

Bassett, Victor H.: The Early History of Vaccination Against  
Smallpox in the Southeastern Part of the U.S.  
JFMA 21:343-348, Feb., 1935

Discussion of vaccination in the South, pointing  
out that it was introduced in Savannah soon after  
its discovery. No mention of its use in Florida.

Also see JFMA 22:363-364, Feb., 1936, for a  
correction and addendum by Bassett.

Still no mention of Florida

Fevers in Florida

Ref: See translation of Castelnau Accounts, Professor Seymour,

Florida Historical Quarterly, XXVI (#3), 220-222.

From other pages: JAMA, November 15, 1965, Volume 194, page 98 (adv)

"Malaria was not indigenous to the new world, but was brought in by the conquerors and colonisers. The first explorers and pioneers who entered the Mississippi found no Malaria. In Illinois, for instance, there was almost no Malaria from the time of Gaoliet and LaSalle in the 1670's through the whole period of the French settlement up to the 1760's. As more people came into the country, however, they concentrated in the bottom lands where mosquitos had banded. Some earlier settlers introduced the parasites in their blood, and the mosquitos bit them and then bit other people, and the Malaria rate spiraled upward and then sky rocketed. About 1800 Illinois had the reputation of being extremely unhealthy."

This may be applicable to Florida - Search the Spanish documents with this in mind.

Smallpox Introduced into America

1520

Ref: Guerra: The Influence of Disease on Race,  
Logistics and Colonization in the Antilles, page 30

Smallpox was said to have been introduced into America  
"by a negro boy among the troupes of Narvaez which joined  
Hernan Cortez (1485-1547) for the conquest of Mexico in  
1520."

No Malaria in Florida

REF: Ashburn: Ranks of Death, page 117

"The account of the second expedition, which settled on the River of May, mentions, in addition to famine, many dangerous diseases due to putrefaction in the air from decomposing fish, so that most of the men felt sick, but they all recovered. Later, Laudonniere developed a continued fever that lasted for weeks, suggestive of Thyphoid. There is nothing to suggest Malaria among either the Hugunots or the Spanish."

*Epidemic File*

The garrisons of Florida are well although these past days that of Santa Elena was nearly devoid of health with what seemed an epidemic of pestilencia (pestilence), which reduced that garrison to only eight men who performed all guard and lookout duty, and Our Lord was pleased that the sufficiency of medicines, physician, and comforts lifted the siege, and after the death of three soldiers, the others began to convalesce (f. 1).

Ref: Stetson Collection: AGI 54-5-14/10, Treasurer Juan de Cebadilla of Florida to the crown, Havana, January 22, 1582, 14 ff.

Also see reference to this in letter: A Sefano to J. Polanco Feb 8, 1572 in Uyarre, Hist. Records & Studies US Cath. Hist. Soc 1935. Indexed on data bank under "Epidemic, St. Elena, 1571"  
Photocopy in Pre-Seminole Indian File

Moll: Aesculapius in Latin America, P. 529

The accepted date for the introduction of Chincona bark (quinine) into Europe from the new world. Taken from Moll's chronologic tables.

Plague ?

July 14, 1650

Ref: Governor Salazar to Sect., Stetson Coll. 54-5-10/68

(Copied ~~for~~ from notes compiled by Doris Wiles and residing  
in the St. Augustine Historical ~~Library~~ Society Library)

No detail supplied in Wiles' notes



Epidemics, St. Augustine

1650  
July 14

Because of the events which the peste (plague) has caused in this garrison, it has been necessary to report all of them to His Majesty, whom God may keep (f. 1).

Ref: Stetsen Collections: AGI 54-5-10/68, Governor Benito Ruiz de Salazar of Florida to the secretary of the Council of the Indies, Florida, July 14, 1650, 3 ff.

*Editorial: Med. Man, etc. St. Augustine*  
*See Manuscript File under "S"* p. 115

"When Diego de Robelleo, the first really able and conscientious Governor at St. Augustine for more than 40 years, took up his duties in 1655, the town presented a gloomy picture...The inhabitants and many of the indians had suffered from smallpox for ten months and could not work. All the negro slaves had died. The people were nearly desparate because of hunger."

Smallpox, St. Augustine

1655

October 24

Today I find it impossible to have the Indians cut and extract timber from the woods to repair the fort, because of the heavy mortality that there has been in past pestes (plagues) and in the present one of viruelas (smallpox), which has scourged the land for ten months, and the number of those who have died has been large (f. 1).

Reference: Stetson Collection, Collection 682: AGI 58-2-2/2, Governor Diego de Rebolledo of Florida to the crown, St. Augustine, October 24, 1655, 11 ff.

Cash: The Story of Florida, p.695

Text mentions a letter from Diego Robelleo in St. Augustine dated October 18th, 1657 stating that there were few Indians left in the provinces of Guale and Timucua on account of the ravages of Smallpox. Cash believes the Spainards brought Smallpox to the Indians and that they were "disseminated" by it.

## Alis Among the Indians

Cash: The Story of Florida, p.696

Cash states "It is known that there was syphilis among the Indians of Florida, and it can hardly be doubted that this disease was communicated to some other Spanish settlers."

p.698: "The worst infection of the native Indians was syphilis, to which they had become so much accustomed before the white man came that apparently they did not suffer such ravages from it as did the Europeans whom they infected."

Measles, St. Augustine

1659  
November 1

After I took possession of the governership [on February 20, 1659], the illnesses resulting from very contagious measles have been so many that more than 10,000 Indians and many from the garrison have died, from which the province has been left with very few people (f. 2).

Ref: Stetson Collection: AGI 58-2-2/A, Governor Alonso de Aranguiz y Cotes of Florida to the crown, St. Augustine, November 1, 1659, 7 ff.

Measles in Florida

Nov. 1, 1659

Ref: Gov. Salazar to Secretary, Stetson Coll. ~~file~~ 58-2- 2/4  
(copied from notes of Doris C. Wiles, former Secretary  
of the St. Augustine Historical Society)(these notes are  
in the files of the SAHS)

Killed 10 M Indians and some soldiers

Smallpox at St. Augustine=

1662

*Editorial: Med. Man, etc., St. Augustine  
See Manuscript file under "S"*

p. 116

A report to the Council of the Indies in 1662 noted that 10,000 indians and many soldiers of the garrison at St. Augustine had died of the plague (smallpox).



## Morden: Geography Rectified, 1688

"The air of Florida and Carolina is so temperate that men live to the age of 250 years while the children of five generations are all alive at the same time. The soil is very fertile, full of fruit, trees and the towns are the best of people in all America. . . the inland country is possessed by the savages, under the jurisdiction of Paroustis, who <sup>are</sup> the lords. They are of olive color and of great stature, well proportioned, their hair black and long, the women of good shape and handsome, they adore the sun, and the moon, and they will make war with one another, nevertheless the Europeans cannot master them.

## Diseases of Slavery

REF: Ashburn: Ranks of Death, page 194

"I think that Leprosy, like Malaria, yellow fever, small pox and several other diseases, should be charged to the account of Negroe slavery." Ashburn makes a great point that Negroe slavery brought diseases into the new world which overcame the Indian population and thus permitted the white man who was more resistant to these diseases to conquer the new world more easily. The aboved named are the principle diseases he felt were introduced by Negroe slavery. He points out that the Negroes were resistant to these diseases because they had had long contact with them in Africa.

*Epidemic File*

A general epidemic of viruelas (smallpox) raged in St. Augustine for more than four consecutive months (f. 14).

Ref: Stetsen Collection: AGI 58-1-31/32, Governor Francisco del Moral Sánchez of Florida to the crown, St. Augustine, March 1, 1735, 55 ff.

Smallpox in St. Augustine

1732

Ref: Gov. \_\_\_\_\_ Sanbhos to Crown 55 pp; AGN 58-1-31/32  
Stetson Coll. 3/1/1735

No detail given in Doris Wiles' note.

Smallpox

1740

November 9

On November 9, I despatched 4 Indian messengers over land to Apalache. I was worried because for a long time I had no news from there. The messengers returned in 30 days (f. 316). The Indian, Juan Ignacio, died on the way there from viruelas (smallpox), and the disease was causing much devastation among the Uchee Indians (f. 317).

Ref: East Florida Papers, Series 37, letter No. 236:  
Governor Manuel de Montiano of Florida to Governor Juan Francisco de Güemes y Horcasitas of Habana, Florida,  
December 20, 1740, ff 315-317.

Guerra: Medical Colonization of the New World, p. 150

"In Spanish America the advantage of using the inoculation of human smallpox as a preventive method in the disease was known lately in the 18th century, and immediately approved by the Protomedicate and therefore the whole medical profession. The importance of a high policy in medical practice directed by professional bodies became apparent in this case of the smallpox."

Moll: Aesculapius in Latin America, p. 533

Reports of contagious diseases required by Spain from all her colonies, 1752.

Taken from Moll's tables.

Smallpox, St. Augustine

1758  
August 20

An epidemic of viruelas (smallpox) was beginning to subside, and the numerous victims of it were being benefitted by an incredible sufficiency, never seen before, in the supply of fresh meat (f. 5).

Ref: Statson Collection: AGI 86-7-21/82-86, Secretary of State for the Indies to the governor of Florida, Madrid, April 19-21, 1759, 10 ff.



Smallpox Epidemic, St. Augustine

1758

Ref: Calendar card in St. Augustine Historical Society Library  
dated April, 1759. (Copied from the notes of Doris Wiles  
which are in the above library)

No detail given in Wiles' note.

Smallpox at St. Augustine

1764-1774

Ref: Catherwood's Account/Explanation, W.O. 1/2  
(see typescript in file "British Period")

"Transports have at two different times come into this Harbour the Small Pox on Board; The infected Patients were sent over to the Lookout House on the Island St. Anastasia by Governor Grant's order, and Bedding furnished them were afterwards burned to prevent the Infection spreading, which might have been of fatal consequence not only to the Troops but to every Inhabitant of this Infant Colony."

Smallpox in Georgia

1764

Ref: The Georgia Gazette (Savannah), May 31, 1764,  
p. 3, Right column. (pencil legdgen in the upper  
right corner of the page carries the # 259)

Savannah, May 31: An Act to Prevent further spreading  
of Smallpox, etc. in Georgia...

This article covers 2 pages and I didn't take time to  
read it.

Possibly the smallpox spread to Florida that year.

*memorandum*

Malaria @ New Symna  
See Master file 1767

re: Malaria @ N. Symna

1767

**ELAVIL® HCl**  
*Amitriptyline HCl*

ELAVIL is a trademark of Merck & Co., Inc.

 **MERCK SHARP & DOHME** West Point, Pennsylvania  
Division of Merck & Co., Inc.

Malaria at New Smyrna

1768-1773

Ref: Siebert: Loyalists in E. Fla., Vol II, pp 326

"During Turnbull's absence the colony at New Smyrna had been broken up. Disease had carried off about nine hundred of the settlers by 1773, malaria spread by swarms of mosquitoes being the chief cause." Siebert doesn't give substantiation for the statement that it was malaria.

Editorial: West Fla., etc., p. 759 (See manuscript file under "W")

An epidemic of smallpox broke out in May 1769 in Pensacola. Provision was made for poor persons suffering from the disease to be taken to Rose Island and there to be given medicines and nursing care until their recovery. Also in June of that year the Assembly authorized a gift to the local hospital at Pensacola.

Disease Indigenous to Florida

REF: Jones: Climate and Diseases, pages 256-258

In these pages the author quotes Bernard Romans and other about the diseases incident to Florida life. This sounds very much like the material that appears in the address by Dr. H. E. Palmer.

*Epidemic File*

Cash: The Story of Florida, p. 697

Quotes Bernard Romans as stating in his A Natural and Civil History of Florida that fevers were most common from June to the middle of October. Cash points out that at that time Florida extended to the Mississippi River and into what is Alabama and Mississippi, therefore he wonders whether this information is applicable to Florida as we now know it.



Ref: Turnbull to Germain, 8th Dec., 1777; Sackville Manuscripts, America, 1755-1777, No. 100 (see photocopy and transcript in file "British Period")

Having been accused and tried by Tonyn at St. Augustine for his treatment of the settlers at New Smyrna, Turnbull writes the Sect. of State for the Colonies, Lord George Germain, pleading his case (15 manuscript pages). Among other things he states (pp 7-8) "The consequences of this strange and destructive Conduct was that these Peoples, having been accustomed for Years to a regular and wholesome Diet and to comfortable and dry Habitations with such (?) increase by Agriculture as contributed to their Health on being removed to St. Augustine, they became so sickly, that sixty five of them died in the last two Months, and from what I see of their Distress, Want and Misery, I think that a few Months more will bury the greatest Part of them, for as there were not any empty Houses in St. Augustine, they were obliged to lay under

Trees, and at the Sides of the Walls in the Rains of August & September, which diseased and dropsied them in such a Manner as (?) resulted in Death, a few of the young and robust excepted, whose Constitution has stood the Shock of the complicated Misery, and Wretchedness into which they were (?) debased; for their Want is ever so great, that above a hundred of the Women and Children went to the Governor's House some Days ago, and demanded Sustenance in the most (?) clamorous Manner for they think that they owe their Misery to him."

The above is my transcription of Turnbull's handwriting which is at times difficult to read. He often fails to form letters well and commonly runs words together. Words I am not sure of are underlined and preceded by (?). These words I have also underlined in the manuscript. Altho I have read this manuscript from beginning to end, this and the comment about the Settlers not being given the aid of a doctor or hospital are the only items related to medicine.

Aid denied the sick from New Smyrna

Aug.-Sept., 1777

Ref: Turnbull to Germain, 8th Dec., 1777; Sackville Manuscripts, America, 1755-1777, No. 100 (see photocopy and transcript in file "The British Period")

Having been accused and tried by Tonyn at St. Augustine for his treatment of the settlers at New Smyrna, Turnbull writes the Sect. of State for the Colonies, Lord George Germain, pleading his case (15 manuscript pages). On page 9 of the photocopy he states that Tonyn denied the sick who had abandoned New Smyrna and come to St. Augustine at Tonyn's enticement and without proper preparation for them at St. Augustine:

"But tho' I do not accuse Govn Tonyn of intentionally destroying these (?) Men, I blame him much for not using his (?) Endeavours to save their Lives; for not even the least (?) Modest Aid was given, tho' there is a Surgeon and four Mates on the Staff here with an Hospital and every necessary for the Sick."

(over)

The above is my transcription of Turnbull's handwriting which is at times difficult to read. He often fails to form letters well and commonly runs words together. Words I am not sure of are underlined and preceded by (?). These words I have also underlined in the manuscript.

Ref: Robt. Adair to Robt. Catherwood, Dec. 26, 1780;  
W.O. 4/275 (see photocopy in British Period file)

"To begin with the Charge for inoculating 36 soldiers, The  
Expense is L 63,3,8. - It is well known that water gruel with  
Bread pudding is the only proper Diet for patients under that  
Operation. For what purpose then can such a Quantity of wine  
have been expended, to say nothing of four gallons of Rum,  
the same Quantity of Brandy, ten bottles of Sweet Oil, with  
Spices of every kind & 172 pounds of Sugar? You have three  
Mates; why do you not send one of them to attend the  
inoculated men, & save your trouble & the Expense of Boathire?  
I will maintain that in this country the same number of men  
might be carried through that Operation for as many shillings  
as you have charged Pounds"

(I suspect the inoculated men were kept on Anastasia Island  
for a quarantine period - thus the "Boat hire" - recall this  
was inoculation, not vaccination)

April 5, 1793

Smallpox at St. Augustine

REF: East Florida Papers, L. C. 100 18; letters to and from the Bishops and Curates (SAHS has microfilm and translations) (translation by E. W. Lawson, 1946)

April 5, 1793, Hassett to Quesada

"...it would red<sup>o</sup>ned to the honor of both Majestys that an Ecclesiastic of the plaza should visit as soon as possible the inhabitants of the rivers St. John, St. Mary and Nassau of this province to the end of administering Holy Baptism to the children that they have had since the last visit...for finding smallpox already introduced into this plaza, it is to be feared it will rapidly extend itself to all the province and it will be a great pity to leave so many poor little ones exposed to fatal contagion without the necessary help for their eternal salvation..."

*Epidemic File*

**Federal Assistance to the State**

Ref: Porter: Additional scraps from Memories Storehouse, page 34  
(see photocopy in Porter file)

"As far as can be learned, the first mention of federal assistance to the state was in 1796, when Congress authorized the President of the United States to 'direct officers of the revenue Cutter Service to aide and assist in the execution of Maritime Quarantine Laws of the sections of Union bordering on the coast of the United States as well as to co-operate in the enforcement of the Health Laws of the states themselves.' At that period in the history of the Republic , the revenue Cutter Service antdated the organization of the Navy. "

U. S. Quarantine=

1799

Moll: Aesculapius in Latin America, p. 542

First national quarantine act enacted in 1799. This is taken from Moll's chronologic tables.



Florida-Quinine

REF: Gifford: Five Plants Essential to the Indians and  
Early Settlers of Florida, pp. 42-44

Gifford claims a small tree that grew in the swamps throughout Florida known as, Pinckeya-pubens or Georgia-Bark, Fever-Bark, Maiden's Blushes, or Florida-Quinine, was used for the treatment of intermittent fevers including Malaria. It is supposedly a close relative of the *Sinchona* tree of South America. The bark of the tree was soaked in rum and often given at regular intervals on plantations to prevent fever. He claimed it was efficacious. Another tree of the Florida Keys belonging to the Madder Family called Prince-Wood (*EXOSTEMA CARRIBAEUM*), it was also used to combat fever. The early natives on the Florida Keys soaked the bark in water and drank the water. Finally he also mentions Mahogany bark as used as to stimulate stomach activity and pep up the system. He points out that Florida-Quinine and Prince-Wood were both very rare at the time of his writing and restricted to local areas.

Vaccination - Spanish Colonies

1803-1808

Moll: Aesculapius in Latin America, p. 542

Charles IV sends vaccination commission to all Spanish Colonies. Taken from Moll's tables.

H

November 10, 1803

Vaccination in New Spain

REF: Piats: Contribution of Spanish Physicians, Translation, pgs. 9-10 (See manuscript file "Spanish Medicine")

On November 10, 1803, an expedition left LaCoruna under the direction of a Dr. Balmis, who had taken part in the Solano Expedition against Pensacola, to bring cow pox vaccine to the new world. They carried 22 children to the innoculate during the trip so as to have fresh fluid when they arrived in the new world. The article goes on to detail the travels of this expedition. It does not mention Florida, but does mention California. Also, in this article the aurthor notes that vaccination was prohibited in France until 1867, in Switzerland until 1868 in Germany and England until 1874, while it was compulsory in Spain as early as 1807.

COPY FOR: EPIDEMIC FILE

Guerra: Medical Colonization of the New World, p. 150

"After British discovery of vaccination, the Spanish Crown readily arranged, through the Protomedicate, the vaccine expedition from Europe to America, which, in an unbelievably short time, established vaccination all through Spanish America in 1804."

Charleston Courier, Vol. 3, p. 1, Mar. 22, 1805

CONCENTRATED TINCTURE OF YELLOW BARK

Prepared by Dr. James Dalton, Corner of Church and Tradd Street, the store lately occupied by Mr. John Thornhill, Charleston, and sold in bottles with his name imprinted on the glass, with directions, at \$1.00 each.

A certain cure for intermittents, and very useful in all complaints that require large doses of the bark, an excellent preventive agent against the prevailing fever of Charleston, and the common fevers which are so prevalent in the country:

This bark is not considered in a new character, but as only possessing the medical powers of the common bark in

Charleston Courier, Vol. 3, p. 1, Mar. 22, 1805

a greater degree, which has been fully proved at Guy's Hospital, in London, where it is now the only kind in use. Dr. O'Ryan, late first physician to the Grand Hotel Dieu of Lyons in France, says "Its reputation rose to such a pitch, that though the price became enormous, it was the only species of bark employed, particularly in any disorder appearing ~~in~~ in the most dangerous, and which required a certain speedy remedy; and that he can safely assert, that out of several hundred cases he does not recollect even one in which it failed of success." Though the bark in substance is generally recommended, yet the stomach frequently will not bear such large and repeated doses as are sometimes necessary. This inconvenience is obviated by the use of the concentrated tincture, as it can be given with greater

.Charleston Courier, 3:1, Mar. 22, 1805

advantage and more likely to agree with the stomach, the dose not being necessarily enlarged by any indissoluble matter which it is evident the bark, in its original state, contains--a teaspoon only of this tincture being equal to a large dose of the powder, or to six times its quantity of the compound tincture of the New London Pharmacopia. The great bitterness also gives it a peculiar advantage in Bilious Disorders and renders it an excellent substitute for the Medicinal Bitters.

"Another advantage still more important, is, that in many fevers of the remittent kind (Particularly those of warm climates) in which a superabundance of bile in the primæ Viæ indicates the use of common bark, this' by its superior bitterness, seems better adapted."-- See Dr. Ralph on the Yellow Bark.

Charleston Courier: Vol. 3, p. 4, Apr. 10, 1805

In column 4 of this page is a notice from "The physicians of the Charleston Dispensary, to the patients of that institution." There follows an exhortation to submit to cowpox vaccination as smallpox is prevalent. In this exhortation is a description of the difference between smallpox and cowpox in its effect. This is signed by a list of physicians, the first name of which is David Ramsey. Thus they had cowpox in this country in 1805.



Charleston Courier: Vol. 3, p. 3<sup>a</sup>, Aug. 24, 1805

"Extract of a letter from a gentleman in Europe to his correspondent in Philadelphia,

Your request on the three different kinds of Peruvian Bark shall be satisfied. Red bark, you may rest assured, is the best of the three, because it is more resinous than the other kinds. It is in my opinion, that half of the red bark contains as much astringent quality as the others do in double the quantity; I would therefore advise you to use it in preference to any other. It is not so easily adulterated as the other kinds...

"The yellow and pale are more easily adulterated with the lign. puassia. If the bitter quality of this wood is extracted by boiling it a little, the wood dried and

Charleston Courier: 3:3, Aug. 24, 1805

powdered, it may be mixed with the yellow and the pale  
bark in considerable quantity, without a possibility of  
discovering it. This being the case, the red bark is  
most safe and certain for use; for, as I have already  
observed, it is impossible to adulterate this without  
being discovered by the taste...Red bark has risen  
considerably in price lately, owing to its scarcity."

Destruction of mosquitoes

1812

Moll; Aesculapius in Latin America, p. 544

First use of oil against mosquitoes as suggested in London occurred in 1812.

Councilman José Mariano Hernández made it known in this meeting [of the Municipal Corporation of St. Augustine on this date] that he has learned that a Negro slave belonging to Don Juan Montes de Oca has the small pox. To prevent its spread with [consequent] damage to the public for lack of adequate measures, the gentlemen present resolved that Don José Mariano Hernández himself, assisted by Physicians Juan José Bousquet and Pablo Mestre, proceed to the examination of the Negro, and if it results that the contagion is true, to make his master remove him from the environs of this city, [in order] to prevent all communication, to a distance where the air can not propagate the disease (f. 165).

Ref: East Florida Papers, Series 412: Cabildo Records

Smallpox

1814  
April 18

In this meeting [of the Municipal Corporation of St. Augustine on this date], the Governor has exhibited a communication, accompanied by certificate of Physicians Juan José Bousquet and Pablo Mestre, addressed to His Lordship, in consequence of and in compliance with that which was resolved in the meeting of the 13th of this month, regarding the reported contagion of small pox. The gentlemen present, seeing the communication, resolved that since the reported small pox is not of such injurious kind, considering that the Negro is already working as cured, the Corporation will watch that the disease does not spread by providing whatever is adequate (f. 169).

Ref: East Florida Papers, Series 412: Cabildo Records

REF: HAMMOND: Health and Medicine in Key West, p 642

TEXT:

"When the crises attendant upon illness descended on the town, the people came forth as they usually do in frontier situations to display their humaneness in many practical ways. Mrs. Mallory, mother of Senator Steven R. Mallory, and presumably the first woman settler in Key West, endeared herself to numerable islanders by her care in the time of illness, while George Alderslade, a bluff and crusty tavern-keeper of robust build, earned the affection and admiration of his fellow-men by his willingness to help in time of need. A Key West chronicler of later times recalled him as a man 'of good judgment, fine mind, and a heart of size proportionate with his body. He was the best yellow fever nurse in Key West, and gave his time free to those afflicted with that dread disease.'"

The reference is to Jefferson B. Browne, Key West, *The Old and the New*, St. Augustine, p 175.

*Epidemic  
File*

Forbes: Sketches of the Floridas, page 65

After waxing eloquent about the situation in climate of Florida and in particular St. Augustine where he lived, the author says "Although these provinces afford careful and temperat resident yet the author... would recommend an occasional tour to the northern States and thus guard against

## Isolation of Quinine

REF: Shryock: Medicine in America, page 53

"Less generally known, but scarcely less significant, was the Isolation of Quinine Cinchona by French chemists in 1822, as a result of which the employment of quinine sulfate in large doses was gradually introduced by Southern Physicians during the Ensuing decade. The new remedy was a mere potent that cured Cinchona, and it's use checked the high mortality occassioned by certain forms of Malaria Fever. (References are given to the Southern Medical Reports) At the same time, an increasing consciousness of the profolacting value of land drainage maniveste itself in the towns, which consequently undertook measure most creditable to them in view of the small means at their disposal. Thus Savannah began in 1817, when it had a population of only about 5000 to eliminate rice fields in it's vacinity, and eventually appropriated 200,000 dollars to subsidize the planters involved in this abandonment of the 'wet culture'."

*Epidemic File*



Quinine Factory

1823

Moll: Aesculapius in Latin America, p. 546

First quinine factory in the world opened in Philadelphia, 1823.

Sickness

~~Yellow fever~~ widespread

1823

Ref: E. Fla. Herald, Oct. 11, 1823 (copied from E.A. Hammond's notes)

Editorial Notes:

Yellow fever rages with great fury in Natchez, Miss.. Many have died. Inhabitants fleeing to the country.

A dreadful sickness is said to prevail in various parts of  
in interior Virginia.

News of dreadful sickness at Key West. Many transient seamen afflicted and died.

Yellow fever widespread

1822

Hydrophobia cured with pokeroot

1824

Ref: Pensacola Gazette and West Florida Advisor,  
Oct. 23, 1824

"A few days ago we were informed by a gentleman of the first standing for respectability and intelligence that a case of hydrophobia has, in the adjoining county after the sufferer had experienc<sup>ed</sup> thiety convulsions, been cured by administering to him a strong decoction of pokeroot."

Palmer, T.M.: Medical History of Florida, p. 35

"The malarial diseases prevailed all over this second division (area from the Suwannee River to the Atlantic down to a line across the peninsula from Indian River about New Smyrna to Tampa Bay on the Gulf of Mexico) to a great extent, until within a few years. Intermittent, remittent and congestive fevers were very common; but now that portion is comparatively healthy, and only subject to these fevers in certain localities--near swamps or prairies which are subject to overflow and then dry up. There are certain conditions of atmosphere also necessary to produce our malarial diseases. Heat and moisture are both necessary, and a certain amount of vegetable matter in a state of decay. One of these without the others will not produce diseases, and hence when we have a dry summer, we are usually exempt from these diseases; and, on the contrary, a wet season

Palmer, T.M.: Medical History of Florida, p.35

stimulates vegetation to an unnatural and rapid growth,  
and then we have all three requisites for autumnal or  
malarial diseases."

Ref: Forry: Remarks on Epidemic Cholera, etc, Am. J. Med. Sc.  
n.s. 3: 307-324, April 1842.

On pages 321-322:

"In the third quarter of 1828, there were reported 57 cases of Dengue, viz. 8 at Fort Pike, La., 14 at Cantonment Clinch, near Pensacola, and 35 at Fort Moultrie, Charleston... In the spring and summer of this year(1828), our southern posts, New Orleans, Pensacola, Savannah, Charleston, &c., suffered a severe visitation.... Surgeon I (Thomas) Lawson, in transmitting his quarterly report of sick at Cantonment Clinch, near Pensacola, writes as follows:-

"Dengue has prevailed to a very great extent in this section of our country. In Pensacola, scarcely a person of any age, sex, or condition has escaped an attack. With us in the cantonment, however, its influence has been less generally felt. The disease was modified somewhat in its character and the intensity

of its symptoms, by the peculiar constitution of the subjects attacked. Among the Americans and other persons of vigorous health, the fever usually ran very high, and continued, without a remission, for twenty-four to thirty-six hours; after which it subsided, leaving the patient in a state of extreme debility, and labouring under an acute rheumatic affection of the muscular system generally. Among the Spaniards, who are generally less plethoric, the febrile manifestations were, on the contrary, much less intense; but the disease was of longer duration, and the pains throughout the fibrous tissue were infinitely more severe.

"As a general rule among the Americans, one or two efficient cathartics were administered in the early state of the disease; after which, the repeated use of the warm bath, and frequent draughts of lemonade, were sufficient to complete the cure. Among the Spaniards, no active medicines at all were taken; ptisans and the warm bath were the only remedies employed. A recurrence of the disease, particularly of the rheumatic affection, was very common among all classes... The period of its course varies from 48 hours to several weeks. Although very severe, it is by no means a fatal disease; no case terminating in death has occurred within my knowledge."



"It is an eruptive fever of a distinct and specific character united with an inflammatory affection of the joints. Hence, one writer styles it scarlatina rheumatica; another, exanthesis anthrosia; and a third designated it an eruptive articular, or rheumatic fever. The vulgar appellation by which it became universally known, it received from the English negroes of St. Thomas. From the stiff affected gait induced by those labouring under it, it was called by them the "dandy fever;" and this term, when the disease invaded Cuba, was there corrupted & in Spanish pronunciation, into *dunga* or *g dengee*."

In the next paragraph he mentions the name "breakbone fever" used by Rush in the epidemic of 1780.

"In regard to the treatment, there does not seem to have been much diversity of opinion. To control the violence of the attack, the lancet was generally employed during the ~~inflammatory~~ inflammatory stage. Cathartics and diaphoretics were almost universally prescribed. In the earlier stages, it was usual to give antimonials, and subsequently Dover's powders and other stimulating diaphoretics. Anodynes, in the form of opium and pulvis Doveri, were generally resorted to with the most happy effect - a remedy loudly demanded by the pain and anguish of the sufferer."

Dengue fever at Pensacola

1828

See two cards in the chronological file under the above date  
~~of~~ for an account of this including details of treatment.

CARD FOR THE EPIDEMIC FILE

Dengue fever

third quart. 1920

Ref: Lawson: Statistical Report - 1910-1939, p. 63

\*In that quarter, there are 57 cases of dengue reported, 8 at Perth

Dengue fever at Pensacola

Aug. 1828

Ref: Florida Argus (Pensacola), Vol 1, #11, Aug. 26, 1828, p.       
Col. 4.

"The Dengue - This troublesome complaint has within the last week become prevalent in this City. It seems to attack the Creole inhabitants as readily as any others; the disease is violent while it lasts, but readily yields to proper medicines and mild treatment."

Mortality Statistics at Key West

1829 - 1833

Ref: Key West Inquirer, Vol 1, # 12, Jan. 3, 1835 (overlying this page and several other pages is a manuscript account of the deaths at Key West between 1829 and 1833. This is apparently by Dr. Henry S. Waterhouse and is broken down into categories: age, color, and disease.

He also writes: "More cases of slow suicide occur in this part of the world than the lovers of '\_\_\_\_\_ Holland's', 'Brandy cocktail' & 'Mint Julep' would be ready to acknowledge."

Palmer, T.M.: Medical History of Florida, p. 34

"The first period, from 1830-1840, the fevers and other diseases were almost entirely remittent."

Vaccination at Tallahassee

1832

Ref: The Floridian (Tallahassee), April 24, 1832

Professional Notice:

VACCINATION

The Poor and indigent persons of Tallahassee and the adjacent country will be vaccinated free of charge by application at my office.

John McLemore (M.D.)

Copied from the notes of E. Ashby Hammond, Prof. History at U. of F., Gainesville, Fla.



Health Measures at Key West

July 18, 1832

REF: HAMMOND: Health and Medicine in Key West, p 638

TEXT: Quoting Dr. Henry S. Waterhouse in the Key West Gazette, Hammond has "concerned as he was about the 'deleterious miasmata' arising from putrifying vegetation in and around the town, Dr. Waterhouse urged the town council to complete the drainage of the foul pond which spread across the town, and which had been repeatedly blamed for much of the sickness among the inhabitants."

*Epidemic File*

Healthiness of middle Florida

1834

Ref<sup>y</sup> The Floridian, (Tallahassee), May 24, 1834

See photocopy for extensive article in Manuscript file "H" for Health.

Florida keys, a haven for people with tuberculosis

1834

Ref: The Floridian (Tallahassee), June 21, 1834  
(copied from the notes of E.A. Hammond)

See photocopy under the Manuscript file "T" for tuberculosis

REF: PEARCE: Resorts in a Pioneer Land, p 37.

TEXT: The author "Dr. Benjamin B. Strobel" ("Sketches of Florida," The Charleston Mercury, June 18, - June 27, 1834):

'Key West is a delightful winter climate for those afflicted with pulmonary diseases. The thermometer very seldom sinks below 60° .....rarely goes up to 90° there can be no doubt, in ordinary seasons, Key West may be considered as a healthy place; whilst on the other hand, it has its sickly seasons... (however) I have never seen a case of yellow fever (that) originated at Key West.'

This supposedly appears in the Courier for May 13, 1837

*Epidemic file*

1835

Sewall: Sketches of St. Augustine, 2 ED., p.44

"Prior to February 1835, groves of the sweet orange had for many years, and with great care, been brought into a thrifty and productive state. Then St. Augustine was one immense orange orchard, and appeared, say an eye witness, 'like a rustic village, with its white houses peeping from among the clustered boughs and golden fruit of the favorite tree, beneath the shade the invalid curled his fevered limbs and imbibed health from the fragrant air.'" The eye witness is not identified, further on he states "That on the night of the fatal month of February, 1835, a frost cut down the entire species of the orange tribe, some of the trees liveling in statue the sturdy forrest oak....To this day, the city has not recovered from the blight of that dire stroke."

Merritt, Webster: Century of Medicine in Duval County, page 11

"Deseases other than Malaria were prevelant in Florida during the Seminole War. In 1836 measles and diarrhea were particularly annoying at Garey's Ferry (Middleburg).

Ref: Drake, Daniel: Principal Dis. Int. N. Am., p. 180

Quoting Med. Stat. U.S.A., p. 295:

"This post, however, has always been regarded as decidedly salubrious, with the exception of the liability to fever and ague. Violent fevers of the remittent form and intermittents running into the same type, occurred in the latter part of the summer of 1837, owing, doubtless, to the circumstance that the smaller trees and undergrowth of a neighboring hummock had been cut down, as a precaution against Indian ambuscade. It is a well-known fact that military stations, near jungles, often continue healthy until the soil is brought under cultivation, or the trees and shrubbery cut down, exposing the boggy surface to the agency of solat action."

Tebeau: Indian Trail to Space Age, Volume 1, P. 155

The Seminoles were induced to migrate to Oklahoma by General Jessup and began to assemble at Tampa. By June there were some 700 Indians assembled. On June 7th without warning almost all of them vanished into the woods. Various explanations were offered and among these was an outbreak of measles among the Indians who thought it might be smallpox and fled in terror. Thus, measles changed the course of the Seminole Indian War.

*Epidemic file*



Ref: Motte: Journey into Wilderness, p. 82

"On the following day (Feb. 1, 1837), we removed our encampment ten miles in a westwardly direction, to the neighbourhood of Col. James Bell. (near present Bellville, Hamilton Cty.) I soon had my hands full of business, for in consequence of the men being exposed to so much wet while the Influenza was raging epidemically around us, they very soon were able to out-bark all the dogs in the neighbouring plantations. Major Dearborn was among the first to adopt this new order of things. Besides the sick of our camp, I was called upon to visit many of the settlers, whole families of whom were down at once with the measles in a severe form..."

Ref: Castelnaud: Notes concerning Two Itineraries from Charleston to Tallahassee, p 315

"... each year bilious fevers of the most dangerous sort spread consternation in all the region. Then all the shops are closed, the fear of the epidemic together with the stifling heat drives from the city the planters of the neighborhoods, and all the inhabitants who can bear an expense of that sort go to the northern part of the United States in search of a more healthy climate; the merchants take advantage of this season to go to make their purchases in New York or Philadelphia, and the planter goes to Niagara or Saratoga Springs to live luxuriously and spend in three months his yearly income.

"However, although the climate is at all times dangerous for strangers, the most unhealthy months are August, September, October and November; then no one can be certain of escaping the plague, not even the planter who settled in the country long years before, nor the negro born in the malarial regions of Carolina or under the burning sun of Georgia. The comparative large size of the cemeteries is a sad warning for one

who, attracted by the beauty of the site, would like to settle in these places."

An Invalid: A Winter in the West Indies and Florida,  
pp. 137-158

The invalid who wrote this book was apparently a neurotic. He makes great protestations about his suffering from the cold, dampness, asthma, dyspepsia, etc. He in the above pages concludes that St. Augustine is too cold and damp for his constitution and, indeed, he does not think it healthy for anyone. He further states: "Very good medical attendance can be procured here, but the charges are high, being about \$5 for a first visit to a stranger, and probably nearly as much for succeeding visits. It is (St. Augusting) small and dull, without amusements and without any horses or carriages to let..." He goes on to state that the chief form of amusement is fashioning canes out of organe sticks.

REF: HAMMOND: Health and Medicine in Key West, p 639

TEXT:

"Being in an invalid who spent the Winter of 1838-1839 in the West Indies and Florida about the health of Key West, Hammond states: "The experience of upwards of 500 inhabitants for several years, with great freedom from fevers of all kinds and rarely a case of ague, even by the intemperate, has not only repelled the charge (of the unhealthiness of Key West) but brought it (the town) into high estimation as a place of extraordinary salubrity." Hammond goes on to note that the invalid concluded his inventory of the town's principle features with the reassuring information that "there are two physicians here, of good reputation, and their charges are not very high." Hammond states that the invalid noted the presence of several invalids, among them, two from Pensacola and one from New York. They professed to have found very great benefit from the climate and "all appeared to think it the best in the United States if not in the world."

*Epidemic  
File*

Epidemic Fever at Pensacola

November, 1839

Cash: The Story of Florida, p. 711

Quotes a letter of Doctor Isaac Hulse, male physician of Pensacola, about an epidemic fever which had been raging 6 weeks in Pensacola. He does not specify the cause of the diagnosis. For more details see quote.

Quinine as malaria preventive - Seminole Wars

1840

Ref: Bayne-Jones: Evolution of Preventive Medicine, p. 100-1

Refers to the use of 3 grains of quinine in a gill of whiskey daily as a preventive of Malaria in the Civil War and

"among the troops in Florida in 1840." Refers to Van Buren,

William H.: Rules for Preserving the Health of the Soldier.

U.S. Sanitary Commission Document No. 17, 12 July 1861. p. 9,

par. 25, for recommendation for the prophylactic use of quinine.

Also other references including one in the S.M.J. 17:593-614,

August 1861, by Joseph Jones.

Ref: Drake, Danl: Principal Dis. of Int. N. Am. p. 706

On this page is a table indicating the incidents of intermittent and remittant fevers at Key West, Ft. Brooke and Ft. King apparent for the above noted year. It is taken from Forry.



Ferry: On Endemic Influences, p. 321

After showing a table of the number of cases and mortality rate of scurvy in the United States Army from 1819 through 1838, Ferry states: "The cases reported in the last three years (1836: 17 cases - 3 deaths; 1837: 59 cases - 1 death; 1838: 159 cases - 1 death) occurred, nearly all, either in Florida, or amongst troops that had served in those campaigns. The relation of cause and effect is here very apparent; for it can be readily perceived that a diet, consisting mainly of salt provisions, in a constitution deteriorated by repeated attacks of remittent and intermittent fever, diarrhoea, and dysentery, will develop scorbutic and cachectic symptoms. The ration of our soldier, regarded in all its component parts, no doubt disposes the system to scurvy in warm countries; and in these campaigns, whenever it proved deficient in any respect, it was always found to be so in reference to the ~~the~~ vegetable portion." Therapy: "These lesions gradually yield to the plentiful use of lemon acid and vegetables with vinegar. The only therapeutic

means employed in conjunction is, the sulphas quinine dissolved in elixir vitriol."

"When stationed at Fort Armstrong (Florida), several cases of this disease occurred. Deprived of vegetables, they grew worse from day to day, until the free use of wild pepper-grass, (lepidium virginicum,) found in a neighbouring swamp, was prescribed. At this post, we have the good fortune to find in great abundance purslane, renowned among the older physicians as an antiscorbutic."

Ref: Forry: On the Endemic Influences, p. 319

"... the yaws, which has been seen by the writer among the negroes of Florida."

Ref: Forry: On the Endemic Influences, p. 309

"That intermittent fever has a tendency to septenary revolution is a fact that was frequently verified in Florida under the writer's observation; and this too in a manner so unequivocal, that it attracted the notice of the common soldier. At these septenary periods, ~~the disease has a disposition to terminate spontaneously~~ either after the seventh, fourteenth, or twenty-first paroxysm, the disease has a disposition to terminate spontaneously. It is at these periods that febrifuge remedies act with the greatest success; and as regards relapses, it is then, too, that a vast majority occurs - a circumstance of such frequent occurrence in Florida, that soldiers would voluntarily come to the hospital to obtain medicine to prevent its return."

Ref: Forry: On the Endemic Influences, p. 306

"That our troops suffer less from disease in the region of East Florida, which is still in a state of nature, than in the cultivated district of our southwestern posts, can, therefore, be easily understood. It is true that this may in part be ascribed to the circumstance that in the latter the summer heats are higher; but, on the other hand, we find that in the cultivated portion of East Florida bordering on Georgia, as well as in Middle Florida, disease is more rife than in the Peninsula generally.

"Among the various circumstances connected with the production and diffusion of noxious exhalations from the soil, it is generally believed that the presence of dead animal matter, when mingled with vegetable remains in a state of decay, gives rise, in warm countries or in the hot seasons of temperate climate, to miasms, especially during humid states of the atmosphere, of a more deleterious character than those resulting from vegetable remains alone. The same causes which render vegetation luxuriant, bring into

existence immense swarms of insects and reptiles, the exuviae and dead bodies of which mingle with the decayed vegetation."

Ref: Forry: Remarks on Epidemic Cholera, etc, Am. J. Med. Sc.  
n.s. 3: 307-324, April 1842.

On page 318:

"In Florida, however, it (hereralopia, nyctalopia, paropsis, noctifuga) may be regarded as endemic. The pathology seems to exist in an exhaustion of the power of the retina in consequence of exposure to a strong light during the day, or, in other words, vision ceases because the retina, after being exposed to a long and brilliant sunshine, is not excited by the feeble light which continues after sunset... Its duration in Florida, according to the observation of the writer, varies from one night to six or twelve months, whilst relapses are frequent. The treatment, ... usually consists in confinement to a dark room, the use of emetics and cathartics, and the application of cups and blisters to the temples and nape of the neck..."  
If this fails, try salivation or removal to "one's native clime"

Ref: Malone: Traumatic Tetanus, Am. J. Med. Sc. 6: 376-378,  
Oct. 1843

Describes treatment of typical tetanus with: enemas, castor oil, laudanum, copious bleeding, quinine, butter of antimony rubbed the length of the spine and iye and turpentine poultices applied to the wound. She recovered with but little disability. Very graphic description.



Palmer, T.M.: Medical History of Florida, p. 34

"From 1840 to 1850, they (fevers) were mostly intermittent and congestive."

Malaria in Middle Florida

1841

Cash: The Story of Florida, p. 707

Quotes extensively from a letter by a Miss Harriet Randolph Parkhill describing Malaria throughout middle Florida in 1841. This is too long to quote.

Sewall: Sketches of St. Augustine, 2 Ed., p.54

A Dr. Samuel Forry, who apparently published an article in the Journal of Medical Science, 1841, is quoted as recommending the Florida Climate for bronchitis of the chronic variety, incipient pulmonary consumption, asthma, chronic disorders of the digestive organs where no inflammation or structural change exists, "many of those obscure affections called nervous and unconnected with inflammation," chronic rheumatism, and "premature decay of the constitution, characterised by general evidence of deteriorated health, whilst some tissue or organ important to life commonly manifest symptoms of abnormal action." There is considerable material in this chapter including temperatures wind direction and weather quoted from surgeon general's reports of June 16, 1848. On page 57 it is noted that in addition to St. Augustine "Preparations are being made for the accommodation of invalid strangers" on on

**Diseases Favorably affected by Florida Climate**

Sewall: Sketches of St. Augustine, 2 Ed., p.54

further it points to other directions such as the banks of the Indian River, St. Lucie and the Miami (rigger)

Ref: Forry on pulmonary and rheumatic diseases, p. 45

Speaking of Florida he states, "That the air is much more humid than in our more northern regions is sufficiently cognizable to the senses. The dews, even in winter, are generally very heavy... As general relaxation and lassitude are consequent on this prevailing humidity, it may exercise some agency in the production of the comparatively high ratio of pulmonic and rheumatic affections in the summer seasons. One of the best safe guards against its effects is, to wear flannel next the skin - a custom generally adopted in the army. It is, indeed, a hygienic measure no less valuable in warm than in cold climates, affording comparative immunity against thermometrical and hygrometrical vicissitudes."

Ref: Forry on pulmonary and rheumatic diseases, pp. 42-43

"Fevers of malarial origin are both more prevalent and fatal in that portion of Florida which borders on Georgia. Along the coast and in many parts of the interior salubrious positions are often found. At several posts along the eastern coast, a case of fever has sometimes not been reported in 3 or 6 months. Forry then points out that he is trying to direct attention to the fitness of Florida as a winter residence for northern invalids. He states, "In 1833, Professor Dunlison called the attention of the profession, on the strength of the meteorological registers kept by the medical staff of the army, to the suitability of St. Augustine and Tampa Bay as a winter retreat."

**Forry: Statistical Researches Elucidating the Climate of the United States and Its Relation with Diseases of Malarial Origin**

On page 26 the author gives statistical data on the appearance of intermittent fever (malaria and other fevers that come and go) showing that in east Florida there is a higher incidence of these diseases than elsewhere. On page 29 he makes the statement "It is only in our Southern latitudes, when violent congestion of the internal organs occur that death may be said to arise directly from intermittent fever."

**Forry: Statistical Researches Elucidating the Climate of the United States and Its Relation with Diseases of Malarial Origin**

On page 34 the author gives the comparative incidence of diarrhea and dysentery in various areas of the country based on Army statistics. On page 35 he states "A reference to the table will show that, in east Florida, the ratio of diarrhea and dysentery is nearly the same in each season - a result arising mainly from the great prevalence of chronic diarrhea, which supervenes upon febrile affections, continues throughout the year, and ultimately in many cases proves fatal."



Merritt, Webster: A Century of Medicine in Duval County, page 11

Assistant Surgeon, Charles McCormick of Fort Gamble, Jefferson County, Florida, popularly was given credit for the use of large doses of quinine in the treatment of Malaria because of his report of this usage for the quarter ending September 30, 1841. However, large doses of quinine was used before the Seminole War - as early as 1825 by Dr. Thomas Fearn in Alabama (reference given) and Dr. Henry Perine (reference given) who was then living in Mississippi.

"It may with truth be said, that to the medical staff of the army (in Florida belongs the credit of having demonstrated on an extensive scale its safety and efficacy and of thereby largely contributed to revolutionize the treatment of the fever in this country (reference given)."

Ref: McCormick: Treatment of fevers

Author recommends massive doses of quinine (4 to 6 grains/hr beginning 4-6 hrs prior to paroxysm of fever and up to 300 grains in "less than 24 hrs") for both intermittent and remittent fevers. He pushes quinine until toxic effects appear. In addition to this he uses bloodletting "when indicated" and purgatives such as calomel. He states that he had learned to use moderate doses of quinine, became disenchanted when they did nothing, used no  $\bar{2}$  quinine for two years, then adopted the high dose technique and had had excellent results therewith.

He writes this as from "Ft. Gamble, W. Florida" yet I have not been able to locate such a fort.

He states: "This irritated state of the nervous system, is the sine qua non, the original, fundamental, or proximate cause, to which all the other phenomena of fever are successive."

Smallpox at St. Augustine

1842

Ref: St. Aug. News, Vol. 5, No. 5, Nov. 28, 1842  
(copied from Wiles' notes in the St. Aug. Hist. Lib.)

"All intercourse between Palatka and St. Augustine shut off.  
All ships from St. Johns River stopped. By authority of  
the mayor and city council - due to Smallpox and variola."

REF: HAMMOND: Title - Page 640  
"Health and Medicine in Key West"

TEXT: "At this point Hammond quotes a letter from a Key West citizen (possibly a physician but also possibly merely a citizen charged with the care of sick seamen), James Davis, to Adam Gordon, Collector of Customs, in which he points out that the fees allowed for the care of sick seamen are totally inadequate \$3.00 per week, for board and nursing, whereas the common board and lodging on the island was \$6.00 or \$7.00 per week and 37½ cents per day for medical attention and medicine which was also inadequate. An interesting statement is made 'medicines here are sold at a high rate; and physicians prescriptions are commonly put up by druggists, and charged to the physician.'"

*Epidemic File*

Scarlet fever at Quincy

Jan. 1845

Ref: Little: On the Climate, Diseases &c. of Middle Florida,  
Am. J. Med. Sc. n.s. 10: 65-74, July 1845

On pages 73 and 74 mentions a small epidemic of scarlet fever in Quincy Florida in January 1845 with two deaths. He doesn't state the total number of cases. He ~~has~~ does describe the symptoms, signs, sequelae and therapy.

Ref: Holmes on Quinine and Malaria

The author contends that whereas quinine is given in small doses in the north, in the south one must give much larger doses. His own practice is to give 15 to 20 grains in a single dose for an intermittent fever, and 30 to 50 grains for a congestive fever. The largest dose he has ever given is 80 grains.

Other dictums are (p. 304): "Every periodical disease is to be checked immediately - Quinine, as a remedy for periodicity, is to be given regardless of any existing state of inflammation - Never give quinine in divided ~~small~~ doses when directed for the immediate cure of a periodical disease. - ... it must be given 18 hours before the desired result is expected - never give quinine for the cure of a periodical disease in anticipation, when the periodicity exceeds five days."

Ref: Porter: Analysis of an "Official Report..." Am. J. Med. Sc.  
Oct. 1845, pp. 310-311.

"In patients debilitated by frequent attacks of fever, a few grains of piperine, in combination with quinine, was useful, though it was not found superior to the capsicum; and, after the paroxysms were arrested, it was often usefully combined with some tonic remedy. Among the tonics employed after the quinine had produced its effect, the *china cinchona* in substance, Huxham's tincture, the tincture of sesquichloride of iron, and other bitters, were used with decided benefit. A very good tonic was prepared from the rind of the bitter orange and the bark of the *Prunus Virginiana* - both *at* indigenous productions, in combination with gentian, columba, quassia and serpentaria. An infusion was made of these ingredients, and a sufficient quantity of brandy added to prevent fermentation. A wineglassful of this preparation three or four times a day, after the fever was broken, was found to produce an excellent effect, in giving tone to the system, and allaying nervous irritability so conspicuous in all cases of continued malarial disease."

Ref: Porter: Analysis of an "Official Report..." Am. J. Med. Sc.  
Oct. 1845.

Page 302, paragraph 3:

"Atmospheric vicissitudes constitute most frequently the immediately exciting cause for febrile attacks, as well as of diarrhoea and dysentery. A resident of Florida, debilitated by exposure to malaria and continued moist heat, is far more sensitive to slight changes of temperature than an inhabitant of the north. The perspiration and biliary secretion being in excess during the intense heat of the day, are the more liable to be checked by the damp chills of the night, for it is not uncommon for a thick blanket to be required for covering in the course of a single night in summer, altho the preceding day may have been exceedingly warm. This is a consequence of the excessive moisture of the air, and not to sudden or great changes of temperature, for the climate of Florida is more equable than any other portion of the territory of the U. States, excepting perhaps, the western portion of Oregon.



Ref: Porter: Analysis of an "Official Report..." Am. J. Med. Sc.  
Oct. 1845.

On page 300, paragraphs 3 and 4:

"Malaria (obviously using it in the broad sense - not the disease caused by the plasmodium only) is, then, the great primary and specific cause of most of the diseases of Florida. It may be introduced into the system through the respiratory passages - by absorption into the pulmonary circulation, or by means of its effects on the ganglial nerves of the lungs, through the fauces, the olfactories, the stomach and the cutaneous surface... In either case it is certain that a depression of the vital forces is the invariable result of exposure to the climate of Florida;...

Ref: The Floridian (Tallahassee), Nov. 29, 1845

(from E. A. Hammond's notes)

Editor notes that a false report has been circulating that there is smallpox in Tallahassee to the detriment of the tourist trade.

On Dec. 6, 1845:

The editor discovers there was a case five miles out of town but that Dr. (J.T.J.) Wilson has some vaccine - from Savannah - and the people should be vaccinated.

Also presented is a letter from R.R. Cuyler, Savannah, to Dr. J.T.J. Wilson of Tallahassee explaining the scarcity of the vaccine matter. That being sent was procured by Cuyler's brother, a Dr. Cuyler of the Army. It came from Dr. Cunningham (presumably of the U.S.Army) Since Cuyler is departing from Savannah next day, he could not procur from Dr. Cunningham a certificate. Sorry he cannot supply more matter to other Tallahassee physicians but no more available at the moment.  
Nov. 25, 1845.

Character of Fevers and Disease

1850-1860

Palmer, T.M.: Medical History of Florida, p. 34

"From 1850 to 1860, they (fevers and disease) were more of a continued or syochal character."

Dengue Fever at Ft. Brooke, Tampa Bay

Sept. 1850

Southgate, Robert, Asst. Surg. U.S.A.: Quarterly Sick  
Report, Ft. Brooke, 30 Sept. 1850

Reports an epidemic of "Break bone fever" at Tampa  
Apparently had 16 cases. Some details of Rx given.  
Photocopy requested.

Ref: Drake, Danl.: Principal Dis. Int. N. Am. p. 725

"By the vegeto-animalcular hypothesis, we can explain the concentrated prevalence of the Fever (autumnal fever: intermittent and remittent fever) in certain places, as rationally as by the malarial hypothesis. Thus, its virulent reign at the head of Pensacola Bay, where there are extensive deposits of river & alluvion, may be referred to the multiplication of animalcules or germs, where they find abundance of nutriment; and in the case of the exposure of the face of a deep stratum of silt by the removal of ~~the~~ a mill-dam on Cedar Creek, ~~was~~ we have only to suppose, that ~~the~~ immediately began to multiply upon the denuded surface."

Ref: Drake, Danl.: Principal Dis. of Int. N. Am. pp 848-9

"It has sometimes been supposed, that a premature use of the bark contributed to the production of enlarged spleen. If this ever happened, it was because the lancet had not been adequately employed before resorting to that (quinine) medicine; which, from its tonic and stimulating qualities, may, at the same time that it arrests the paroxysms of fever, contribute to disorder of the viscera. Such an objection will not lie against the sulphate of quinine; and the sooner the Fever is checked, the less is the danger of enlarged spleen; as it is the repetition of the paroxysms, more than anything else, which produces that organic derangement. Nevertheless, venesection, in the higher latitudes, is of great value, as a preparative of the system for the quinine; and it is the omission of the lancet, which in many cases permits a result, that throws discredit on the quinine."

Ref: Drake, DANl.: Principal Diseases in Int. N. Am. p. 821

"Assistant Surgeon Holmes (? R.S. Holmes), gave me the following case. A soldier, in Florida, of intemperate habits, but vigorous constitution, died in sixteen hours, that is, in the first fit of a malignant intermittent. The chief signs of congestion during life, were in the chest, the parietes of which, displayed an ecchymosed appearance. Blood could not be obtained by venesection. Eight grains of tartar emetic operated as a cathartic; after which he took large doses of sulphate of quinine. On examination after death, the mucous membrane of the stomach was found healthy; that of the bowels had more or less congestion; the liver showed signs of the same condition; and the spleen was double its natural size; but ~~the~~ healthy in texture and appearance. The cavities and substance of the heart were engorged, and the lungs loaded with blood. The brain was not examined. This individual had probably experienced a previous attack of intermittent fever, which produced the enlargement of the spleen, and hence its natural appearance, except in size. The fatal congestions were in the lungs, as the symptoms indicated."

Ref: ~~xxxx~~ Daniel, R.P.: Cutaneous Diseases, Proc. FMA, Session,  
1880, p. 109  
Merritt; Webster: Cent. Med. Duval Cty., pp 25-26.

Daniel, then a medical student, studied an epidemic of dengue and wrote a thesis on it but according to Merritt, his thesis has been lost.

In a paper before the FMA on Apr. 16, 1880, Daniel describes the signs, symptoms and prevalence ("Embracing in its course almost every man, woman and child) Merritt in the above reference quotes this paper of Daniel's and gives in addition; other references and details of the epidemic.



Ref: Bayne-Jones: Evolution of Preventive Medicine , p. 94

Mentions the publication of the report by Lemuel Shattuck (1793-1859) as the beginning of sanitary reform and public health efforts in the United States. Shattuck was a layman commissioned by the legislature of Massachusetts to study health reforms for that state.

Dengue fever in Jacksonville

1850

Ref: Am. J. Med. Sc. n.s. 22: 285, July 1851.

In the list of graduates of the University of Pennsylvania School of Medicine for the commencement of April 5, 1851 is listed Richard P. Daniels of Jacksonville, Florida. It further states that his thesis was on "Dengue as it Appeared in Jacksonville in 1850." Thus there was probably an epidemic of dengue fever in Jacksonville in that year.

Ref: Statistical Report, U.S. Army, 1839-1855, p. 332

"The only case of dengue which occurred at this post, although a severe one, yielded readily to large doses of sulph: quinae, with tinct: opii. "

Report of Asst. Surg. Jonathan Letherman, U.S.A., from Fort Meade, 1852.

Palmer, T.M.: Medical History of Florida, p. 38

"But another disease that I have noted in this middle portion of Florida was imported, and that is typhoid fever. The first cases I ever saw of it in this climate were in 1851, and were brought to the country by a lady of Jefferson County, who was travelling in Middle Georgia in her own carriage, and stayed all night at a house where there were some cases of typhoid fever. About fifteen days afterwards, and a week after her arrival at home, she was taken with genuine typhoid fever, and from that one case the whole neighborhood was affected, and it continued for six or eight months to prevail in that locality. These cases and what proceeded from them are the only cases of real typhoid fever I have ever seen in Florida...There was very little mortality in it. Most of the cases convalescing after three or four weeks. Those that died usually succumbed before the fourteenth day.

<sup>2</sup> Typhoid Fever

1851

Palmer, T.M.: Medical History of Florida, p. 38

The treatment was principally stimulating and nourishing

Palmer, T.M.: Medical History of Florida, p. 37

"There is a disease very much resembling yellow fever in some of its behavior, which occurs in the middle portion of the state, and which is equally fatal and fearful as a genuine vomito. I allude to what is called malarial haematuria, or bloody-urine fever. The first occurrence of this terrible disease was in 1852, in a single neighborhood in Leon County, about ten miles from Tallahassee. Fully one-half of those attacked by the disease died. Its commencement was as a simple intermittent fever, but during the cold stage, a discharge of broken down blood came from the bladder, and then all the symptoms of yellow fever, (except black vomit,) presented themselves. There were violent pains all over the system and the skin became rapidly tinged with yellow, almost to a saffron color; and I have seen patients turn yellow

so rapidly that you could almost see it. This fever prevailed that season in that particular locality in Leon County, and the next year we had it in Jefferson County, and from that time we have had a few cases every year in Middle Florida...The treatment has been very unsatisfactory and very unsuccessful, as about one-third died. This disease seems to have been of local origin in this state, and has, since the war, prevailed quite extensively in Alabama."

Palmer: Physicians of Early Tallahassee, Apalachee,  
1944, p. 38

(Manuscript file under "P")

"A page from this physician's day book gives an interesting picture of a physician's practice in the early days of Tallahassee. It is for services rendered by Dr. Bradford to Dr. Edward Bradford's slaves between January 12 and September 19, 1852, the total bill being \$86. During that period, Dr. Bradford visited Horseshoe Plantation ten times, the usual charge being \$2.50 a visit. Between visits he gave prescriptions for such remedies as iron and gentian pills, calomel, squill and digitalis, lead and opium pills, croton oil, pink root and quinitis mixture. His charge was \$1 for writing a prescription. He also attended slaves brought



Palmer: Physicians of Early Tallahassee

to him, for on February 12 there is an entry, 'bleeding ginny, \$1,' and on May 11, 'cupping and medicine for Tony, \$1.25.' For extracting a tooth for 'Short' Henry (thus distinguished from Lazy Henry, for whom he prescribed), he charged \$1, but when he extracted two teeth for Ned, the charge was only \$1.50."

For xerox copy of the day book page of Bradford  
see Palmer Family folder, Manuscript file under "P"

Malarial hematuria in Leon County

1852

Ref: Palmer: Malarial Hematuria, Proc. FMA, Session 1886

See bibliography card for more detail but in essence he describes an epidemic of malaria with hematuria at Waukeensah, Leon County in 1852. There were few fatalities. Quinine was ineffective. He also observed this disease in 1857 but this time with frequent fatalities.

Smallpox at Jacksonville

1852

Ref: Ancient City (St. Augustine newspaper) Vol.3, No. 33,  
August 14, 1852 (copied from Wiles' notes in the St. Aug.  
Hist. Lib.)

Smallpox reported in Jacksonville - some think cases  
exaggerated.

Jones, F.S., Dr.

1843

Loc: St. Augustine

Ref: St. Augustine News, vol. 5, no. 23, April 3, 1843

Mentions that Dr. F.S. Jones will vaccinate anyone at the council chambers free of charge. Perhaps this is the same man who appears on the card under Jones, S.F. and there has merely been a transposition of initials.

Ref: Farre: Gen. Corresp. Med. Times & Gaz, Mar. 19, 1853

This article is an account of a Cholera epidemic in Nassau and the Bahamas. The first death occurred on Sept. 16, 1852.

It mentions theories of etiology, therapy and mortality.

It says cholera was introduced from ~~the~~ "North America" via a schooner but doesn't give the name of the schooner or its home port. No mention is made of cholera in Florida.

See typescript in the manuscript file "C" for cholera.

Cholera in the Bahamas

September 1852

Ref: ~~General Correspondence~~

Porter: Serial No. 5, p. 135

The Florida Legislature of 1852 authorized the seaboard cities and counties to establish maritime quarantines against vessels arriving from foreign ports which were known to be infected with contagious diseases. (

(N.B.: The National Board of Health, a federal organization created by Congress produced a health bulletin in which Dr. R. B. Hargis in one issue gives an interesting account of the prevalence and course of an epidemic of yellow fever in Pensacola at the naval yard in 1852. He mentioned the quarantine of several infected vessels arriving from Havana. This federal board functioned from 1878 to June 1883 and apparently aided the Pensacola quarantine station financially and very substantially, c.f. the above reference)

Ref: Letter from the Office of the Surgeon General  
See manuscript file "C"

In this letter which is incomplete, someone from the Surgeon General's office detailed his experiences with the climate of Florida personally and specifies temperature changes from the records of the military. In particular he states, "the general healthfulness of many parts of Florida particularly on its coast, is proverbial, "It goes on to quote the percentage mortality at Ft. Marion (St. Augustine), Ft. Brooke (Tampa) and Ft. King as evidence of the healthfulness of Florida. He concludes that, "Florida, washed on the east side by the Atlantic, and on the west and southwest by the waters of the Gulf; daily fanned by the breezes of the sea which lofted over the whole face of the country; and lifts an atmosphere of equable temperature thro-winter and summer, the climate cannot be more unfriendly to the health of man than that of the adjacent states which present but one side for a small portion of the territory to the ocean."



Tallahassee, a sickly place

1856

Cash: The Story of Florida, p. 707

States that as late as 1856 many people considered Tallahassee a sickly place then quotes a reason given against the location of the west Florida Seminary in Tallahassee. It goes on to state that because of this the town of Bel Air was founded 3 miles south of the capitol.

Palmer, T.M.: Medical History of Florida, p. 34

"From 1860 to 1870, they (fevers and diseases) were again of a remittent character, and since 1870 to the present time (1877), fevers have almost entirely disappeared from the section now under discussion (Florida, North and west of a line drawn from St. Augustine to Tampa."

Typhoid and diphtheria --

1861-65

Cash: Story of Florida, p. 719

"However, there was apparently more typhoid fever and diphtheria (during the Civil War.)"

Cash: Story of Florida, p. 718

"To make conditions worse, soldiers coming home on furlough often brought measles, mumps and even smallpox, not to mention lice, scabies and other minor physical disturbances. Most of the smallpox, however, was in and around such places as Jacksonville, Fernandina, Apalachicola, Tallahassee and others of the greater population centers. W. W. Davis, in his Civil War and Reconstruction in Florida, says that part of the work undertaken by the Freedmen's Bureau was vaccination of persons against smallpox and that thousands of persons received the preventive treatment. It is certain that many Negroes especially around Fernandina and Jacksonville, contracted this disease from the Federal soldiers who invaded the section."

## Ref: Hammond: Brief Account of Dysentery

Author describes in detail the treatment of dysentery at Ft. Jefferson on Dry Tortugas in 1862. It is too complex to detail here but it includes: sea baths, specacuanha, castor oil, boiled arrowroot, mucilage, Hope's mixture, tinct. of opii, dry and wet cupping and mustard cataplasms. The average duration of each case despite all this was 3.77 days. The article is dated October 5, 1861.

Ref: Brown: On Quarantine, p. 39

"Typhoid fever prevailed in the town (Key West) and camp previous to the appearance of yellow fever, there being upward of one hundred admissions to the military hospital (? Army Post Hospital) with this disease in April and May."

See the card from this reference on yellow fever for details of his sources of information which make me suspect he is referring to the Army Post Hospital rather than the Marine Hospital as relates to the admissions.

Cash: Story of Florida, p. 719

"The worst mortality of the war in Florida was probably at Cedar Key and Fernandina, where so many deserters gathered to join the Federals holding those towns. Cedar Key was considered a "death-hole" for months after its capture in 1862." Cash attributes this to overcrowding and contagious diseases brought in by the soldiers. He goes on to state that deserters fled to the swamps of Taylor and Lafayette County, rather than go to Cedar Key or Fernandina because of the overcrowding in those places.

Ref: Reminiscence of James M. Anderson, M.D. P. 6

States that his two older sisters died of Malaria when because of a Federal Army raid through South Carolina his father sent his mother and the children to Montecello, Florida to escape the Federal Army. He states " of course having only old boneset tea to administer the children in those trying days contributed to a good many deaths in that day." Thus, apparently boneset tea was used to treat malaria about that time. He further states that they used smudge pots with old rags and sulphur in the houses at night to keep the mosquitos away.

*Epidemic File*



Davis: Reconstruction in Florida, pp. 384-5

"Smallpox was raging in localities among Negroes during 1865-66. The Bureau (Freedmen's) by systematic campaign of vaccination against the disease rendered a good service to the society."

Smallpox in Jacksonville

1865

Ref: Daniel, R.P.: Cutaneous Diseases, Proc. FMA, Session, 1880  
Merritt, W.: Cent. Med. In Duval Cty.,, pp. 64

Daniel in a paper ~~hix~~ before the FMA noted that "just at the close of the late war" smallpox broke out in Jacksonville and it was difficult to control due to the small supply of vaccine.

Merritt in the above reference gives more detail for this epidemic.

Smallpox in Jacksonville

1852

Ref: Daniel, R.P.: Cutaneous Diseases, Proc. FMA, Session, 1880.  
Merritt, W.: Cent. Med. Duval Cty., pp 27-28

Daniel in a paper before the FMA mentions smallpox

Smallpox at Apalachicola

1866

Cochrane: Y.F. on the Gulf Coast, p. 30

"On several occasions, particularly in 1866, Apalachicola has suffered from small-pox, which has always prevailed in the winter season, and mostly amongst the negroes."

Ref: Shofner: Nor is it Over Yet, pp. 82-83

"Even efforts to preserve the public health were aggravated by disputes arising from local citizen's resentment of military personnel who symbolized the Confederate defeat and the end of slavery. However, there was also extensive cooperation in this area between civil and military authorities. Local white leaders did cooperate with the Freedmen's Bureau to control epidemics of smallpox, & cholera, and other contagious diseases. Both military commander and civil governor recognized the desirability of inspection and quarantine facilities in the ports to control yellow fever. General Grant ordered such a system and (Gen. John G.) Foster implemented it in April 1866. Because the state's treasury was depleted, the army maintained most of the stations, & although the civil government assisted when it could. By late 1866, St. Augustine and Jacksonville city governments had relieved the military quarantine personnel in their cities. Civilian

doctors were hired by the army on contract and paid with proceeds from a three-dollar fee levied on each ship inspected. (Ref.given

"There was an outbreak of yellow fever at Key West in 1866 which was successfully contained, suggesting that the quarantine system was effective. Although Foster complained that the civil government was doing nothing to support the system, he admitted that its resources were inadequate. There was as much cooperation as friction resulting from public health regulation by the army."

Cochranes Y. F. on the Gulf Coast, p. 24

"In 1866 there were three cases of smallpox at Atsona Oti (island off Cedar Keys), and two deaths. The disease was brought from Savannah by Mrs. Aldridge. It did not extend to Cedar Keys."

**Editorial: Physician - Alachua County and Gainesville, J.F.M.A., Oct.  
1955, p. 304**

**Smallpox appeared in a nearby Gulf Coast town (probably Cedar Key) during the spring of 1866 and spread to Gainesville, but only a few cases occurred.**

**See Item 32 in Bibliography.**



Brinton: Guide Book of Florida and the South, pp 47-48

"One fall I ascended the Ocklawaha river in a 'polebarge' - a large scow propelled by poles. At night we fastened the boat to a tree, and slept at some neighboring house. The captain and several of the 'darkies' had a diurnal shake, with great regularity, and I entered hardly a single house from Palatka to Ocala in which one or more of the family were not complaining of the same disease. I had no quinine with me, and in default of it used as a preventive a strong tincture of the peel of the bitter-sweet orange. Either through its virtues or good luck, I escaped an attack, quite to the surprise of my companions. I repeat, however, that during the winter there is no danger from this source, and even during the sickly season an enlightened observance of the rules of health will generally protect the traveller."

Cutler, H.G.: History of Florida, 1923, p. 218

Quarantine regulations and a Board of Health provided for each port.

Author Not Stated: A Guide to Florida, 1872, p. 26

"There was a widespread misapprehension respecting the malarial character of the interior of Florida. It is supposed that <sup>in</sup> some parts the areas charged with the most poisonous and noxious vapors arising from the swamplands, and that fevers are common in consequence of it. It is true there is much swampy land in the state, and that wherever there is a dense vegetable growth accompanied by decomposition, malarious diseases arise, but in this cases, the magnificent breezes which sweep across the country, clear the atmosphere and purge it of its evil humors. All fevers in Fla. assume a much milder type than in other sections where they are prevalent...The remedial character of the springs, which abound in every part of the state, must not be overlooked. Some are

Author not stated: A Guide to Florida, 1872, pp.26-27

known to be highly beneficial to the rheumatic and dis-  
peptic patients."

Smallpox

1872

Key West

Diddle: Medical care in Key West, p. 384 (the photo copy, manuscript file under K).

"Smallpox had always been more or less endemic until recent years."

Ref: Wall: Climatological and Sanitary Report, p. 28

"The attending physician in (at Chattahoochee State Prison) in his report (for 1874) to the warden says that he had treated 1500 cases during the year; (there were 150 convicts that year) ... "Intermittent fever, remittent fever, rheumatism, dysentery, diarrhoea, and catarrhal fever were the principal cases treated." Two deaths are reported. 1500 cases of sickness to 150 subjects certainly indicates an extraordinary percentage of sickness."

Ref: Wall: Climatological and Sanitary report, pp. 29 & 30

"While it is my opinion that Florida is probably the most healthy of the Southern States, yet I think it is a weak enthusiasm to conclude that Florida is the healthiest country of the face of the wide world. It would be strange, indeed, if her fertile swamps and hammocks did not generate fevers. It has been proved, however, that on her salubrious sea-coast almost immunity from fever may be enjoyed; and it is high praise to say that, if the bane exists, a way of escape is within easy reach of those who select Florida for a home."

St. Johns

Malaria abounds along the ~~Indian~~ River

May 1875

Ref: PARSONS, G.W.: Manuscript diary - see transcript in the manuscript file "P" for "Parsons Diary."

p. 217. May 14, 1875: "Malaria abounds" along the St. John's river. May 15, 1875: "all the settlers tell the same old story of chills & fever."



Ref: Wall: Climatological and Sanitary Report, p. 29

"Dr. J.A. Williams, of Alachua, writes me that certain sections of that county are quite exempt from malarial fevers, while contiguous sections may be quite sickly."

Ref: Wall: Climatological and Sanitary Report, p. 29

"Dr. W.S. Rice, of Hamilton County, says: 'Our principal diseases are fever and ague, and remitting or bilious fever. Some years they prevail almost all over the county, but again we have ~~years~~ a very light sprinkling of them... Once or twice I have seen pneumonia prevail endemically.'"

"Haematuria has also become a frequent complication in the malarial fevers in the northern part of the State, and even as low down on the peninsula as Marion County.

"Throughout all the interior of Florida, malarial fevers are generally common, though occasionally localities are found quite exempt. The coast, as a rule, is entirely free from this class of fevers. From my own personal knowledge and observation, much less malarial fevers now prevail in the counties of Hernando and Hillsborough than formerly; and I am assured by Dr. Butts, of Beala, that the same is the fact as regards Marion County."

Ref: Wall: Climatological and Sanitary Report, p. 29

"A gentleman, writing from Madison County, says: 'Chills and fever and light bilious attacks are common, but typhoid and congestive, typhoid with pneumonia, and other fatal diseases, are not prevalent here, though we are not entirely exempt from them.'"

Ref: Wall: Climatological and Sanitary Report, p.28-29

"Dr. J.H. Randolph, of Tallahassee, says: 'The diseases of Middle Florida are few, and possess little variety. In the spring, from sudden variations of temperature, from want of clothing, and from imprudence in diet, diarrhoea prevails, and sometimes sporadic cases of dysentery occur. In the summers, bilious remittent fevers, usually of a mild type, show themselves; and in the fall intermittents, with occasionally a case of the much dreaded congestive chill.' These diseases are very amenable to medical treatment, and are rarely fatal. The ratio of mortality is unusually low, and a remarkable exemption exists from all epidemic and contagious diseases. Another writer, in the same county, says:....'We have intermittent and remittent fevers in summer and fall, and pneumonia and rheumatism afflict those who are exposed to the inclemencies of the weather in winter and spring.'

Palmer, T.M.: Medical History of Florida, p. 39

"Some portions of the state are better than others for the different classes of invalids. The coast for asthma, disorders of digestive organs, and sequelae of malarial diseases. The interior for consumptives...It would not be strange if our public lands and swamps should generate fevers, but we have the antidote easily accessible in our extensive and salubrious seacoast, where almost entire immunity is enjoyed from all malarial fevers."

Palmer, T.M.: Medical History of Florida, p. 39

"The only reliable statistics as to the health and mortality of Florida, are taken from the published reports of the Surgeon General of the United States Army, and they show the average annual mortality of cases in Florida to be 2.6%, while of the other portions of the United States it is 3.5%."

Palmer, T.M.: Medical History of Florida, p. 39

"The treatment of our malarial diseases is simple and usually successful. An anti-bilious purgative, and a few doses of sulphate quinine are all that is necessary. Very few disagreeable sequelae follow these diseases, when proper treatment is pursued long enough to eradicate them from the system."

Palmer, T.M.: Medical History of Florida, p. 38

"I have not known but a few cases of asiatic cholera or a single case of hydrophobia in this state. Nor have I seen more than half a dozen cases of a sunstroke in a period of 48 years. Few, if any states, can boast as much...Few cases of pulmonary consumption have originated in Florida, and those are among persons so strongly tainted hereditarily that it will take many years residence here to eradicate the previous position."



Malaria in Florida

1873

Ref: Lente: The Constituents of Climate, etc. pp 21 - et. seq.

Discusses malaris at length - too much to abstract

Whooping cough epidemic at Key West

1878

Ref: Guiteras: Some Observations... Rept. S. Surg-Gen. Mar. Hosp.  
1888, p. 81

"In 1878 there was an epidemic of whooping-cough (in Key West). This disease appears to exert upon the mortality of the two races (black and white) an action opposite to that of yellow fever. (ie. it attacked the negro more than the white)

Epidemic Influenza in Jacksonville

Apr. 1879

Ref: Proc. FMA, Session, Apr. 15, 1879, p. 20

Dr. E.T. Sabal reporting on Apr. 16, 1879, notes that there had been epidemic influenza in Jacksonville "for the past few months" but that very few had developed pneumonia and bene fatal.

Barbadoes leg in St. Augustine

1880

Ref: Daniel, R.P.: Cutaneous Diseases, Proc. FMA, Session, 1880,

Daniel mentions that in former times a form of Elephantiasis Arabum, commonly called Barbadoes leg, was seen frequently among the Greeks and Minorcans in St. Augustine. However, by 1880, this was rarely seen.

Cash: Story of Florida, pp. 725-726

Cash goes into considerable detail about certain areas of Florida that were malarious while others were not. He makes the point that malaria was practically unknown in and around the Florida Everglades, and in the swamp section of Taylor, Lafayette and Madison counties.

In 1880 Alphonse Laveran presented to the academy of Medicine of Paris the complete paper of his discoveries ending with the following conclusion "The accidents of Malaria Fevers are caused by the introduction in the blood of parasitic elements which take the different shapes above described; it is because it kills these parasites that sulphatep quinine puts a stop to the accidents of malarial fevers."

Dewhurst, W.W.: The History of St. Augustine, 1881, p.173

The Post Hospital in 1880 was located near the military barracks and cemetery.

Dr. Bonson and Mr. Buckingham Smith were responsible for the erection of a home for the aged and infirm colored persons west of Santa Maria Creek on King St. "A matron, chosen by the ladies of the different church parishes subject to the approval of the Board of Directors, manages the home." (pp. 173-174)

H

Duran Reynals: Fever Bark Tree, p.164-165

Albert Freeman Africanus King, Professor of obstetrics at the National Medical College in Washington, D. C., published a paper in 1883 stating that mosquitos were the carriers of malaria. He back up his statement with 19 reasons, but he was apparently unaware of Alphonse Laveran's discovery of malaria parasite. Two years later (1885) King's paper came to the attention of Laveran who made the suggestion that the parasite might live temporarily in the mosquito, a suggestion that <sup>was</sup> proved true by a British Army officer, Sir Ronald Ross.



Ref: "DMC nears 98, still growing", Jacksonville Journal, May 13, 1968  
- C Manuscript file "D"

"In 1883 Jacksonville was plagued by small pox yellow quarantine' flags were placed on homes. But the flags were generally disregarded. a local paper reports that on April 13 colorful mayor F.S. L'Engle assigned men with 'heavily loaded double barrel shotguns ' to guard the quarantine houses and instructed them to shot the first person who attempted to violate the quarantine... a leaky-roofed 'pest house' was hastily built on the county hospital grounds to care for the victims... the epidemic continued amidst allegations that if it remained through the summer, Jacksonville would be bankrupt... about 1189 persons had contracted the disease and 60 had died. Meanwhile, the commonly used name for the community hospital was changed from 'poor house' to 'pest house'.

Whooping cough at Key West

1884

Ref: Guiteras: Some Observations..., Rept. Supv. Surg-Gen. Mar.  
Hosp. Serv. 1888, p 81

"Whooping-cough prevailed also in 1884."

Quotes this to explain the high death rate of children in 1884

Ref: Editorial: The Florida Medical and Surgical Journal 1: 52,  
November 1885.

"Consumptives are seeking localities apart from the thickly populated cities. The high pine lands in Central and Western Florida re peculiarly adapted to this class by the presence of a pure, dryer atmosphere and a most equable temperature. Even there, patients must live circumspectly if they would bring their disease to a favorable issue. The requisites for meeting the indicatio morbi are sunlight, warmth, pure air, outdoor life, and temperate living. In this, Florida surpasses Madeira, Algiers or Cairo."

Entire note

Early form of IPPB apparatus

Dec. 1885

Ref: Pneumatic Differentiation, The Florida Medical and Surgical Journal 1:121-122, Dec. 1885.

Under a letter to the editor announcing the availability in Jacksonville of an "apparatus from The Pneumatic Cabinet Co. of N.Y. which was signed by Dr. Wallis & Nelson, Room 2, Ely's Block, Corner Forsyth and Laura Streets, is an editorial on "Pneumatic Differentiation." This procedure is described as: "Pneumatic Differentiation is the title of a method introduced for the treatment of phthisis by Dr. Herbert F. Williams, of Brooklyn, N.Y. The differentiator is an air-tight cabinet, in which the patient sits, stands or reclines, breathing ordinary atmospheric air, which is conducted from the outside through a flexible tube. By means of an ingenious arrangement, the physician can condense or rarify the air in the cabinet to any required degree. When it is rarified, the external pressure on the patient's chest is lessened, but, as the pressure of the atmosphere remains the same, more air rushes in through the

breathing-tube, and the lungs are consequently dilated from ten to fifty percent more than in ordinary breathing. The air in the cabinet may then be condensed, and the pressure on the patient's chest increased, or he may be permitted to expel the air from his lungs by his own unaided efforts. It is claimed that by this method the blood is more perfectly oxygenated than would otherwise be possible, and that by it various antiseptic ~~antiseptic~~ medicaments may be carried to every portion of the pulmonary tissue; that it produces permanent benefit in various non-tuberculous affections and bronchial tubes, and that even in pulmonary tuberculosis can be ameliorated or lessened by its employment."

The article goes on to quote Dr. Vincent Y. Bowditch of Boston and Dr. Alfred S. Houghton of Chicago as endorsing it. Finally, the article notes that only reputable physicians will be allowed to use it and cabinets cannot be bought but may be rented "for the ~~small~~ modest sum of two hundred and fifty dollars a year

Health of Apache Indian prisoners at Ft. Marion

May 1886

Ref: Webb: The Indian Under Medical Observation

In this excellent article Webb describes the diseases the  
497 APACHE Apache Indians suffered while imprisoned at  
Ft. Marion, St. Augustine, May 1, 1886 to April 20, 1887.

See bibliography card ~~at~~ for more detail.

# Health of Apache

Malaria is ~~xxxxx~~ rare in Key West

1888

Ref: Guiteras: Some Observations, Rept. S. Surg, M.H.S. 1888,  
p. 78

"I have no doubt that not one case of malaria has originated for many years on the island of Key West. A few have died there of malarial poisoning, but these were infected in Cuba or on the mainland of Florida, or they were sailors with chagres (sic) fever from Central America. It is a well-known fact that the inhabitants of the mainland of Florida come to Key West to get rid of malarial infection contracted on the continent."



1

# The Japanese Problem

R.P. Daniels

Proc. Am. A., Session 1891,

Appendix K, pp 65-8

Mentions accusation of leprosy workers in Singapore in Kay West + Tanager (over)

Moderately severe infections\*

**loridine<sup>®</sup> I.M.**  
cephaloridine

500 mg. to 1 Gm. t.i.d. (usual adult dosage)

Please see back pages for prescribing information.

\*due to susceptible organisms

Also see  
Report on Leprosy, Proc. FMA, Semin 1892  
appendix. p

Warren E. Anderson

Repts 1 case  $\tau$  leath @ Lussala  
1 case @ K.W.

4 Joplin @ Kew 1896  
Maxwell. Geo Thompson, Hygiene in 76  
Part. Just, Seminar 1896, Appendix 15  
C pp 60-

Moderately  
severe  
infections\*

 **Loridine<sup>®</sup> I.M.**  
cephaloridine

500 mg. to 1 Gm.  
t.i.d. (usual adult  
dosage)

Please see back pages for prescribing information.

\*due to susceptible organisms

Tuberculin treatment of T.B.

Jan. 19, 1891

Ref: Mitchell, Sollace: Report of Cases Treated by Koch's  
Lymph, Proc. FMA, Session 1891, pp 51-55, Appendix G

Reports the use of tuberculin in six cases at the Schumacher Hospital in Jacksonville in early 1891. Obtained his supply of "Dr. Koch's tuberculin" from Berlin on the above date, and reported his experiences in at the FMA meeting in April, 1891.

Leprosy in Florida

April 1891

Ref: Daniel: The Leprosy Problem, Proc. FMA, Session 1891,  
Appendix K., pp 65-80.

Notes allegations of Northern newspapers of lepers being  
employed by the cigar industry in Key West and the refutation  
of this allegation by J.Y. Porter, State Health Officers.  
He doesn't deny there are probably a few lepers in Key West.

Pneumonia in Florida

1892-1897

Ref: Fremont-Smith, F: The Effect of Florida Climate, etc, p. 8

Gives the statistics for pneumonia in Florida during the above years. Also gives information about other diseases seen in Florida.

Leprosy in Florida

April 1892

Ref: Proc. FMA, Session 1892, p. 9

Committee to investigate presence of leprosy in Florida reports 1 death from ~~an~~ leprosy in Pensacola in the past year and one case reported living in Key West. They endorse the suggestion of J.Y. Porter that a leprosarium be established on Mullett Key where the Marine Hospital Service already maintains an Isolation Hospital.

Typhoid and Leprosy

2  
.

Key West

Diddle: Medical care in Key West p. 384 (photo copy, manuscript file under K).

"Smallpox had always been more or less endemic until recent years. The same was true for Typhoid and Leprosy."

H



Hardy: Millstones and Milestones, p. 17

"Leprosy is mentioned as a problem because of unfortunate publicity. There were sensational articles in northern newspapers maliciously reporting the employment of lepers in cigar factories in Tampa and Key West."

Typhoid Fever and the Railroad

1893 ?

Bell: My Pioneer Days in Florida, p. 53-54

For more detail see master file under the date of 1893.

Malaria transmitted by mosquitoes

1895-97

Moll: Aesculapius in Latin America, p. 566

The transmission of malaria by mosquitoes was proven  
by Ronald Ross.

Diddle: Medical care in Key West p. 384 (photo copy, manuscript file under K).

**"Officials of the United States Government were confronted by active and passive hostility from the local inhabitants. The physicians were suspicious of new ideas. During the Smallpox epidemic in 1896 the citizens threatened violence when Dr. J. Y. Porter, Sr., the State Health Officer, tried to enforce the isolation of infected patients. To overcome the opposition he had to enlist the aid of the United States Naval forces and the United States Marine Hospital staff at this port and to place the harbor under martial law."**

Smallpox

1896

Key West

Diddle: Medical care in Key West, p. 384 (the photo copy, manuscript file under K).

Smallpox in Pensacola

Spring 1896

Ref: Vickers: Notations on Pensacola, pp. 93-94

Appeared in March 1896 - only sporadic cases - lead to "vituperative remarks" between Mr. B.R. Pitt, President of the Board of Health, and Dr. Frank Gale Renshaw.

The Daily Miami Metropolis, Vol. 1, p. 8, Col. 1

"No need for vaccination whatever. Any person who eats a small quantity of lettuce twice a day, morning and evening, is as well protected against small pox as it is possible for anyone to be." This unsigned article goes on to say that the author defies anyone to produce a case of small pox ~~xx~~ that has been contracted by anyone who made daily use of lettuce as food.

Typhoid among troops at Jacksonville

Summer 1898

Ref: Henson: The Prophylaxis of Typhoid Fever, N. Orleans Med. & Surg. J., 67:240-244, Sept. 1914.

Quotes the following statistics without further detail:

No. Troops	10,759
Typhoid, certain	1,729
Typhoid, certain & probable	2,693
Deaths from typhoid	248
All deaths	281



Wood: Medical Highlights, Fla. West Coast

States that troops stationed at Fort Brooke (Tampa) were ravaged by typhoid fever. This was apparently due to the large concentration of troops polluting the water supply and water was carried in boats from across Tampa Bay at St. Petersburg (Reservoir, now Mirror Lake) to Tampa.

Key West

Diddle: Medical care in Key West p. 384 (photo copy, manuscript file under K).

Rerrick: Memoirs, p 137: says dengue appeared to pass from Key West to Fla. where there were more than a thousand cases.

occurred chiefly in July, Aug. & Sept. 1898 @ Key West - 6000 cases & no deaths.

Malaria in Spanish American War

1898

Duran Reynals: The Fever Bark, p. 235

"In the Spanish American War, for each soldier wounded four came back sick with malaria. "

**Disease in camps of Spanish American War**

**Summer 1898**

**Ref: Tebeau: History of Florida, pp. 323-325**

**On these pages are considerable details about the problems of sanitation and disease in the Florida camps of the Spanish American war. There is too much to be summarized.**

Ref: Williams, A.W.: Vaccination Against Typhoid in the United States Army, Am. J. Med. Sc. n.s. 143:352-356, March 1912.

Page 353: "In the origin and spread of typhoid fever in our army during the Spanish-American War, investigated by a Board consisting of Reed, Shakespeare, and Vaughn, (Origin and Spread of Typhoid Fever during the Spanish-American War, 1898, Harrington's Hygiene, p. 668) they reported that in certain regiments of regulars the disease developed in three to five weeks, and that more than 90% of the volunteer regiments developed the disease within eight weeks of going into camp. Among the whole body of troops there were no less than 20,000 cases between May and September. The Second Division, Seventh Army Corps, assembled at Jacksonville, Florida, with 2,000 less in numbers than the Maneuver Division, for the same length of time, same latitude, with an equally good campsite, and an artesian water supply of

of absolute purity, had 1,729 cases of typhoid with 248 deaths. As Colonel Kean remarks, (The Sanitary Record of the Maneuver Division, Jour. Am. Med. Assn, Aug. 26, 1911) "this division was not conspicuously unfortunate in its ~~yr~~ typhoid record for that time." It is selected for comparison on account of the close similarity of its conditions of service with those of the Maneuver Division."

**Rainey, J.K.: An Epidemic in St. Augustine, Trans. FMA, Session,  
1899, pp 131-135.**

Reports an epidemic of a febrile disease with a vesicular rash that apperared in St. Augustine in 1898. He doesn't defintiely identify it but perhaps a dermatologist could identify it from his rather complete description.

April 1898

Coleman, J.R.: Smallpox as it Occurred in Waldo, Trans. PMA, Session

1898 1899, pp 136-140.

Describes a smallpox epidemic beginning in April 1898 with a negro who came from Mason, Ga. It was confined to negroes until October 1898 when whites developed it. There were no recent vaccinations in the area. He inoculated from one case to the exposed and got some prophylaxis. Perhaps vaccinia not available. I didn't check this. In all there were about 200 cases with about 14 deaths, the author states.



Rerick: Memoirs, p. 133

Lists the causes of death in the state in 1899:

Consumption	490	Deaths
Heart Disease	274	
Pneumonia	253	
Malaria	250	
Typhoid	200	
Dystenery	7	
Nephritis	138	
Menengitis	126	
Enteritis	135	
Dropsy	105	
Yellow Fever	74	
Smallpox	7	
Diphtheria	10	

Rérick: Memoirs, p. 133

Measles	43
Influenza & Grippe	41
Old Age	158
Wounds and Accidents	182

There follows a notation of the leading causes of death in the United States for the year 1900. The average death rate was 11.67 per thousand population.

There are also comparative death rates from various diseases in New England and the Northeast.

Rerick: Memoirs, p. 135

"In the twelve months of 1899 about one person of 2,000 population died from this (malarial fever) cause."

"The malarial fever is most frequent and dangerous about the hammocks and where excavations are made for mining, railroad building, or street improvements, and where new country is given to the plow. It has been noted on the other hand that the workmen on the canals in the Kissimmee and Okeechobee regions were singularly free from it. Operatives in the phosphate mines, where the work is carried on in deep pits where the solar heat is intense and considerable moisture is underfoot are liable to cause intense malarial poisoning during the summer."

Rerick: Memoirs, p. 135

"In 1899 there was a slight epidemic of diphtheria at Gainesville, necessitating the closing of school for a few days. There were 8 cases and one death. Rigid isolation and thorough fumigation with formaldehyde were carried out in every case and the town was soon free of the disease. Diphtheria antitoxin procured from the office of the State Board of Health was promptly used in all cases."

Rerick: Memoirs, p. 135

During 1899, scarlet fever was reported from Duval, Escambia, Hillsborough, Orange, St. Johns, Marion and Monroe Counties, but mild in type and no fatalities. In almost every instance it has been possible to trace the source of infection to importation.

Small pot

1899

Trans Jm A. 1899 (Rad #2)  
P 136

Moderately  
severe  
infections\*

 **Loridine® I.M.**  
cephaloridine

500 mg. to 1 Gm.  
t.i.d. (usual adult  
dosage)

Please see back pages for prescribing information.

\*due to susceptible organisms

Ref: 11th Annual Report, Florida State Board of Health, 1899,  
Jacksonville, March 15, 1900  
(manuscript file "D" for Dade County)

Dr. Jas. M. Jackson, county health agent, reporting to the State Board of Health notes that early in 1899 Miami had 10 cases of smallpox. First case a negro in North Miami who had "runaway from a work train, where a negor had smallpox, at or near Fort Pierce, Brevard county." "General vaccination was resorted to....." and the epidemic ended. There is no mention of isolation of the cases - the county isolation hospital had not yet been built.

Smallpox

1899

Rerick: Memoirs, p. 129

Mentions an outbreak of smallpox (doesent specify the location) which the sanitary agents had to deal with.



May: 'Gators' Skeeters and Malary', p. 120-121

Mentions Small Pox epedemic of an estimated 200 cases with perhaps a 100 deaths, all but one of which was among the Negroes. The State Board of Health sent doctors who confirmed the diagnosis and provided "the virus for vacation" which was effective in stopping the epedemic.

Plague in U.S.

1899

Moll: Aesculapius in Latin America, p. 567

Plague invades the U.S. - taken from chronological  
table of Moll.

**Infant mortality in Florida**

**1900**

**Ref: Harrington, Charles: Infantile Mortality and its Principal Cause - Dirty Milk, Am. J. Med. Sc. n.s. 132:811-835, Dec. 1906.**

**In a table on page 813 listing the infant mortality as gotten from the 1900 census, he lists:**

**Key West, Fla. 311.8/ 100,000**

**Jacksonville, Fla. 287.6/ 100,000**

Ref: Jones, T.J.: Tuberculosis Among the Negroes, Am. J. Med. Sc. 132:592-599, Oct. 1906.

The article is devoted to the thesis of the high frequency of tuberculosis among the Negroes and the need for better efforts to eradicate it. ~~xxxxxxxxxxxxxxxxxxxx~~ In a graph on page 594, the Mortality Rate From Consumption in 1900 is portrayed. Florida is shown to have the following mortalities per 100,000 population: White 75 and Negro 140. The only lesser mortality rate listed is rural Louisiana for the whites at about 55/100,000. The negro rate in Louisiana (rural) is 150.

Brink: Fifty Years of Health Work, p. 2

"Another smallpox outbreak appeared in the upper border counties during the 1901 session of the legislature. Food and Medical care were still furnished so there was a consolation if not a real advantage in having smallpox

Porter: Serial No. 6, p. 165

In 1901 the State Board of Health authorized the establishing, equipping and operating of bacteriological laboratory in Jacksonville. Dr. Edwardo Andrade was selected as the bacteriologist of the State Board of Health. Shortly thereafter branch laboratories were built in Tampa, Pensacola, Miami and Tallahassee.

Porter: Serial No. 5, p. 138.

Dr. J. Y. Porter obtained a leave of absence from the State Board of Health and was elected as Representative from Monroe County. He attempted to introduce a bill for compulsory vaccination against smallpox. This prohibited and forbade the operators of large industries, such as mill, turpentine and phosphate activities, from employing labor before the operators and laborers were successfully vaccinated. It passed the Senate but failed in the House, chiefly because of an argument that people who were vaccinated might lose arms and legs. Although the bill failed, an education program, refusal to pay for the food and medical aid or nursing for those ill with smallpox, and the use of quarantine signs on houses in which there were cases of smallpox

Porter: Serial No. 5, p. 138.

gradually accomplished what the legislature failed to pass.



Rerick: Memoirs, p. 137

"The thorough screening of houses not alone of beds, should be considered as essential a thing in Florida as building of a roof over the house. It should be understood that the night air is dangerous only in the absence of mosquito nets, and kerosene oil, a thin film of which kills the mosquito 'wigglers' found in stagnant water, should be liberally used wherever there is opportunity."

Hookworm eradication begins

Jan. 1903

Ref: Eberson: Eradication of Hookworm Disease in Florida,  
J.F.M.A. 67: 736-742, August 1980.

See tearsheets in the manuscript file "H" for hookworm.

First hospital in Dade Cty - Smallpox pesthouse Feb. 1903

Ref: 15th Annual ~~Florida~~ Report, Florida State Board of Health,  
1903, Jacksonville, Feb. 9, 1904

Report by James M. Jackson, Jr., county health agent, mentions a negro found with smallpox on Feb. 17th. Couldn't rent a house for a pesthouse. "Together with the county commissioners and members of the city council, land was located and purchased; city built a small building, 18 x 24 feet, and in twenty-four hours patient was removed, guards employed and pesthouse running. Various patients were added from time to time till April 9th. Pesthouse closed May 5th, having had seventeen colored and five white cases, or a total of twenty-two cases; no deaths. .... All white cases were treated in tents."

(see photocopy in manuscript file "D" for Dade County)

OVER

In the closing paragraphs of this report Jackson urges J.V. Porter to remind the State Board of Health that they had provided Dade county a pesthouse if the county would furnish 13 acres of land. The county commissioners had purchased and deeded the land and had built "a rock road... from Miami to the land, a distance of two and one-half miles. This was done at no small cost." He implies that the pesthouse built by the city was on this land - i.e. where the armory now stands at NW 7th Ave. and 28th Street.

Cash: Story of Florida, pp: 740-741

In January of 1903, Drs. Adamson and Helms of Tampa began to observe the disease in that part of the state. Dr. Adamson called this to the attention of Dr. Byrd, Field Representative of the State Board of Health, and the state board of Health efforts in this disease date from this time.

(John S. Helms)

(William P. Adamson)

Smallpox in various areas of the State

1903-4

Ref: Pierpont, J.H.: President's address, Trans. FMA, Session, 1903, pp. 9-10.

Mentions mild form of variola (smallpox) recurred in various areas of the State during the past year. He goes on to quote the State Board of Health Report that smallpox had not reached epidemic proportions. Pierpont says "in almost every case it was imported from other states."

Reference: Dailey Miami Metropolis I: #83, p.5, column, 3, March 18, 1904

Text: "MALARIA IS ABSURD" Quotes an article in the Times Union in an interview with C. M. Robinson founder of the National Health Association. "If people would take a copious sweat once a week they would never have rheumatism, and even if malaria has a strong hold on the system this treatment would soon eliminate all poison from the system." He makes no mention of quinine therapy. While it is true there is more or less malaria here (Florida), it is a very easy matter to keep it out of the system.

Hardy: Millstones and Milestones, p. 20

"In 1904 the control of smallpox entailed a greater financial expenditure than any of the other contagious diseases with which the State Board of Health had to contend. In nine years 660 cases were cared for at a cost of \$6.95 per case." The management consisted of treatment, medicine, food, nurses, guards and substantial disinfection. During this and the preceding years, there was a promotion of vaccination and the building of isolation hospitals or "rest houses". These isolation hospitals were constructed near Tampa, Jacksonville and Miami (he doesn't mention Miami but I know that one was built there) at approximately \$2,000 each.



Meningitis @ Madison 1904  
Black A.L.: "Colony-purified"  
"Four" at Madison with  
Report of cases

Trans Jm A 1904, pp 173-184

(Reel #2)

\* Also same source p 216 - 227

Byrd, Hiram: "Colony-purified"  
"Four" The Epidemic of Madison  
Statistics

Moderately  
severe  
infections\*

**floridine® I.M.**  
cephaloridine


500 mg. to 1 Gm.  
t.i.d. (usual adult  
dosage)

Please see back pages for prescribing information.

Also @ Pine Oak 1904  
EFIRD, L. J. VAN: An Epidemic  
of Infective Parotitis.  
~~Proc.~~ Transactions of The FMA, 1905  
PP 274 - 279

Moderately  
severe  
infections\*

 **Loridine® I.M.**  
cephaloridine

 500 mg. to 1 Gm.  
t.i.d. (usual adult  
dosage)

Please see back pages for prescribing information.

\*due to susceptible organisms

Ref: Sowder: Florida's Health, etc. - unpublished manuscript  
Chap. 16, p. 21.

"... Yellow fever disappeared from Florida in 1905. Smallpox became more and more rare. Only seven cases were reported in 1940 and only four cases thereafter, the last one in 1946. Malaria had subsided by the 1940's, at about the ~~time~~ time paradoxically when the first systematic statewide control program was initiated. In 1940, 140 cases of malaria were reported, but the war with the Japanese in the South Pacific brought in new cases so that in 1944 there were 522 cases reported and 503 in 1946. By 1949, however, newly reported cases were down to 43 and since 1948, no cases originating in Florida have been reported."

Ref: The Daily Miami Metropolis, June 30, 1905, p. 3, col. 3

This details a report by Dr. Joseph Y. Porter, state health officer, about the health in Florida. "The health of the state, he reports fair and not as much small pox as formerly. This disease is almost exclusively confined to the colored race. There is more typhoid, however, than there should be. This is accounted for by the lack of sanitary precautions but that he is pushing up any locality that is not thoroughly observing this system... Dr. Porter says there is no yellow fever nearer Florida than the Isthmus of Panama, and none in Cuba."

**Smallpox in Dade County**

**1905**

**Ref: 17th Annual Report of the Florida State Board of Health,  
1905, Jacksonville, 1906  
(photocopy in manuscript file "D" for Dade Cty.)**

**"During the past year (1905) we had twenty-eight cases of smallpox which were cared for at the Dade County Isolation Hospital."**

Hardy: Millstones and Milestones, p. 120

"The Sixth International Congress on Tuberculosis was held in Washington, D.C., September 28-October 5, 1908, with Dr. Borter and Dr. Daniel among the 28 in attendance from Florida. Organized anti-tuberculosis work in Florida began some two months after this Congress. The Florida Anti-Tuberculosis Association came into existence in March 1916. Much of the credit for anti-tuberculosis work in Florida belongs to the Woman's Club of Jacksonville."

Cash: Story of Florida, p. 741

An aggressive and active campaign against hookworm was launched by the state Board of Health in 1908, beginning with a meeting of The Florida State Teachers Association in Gainesville. The teachers were informed of the symptoms of the disease and urged to help find cases. This resulted in extensive interest throughout the state and the finding of many cases. At that time the state Board of Health paid the physician \$3 per case for treating indigent hookworm sufferers. Two physicians were detailed to devote their full time to this work apparently. Also, Cash mentions a gift of \$1 million by John D. Rockefeller for the eradication of hookworm disease -- he does not state what per centage of this Florida got.

Therapy (p. 742) was "a few doses of thymol, repeated at

"Cash: Story of Florida, p. 741

intervals of about two weeks until parasites are no longer in the feces.." Cash continues that at the time of the writing of the book (1938) oil of chenopodium and carbontetrachloride were more used than thymol.

See also Hardy: Millstones, etc p 33-34 for more detail.



Ref: Forchheimer, F. (sic): The Treatment of Chronic Bronchitis, Am. J. Med. Sc. 137:167-180, Feb. 1909.

On page 177 of the above article the author recommends the coast of Florida for people with bronchitis and very little secretions and the interior for those with moderate secretions. He doesn't ~~any~~ specify towns and lists many other states and foreign countries as also helpful. The author is professor of Medicine at the Medical College of Ohio in Cincinnati.

Ref: Patterson, Henry S.: Endemic Amoebic Dysentery in New York, with a Review of its Distribution in North America, Am. J. Med. Sc. n.s. 138:198-202, Aug. 1909.

On page 201 the author states:

"Florida. Boggs has contributed two cases. I myself have seen two cases which were infected in this State."

Boggs reference: "Virginia Medical Semimonthly, 1908, xiii,9.

Hardy: Millstones and Milestones, p. 23

"The legislature in 1909 authorized the State Board of Health to provide for the care, segregation and isolation of persons having contagious or infectious diseases. This permitted acquisition and maintenance of institutions for the treatment of indigent persons with tuberculosis. However, the same legislature diverted \$60,000 which the State Board of Health had intended to use for this purpose to the pension fund. In 1913 after several years of frustration and a close study of the subject, an acceptable alternative was suggested. The plan was to employ a corp of trained nurses to travel the state, hunt out pulmonary consumptive and by advice continuous assistance teach the sick individual as well as other members of the family the rudiments of health for living and thus protect the well members of the family as well as assist the sick." It goes on to state that in the following year three ~~four~~ "sociological workers (nurses) for special tubercol

Ref: 21st Annual Report, Florida State Board of Health, 1909,  
Jacksonville, February 8, 1910  
(photocopy in manuscript file "D" for Dade Cty.)

Jackson reporting to Porter:

"The medical profession seeing the dangers, with the assistance of your agent, prepared and submitted to the City Council for its consideration and guidance two bills, one for the tuberculin testing of all cows from which milk was offered for sale in the city, and the other for examination and testing of all milks, and for inspection of dairies. Both of these, having been put in shape for laws by the City Attorney, were passed and are now laws, and one of the medical profession, Dr. J.H.F. Mullet, was elected by the City Council as Food Inspector for the city, and has for some time been performing his duties."

Typhoid Fever in Dade County

Mar-Apr. 1909

Ref: 21st Annual Report, Florida State Board of Health, 1909,  
Jacksonville, Feb. 8, 1910  
(photocopy in manuscript file "D" for Dade Cty.)

Jas. M. Jackson, Jr., county health agent, reporting to Porter:

"During the latter part of March and April there occurred, in a period of about sixty days, fifteen (15) cases of typhoid fever, and for a time caused some anxiety as to the source; but a consultation of the medical profession and an analysis of cases caused us all to come to the conclusion that the source was from milk supply through carriers or vessels used, and the profession joined with me in asking or advising all using milk to sterilize same after it had been delivered to them for use. It was further advised that all citizens using surface or pump water and not supplied ~~from~~ from the city water works, should boil same before using it for drinking purposes... I am glad to say, all reports to the contrary notwithstanding, we have not had a new case since May 1st, 1909."

Smith: Seven Years of Preventive Medicine, JFMA 53,  
August 1966 (See manuscript file T for Terry)

On January 2, 1910, Dr. Charles Edward Terry was inducted as the first full time city health officer for the Duval County area. During the following seven years by enthusiastic effort he reduced the mortality of typhoid fever, smallpox, and tetanus dramatically and favorably influenced other diseases. For a dramatic account of this see the above article.

Ref: Albert, Henry: ~~the~~ The Control of Rabies, Am. J. Med. Sc.  
n.s. 145: 697-704, May 1913.

In a table on page 699, the author ~~it~~ notes that there were in 1911, ~~in~~ thirty-six infected areas (i.e. with rabies) and 128 persons treated for rabies in Florida. These figures are given for other states also and the total number of rabies infected areas reported in the U.S. was 1381 with a total of 4625 persons treated in 1911.

Brink: Fifty Years of Health Work, p. 4

"A Veterinary Division was one time an important part of the State Board of Health. It was established in 1911. Its principal activities were the control of hog cholera and glanders and the eradication of cattle ticks which transmitted Texas fever. Although these duties were finally taken over by the State Livestock Sanitary Board provided for by an act of the 1923 Legislature."



Malaria in Dade County

1911

Ref: 23rd Annual Report, Florida State Board of Health, 1911,  
Jacksonville, February 1912.

(photocopy in manuscript file "D" for Dade Cty.)

Jackson reporting to J.V. Porter:

"Malaria has been more in evidence this year than in any year within the past fourteen, but I believe the people are becoming more aroused and realize more perfectly the effect of the preventing of the breeding of mosquitoes, and in a few years we will find very much less of the disease."

Typhoid fever and amoebic dysentery in Tampa

1911

Ref: Byrd, H. and Bartlett, Chas. Wm.: Typhoid Fever in Tampa, Florida. Studies on an Outbreak of Typhoid Fever and Amoebic Dysentery, Trans. FMA, 1912, pp 179-198.

Records and outbreak of typhoid fever in Tampa in the early spring of 1911 with associated amoebic dysentery. Began in Dec. 1910 and abated in March 1911. Thought to be transmitted by contaminated lettuce.

Thirty Ninth Annual Meeting, FMA  
Trans. FMA, Session 1912, pp. 7-35

May, 1912

Byrd, H. and Bartlett, Chas. Wm.:

Typhoid Fever in Tampa, Florida. Studies on an  
Outbreak of Typhoid Fever and Amoebic Dysentery

pp.179-198

Records outbreak of typhoid in early spring 1911.  
Amoebic dysentery associated. Began in Dec. 1910  
and abated in March.

Thought to be transmitted by contaminated lettuce.

Ref: Sowder: Florida's Health, etc. - unpublished manuscript,  
Chap. 16, p. 3

"In looking over some old correspondence of this period, I found one incident related which I tried to preserve for the archives. ... About 1912, it was the practice of the State Board of Health to pay private physicians for the treatment of cases of smallpox and a young physician in Milton, Dr. H. Mason Smith, submitted a bill for the treatment of three cases of that disease. He had cared for them through the entire course of their illness, and his total bill amounted to \$18.00. There was no question that he had rendered the services, or that payment was due, but Dr. J.Y. Porter, the State Health Officer, thought his charges were outrageously high. After some correspondence with Dr. Smith, which did not change Dr. Porter's opinion, he wrote a memorandum that I found to his assistant, Dr. ~~xxxx~~ Hiram Bird, giving his thoughts about Dr. Smith. He said that when God Almighty created the human race, he had given families

various names, but He had left over an assortment of individuals who did not meet the standards for any of the family names he had selected. So, Dr. Porter wrote, "the Lord finally decided to lump them all together and call them 'Smith.'"... I did not find a record of whether or not the bill was finally paid, but Dr. H. Mason Smith apparently did not suffer otherwise because of his surname. He lived to be Superintendent of the State Hospital at Chattahoochee, a member of the State Board of Health, and was one of the leading psychiatrists in the state carrying on his private practice in Tampa."

Ref: Medical News Items, New Orleans Medical and Surgical Journal  
63: 253, September 1912.

"...a conference of health officials from Alabama, Georgia, Florida, Mississippi and Texas was held in New Orleans, Monday, July 29, for the purpose of considering plans for preventing the introduction of into the Gulf ports of bubonic plague, and also the question of quarantine regulations in the event that plague infection should be discovered in a southern port.

... The visiting health officers ... agreed to make operative at once ... the following line of procedure: A rat survey to be limited to the water fronts; division of cities into districts, with segregation of rats of each area for examination; the examination of rats to include a rat autopsy, search for fleas, microscopic examination and recognition of infected rat localities. Regulation in regard to ships to include 36-inch rat shields on hawsers, rat guards, along each gangway while the ship is being

loaded or unloaded; fending the ship off of the wharf by four floating timbers joined together and inspection of crated cargoes; extra vigilance to be observed on the part of steamship companies before fruit is unloaded from vessels. In the event of infection being discovered in any city, an area of eight blocks is to be considered the area of suspicion.

...

Leprosy in Tampa

1912

Ref: Rept. Supv. Surg-Gen. Marine Hosp. Serv. 1913, p. 249

"During the week ended August 3rd 1912, one case of leprosy was reported in Tampa, Florida." (Entire quote)



Hardy: Millstones and Milestones, p. 20

"A major epidemic of Smallpox occurred in 1912 in Florida with over 3,000 cases reported. There were 60,000 vaccinations in that year. In later years the number of cases declined with the increasing acceptance of vaccination. Late in this period, isolation hospitals built for the care of Smallpox patients were either closed or utilized for other purposes."

Smallpox at Ft. Lauderdale

Feb-June, 1913

Ref: 25th Annual Report, Florida State Board of Health, 1913,  
Jacksonville, March 1914.

Jackson reporting to J.Y. Porter: Smallpox in Ft. Lauderdale since Feb. 1913. Jackson first learned about this May 1st, and it continued until June 30, 1913. Apparently the patients were brought to the Dade County Isolation Hospital: "I therefore secured some teams and had the patients transported to the Isolation Hospital at Miami; had the houses disinfected, and a general vaccination, by which means we were enabled to stamp out the disease in a short time."

Hardy: Millstones and Milestones, p. 126

"The death rate from syphilis in Florida cities was 18.7 per 100,000 population in 1914, as compared with 7.9 for the registration area. This, and the fact that syphilis caused more deaths than malaria or diphtheria, prompted some educational activity by district health officers...The Bureau of Venereal Diseases was created in 1918."

Ref: Byrd: Mosquitoes. Role of Certain Species in Prevention of Malaria, N. Orleans Med. & Surg. J., 67:14-17, July 1914.

Discusses his studies on mosquito species in Florida and their role in malaria distribution. He notes that the high density of pest mosquitoes along the Florida East Coast forces the people to screen efficiently and thus they keep out the malaria bearing mosquito as well as the pest mosquito. This results in a lower incidence of malaria along the east coast than in the inland areas. Notes that malaria is less frequent in Lake County (Eustis and Travares) where again pest mosquitoes force efficient screening. Says there was "four or five years ago" a belief in the Lake County area "that people will not take malaria where there are pines."

Brink: Fifty Years of Health Work, p. 6.

"At a meeting of the State Board of Health held in March 1914, the employment of nurses for tuberculosis work was authorized. During the same year three nurses were engaged and began an educational campaign. They found and visited 271 patients and gave them instruction about how to live and to avoid infecting other people."

Porter: Serial No. 6, p. 164.

The Florida Legislature of 1915 empowered the state Board of Health to operate a "Health Train". This was a railroad car fitted out with various health exhibit that was displayed over the state to educate people on health matters and sanitary systems. More detail appears in the above cited reference.

Registration of Births and Deaths Required

May 27, 1915

Ref: Salute to Dr. William M. Davis, St. Petersburg's Record Keeper, JFMA 35:506, February, 1949

Notes that a State Law became effective May 27, 1915, requiring registration of all births and deaths.

Dr. William M. Davis, City Physician of St. Petersburg, had engaged in such a recording 4 years before this became the law of the State.

First sanitary engineer appointed

1916

Hardy: Millstones and Milestones, p. 22

"The first sanitary engineer was appointed in 1916 in a bureau of engineering was developed with the initial major purpose of preventing Malaria through mosquito control."



Ref: Francis, Edward: Filariasis in Southern United States,  
Treasury Department, United States Public Health Service,  
Hygienic Laboratory Bulletin No. 117, June 1919.  
(borrowed from N.Y. Acad. of Med.) pp. 13-14.

"Blood examination was made May 22 and 23, 1916, of 200 individuals in the following institutions: Duval County Hospital, St. Luke's Hospital, Brewster Hospital, and the City Prison Farm. All were found negative except two colored males; these were met with at the city prison farm and both were natives of Charleston, S.C. (there follows a brief summary of each case) While in Jacksonville I was told by Dr. H. Hanson, director of the laboratory of the State Board of Health at Jacksonville, that 20,000 blood smears had been examined for malarial in that laboratory coming from all over Florida, and that no microfilariae had been found in them; malarial smears are usually taken in the daytime, however. He also said that not a single case of chyluria had come to their notice in five years in routine examination of the urine in the laboratory at Jacksonville. In this connection the late

Surg. R.H. von Ezdorf, United States Public Health Service, told me that in 13,500 thick blood smears taken in various Southern States and stained and examined for malaria no microfilariae had been found."

The implication of the article is that there is an endemic focus at Charleston and the above two mentioned cases acquired their infection there.

**Ref: Francis, Edward: Filariasis in Southern United States, Treasury Department, United States Public Health Service, Hygienic Laboratory Bulletin No. 117, June 1919, pp 14-15 (borrowed from N.Y. Acad. of Med.)**

"Blood examination was made May 11 to 16, 1916, of 115 individuals at Tampa, Fla., in the following institutions: Hillsborough County Farm and Hospital, County jail, Private. All examinations were negative for microfilariae except the following three: (details brief case histories - two males from Havana who had lived many years in Tampa and one German who had spent some time in Charleston. The German had an enlarged testicle) Examination of the annual reports of the Florida State Board of Health since 1907 showed only two cases in which the blood examinations had been positive. Both were reported by Dr. G.W. Simon, in charge of the State bacteriological laboratory at Tampa; one of these cases was reported in 1911 and probably was my case No. 73 above, while the other was reported in 1912 as simply positive for *Filaria bancrofti*, without any further details."

Brink: Fifty Years of Health Work, p. 5

The Communicable Disease Bureau (of the State Board of Health) was established in 1916 and comprised a Division of Field Service, a Division of Laboratories and Division of Child Hygiene. More detail is given.

Hardy: Millstones and Milestones, p. 76

"The Red Cross, a quasi-governmental organization with its program related prominently to the military forces, had its national birth in 1881, and aided in the 1888 yellow fever epidemic in Jacksonville. More typical of the voluntary health agencies is the Florida Tuberculosis and Health Association, which organized in Florida in 1916, though it had its national birth in 1904 and initiated some activities in Florida in 1908." Thus apparently the Florida Tuberculosis and Health Association was the first truly voluntary health agency in Florida. Elsewhere in this book (p. 75) the statement is made that there was no voluntary health organization in Florida prior to 1916.

Hardy: Millstones and Milestones, p. 113

"The early mosquito control in the state was for the most part directed against the yellow fever mosquito, *aedes egypti*. It was not until World War I that drainage and larvicidal measures were introduced at Camp Johnston, now the Jacksonville Naval Air Station." The text goes on to mention the Perry Malaria Control Project in 1919 and the Florida Anti-Mosquito Association organized in 1922.

Hardy: Millstones and Milestones, p. 118

"About this time ordinances began to appear in cities throughout Florida requiring dairies selling milk or milk products to the public to ~~th~~ have their cattle tuberculin tested. Later ordinances required pasteurization. Bone and joint tuberculosis, resulting from drinking milk from tuberculous cows, was being revealed by the program for crippled children. Considerable controversy arose over the destruction of infected cattle and the pasteurization of milk... However, as these ordinances were enforced, orthopedic cases of tuberculosis declined."

Ref: Rept. Supv. Surg.-Gen. Marine Hosp. Serv. 1918, p. 31

"In October last a survey was made through the northern, middle, and southern sections of Florida and clinics held at Jacksonville, Sanford and Tampa. A three day clinic was held at Sanford where the physicians had previously examined the schools of the neighboring counties for trachoma and had selected about 500 persons for further examinations. One hundred twenty-seven were found to have trachoma. One of the large hotels at that place was used by the local community for a hospital and the 127 trachoma cases operated on by the service representative during the three day clinic. Many of the physicians of middle Florida were present."



Hardy: Millstones and Milestones, p. 30

Governor Sidney J. Catts who took office in January 7, 1917 was apparently intollerable to Dr. J. Y. Porter so he resigned. In his place Catts appointed Dr. W. H. Cox, a private practitioner from Brooksville as state health officer. To assist him, Dr. Hiram Byrd, a long time first assistant to Dr. Porter, was named scientific secretary. Cox served from 1917 to 1919 when, because of disagreement with the Governor he was replaced by Dr. Ralph N. Greene. Greene served until 1921 when he resigned to enter private practice. Dr. Raymond C. Turck was then appointed and served until 1925 when he resigned. Dr. B. L. Arms, director ~~fk~~ of the diagnostic laboratories was then appointed and completed a four year term ending in 1929. He was followed by Dr. Henry Hanson.

Hardy: Millstones and Milestones, p.31-32

The influenza pandemic of 1918 presented problems which surpassed all others. Within one month there were 2,712 deaths in the state from this one cause, with up to 145 deaths on one day. During the four month epidemic deaths attributed to influenza and complicating pneumonia exceeded 4,00. All public health effort was directed toward aiding in the care of the ill."

Ref: Editorial: N. Orleans Med. & Surg. J. 71:1-3, July 1918

p. 2: "Leprosy has been known in Louisiana and along the Gulf of Mexico as far as Florida since the last quarter of the eighteenth century. The proximity to the West Indies and its people, known to have lepers among them, and the more frequent contact with the colonies of Latin countries, probably will explain the importation of leprosy to Louisiana so early in the history of this country..."

p. 3: "The majority of cases in the United States today are found in New York, Massachusetts, Florida, Mississippi, Texas and Louisiana on the Atlantic and Gulf seaboard, and in California on the Pacific side. The Middle States have shown less of the disease, excepting Minnesota."

**Ref: Tebeau: History of Florida, p. 375**

**"Jacksonville bore the brunt of the (flu) epidemic. On Sept. 18, a few prisoners at the city farm became ill, and by the end of the month the disease had reached epidemic proportions. Schools and motion picture theaters closed on October 7 and all amusements and soft drink places a day later. By the tenth a protable soup kitchen began to deliver food to persons unable to prepare meals. Two days later Camp Johnston authorities loaned four soup kitchens to the city. Thirty-nine persons died on October 13, the peak of the epidemic. Possibly as many as thirty thousand persons contracted the disease, and 464 died within four weeks. The 'flu' returned in 1919 with 621 czses and sixty-four deaths and again in 1920 with 2,541 cases and seventy-nine deaths."**

Brink: Fifty Years of Health Work, p. 5

In 1918, an outgrowth of the great war and with the cooperation of the U. S. Public Health Service, a Venereal Disease Division was established with a federal allotment of \$8,000 and an equal amount appropriated by the state, a campaign of education, diagnosis, treatment and law enforcement was inaugurated.—Ten Clinics were opened at strategic points for diagnosis and free treatment of indigent cases of syphilis and gonorrhoea.

Spanish influenza in Florida

Fall 1918

Ref: Straight, W.M.: Florida and the Spanish Flu,

JFMA 68: 644 - 654, August 1981.

For much detail of this, the most recent horrendous epidemic in Florida, see the chronological file from Sept. 1918 to Dec. 1918. There were lesser recurrences in the winters of 1919 and 1920. See appropriate dates in the chronological file.

Influenza

1918

Key West

Diddle: Medical care in Key West, p 384 (the photo copy, manuscript file under K).

Influenza epidemic at Pensacola

1918

Ref: Vickers: Notations on Pensacola, p. 104

Graphic description of the flu at Pensacola



Hardy: Millstones and Milestones, p. 126

The Bureau of Venereal Diseases was created in 1918 with the assistance of funds appropriated by the Congress. In 1921 it was consolidated with the Bureau of Communicable Diseases. Again in 1938 with the build-up of World War II a Division of Venereal Disease was again functioning in the State Board of Health with the assistance financially of the U.S. Public Health Service.

May: "Gators, Skeeters and Malary", p. 54

Judge May gives this anikdote to indicate virulence of the 1918 flue in his area of the state. Having explained that he himself had it and that many of the prominate people had died he gives this paragraph: "Soon after that the wife of Jessee Smith, a rich cattleman from red-level district, died, and I appointed Jessee as administrator of her estate. He died before he could qualify and I appointed the husband of their daughter administratr of both estates. But he did not live to qualify. I then appointed Art Smith, the brother of Jessee, the administrator of all these estates, and he died before he could file his bond. There was not man left in these families and I had to go out side for representatives to settle these estates. We lost more than 100 people in this small county of no more than 5,000, and most

2.

Flue at Dunnellen

Spring of 1918

May: "' Gators, Skeeters and Malary", p.154

of them were heads of families."

Hardy: Millstones and Milestone, p.32

From the impetus of WW I an extensive venereal disease drive was launched through the newly created Bureau of venereal disease. Clinics were open, some for a few months and some for a year. Neoarsphenamine for the treatment of syphilis was furnished to physicians from the State Board of Health. One lumber concern employing 1500 men was found to have approximately 900 employees infected with venereal disease. In 1920 more cases of venereal disease were reported by physicians than for the total of the next three reportable diseases. Soon there after the venereal disease control activities ~~were~~ declined and continued at low level for the remainder of the era.

Hardy: Millstones and Milestones, p.32

Mentions an "extensive epidemic of Dengue Fever" in 1919.

Hardy: Millstones and Milestones, p. 32

In 1919 it was decided that something must be done about Malaria since the economy as well as the people were suffering. Taylor County had the highest death rate from Malaria in the state. Therefore an intensive project for mosquito control was undertaken there and proved highly successful. This was partially financed by the Burton-Swartz Cyprus Co., the city of Perry and Taylor County. State Board of Health furnished engineering assistance and supervision. The incidence of Malaria was reduced in excess of 90% upon completion of the mosquito control program. This program was completed in 1921.

Hardy: Millstones and Milestones, p. 34

"Trachoma, a chronic eye infection, was recognized among school children and received major attention by those working in child welfare."

Hardy: Millstones and Milestones, p. 121

"In rural areas, some patients were isolated in "burr cottages", one-room screen structures having a lift-up side. These were usually located in the backyards of patients' homes, and, when used as intended, provided the isolation recommended. However, in one instance a visiting nurse found all of the patients' children locked in the cottage while the mother patient was rocking on the front porch. She had been advised to rest and this, she said, was her method of relaxation. In another instance the nurse found heavy smoke exuding from the cracks around the cottage windows, which were tightly closed. She feared for the patient, only to find he had died some days previously and, since his death, the cottage had been converted into a smokehouse. A photograph of one of these cottages is shown on the plate opposite page 123.



Brink: Fifty Years of Health Work, p. 6

"A case of human plague (bubonic) was discovered in Pensacola by the writer on June 11, 1920...The Public Health Service was notified immediately and asked for assistance. A force of government men was soon sent in and in cooperation with the Board of Health soon stamped out the disease. Trapping operations were continued until May 1, 1922. During the campaign, many rats were destroyed by cyanide fumigation and many buildings were made rat-proof."

Bubonic plague at Pensacola

June 1920

Ref: Vickers: Notations on Pensacola, p. 104-5

Detailed description of this epidemic. There were 10 cases with 7 deaths between June and August 31, 1920.

Hardy: Millstones and Milestones, p. 66

"A Bureau of Communicable Disease and Health Units was established (in the State Board of Health) in 1921, with Dr. George Dame as Director. He had already had four years service as a district health officer."

Wood: Medical Highlights - Fla. West Coast

In 1921 an epidemic of smallpox broke out in the Negro School. The city physician, Dr. Alvin J. Wood, backed by the Mayor, Frank Pulver, and the St. Petersburg police force, vaccinated the students and teachers alike by force.

Epidemic Dengue Fever

1921

Hardy: Millstones and Milestones, p. 32

Mentions an "extensive epidemic of Dengue Fever" in 1921.

Dengue fever at Coconut Grove

Oct. 18, 1921

Ref: Mary Barr Munroe diary on above date

Mentions that Kiet has dengue.

Hardy: Millstones and Milestones, p. 34

"Epidemics of Typhoid Fever were recurring source of concern. In Miami outbreak in 1921 was attributed to contaminated oysters."

Porter: Serial No. 7, p. 193

Beginning in 1921, a vigorous campaign to suppress the breeding of Anopheles mosquitoes by drainage of swamps and screening of homes or living quarters was prosecuted. The chief promoter of this was George W. Simmons Jr. This drive was still in progress at the time Dr. Porter wrote his article in 1925.

*See Hardy: Millstones, etc p 32 for more detail*



Venereal Disease control in Florida

Apr. 1922

Ref: Dame, George A.: Florida's Program for the Eradication  
or control of Venereal Disease, JFMA 8: 178-182,  
April, 1922.

I didn't read this article but it seems to be useful material  
Dame was with the Florida State Board of Health

Forty-Ninth Annual Meeting of FMA

June 27 & 28, 1922

Proc. 49th Ann. Meet. FMA, JFMA 8: 92-19, July

Brink: Fifty Years of Health Work, p. 6

The Florida Anti-Mosquito Association was organized in 1922 and the Florida Public Health Association was launched in 1928.

Raborn, J.B.: Medical Legislation, JAMA 9: 100-104, Dec. 1922

Raborn, a physician in Plant City, was also a representative in the state legislature. In this article he points out the problems of getting better medical legislation through the legislature and urges more doctors to become active in politics. He urges that the SBE appropriation be returned to its previous amount (had recently been halved in an economy move); wants the appointment of the members of the Medical Examining Board to be taken from the governor and given to the FIA or SBE; and urges better laws on the management of communicable diseases. Cites hookworm surveys by the SBE showing 60% of rural school children of a number of counties surveyed have hookworm; in Escambia Cty. the rate was 83%. Also 3 to 6% have trachoma; and 60% of the inmates at Chattahoochee have venereal disease.

Smallpox in Florida

May 1926

Editorial: Smallpox, JFMA 10: 281, May 1926

Mentions a recent outbreak of smallpox "in certain sections of the state" - notes that the newspapers for business reasons have suppressed the reporting of this and condemns this action. Urges publicity to make people get vaccinated and thus stop the epidemic.

diphtheria immunization program

1926

Hardy: Millstones and Milestones, p. 34

Mentions a program of "active immunization" which was started in 1926 that resulted in decreasing numbers of illness & death from diphtheria.

Hardy: Millstones and Milestones, p. 123

"Pneumothorax was the popular treatment of the day and a few physicians in this method. Miami was elected as the site for the training. Local tuberculosis specialists were leaders in giving instruction. In addition to pneumothorax some simple surgical procedures were being done in Miami, probably the earliest chest surgery for tuberculosis in the southeast. Desperate for space, physicians installed their patients in the greenhouse of the Jackson Memorial Hospital. As the patients moved in, the flowers moved out." (Note: The term greenhouse related to the paint on the outside of wooden pavilion-type screen structures of temporary nature - Hardy is mistaken if he believes they were used as actual greenhouses for flowers.)

Hardy: Millstones and Milestones, p. 123

In 1927 the legislature created the State Tuberculosis Board with authority to study the problem, select sites, build hospitals, and develop programs for the treatment of tuberculosis. The first State Tuberculosis Board appointed by the Governor was composed of: W. T. Edwards, a Jacksonville business man; J. Maxey Dell, M.D. of Gainesville; and Mrs. Mary L. Stanley, Daytona Beach, former President of the Florida Federation of Women's Clubs, and at that time President of the Florida Tuberculosis and Health Association.



Ref: Reminiscences of James M. Anderson, M.D., P. 22

Mentions instituting drainage of swampy areas and covering palms with a mixture of gasoline and old crank case oil to cut down mosquito breeding.

*Epidemic*

## Reminiscences of James M. Anderson, M.D., P. 20

Dr. Anderson speaks of their campaign to get people to keep their children inside screens during the hour before dark. He was convinced that the anophles mosquito would not bite and thus transmit malaria. Several times in his reminiscences in letters and papers he speaks of this point and claims that by simply doing this they markedly reduced the frequency of malaria in his area.

*Epidemiol*

Ref: Rash, J.O.W., Rickettsial Diseases in the South, JFMA 28:270-286, December, 1941

This is an exhaustive article on rickettsial diseases (typhus, Rocky Mountain Spotted Fever, Q Fever, Brills Disease). There is relatively little mention of Florida specifically, but on p. 274 is a table of the incidence of Typhus Fever in the U.S. from the U.S. Public Health Service from 1928-1938. This shows a significant amount in Florida but much less than appears in Georgia. There is a similar table on p.279 dealing with Rocky Mountain Spotted Fever which shows almost no cases.

Ref: Reminiscences of James M. Anderson, M.D., P. 19 & PP. 23-24

He details his "heroic treatment" of Malaria. This was apparently devised by his friend, Dr. T. C. Jones. He used 1/4 box of Arm and Hammer Soda and 1 gallon of hot water to gavage the stomach through a tube. After this he put 20 grains of Cowmal into the stomach and two ounces of Fleets Phospho Soda. He then gave an enema of 1 gal of warm water containing 4 tbles. of soda. Then he injected 30 grains of quinine in each hip and "corded" the arm and gave 7 1/2 grains of quinine intravenously. If the pupils began to dilate he slowed down the ~~several~~ administration of the intravenous quinine. Dr. Anderson described several cases in which this seemed to "fetch them back from the dead." Apparently after the initial intravenous dosage it was given 10 grains nightly for 10 days by now. In more chronic cases then continued intravenous quinarsen- perhaps this was the preparation of quinine he refers to.

*Epidemic*

Ref: Review of "Endemic Typhus Fever of the Southeastern United States: Reaction of the Guinea Pig, Maxcy, United States Pub. Health Rep. 1929, 44, 589, as it appears in Am. J. Med. Sc. n.s. 179, 867-8, June 1930.

"It appears, therefore, that a North American strain of typhus can be recognized and distinguished from Old World typhus, though the two be closely related immunologically. The conclusion may be drawn that the disease which is endemic in our eastern seaports, Wilmington, N.C., Charleston, S.C., Savannah, Ga., Jacksonville, Fla., belongs to the typhus group, but is not dependent upon importation from across the sea. This disease has a common origin with the typhus of Mexico, even though transmission be effected by some agent other than that generally recognized for this disease, namely, the louse."

(above quote appears on page 868)

Ref: Reminiscences of James M. Anderson, M.D., P. 19

" I had tabulated some figure that showed that 98% of Malaria in Lafayette ( County) were Tertian or Quartan type and only 2% of the tropical ( blackwater fever type)... Malaria in Dixie County was the reverse of what it was in an adjoining county; 98% of tropical ( blackwater fever) type.. the majority of cases were so saturated with double and triple infections..."

*Epidemiol*

Hardy: Millstones and Milestones, p.37 and figure 1. opposite page, 72

The first County health department was established in 1930 in Taylor County. Two other counties Leon and Escambia, followed in 1931 and 1932. After Social Security funds became available, counties organized rapidly, some singularly and others in groups of two or three until 1960 when all 67 were affiliated with the State Board of Health.

Brink: Fifty Years of Health Work, p. 6

"The first full-time county health unit under the State Board of Health began to function in Taylor County on Sept. 1, 1930." The minimum personnel consisted of a health officer (physician with special public health training), a public health nurse, a sanitary officer and clerk. Such a unit cost about \$10,000 annually at the time Brink wrote the above manuscript.



Hardy: Millstones and Milestones, p. 36

"During this period there were some bright spots in public health programs in spite of the inadequate budget. One was the establishment in 1931 of the Malaria Research Station at Tallahassee. Dr. Mark Boyd, a well known Malariaologist was appointed as director and paid by the Rockefeller Foundation." Goes on to indicate that they used Malaria to treat neuro-syphilus at the State Hospital at Chattahoochee.

Hardy: Millstones and Milestones, p. 37

In September 1932 the Division of Malaria Control Studies was established with Dr. T. H. D. Griffiths, Malariaologist of the U.S. Public Health Service, assigned to direct the program. This was a part of the country-wide study of the Malaria parasites index. Also in 1932 the U.S. Department of Agriculture Bureau of Entomology and Plant Quarantine established a mosquito research station at Orlando which was still functioning in 1964 at Gainesville.

Hardy: Millstones and Milestones, p. 37

"The significance of nutritional deficiency as a cause of human disease was recognized in this period. Pellagra had been a substantial problem accounting for 100 to 200 deaths annually and for much debilitating illness. Field studies in the Southern states established that the cause of the disease was deficiency in specific nutrition elements. In 1932 the legislature authorized the free distribution of Brewers' yeast for the treatment and prevention of this disease."

DU PUIS, J.G.: Pellagra

J.F.M.A. 2:234-236, Feb. 1916

I did not read this but he seems to favor dietary inadequacy as the cause.

Dengue Fever, Miami

1934

Ref: Faver, Marshall: Ocular Complications following Dengue epidemic of 1934, JFMA 24:395-397, January 1938

I have not read this in detail but in brief it recounts cases in which he found eye damage which he attributed to the Dengue Fever epidemic of 1934.

Dengue in Miami

July, 1934

Ref: Hanson, H.: The Dengue Fever Situation,  
JFMA 21:109, Sept. 1934

Brief editorial noting between 6000 and 8000 cases of dengue fever in Miami starting in July, 1934, or possibly earlier.

Points out Y.F. carried by same mosquito so physicians should be alert for Y.F.

Griffitts, T.H.D.: Dengue in Florida, 1934, and Its Significance,  
JFMA 21:395-397, Mar. 1935

Reports 1st case discovered July 16, 1934.

Up to Nov. 24, 1934, there were 1,003 reported cases and estimates up to 15,000 cases. Gives a table of cases elsewhere in the State, noting some from many areas, with:

70 at Ft. Lauderdale  
157 at Tampa  
120 at Orlando

Also mentions 3 deaths in Miami.

Alludes to epidemic of 1922 and gives a brief account of the historical aspects of dengue.

MacDonell, George W.: The Dengue Epidemic in Miami  
JFMA 21:392-394, Mar. 1935

Delightful account of the dengue epidemic with statistics.

He estimates 15,000 cases although Henry Hansen estimated  
6000 to 8000 cases.

No deaths.

Didn't read the article in detail.



Hardy: Millstones and Milestones, p. 41-42

"After some years of cut-back programs because of a loss of funds during the depression the Division of Public Health Nursing "fell back to eleven supervisors and 275 county nurses through the Federal Emergency Relief administration (FERA) nursing project. These nurses carried on a generalized nursing program in public health with emphasis on the maternal and infant care, participated in hook worm and Malaria survey, and gave parent education and assisted in communicable disease control. The state wide midwifery training program was activated."

Hardy: Millstones and Milestones, p. 114

"In the early 30's typhus fever began to be reported, and by 1935 there were 27 reported cases..."

Cash: Story of Florida, p. 748

Mentions the outstanding work in investigation or treatment (or both) of certain diseases:

- Dr. Mark F. Boyd, Malaria
- Dr. R. H. McGinnis, Syphillis
- Dr. Calvin T. Young, Smallpox
- Dr. Gary R. Holden, Cancer
- Dr. John Keely, Hookworm Disease

These men had done their work during the quarter of a century prior to the publication of Cash's book in 1938. No specific articles by these men are referred to.

Hardy: ~~Mil~~stones and Milestones, p. 44

The American Public Health Association sent a team of consultants to Florida in 1939 to make a study and provide recommendations for improvement in the public health picture. Malaria and hookworms were emphasized in their report. During that year four counties had a Malaria death rate of over 100 per 100,000 population and 16 additional counties had a death rate of more than 50 per 100,000. By the standard yard stick of 300 cases per death, these figures pointed to at least 102,000 cases of Malaria per year in Florida.

Hardy: Millstones and Milestones, p. 44

The American Public Health Association sent a team of consultants to Florida in 1939 to make a study and provide recommendations for improvement in the public health picture. Malaria and hookworms were emphasized in their report. During that year four counties had a Malaria death rate of over 100 per 100,000 population and 16 additional counties had a death rate of more than 50 per 100,000. By the standard yard stick of 300 cases per death, these figures pointed to at least 102,000 cases of Malaria per year in Florida.

Undulant fever in Miami

1939

Ref: Smiley: Knights of the Fourth Estate, pp 159-162

Graphic description of the undulant fever that was epidemic in Miami in 1939 and the fight to pass an ordinance requiring ~~pasteurization~~ pasteurization of milk.

Hardy: Millstones and Milestones , p. 46

In 1939 the state legislature adopted the "State Sanitary Code Law." On the basis of this authority, the Bureau of Sanitary Engineering in 1931 drew up the first state sanitary code containing chapters on subjects relating to sanitation and quarantine necessary for the protecting of the public health.

Hardy: Millstones and Milestones, p. 45

The first law requiring the installation of silver nitrate into the eyes of new born babies to protect from gonorrhoeal infection was enacted in 1941.



Hardy: Millstones and Milestones, p. 48

In 1941 Florida's death rate from Malaria was the third from the highest among the states. Only Arkansas and Mississippi had higher rates. Over the 10 year period 1930 to 1939 2,749 Floridians were reported to have died of Malaria, an average of 275 person per year. This year Dr. John E. Elmdorf, Jr., Malarialogist of the Rockefeller Foundation, was appointed director of the newly established Bureau of Malaria Control. With the supplementary aid of the newly introduced D.D.T., this program proved to be one of the outstanding success stories of public health in Florida and in the world. The rapid decline in mortality and morbidity continued toward complete iratication from the state.

Hardy: Millstones and Milestones, p. 49

In Dr. Wilson T. Sowder's report for 1942 he showed that 5% of Florida's young white males and 40% of the non white males had positive blood tests usually indicative of syphilis. Particulary disturbing was the finding that Florida's venereal disease rate was one of the three highest in the country for the whites and the highest for the non-whites. Rapid treatment centers were established in 1943 in the introduction penecilun in 1944 produced a dramatic change in the treatment of both syphilis and gonorrhoea.

Hardy: Millstones and Milestones, p. 114

"In the early 30's typhus fever began to be reported, and by 1935 there were 27 reported cases; by 1943, reported cases had reached 314, and the greatest number of cases (484), was reported in 1944. In 1945 the U. S. Public Health Services started a D.D.T. dusting program to destroy rat-fleas in the endemic typhus areas. Prior to this, a rat-proofing program was carried out in the major cities of the state. After the extensive dusting program, was completed, the typhus rate dropped sharply, and by 1960 there was not a reported case."

Ref: Rogers, W.W.: Some Wartime Problems of the Local Health Department, JFMA 31:578-582, June, 1945

Rogers, who was City Health Officer for Jacksonville, details problems that the war caused such as need for intensive venereal disease control, shortage of personnel in health departments, problems of environmental sanitation and food sanitation, and in June of 1944 an ice shortage in Jacksonville.

At the end of this article is a table showing the average death rates in Jacksonville in 1944 and compares them to statistics from ~~1911~~ Jacksonville between 1911 and 1940.

Licensure of Hospitals and Nursing Homes

1945

Ref: Sowder: Florida's Health, etc. - unpublished manuscript,  
Chap. 16, p. 33.

"The inspection and licensure of hospitals was begun in the Caldwell Administration (August 1945 - 1948), and of Nursing Homes during Dan McCarty's short tenure. (Jan 6, 1953 - Sep6. 28, 1953)"

Polio Scare

Spring, 1946

Ref: Florida's Polio Scare & Georgia's Medieval Quarantine",  
JFMA 33:92, August, 1946

In this editorial by Webster Merritt is an account of 126 cases of Polio that developed in the State of Fla. in the Spring of 1946, and the ridiculous quarantine response instituted by Georgia's Health Officer.

Ref: Directive and clippings in the Mustard collection

"Jackson Memorial Seeks More Space For Polio Cases, Fortieth Victim Overflows Facilities; Navy May Spray County With DDT"

"With two patients under observation as possible victims (of polio), Zack Thomas, acting superintendent, and hospital physicians informed the county commission they would have no place to put them if they proved to have infantile paralysis... Meantime, Dr. T.E. Cato, Health Commissioner, reported a new polio case - a 26 year old N.W. section male Negro - bringing the total for the county for the year to 40. In addition, a 4 year old infantile paralysis victim from Canal Point or Lake Okeechobee was brought to Jackson Memorial Hospital for treatment."

Sowder, Wilson T.

Ref: Public Health Problems in Fla., JFMA 33:81-84, Aug. 1946

Have not read this article but it should be referred to  
at some future date.



Ref: Riley, Edwin G.: A Preliminary Review of Poliomyelitis in Florida, JFMA 33:638-642, May, 1947

This is a review of the episodes of poliomyelitis in Florida beginning with 1920 up to and including 1946. There is much detail and should be reviewed if the general history of Florida medicine is written.

Hardy: Millstones and Milestones, p. 114

"The last confirmed case of indigenous malaria was finally reported in 1948."

Ref: Malaria Remains Endemic in Florida, JFMA 34:403-404,  
January, 1948

Editorial notes that malaria occurs in cycles, and if there is a decrease in the number of cases in a community after a good mosquito control program, the program is given credit whereas it may have been the downswing of the cycle..

"State Board of Health statistics showing that there has been an average of 560 cases of malaria annually in Florida for the past 20 years, with a peak of 1,535 in 1939 and a low of 85 in 1942.

In 1946 there has been 467 cases, and in addition to this 40 cases in veterans returning from overseas. For the first 7 months of 1948 there had been 100 cases reported and 10 cases brought from overseas by veterans.

*over*

Listed are the number of cases by county, and all of them are in the Northern end of the State and the Central area.

Typhus Control

August, 1948

Ref: State Board of Health, Typhus Control, JFMA 35:103,  
August, 1948

Notes that the first case of endemic Typhus Fever was reported to the State Board of Health in 1918.

Cases increased in number until a peak in 1944 when 484 cases were reported during the 13 yr. period from 1935 to 1947 a total of 2,972 human cases with 199 deaths were observed in Florida. It has been demonstrated that only 1 human typhus case of each three cases that occur is reported. Therefore, typhus fever would seem to have become a disease of major importance in Florida.

There is much more detail about the use of D.V.T. and the effectiveness in control of the rat-flea population.

Sowder, Wilson T.: Progress in Public Health in Florida,  
JFMA 35:635-639, April, 1949

I have not read this article but it would deserve  
reading before writing the History of Medicine in  
Florida

Ref: Sowder: Florida's Health, etc. - unpublished manuscript  
Chap. 16, p. 24 & 24.

"Endemic or murine typhus fever, which is spread by fleas and rats was a major problem in Florida until about 1950. In the decade 1935-1944, there were 1,858 cases in Florida and 150 deaths. A vigorous rat control program under the leadership of John Mulrennan and the unforgettable George Bote, assigned to us by the U.S. Public Health Service, practically wiped the disease out. Better sanitation by denying food to rats, rat proofing, poisoning by warfarin, and spraying to kill fleas did the job."

John Mulrennan was the State Board of Health mosquito control officer, I believe.

Hardy: Millstones and Milestones, p. 56

"The major press for Malaria control was so effective, that in 1950 it could be stated unequivocally that this disease, so recently a major surge, had been eradicated. Yellow Fever and Dengue seemed only of historical interest. But the insect hosts remained and with them there was the ever present hazard of reintroduction and spread."



Hardy: Millstones and Milestones, p. 118

"The first case of bat rabies in the United States was diagnosed in Hillsborough County in 1953. Extensive studies of wild life rabies were made by the Division Biologists during 1954-1963. The last human death from rabies in Florida was reported in 1947."

Hard: Millstones and Milestones, p. 56

"Prior to the 40's, polio did not commonly occur in the South, but there followed a disturbing epidemics, the worst in 1955. Then the polio vaccine became available, first Salk and then oral, Florida had an active role in the early test of the efficacy of each of these vaccines. Evidence indicates that this dread disease ~~k~~ can be eradicated, and this goal is nearing a time of period."

Hardy: Millstones and Milestones, p. 132

"In 1958, the Commission (Crippled Children's Commission) began treatment of congenital heart diseases requiring surgery."

Hardy: Millstones and Milestones, p. 124

"The death rate in Florida reached a low of 4 per 100,000 in 1962, with a national rate of 5.1. This low rate and better response to treatment has resulted in public apathy and complacency (about tuberculosis)."

Hardy: Millstones and Milestones, p. 57

Since 1959 three epidemics of vire encephalitis (a mosquito born disease transmitted chiefly from birds), two small and one substantial, occurred due to the St. Louis encephalitis, all of these outbreaks in the Tampa Bay area. In 1962 Florida's encephalitis research center was established in space made available by the Southwest Tuberculosis Hospital in Tampa. This is supported by grant by the N.I.H.

Hardy: Millstones and Milestones, p. 165

"An added major research program grew out of the disturbing St. Louis Encephalitis epidemic of 1962 in the Tampa Bay Area."

Ref: Sowder: Florida's Health, etc. - unpublished manuscript

"... of 118,289 specimens of feces submitted to the State Board of Health laboratories 19,000 were positive for parasites - mostly hookworms, but the infestations were less heavy."

This manuscript is without serial numbering on the pages and I neglected to note the chapter and page number.

~~118,289~~  
~~19~~

$$19,000 = 16.06\% \text{ of } 118,289$$

Ref: News article, "Will Navy put Jax off limits?" The Miami Herald  
December 14, 1968 , page 28A

News article filed in manuscript file "S" "Syphilis" states that venereal disease is so rampant in Jacksonville that some Navy authorities are considering moving the city off limits to thousands of sailors and flyers stationed nearby.



Causes contributing  
to upbuilding of Fla.  
(p. 18)

Stockbridge & Perry,  
Fla. in the Making

"To the work of the pioneers in experimental medicine who first discovered the causes of yellow fever and malaria and how to prevent them, is due the removal of the last obstacle to the permanent settlement of the state."

Miami Public Library