tackle, director of the Peat Experiment Station, Bremen, submits a careful analysis of the soil. Dr. Tackle says: "In respect to contents of potash, phosphoric acid and lime, the samples of soil from Florida are quite similar to those from northwestern Germany, overflowed with heather. It is distinguished, however, with a much higher content of nitrogen and by a much more perfect decomposition. Very likely the nitrogen is contained in a form more available to plant growth than in northwestern Germany peat lands. Undoubtedly the soil as represented by the samples will become very productive."

#### APPROVED BY SPRECKLES.

Mr. Claus Spreckles, probably the greatest authority on sugar production in the world, pays a high compliment to the richness and value of muck lands for the production of sugar:

"Philadelphia, Pa., March 22, 1890.—To Mr. Hamilton Disston: Dear Sir—In answer to yours of the 20th instant, in which you ask my opinion regarding Florida as a sugar-producing State, I take pleasure in saying that, during my recent trip to inspect your sugar operations, my surprise was great at finding such a country for the growth of sugarcane. The soil is as rich as any that I have ever seen, and, with proper cultivation, the yield should be equal to that of any other country on the face of the globe.

I congratulate you upon the bright prospect for the future of the sugar business in the State of Florida.

Yours truly,  
CLAUS SPRECKELS."

### THE DRAINING OF THE EVERGLADES.

There are great agricultural possibilities in the Florida Everglades. Though they are yet merely an expansive waste of swamp and lake and jungle, I venture to predict that they will be the location of hundreds of fertile farms within ten years, and will by degrees develop into one of the most productive tracts of land in the world. The barrier to the utilization of the Everglades has been, of course, the water which covers the greatest part of them to a depth of from one to six feet. But it has been found entirely practicable to drain off the water. Work to this end has already been begun, and is being pushed rapidly. When it is completed a tract of land one hundred and sixty miles long and sixty wide will have been opened to civilization. The size of this region is not as important as the remarkable productivity of the soil. The latter is not only absolutely virgin, but has been fertilized by animal and vegetable life through many centuries. I am confident that its crops will lift Florida to a place among the leading agricultural states.

The project of draining the Everglades attracted the attention of Henry B. Plant in the early nineties, but he was by no means sure that the scheme was feasible, so I, acting under his direction, undertook an expedition through the region. Despite its proximity to centers of population, it was then for the first time thoroughly explored by white men. Ours was virtually a voyage of discovery. We paddled our light boats on lakes and camped on islands that I have good reason to believe, had never before been visited by any human being but Seminole Indians, and by these rarely. We underwent so many hardships that some of our party were compelled to turn back, but our efforts were not in vain, for we ascertained the important fact that the Everglades, along the whole one hundred and sixty miles of the eastern side, are rimmed by a rock ledge. We furthermore learned that all of the lakes are several feet above sea level, and we decided that

there was nothing whatever to prevent the water of the lakes from floating into the ocean and leaving the land drained if vents could be made in this long ledge of rock. The chief question before us pertained to the practicability of cutting through the ledge in various places, and dredging out outlets into the Atlantic, which is not more than two or three miles away at numerous points.

Experiment proved that this work would present no great difficulties. It was merely a matter of a great deal of digging. Henry M. Flagler took up the project, and it is being carried out by his lieutenants. We are not only making artificial outlets through the rock but are also, by ditching and dredging, turning large bodies of water into rivers and creeks which flow to the ocean. The work has progressed far enough to enable me to predict confidently the opening in Florida, within a very few years, of a great tract of land of almost unprecedented fertility.—J. E. Ingraham, in Success.

Prof. H. W. Whiley, Chief Chemist, U. S. Agricultural Department, says (in the published report of the Secretary of Agriculture for 1891): "In regard to the depth of the soil, it runs most curving at the edges of the sand, to from fifteen to sixteen feet. \* \* \* \* \* It may be said then, with confidence, that in the region of Lake Okeechobee the land which may be recovered for sugar-making purposes has all the advantages of the climate of Cuba. The manufacture of sugar from the cane of this region may be postponed with perfect safety until the beginning of February, and the months of February, March and April made of greatest activity in sugar manufacture."

I have been in correspondence with the largest builders of dredges adapted for the work necessary to be done in the drainage of the region around Lake Okeechobee, and find that with the use of four dredges, efficiently equipped, the cut 200 feet wide and 15 feet deep, from Lake Okeechobee to St. Lucie river, a distance of twenty-four miles, can be cut in 18 months, at a cost of approximately \$250,000.00, basing the cost at the figures made in the report of Col. J. M. Kraemer previously cited, and upon a personal knowledge of the character and quantity of work to be done, and these dredges could be at work in six months after being contracted for.

By the opening of this canal, as suggested, and further deepening the waterways connected with the Caloosahatchee river, a continuous waterway for freight traffic would be opened up from Ft. Myers on the west, to the Indian river on the east, and upon the completion of the Florida East Coast Canal direct to Jacksonville, where connection with steamship lines to Northern ports could be had.

This canal by lowering the water of Lake Okeechobee not more than three or four feet, to be controlled by proper locks, would drain a vast acreage of the most fertile land in the world, opening up cultivation in the territory immediately surrounding Lake Okeechobee, a larger acreage of cultivable land than is now under cultivation in the whole State of Florida, and with the drainage extended through the Everglades to the South, ultimately about 6,000,000 acres of the finest land in the country would be rendered cultivable—an area capable of producing the entire tonnage of cane sugar used in this country, a crop which alone would be of untold value to the State.

The vital importance of the questions and the best interests involved, together with the array of legal talent employed by the railroad and canal companies, claimants, under the alleged land grants, against the Trustees made it necessary that the Trustees employ able counsel to represent the great trusts imposed upon them, and they have employed Col. R. W. Williams of Tallahassee, Messrs. Bryan & Bryan, and Hon. W. S. Jennings of Jacksonville, and Hon. W. B. Farley of Marinanna.

I became firmly convinced many months ago that the lands belong to the Internal Improvement Fund for the purposes of drainage and reclamation and have so publicly expressed these views throughout the State of Florida. Upon more thorough investigation, having been more fully advised and having assumed the responsibility of the trusteeship, I am more and more impressed with the correctness of my former views, and I am more fully determined to exert every proper effort to discharge the duties devolving upon me in part as Trustee, and solely as Governor, to the end that the remainder of this fund now available may be used for the purposes and trusts expressed in the laws heretofore referred to. It cannot be said that the Trustees have in the past recognized the right of the railroads, under legislative land grants, as being superior to the duties of the Trustees to drain, when drainage contracts to

convey the title to large areas of the land have from time to time been made by the Trustees since the grants were made to the railroads and claimed to have been earned by them.

In 1898 when the railroads were claiming more lands than had been patented, and when the Governor, then one of the Trustees, had been a Trustee from 1881 to 1885 as Governor, and from 1890 to 1897 Trustee as Comptroller, and from 1897 Trustee as Governor, and when the Attorney-General and the Commissioner of Agriculture, two of the Trustees, had been such since 1889, and when the regularly retained legal adviser of the Trustees, was one of the Trustees from 1877 to 1885, during which period nearly all of the land grants were made and claimed to have been earned, contract for drainage was made by the Trustees which provided for a conveyance of about 800,000 acres of land then claimed by the railroads as having been granted to and earned by them, page 437, Minutes of the Trustees, 1898, the validity of that contract was never seriously questioned.

The acts of the Trustees in the past are not inconsistent with the recognition of their primary duties to carry out the trusts, as expressed in the Internal Improvement Act, to drain and reclaim the swamp and overflowed lands in this State, as therein provided for. There being an estimated area of 6,000,000 acres of swamp and overflowed lands unfit for cultivation and available in the territory of the Kissimmee Valley, Lake Okeechobee and the Everglades—3,000,000 acres of which territory have heretofore been deeded by the Trustees of the Internal Improvement Fund to the various railroad and canal corporations, which 3,000,000 acres would be greatly benefited by the successful drainage and reclamation of the 3,000,000 acres now vested in the Trustees and under their control and management, it has become necessary in considering the plan of drainage and reclamation of the Everglades to consider the benefits of this adjacent territory; and it is found that a constitutional amendment is necessary to enable the Trustees to require a proper contribution on the part of the owners of the lands heretofore deeded, in proportion to benefits that the land will derive by means of such drainage and reclamation. I, therefore, recommend that a Constitutional amendment be proposed, creating a drainage district, embracing the Everglades, and the ad-

jacent swamp and overflowed lands, including the Kissimmee Valley, and right to establish other drainage districts, authorizing a drainage commission to levy an acreage tax for a reasonable amount, to be levied and collected annually, to be used in the drainage and reclamation of said territory; and in the aid of the great purposes and the trusts accepted by the State of Florida in its acceptance of the magnificent domain, patented to her by the United States government.

As a difference of opinion exists as to the necessity for such a constitutional amendment, and as it is the purpose of the Trustees to proceed with the drainage and reclamation of the 3,000,000 acres now under their control, as speedily as possible, I also recommend in addition thereto, that a statute authorizing the creation of drainage districts by the Trustees, and the assessment of benefits and damages be enacted.

Respectfully submitted,

N. B. BROWARD,  
Governor.