







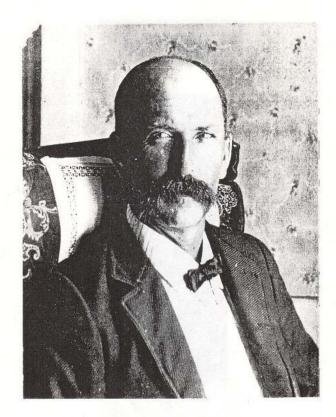
Jacksonville History 1885-1913

CLEVE POWELL
RETIRED COE

Member A.S.C.E.

Fla. Eng. Lic. 62

Historical Records Jacksonville District



F. W. BRUCE

1885 - 1913

1856 –New Hampshire – 1932 Arlington Fl.











Civil war brought
Bruce family to St.
Augustine, Fla.



BRUCE & HOYT,

CARPENTERS & BUILDERS,

St. Louis Avenue,

ST. AUGUSTINE, - FLORIDA.

ESTIMATES FURNISHED.

Timothy Bruce - Father

F. W. (Fredrick William) Bruce - Son F. W. BRUCE, CIVIL ENGINEER.

Town Surveying and Railroad Work a Specialty .-

OFFICE:

ROOM 4, RAINEY BUILDING. St. Augustine, Florida.

P. O. BOX 134.

ST. AUGUSTINE DIRECTORY,

CONTAINING A

GENERAL DIRECTORY OF THE CITIZENS, THE CHURCHES, SCHOOLS, SOCIETIES, STREETS,

BUSINESS DIRECTORY.



TO WHICH IS ADDRED

A CONDENSED HISTORY OF ST. AUGUSTINE,

GIVING A GRAPHIC DESCRIPTION OF THE PLACES OF INTEREST IN AND AROUT THE ANCIENT CITY,

CONTAINING

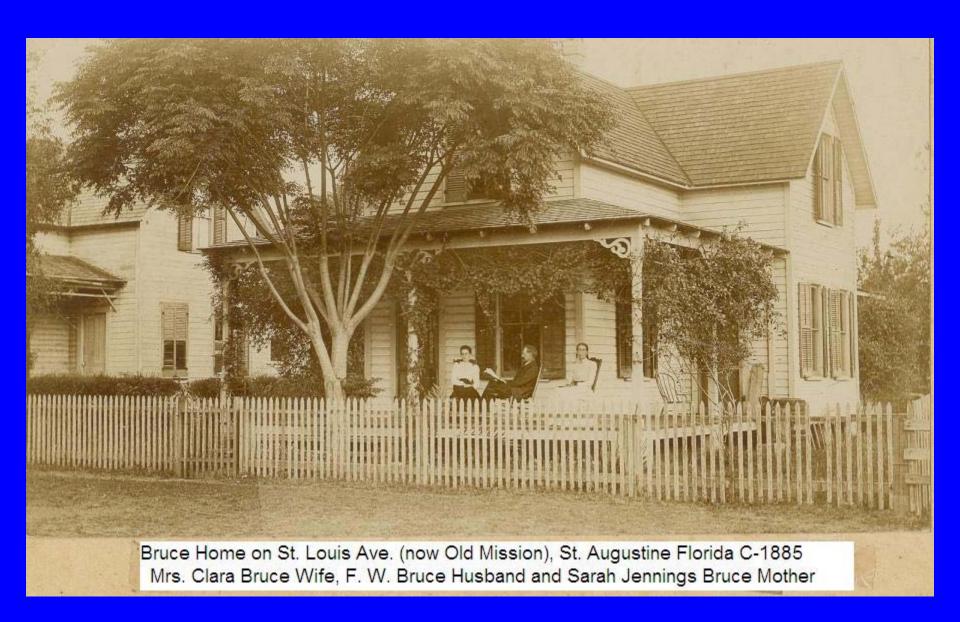
Filty Engravings, a Map of St. Augustine,

AND MUCH MATTER OF INTEREST TO THE TOURIST.

The St. Augustine Historical Society

CHAPIN & CO., PUBLISHERS, Messum Bennero, ST AUGUSTINE, FLA.

1885-86 DEC.#6959



St. Augustine Fla., Feb. 12th, 1885

First letter written by

F. W. Bruce as C.O.E. employee

Capt. Wm. T. Rossell
Corps of Engineers U.S.A.
Jacksonville, Fla.

Sir,

I have the honor to acknowledge the reciet of your instructions of the 9thinst. last night.

In reporting on condition of grounds would state that there is considerable standing water at present with a deposit of soft mud in all depressions; in lower portions of the reservation.

I would also state that there are several piles of rubbish on the grounds which show signs of recent additions, according to your instructions will endeavor to learn who the depositors are and notify them to desist.

In reporting on fence - would say - that the fence is built on the west - north - and east sides, with the post set on south side of reservation, and a small amount of painting done.

I have heard some dissatisfaction expressed in relation to fence but nothing that I think will lead to trouble.

With your permission I would withdraw my former estimate of leveling and draining (as I think I now understand your object better) and make an entirely different estimate, which will be forwarded soon as possible.

Hoping this report is sufficiently complete, I hereby submit it.

Your obb. servant f. W. Bruce (signed as

Fort Keeper

ltr. of 2-20-

1885)

copied from pages 2 and 3 of the records of F. W. Bruce by

Surveying Ft. Marion, St. Augustine, Fla. For restoration c-1885



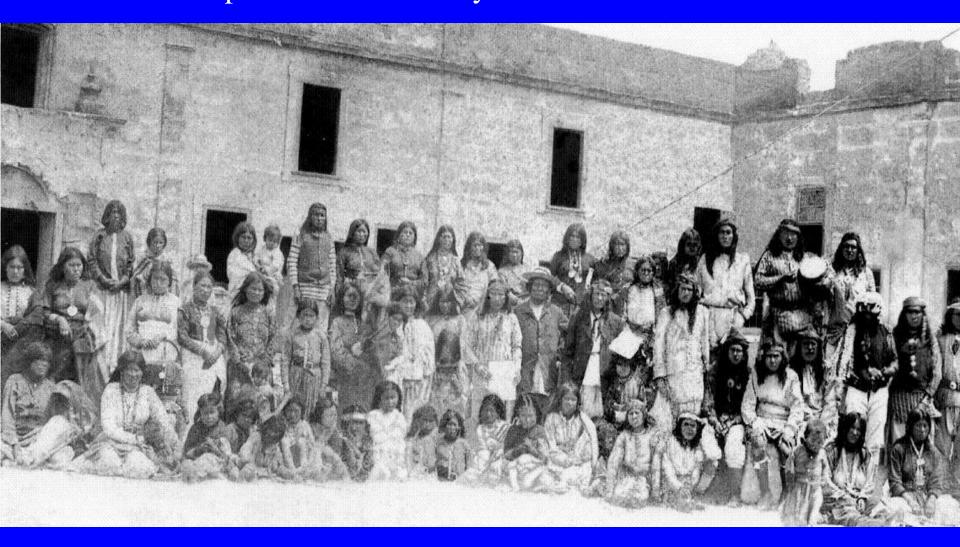
View of Ft. Marion, St. Augustine, Fla. C-1885 (road now A1A below)



Ft. Marion -View of arch successfully restored by Bruce and ramp which he later modified into stairway (1st. congressional funds for Natl. Mon.)



Geronimo's Apache tribe in courtyard at Ft. Marion after surrender



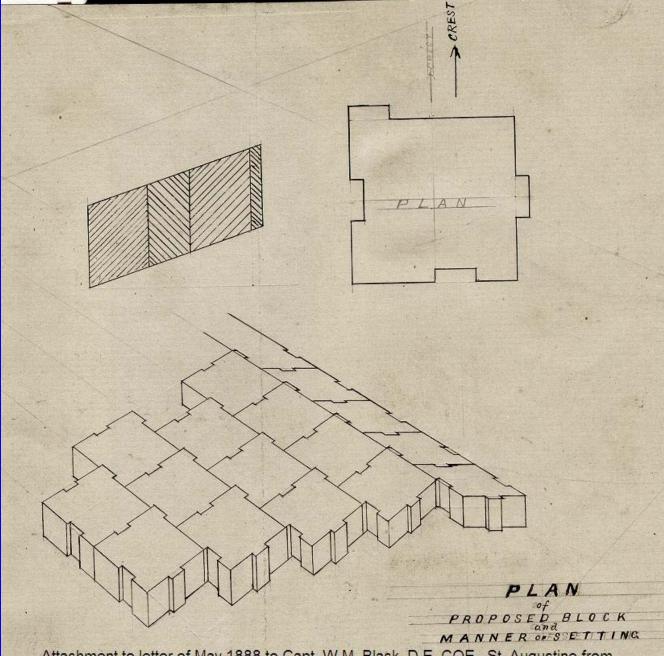
They were held in St. Augustine from April of 1886 until May of 1887. The tribal leaders are standing by the one with the paper (middle).

Geronimo and F. W. Bruce at Ft. Marion, St. Augustine C-1886

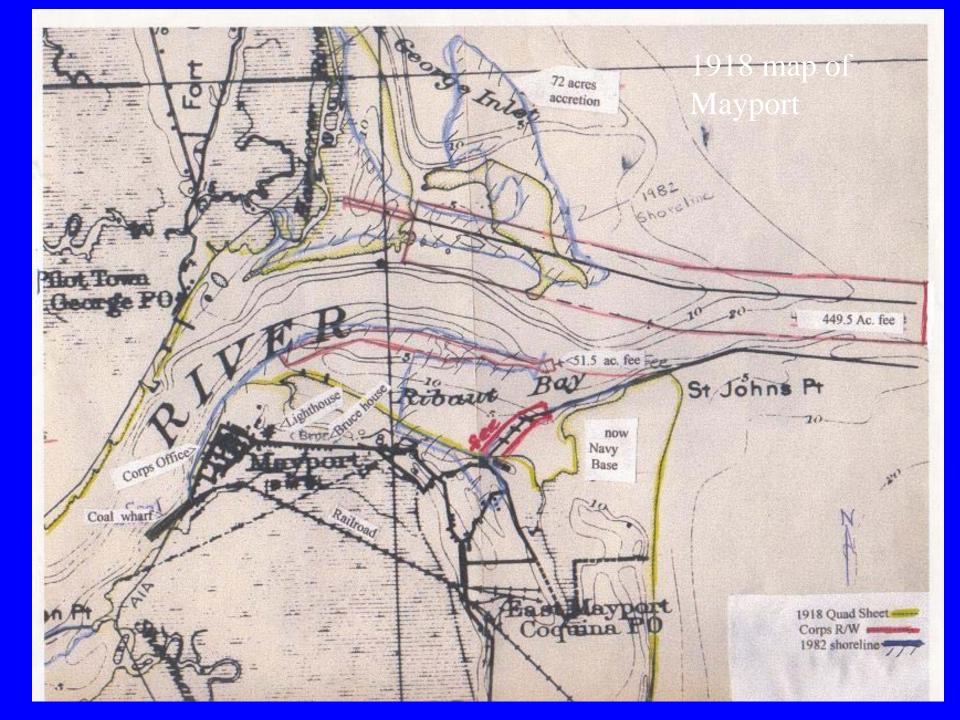


JA P. ENGINEER POPULE Mayport Fla May 1888 Capt. W. M. Black Coyes of Engineers U.S.a. St. Augustine Ila. I have the honor to report upon the experimental concrete work for capping the jetties at the month of the It. John's River which I was detailed specially to superintend, Willhough 300 barrels of Rosendale cement were received on the 29th of Dreember, the actual work of making concrete was not begun until the secend day of February but considerable labor was employed previous to that date making moulds, building shed and innumerable other items incidental to the commencement of such a work, The moulds for blocks were made of 134 in the pine. with reputed corners secured by rods, and in size were 2'1" by 4' 2" 1'6" for regular sized 2 lope and with alternate and and side skew to conform to a slope of I on 3 giving The one st blocks were 2'by 4-2" by 1-6", these, with the necessary half blocks to make even work in the bond

One of many letters written by F.W. Bruce after transfer to Mayport, Florida in 1887. He was placed in charge of Jetty construction which had begun in 1880 c-1889



Attachment to letter of May 1888 to Capt. W.M. Black, D.E. COE . St. Augustine from F.W. Bruce Supt. at Mayport for precast blocks (on site) to cap jetty





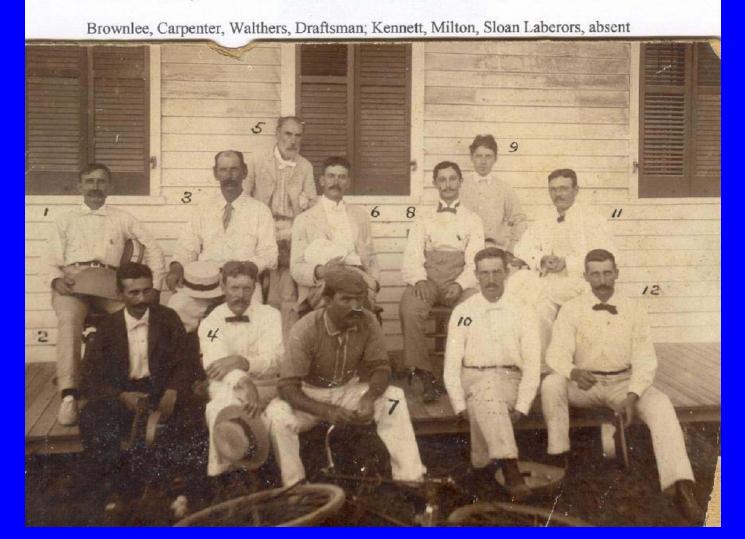
US ENGINEER OFFICE, MAYPORT C-1900 (NOW MAYPORT FERRY OFFICE 04)

1. Sperry, Overseer: 2. Brown, Timekeeper: 3. Bruce, Asst. Engr.: 4. Brown, Inspector:

5. Jones, Chief Clerk: 6. Lt. McKinstry, 1st. Lt. of Engineers Office in Charge

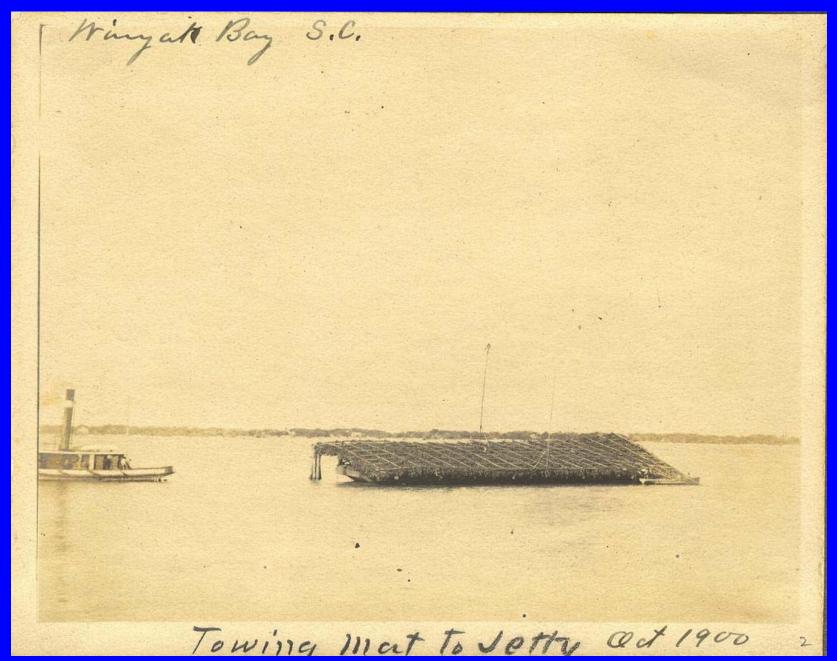
7 Enslou, Master Laberor: 8. Straus, Stenographer and Typewriter, 9. Kettle, Clerk

10. Braxton, Inspector: 11. St. Coe, 1st. Artillery Reg. Army: Reybold, Master Machinest:

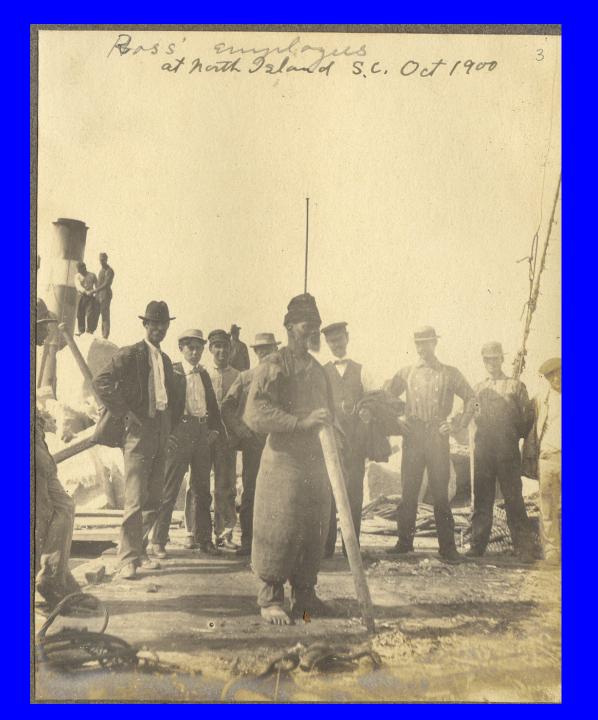




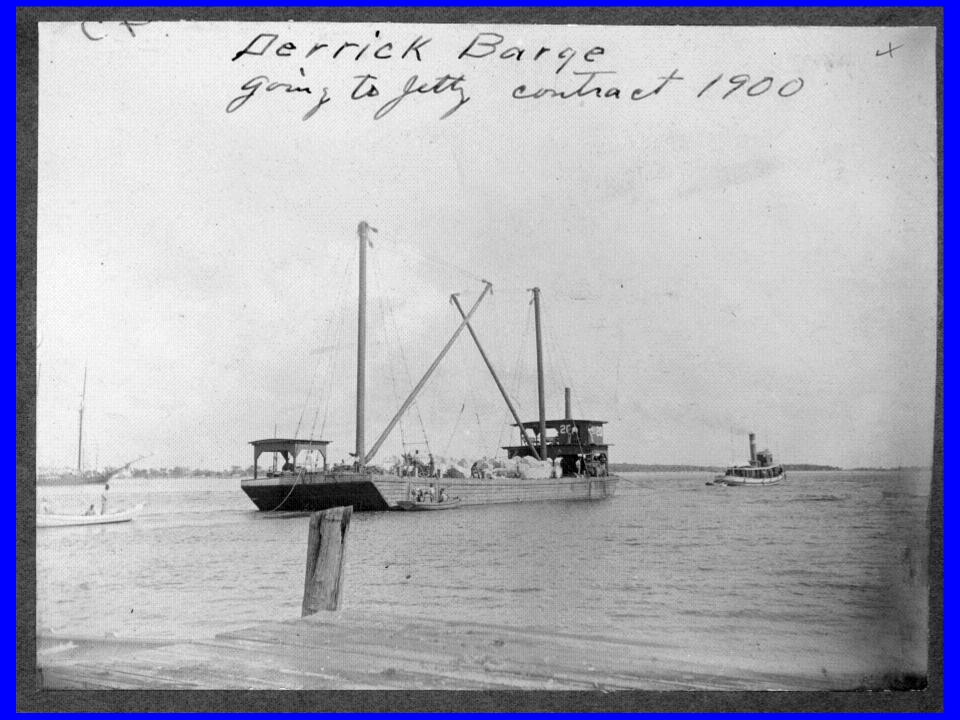




Similar to mats used at Mayport to stabilize stone on ocean floor







Stone was So. Car. granite









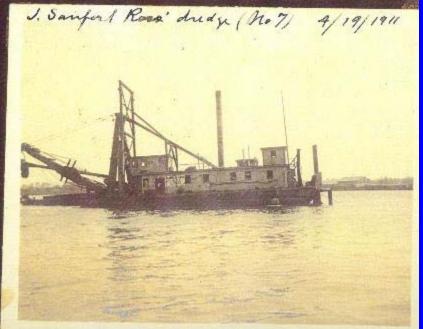












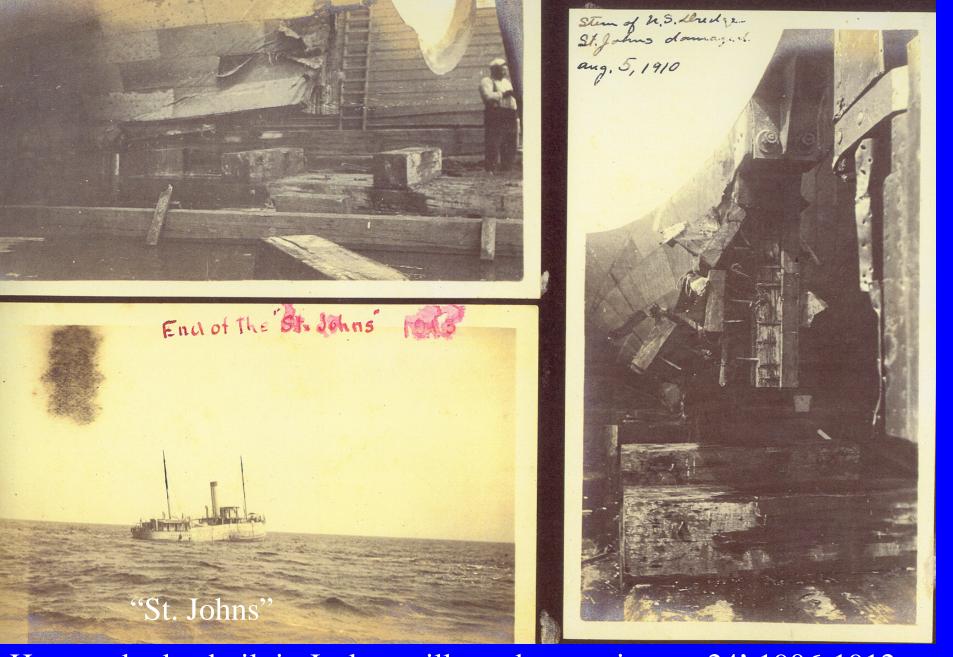
"Savannah" dredged bar in 20s



Sea going hopper dredge worked on Jacksonville Harbor 1908-1921 Dredging the 24' project and the 30' project over the bar



Dredged St. Johns River bar and river channel 1901-1903



Hopper dredge built in Jacksonville to deepen river to 24' 1906-1912 Wrecked on jetty a total loss

One of several letters written by F. W. Bruce while on detail to Key West c-1898-1899 during Spanish American war to modify Ft. **Taylor**

Personal.

Dear Captain:

I have the honor to acknowledge receipt today of letter dated August 10th. and marked "confidential", on losing a copy of the report on barracks site signed by Captain Harlow as President. This will receive the earliest possible attention.

I would report that C. M. Brown is sick and confined to his bed with Dengue fever, and I see no way but that I will have to inspect the jetty work until his recovery, as there is no one here that has ever had any experience whatever on similar work.

Yours truly:

(signed F. W. Bruce)

Captain C. H. McKinstry

Corps of Engineers, U. S. A.

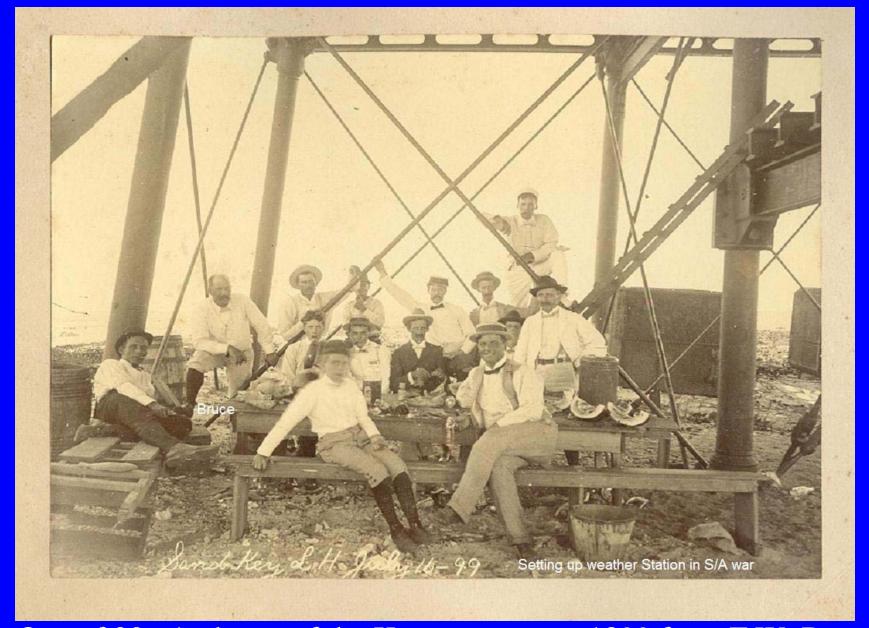
St. Augustine, Florida

(2nd. Letter)

Key West, Florida, August 19, 1899

Confidential





One of 20 +/- photos of the Key west area c-1899 from F.W. Bruce

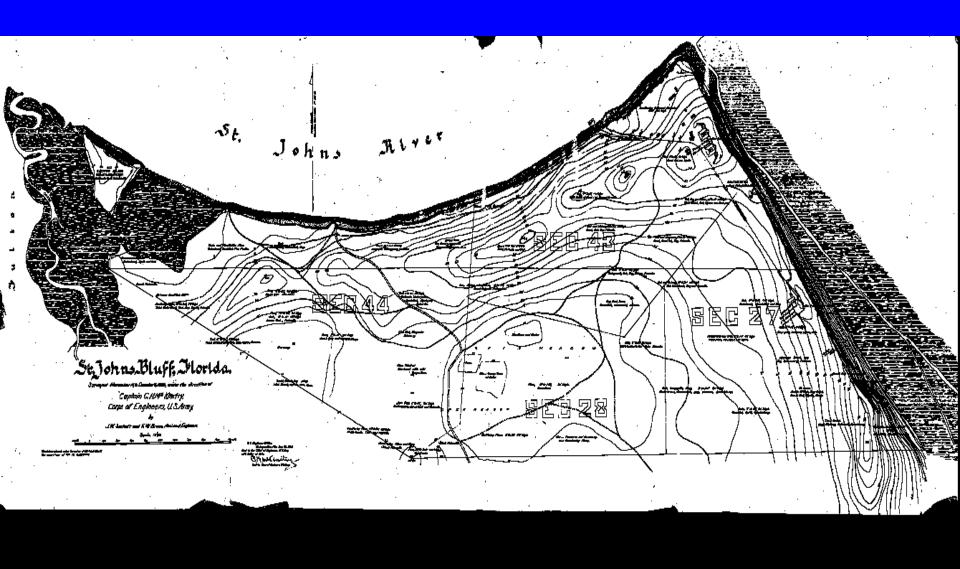
Copies in placed in Florida archives in 2006



St. Johns Bluff c-1900 shows buildings on bluff for Spanish/American War reservation. Also shows erosion of bank and rip rap stone at base

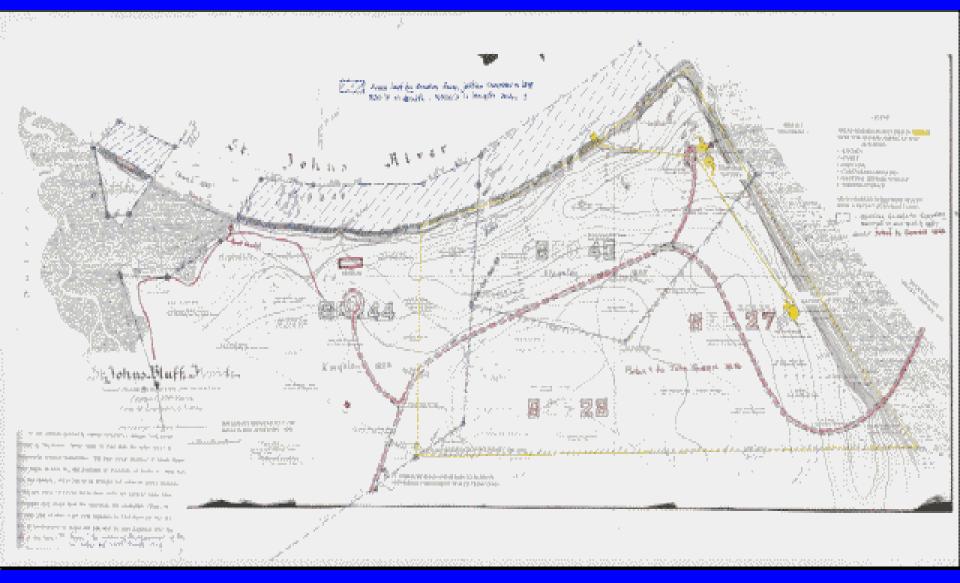


St. Johns Bluff c-1900 shows dock and cut in bank for construction of Spanish/American War Batteries. Possible mine field terminal on right



1899 Survey of S/A war reservation shows loss of 300' of shore when compared to 1830 GLO survey due to erosion loss of Ft. Caroline

Old Arlington Inc, Historic Preservation



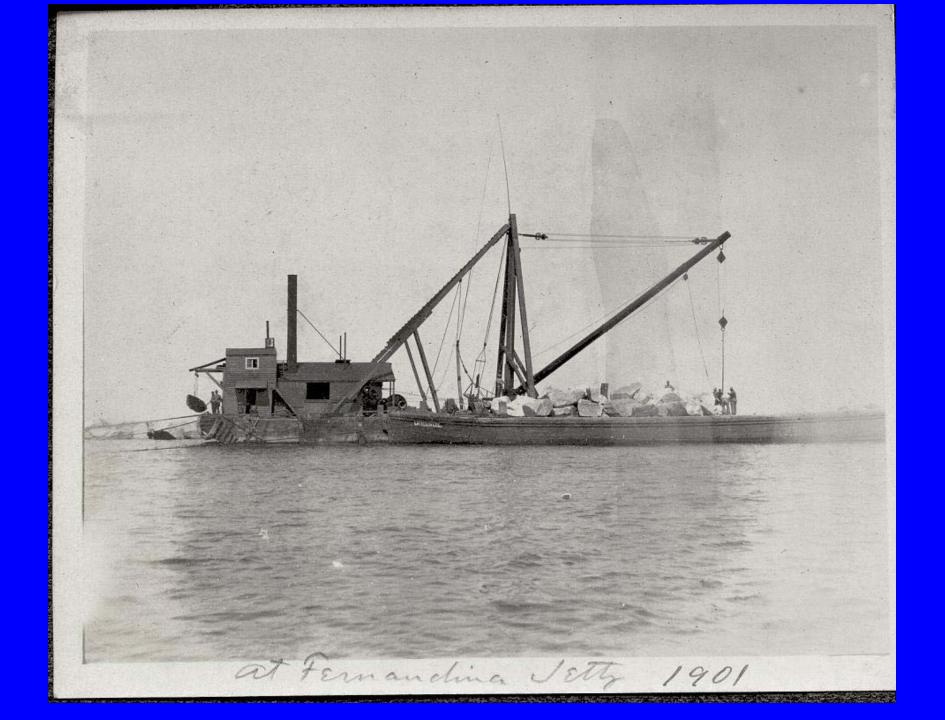
http://www.oldarlington.org/home.php



AR-4 *** SPANISH-AMERICAN WAR GUN EMPLACEMENTS

ates to abandon their batteries on St. Jo







Station on Jetty 1901 F. W. Bruce Fernandina







Irony Strikes Twice - Double Shipwreck Site

Annemarie van Hemmen, May 2005 (Lighthouse Maritime Program)

The *Florida* and the *Isis* shipwrecked at the beginning of the last century, a fascinating period in Florida's maritime history. During this era technological advancements greatly improved safety and efficiency at sea. The Spanish-American War followed by World War I raised concern about coastal defense. Away from the coast, travel over land through Florida's forests and marshes had always been cumbersome. Waterborne transportation seemed the answer. As steamships became an important means of transportation in the mid-1800s, the U.S. Army Corps of Engineers labored to make Florida's waterways navigable and investigated options to connect them. Dredges were employed to deepen channels, and snagboats were used to clear obstructions. In the 1890s, an Assistant Corps Engineer in St. Augustine, John Warren Sackett, applied his technical competence and inquisitive mind to finding a solution for the water hyacinth invasion.

At the turn of the 20th Century it was clear a more modern and powerful dredge-snagboat combination was needed to clear Florida's inland waterways. The River & Harbor Act of 1899 appropriated money to build the dredge *Florida* for the U.S. Army Corps of Engineers Florida District Office. Sackett signed over his dredging equipment patent to the Corps of Engineers after the Spanish-American War. He participated in the vessel's planning and later supervised the construction. A local Jacksonville shipbuilder, Merrill-Stevens, obtained the contract to build the *Florida* and delivered the dredge in 1905. The *Florida* had a successful run until she wrecked in 1918. By World War I the Corps' focus was naturally once more on coastal defense. Transportation had also shifted from waterways to railways. Maritime transportation was still important but heavy lobbying by railroad barons made waterborne transportation lose ground. Even so, after the *Florida* tragedy, the question was raised if an adequate Florida East Coast Canal would have prevented the loss of valuable men and a government vessel much needed during the country's difficult times.

Shipwreck #1 (#2 USC&GS Survey ship "Isis" hit wreck of the Florida in locating it. 1920

In the summer of 1918 the Florida dredged the East Coast Canal, now known as the Intracoastal Waterway, in the vicinity of St. Lucie. The state of Florida had suffered a long dry spell, and ironically low water levels prevented the dredge Florida from taking the inland waterway in spite of previous dredging. Captain Sharp and now District Engineer Sackett believed the Florida could make the Atlantic outside passage safely with a few adaptations. However, before reaching the Florida's next job destination on the St. Johns River, the ship ran into a fierce northeaster.



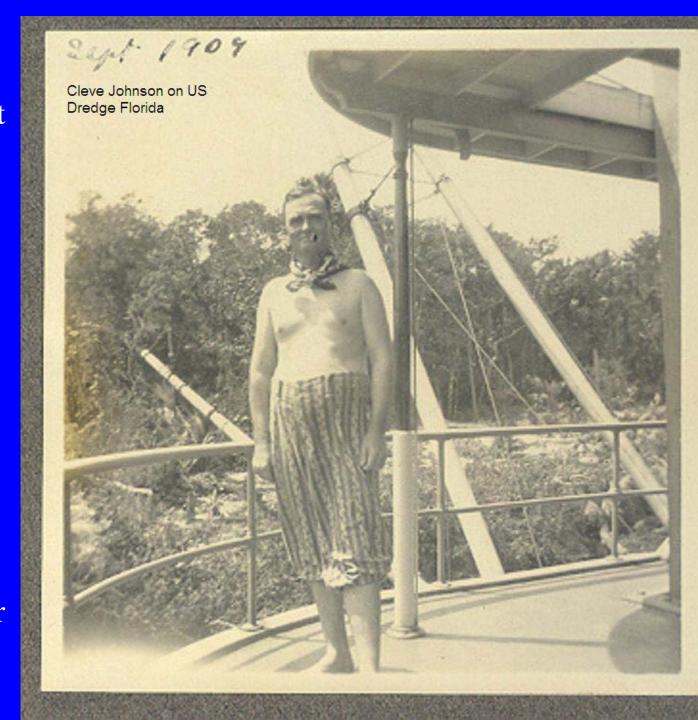
Courtesy of C. Powell

After battling severe weather for over a day the vessel sank July 3rd off Crescent Beach, just South of St. Augustine. Sackett and two crew members drowned. Many people assisted with the search and salvage efforts. Numerous *Florida* items washed ashore. The bodies were never found, and the three men were declared lost at sea. After two weeks local newspapers announced that bids would probably be taken for the salvage job of the *Florida*. No further information about the salvage operations is currently known.





Cleve Johnson went to work for COE in Mayport in 1901 married F. W. Bruce's daughter in 1904. Quit COE to help F. W. build Jax. Municipal docks in 1913 began dredging co. in 1929 and built some of the levees at Lake Okeechobee and for the Mississippi River. Fl. CE #126





First 5 master to Tampa 12. Nov. 1910



State dredze in Calorahetcher River May 22, 1910



Merrill shipyard on south bank built under direction of F. W. Bruce

C-1917-20





Tom Jaques, Cleveland Johnson, Joan Jaques - May,1955 Dedication- Bruce Johnson, Cleve Powell, Mary J Powell

F. W. Bruce Park in Arlington, Florida



Cleve Powell And family