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A VIEW

OF

WEST FLORIDA,

EMBRACING ITS

GEOGRAPHY, TOPOGRAPHY, &c.

WITH

AN APPENDIX,

TREATING OF ITS

ANTIQUITIES, LAND TITLES, AND CANALS.

AND CONTAINING

A MAP,

EXHIBITING

A CHART OF THE COAST, A PLAN OF PENSACOLA,

AND

THE ENTRANCE OF THE HARBOUR.

BY JOHN LEE WILLIAMS.

PHILADELPHIA:

PRINTED FOR H. S. TANNER AND THE AUTHOR.

T. B. BAILEY, PRINTER.

.....
1827.

EASTERN DISTRICT OF PENNSYLVANIA, TO WIT :

BE IT REMEMBERED, That on the ninth day of March, (L. S.) in the fifty-first year of the Independence of the United States of America, A. D. 1827, H. S. TANNER and JOHN LEE WILLIAMS, of the said District, have deposited in this Office the Title of a Book, the right whereof they claim as Proprietors, in the words following, to wit :

“A View of West Florida, embracing its Geography, Topography, &c. with an Appendix, treating of its Antiquities, Land Titles, and Canals. And containing a Map, exhibiting a Chart of the Coast, a Plan of Pensacola, and the entrance of the Harbour. By John Lee Williams.”

In conformity to the Act of the Congress of the United States, intituled, “An Act for the encouragement of learning, by securing the copies of maps, charts, and books, to the authors and proprietors of such copies, during the times therein mentioned.” And also to the Act, entitled, “An Act supplementary to an Act, entitled, ‘An Act for the encouragement of learning, by securing the copies of maps, charts, and books, to the authors and proprietors of such copies, during the times therein mentioned,’ and extending the benefits thereof to the arts of designing, engraving, and etching, historical and other prints.”

D. CALDWELL, *Clerk of the*
Eastern District of Pennsylvania.

PREFACE.

THE following pages are the result of the occasional employment of the writer, while engaged in other pursuits, during a residence of seven years in Florida. His attention was first attracted to the subject, by remarking the singular deficiency of the maps of West Florida, in his frequent excursions through the country. Having been appointed one of the commissioners for locating the new seat of government of Florida, the author, for his own satisfaction, made a minute survey of the coast, from St. Andrew's bay to the Suwannee, as well as of the interior of the country in which Tallahassee is situated. In consequence of the information thus acquired, he conceived the idea of preparing a new map of that part of Florida which had come under his immediate notice; and of accompanying it with a memoir, or essay, containing such information in relation to the country, as would seem to be called for at the present moment.

In appearing before the public as an author for the first time, he throws himself upon the candour of those who are in search of useful and accurate information, without being too fastidious as to the manner in which it is conveyed; for they will find no attempt to amuse by highly wrought diction, or the ingenious inventions of the imagination: his object has been to offer something useful to practical men.

Although Florida is rapidly increasing in population, there are several causes which must tend to retard its progress in some parts, for several years to come: these are, principally, the unsettled land claims, and the large grants possessed by individuals, which are withheld from sale for the purpose of speculation.

The general excellence of the climate, and its adaptation to the culture of some of the most valuable of the southern staples, must give it decided advantages over any part of the southern seaboard. The sugar cane, the silk worm, the grape, and the olive, will no doubt at some future day render it one of the most important portions of America. The fine harbours of Florida will secure to it important commercial advantages; and no portion of the Union possesses such singular facilities for the construction of canals. Should the *ship channel* across the peninsula be effected, and in the practicability of which the author is very sanguine, a most important revolution in commerce will be the result.

The author has had it in contemplation to prepare a similar map and memoir of East Florida, should the success of the present attempt be such as to afford him encouragement: his expectations, however, are not high, and it is therefore impossible that his disappointment can be great. Should such a work be undertaken, the natural as well as the civil history of Florida will appear in a more systematic form.

The Appendix to this little volume is somewhat more copious than was at first intended; but it contains some interesting documents, which the author felt unwilling to omit.

PHILADELPHIA, *March 5th, 1827*

VIEW OF WEST FLORIDA.

THE title of West Florida has, at different periods, been applied to territories very different in location as well as in extent. At one time, the river Mississippi was the western boundary, and for a long period of time, the Appalaehicola river was the eastern limit. In 1821, General Jackson, then Governor of Florida, by an ordinance, since confirmed by several Acts of Congress, fixed the limits of West Florida, from the bay and river Perdido on the west, to the river Suwannee on the east; and from the Gulf of Mexico on the south, to the thirty-first degree of north latitude on the north, until intersected by the Chatthahe river; then down the Chatthahe river to its junction with the Flint river; thence eastwardly on a direct line towards the head of St. Mary's river, until it intersected the river Suwannee. The tract of country thus designated, is situate between $28^{\circ} 10'$ and 31° N. lat., and between 6° and $10^{\circ} 20'$ W. long. from Washington. It is about 276 miles long, from east to west; and from forty to ninety in width, from north to south. It contains about 16,500 square miles, and 10,560,000 acres of land, with a population of from eight to nine thousand inhabitants.

The face of the country is, generally, rolling, but there are neither mountains nor hills of any considerable magnitude. It is intersected from north to south by numerous rivers, many of which are navigable quite through the territory. A large portion of the country is covered with forests, the trees usually at a considerable distance apart, without underbrush: while the sur-

face of the ground presents a carpet of verdant grass and flowers most of the year. The borders of the water-courses, however, as well as the hammocks, are covered with thick woods of hard timber, tangled with innumerable vines. An abundance of lakes and ponds diversify the interior; while the seacoast is indented with bays, bayous, and lagoons, abounding with fish of all kinds, and affording every facility for internal as well as foreign commerce. Although the largest portion of the country is covered with pine barrens, and much of it extremely poor, yet there is also much upland, interval, and hammock land, of the most excellent quality: peculiarly well calculated to produce sugar, rice, cotton, tobacco, indigo, corn, small grains, vines, and fruits; and all the timbers necessary for ship-building are found here in abundance. The pine barrens afford excellent grazing for cattle, and they are abundantly stocked with wild game. The climate is healthy and the seasons mild.

The southern coast of West Florida, from Perdido bay to Cape St. Bloss, a distance of 140 miles, is formed of pure white sand, principally silicious, but mixed with calcareous particles of broken sea shells. From Cape St. Bloss to the Appalache river, a distance of sixty miles, the coast is composed of a yellowish brown sand, alternating with white cliffs and sometimes with salt marshes. From the Appalache to the Suwannee river, a distance of eighty miles, a calcareous rock forms the seacoast, generally covered with grass and rushes for several miles into the sea. These different formations of the coast are occasioned by various causes. The limestone which forms the base of the country, from the Chactawhatchee river in the interior, to the seacoast of Appalache bay, is, every where, very productive of grass; this bay is also sheltered from storms by the circular form of the coast; and the Tortugas shoals throw the currents of the gulf so far out to sea, that they scarcely strike the western coast of Florida until they reach Cape St. Bloss; from thence westward, the coast receives the full force of both storms and currents, and exhibits a beach of sand, white as snow, and almost as hard as rock.

Between the Perdido bay and the Escambia river, the soil is alluvial. The substratum is a clay of various colours—white, yel-

low, red, and blue. Strata of dark iron sandstone pervade it in many places; and is often thrown up in small hills, especially in the low grounds near the water-courses. This clayey substratum is generally covered with a fine, white, silicious sand, which in its native state, produces little more than pine forests and grass; except where the tide or the streams have thrown upon it fossil or vegetable remains; these form hammocks and intervals, rich in vegetable productions. The peninsula, extending between Pensacola bay and St. Rosa sound, has not even clay beneath the sand: peat is sometimes found there in extensive beds, with abundance of cypress and cedar stumps, standing far beneath the sand. A stratum of sandstone, three or four feet in thickness, is forming, some twenty miles from the west end of the peninsula, but it is yet too tender for building.

North of the Chaetawhatchee bay, a high ridge of sand divides the water-courses, which fall southwardly into the bay, and northwardly into Shoal river, a branch of Yellow Water. Near the east end of the bay, this ridge subsides in a succession of knolls, which give rise to the springs of Alaqua river and Uchee creek. A pleasant country of rich land extends from this to the Chaetawhatchee river, based on soapstone and limestone formations.

The soapstone is found in strata, from five to eight feet thick, and extends to the Shoal river. The limestone has been discovered west of the Chaetawhatchee, only in the Uchee valley, where it is abundant. On the eastern bank of the Chaetawhatchee, the limestone is found less compact than on the western; it seems a congeries of shells, some of them entire, cemented together by a tough aluminous matter. Buhrstone of an excellent quality is found in large masses near the Alabama line. Millstones are made here of a better quality than can be procured from abroad. This stone extends as far eastward as the Flint river, and northward for a hundred miles or more. The structure is nearly compact; the cavities are very small; it appears like a mass of fine escallop shells; is evidently calcareous; and rings like marble. The colour is from a light gray to a brown, the break conchoidal, and has an earthy appearance. Ponds and sink holes are numerous between the Chaetawhatchee and Chapola rivers, and large

springs, forming navigable streams, often burst from this formation; the waters, though perfectly transparent, are highly impregnated with lime, and are not generally considered healthy.

Proceeding towards the Chapola river, the limestone acquires a firmer texture, the clayey concrete disappears, and the mass approaches nearer the surface; it is seen as far south as the Econfina river, seven miles above the head of St. Andrew's bay. Near the Chapola river, this formation often rises above the earth, in tabular platforms; they are usually covered with grass, but not with trees. At other places, broken fragments lie in large piles, interspersed with dogwood, chicasa plumb, hydrangia shrubs, and vines. Under these piles of rock, caves have usually been discovered.

East of the Appalachian river, there are few indications of stone, until we approach Leon county. Here a ridge appears above the earth, from four to six miles from the coast, and parallel with it; it dips a few degrees to the SSW., and is probably the edge of that stratum which forms the coast: the navigation of all the streams between St. Marks and Suwannee is impeded by it. This rock resembles chalk, generally of an ash colour; some of it, however, is quite white, and is used for chalk. A kind of imperfect flint is imbedded in it, in form of a shelly nucleus. It becomes hard on exposure to the air. The flint is of a light gray colour, full of holes, which are filled with the calcareous matter: it breaks with a conchoidal fracture; gives fire freely with steel; is quite opaque, but void of the greasy feel which is peculiar to pure flint. On points of the coast, where the waves have washed the calcareous matter away, these flinty nuclei form extensive and very rugged reefs. The fort of St. Marks is built of this limestone. Grass grows spontaneously on this rock, whether covered with salt or fresh water, even to the depth of twenty feet. Oysters grow in great masses to the rock, and they are very hard to separate from it.

Through the centre of Gadsden and Leon counties, ridges of clay extend, and form the base of an excellent soil. The upper stratum is red and very pure, and has an unctuous feel; but very small sandstones, of the size of a buck-shot or bullet, pervade the whole mass: this stratum is usually fourteen feet, more or less,

in thickness. Under this, a white clay, similar in quality, extends from twenty to thirty feet, which resposes on a rotten limestone; somewhat different, however, from that found in the western part of Jackson county. The shells which compose it are more perfect, and the cement is a calcareous, instead of aluminous matter. It is found to make excellent lime. The springs and streams in this part of the country are very pure; they rise and run over the aluminous formations, but they all at length sink beneath the limestone rock, where, having united their currents and become highly impregnated with lime, they rise at once navigable rivers; such are the St. Marks, the Wakulla, and Oscilla rivers, which from these springs pass over the chalky formation to the sea.

CLIMATE.

This term, originally expressing temperament of situation, has by common use become an indication of situation, as it respects health or sickness. In this sense, West Florida is peculiarly blessed. Her climate is temperate, both from its latitude and from exposure to the mild sea breezes of the Southern gulf.

A rolling country is more favourable to a free circulation of air than a level plain; and a sandy soil, covered with forests, although not the most profitable to cultivate, is eminently productive of health. On the contrary, the estuaries of large rivers, and rich bottom lands, densely covered with timber, although rich in natural productions, are usually unfavourable to health, especially when first opened to the influence of the sun. A high state of cultivation usually corrects both. Ponds of stagnant water are usually fruitful sources of disease, and some of these exist in this country. Many of these ponds, however, are merely expansions of the subterraneous rivers, which pervade the limestone region. Extensive marshes are, also, usually unhealthy in a warm climate; and these line our seacoast, from the St. Marks eastward, to the Suwannee; how far the sea breezes may correct the evil, time will discover.

From these observations, it appears certain, that the advantages of a pure atmosphere, and at the same time a very rich

soil, cannot be expected to meet in the same place. If this country be diversified with both these blessings, in different situations, it is all we can reasonably expect. Residences on the low alluvial bottoms, and near the marshes, have usually, in autumn, been attended with agues and bilious fevers; except these, I have heard of no diseases peculiarly incident to the climate. Pensacola has twice been visited with yellow fever. The last time that dreadful disorder occurred, was in the year 1822. The season had been unusually hot, there was no efficient police, the town was filthy in the extreme, and overrun with strangers. A cargo of spoiled codfish arrived from Havana, and was distributed among the little huckster-shops along the bay. From this moment, the pestilence spread like wildfire, sweeping whole families, and almost whole streets, in one general destruction, which ended only in a total desertion of the inhabitants. We have every reason to believe, that a vigilant police will always prevent the recurrence of a similar calamity.

Our climate has proved peculiarly salutary in pulmonary complaints. Many of our most useful citizens came here, merely for the recovery of constitutions which were rapidly declining; and they are now enjoying perfect health. We are taught by experience, that intemperance will produce disease in every climate; but with habits of cleanliness, moderate industry, and temperance, any person may enjoy as perfect health in West Florida, as in any part of the universe. Sea-bathing is one of the greatest luxuries of our climate; and this, more than any other prescription, has tended to recover invalids from most disorders. This, with other gentle exercise, and a prudent diet, has uniformly proved successful, in the most inveterate diseases. The yellow fever has yielded to it, and by it this dreadful disorder has often been prevented.

BAYS.

Perdido bay, which divides Florida from Alabama on the west, is a pleasant sheet of water, about thirty miles in length, and from two to six miles in breadth. The bar, at its junction with the gulf, is shoal and constantly shifting, and has from five to seven feet water.

Pensacola bay is from twenty-five to thirty miles long, and from four to seven miles wide. About eleven miles from its junction with the gulf, it divides into three parts; the north-west bay is called Escambia, which is about ten miles long, and from four to six wide. It receives the Escambia river at the north-west end, which enters among several low islands. The north branch is called Yellow Water bay; it is about the same length, and from three to four miles wide. It receives a river of the same name, from the east, through several channels. Black Water bay is attached to its north-west corner. This is a small bay, seven miles long and two wide, and is full of islands; it receives from the north, Cold Water river, Black Water and Cedar creeks. The eastern bay is called East river bay, it extends six or seven miles into the country, where it ends in a small river. St. Rosa sound is connected with Pensacola bay, on the south-west. The latter joins the Gulf of Mexico, between the fort of Barrancas and St. Rosa island, where it is at least three-fourths of a mile wide. It has, at the lowest tides, twenty-one feet, and usually twenty-three feet water on the bar. This is by far the best harbour on the Gulf of Mexico, or indeed south of the Chesapeake bay. The following Report of Commodores Bainbridge and Warrington, and Captain Biddle, will show the opinion of those gentlemen on the subject.

“The bay of Pensacola is extensive and capacious, easy of access from the sea, and affording secure anchorage for any number of vessels of the largest class. The depth of water on the bar, as laid down by Major Kearney, of the Topographical Engineers, is twenty-one feet. From the report to us of Lieutenant Pinkham of the John Adams, whom we directed to sound, and from all the information we have been able to collect, at least this depth of water, we believe, will always be found on the bar, even after a long continuance of northerly winds. These northerly winds sensibly affect the waters on this part of the coast; they, however, seldom continue long. The ordinary tides do not rise more than three feet, but these tides run with considerable rapidity, thus affording facilities to vessels working in or out of the harbour, against an unfavourable wind.

“The position which we have selected, as, in our judgment,

combining the greatest advantages for a Navy Yard, is in the vicinity of the Barrancas, and to the northward and eastward of Tartar point. Here we found the necessary depth of water nearest the shore ; an important consideration in respect to the expense to be incurred in carrying out the wharves required for naval purposes. Here too the works erected for the defence of the Navy Yard, would give additional security to the harbour, while its vicinity to the Barrancas would admit of assistance to it, in case of need, from the troops stationed there. Here, we are, in our opinion, susceptible of complete defence, at a less expense than elsewhere in the bay. The position is wholly protected by Tartar point, against the swell of the sea, which strong south-westerly winds set over the bar. It is favourably situated for rendering assistance to vessels approaching the harbour. Its healthiness is not surpassed by any other part of the bay ; and fresh water is here abundant, and of a wholesome quality."

The post of Barrancas was established in 1669, by the Spaniards, under Andre de la Riola ; and the present fort was built by Don Bernardo de Galvez, about 1784. It is situate on the north shore, on a high shell bank. It completely commands the entrance of the harbour. West of the fort, a light-house was erected in 1824. It is thirty feet high, and may be distinctly seen at fifteen miles distance. The ruins of old Fort Arunado, are situate on the north side of St. Rosa island, about two miles from the west end, and two and a half from Barrancas, nearly opposite Tartar point, where the naval depot is now established.

Large vessels, coming from the eastward, should keep in seven fathoms water, until the light-house bears N. by W., in that course run to three and a half fathoms on the bar, then steer the same course till the west end of St. Rosa island bears E. by S. and the light-house N. one half W. ; then steer direct for the light, until within the island, then hawl up and run into the bay. The same should be the course of large vessels coming from the west, except that they may safely run in five fathoms. Vessels drawing less than fourteen feet, may bring the light to bear N. three-fourths W., and then steer for it till within

half a mile; thence E. by N. till sheltered by St. Rosa. The ebb tide sets south-west, and the flood north-east. The ebb sets directly on to the Caycos shoal, and the flood across the Middle ground.

The following extract from the Report of F. Laval, Commissioner of Marine, &c. to His Catholic Majesty, in 1719, will show that a century has made no material difference in the entrance of Pensacola bay:

“The Admiral (Champmeslin) was on board of the *Hercules*, of sixty-four guns, but then mounted only fifty-six, and drew about twenty-one feet water; he was advised that there was only twenty-two feet on the bar; he therefore despaired of entering the harbour; but an old Canadian, named Grimau, a man of experience, and well acquainted with the channel, alleged that he could take her in, and actually succeeded. He ran along a good musket-shot from the ledges, (breakers,) till he brought the Fort of Pensacola, (Barrancas,) N. and S. one-fourth E., and ran that course till he was W. one-fourth S. from the old fort on St. Rosa; he then bore away a little to the west land, keeping midway betwixt that and the island, to avoid a bank on the latter, which ran out to some distance WNW. from the point. The *Hercules* was followed by the *Mars*, pierced for sixty, but carrying only fifty-four guns. The *Triton*, pierced for fifty-four, but carrying only fifty. Two frigates, one of thirty-six, the other twenty guns. They all anchored in water from twenty-five to thirty-six feet, in good holding ground of soft mud.”

The Grand Lagoon extends from the entrance of Pensacola bay, below the Barrancas, eight miles westward, and within three-fourths of a mile of the Perdido bay, and with which it might be connected by a trifling labour. It is open to the gulf near the west end; the passage has usually six feet water on the bar; near the Barrancas it is more shoal, the sea having lately broken over and thrown considerable sand on the bar.

The Big bayou enters the bay one and a half miles above Tartar point.

Three miles farther north-east, Bayou Chico enters; on the north bank of which, Camp Clinch is beautifully situated, one and a half

miles north of the bay, of which there is a fine prospect. This bayou is a pleasant, healthy, and safe harbour for small craft.

Bayou Texar enters from the north, one mile above the city of Pensacola; it is a handsome sheet of water, one-fourth of a mile wide, and four miles in length.

The Bayou Mulatto enters the east side of Escambia bay.

St. Rosa sound connects the bays of Pensacola and Chactawhatchee. This is a charming sheet of water, about forty miles long, and from one and a half to two and a half miles wide. A narrow peninsula divides the Pensacola bay from the sound, for thirty miles. Vessels drawing five feet water may pass through the sound and thence to sea, through the west end of Chactawhatchee bay, and the pass L'Este. The navigation is perfectly safe, and no difficulty occurs, except at the narrows, near the east end of the sound, where there are two places that the channel is narrow and crooked.

The Chactawhatchee bay is at least forty miles long, and from seven to fifteen wide. It receives the Chactawhatchee river through many mouths, at the east end; while on the north side there enters Cedar creek, the Alaqua river, Rock creek, Boggy creek and Twin creek. This bay is much affected by storms; and many shoals running far into it, the navigation is considered somewhat dangerous. It has two outlets. The pass L'Este communicates with the sea, seven miles south-east from the west end of the bay, and at the west end by St. Rosa sound. When a heavy swell of the sea meets the ebb tide on the pass L'Este, the breakers render it impassable. The British established a very profitable fishery here. It might still be improved to great advantage.

St. Andrew's bay has, hitherto, been little known, but it must hereafter become a place of importance. It is easy of access, has eighteen feet water on the bar, good anchorage, and is perfectly sheltered from every wind. It is divided into several arms, which stretch over a wide extent of country; the north and east arms extend to the neighbourhood of the rich settlements of Chipola, the principal trade of which, at this time, passes through this bay. Three islands lie off the mouth of this harbour, Sand island, Hummock island, and Crooked island. The principal

channel is between Sand and Hummock islands, it being the nearest; betwixt Hummock and Crooked islands the channel is equally good.

The main body of the bay extends northward for about twelve miles, and thus far averages about five miles in breadth. Five miles from the entrance, a large arm, near a mile in width, runs to the west, parallel with the coast for twenty miles. Ten miles from the entrance, another branch extends westwardly thirty miles; this branch is in some places ten miles wide, and approaches very near the Chipola inundation. The Wetappo, a navigable creek, which enters the north-east end, rises near the very bank of this sheet of water. Five miles north-west of East bay, the Wapaluxy bay branches off to the west, in a circular form, which the name indicates. This bay is from seven to ten miles in diameter. A navigable creek enters the west side of Wapaluxy, from which, to the lake branch of Chactawhatchee river, is only four miles and a half. Seven miles farther up the north branch, vessels may carry eighteen feet water, to Little Oyster point. From thence to the head of the bay, a distance of eight miles, the water gradually shoals to seven feet.

St. Joseph's bay presents an entrance, from the north-west, six miles wide, but most of this distance is occupied by a middle ground. One channel is close under the north point of the peninsula, where there is seventeen feet water. The main channel commences near Cape False, and passes about two miles from the main land, and has twenty-eight feet water. The bay is generally from seven to eight miles wide, but grows narrower, and shoal, towards the south-east end. It is twenty miles in length, and easy of access. On the land side it is unapproachable, being insulated among lakes, lagoons, and marshes. The southern point of the peninsula, which forms St. Joseph's, is the Cape St. Blass. The north end is blown up into sharp sand hills, except, that inside of the point there is a forest of high pines, which may be seen at a great distance.

The Appalachicola bay is formed by the islands of St. Vincent and St. George, opposite to the mouth of the Appalachicola river. It is from four to eight miles wide, and twelve in length. Vessels drawing twelve feet water can enter the bay, and with eight feet

can approach Murder point, at the mouth of the river. This river being the largest in West Florida, and the outlet of an extensive and fertile country, it will, at some future time, render this bay a place of extensive business, unless the produce of the country should be directed into some other channel.

This bay is connected with the gulf, on the north-west, by the Indian pass, which is rapidly filling up: little more than four feet water is now found on the bar.

The main channel is betwixt St. Vincent and St. George islands; here the channel is about a mile wide, and easy of access. A small sand bar lies outside of the entrance, which is called Flag island: the channel is near the east side of it. From the north-east corner of St. Vincent's, an extensive oyster bar runs, in a circular form, round the entrance of the bay, almost to St. George's island. St. George sound, between the island and the main, is a pleasant inland passage, but is obstructed about midway by an oyster bar, which extends from north to south, quite across the channel; at low tides the water is not more than four feet deep on this bar. East of Cat point, in this sound, there are extensive bars, covered with large and excellent flavoured oysters.

The Ocklockney bay is twelve miles long, and two broad. The Ocklockney river enters the west end, where a large branch passes off to the west, called Crooked river, which, after running about twenty miles, enters New river near its junction with the sound, directly north of the west end of Dog island. The entrance of this bay is obstructed by sand bars and oyster shoals. No more than four feet water can be depended on at low tide.

The Appalache bay is that circular indentation which sweeps round from the South cape to Histahatchee bay. This on one side, and the peninsula on the other, affords a partial shelter from the eastern and south-western storms, and although it is quite exposed to the south, and the shore also quite shoal and composed of rock, yet it has the credit of a safe navigation. There is really no good harbour in it for large vessels. It is wholly surrounded by green marshes, interspersed with keys, which are covered with live oaks, cedars, and palm trees. The port of St. Marks is much frequented since the establishment of the seat of government at Tallahassee: seven feet water can usually be depended on

in passing up the river to the fort. A great number of oyster bars render the navigation of the river narrow, crooked, and difficult.

Histahatchee, or Deadinan's bay is small, but offers a safe harbour for small vessels, which may enter and anchor perfectly secure in twelve feet water. Nearly the same draught of water may be carried up nine miles to the falls.

Vacassar bay receives the Suwannee river from the north, divided among an archipelago of islands and keys; but scarcely five feet water can be any where found on the bar, nor is the anchorage outside of the bar very secure, though here the water is deeper. This is the easternmost bay in West Florida.

CAPES.

Cape St. Blass is the most noted of any in West Florida: it is situate in Washington county, in latitude $29^{\circ} 42'$, longitude $85^{\circ} 45'$, and lies in front of St. Joseph's bay. It stretches into the sea near twenty miles, in successive ridges: even at that distance, it is little more than seven fathoms deep. Vessels drawing ten feet water, may, in good weather, pass within three miles of the land, but if a southern swell prevail, they ought to keep double that distance from the shore.

Cape St. George extends south from the island of that name, about five miles from the west end, in latitude $29^{\circ} 32' N.$ and longitude $84^{\circ} 52' W.$ It is perceptible only three or four miles from the island.

South Cape is a point of land in front of Alligator harbour, on James island, below the Ocklockney bay. Several distinct shoals lie off this point. Vessels bound to or from St. Marks, should keep three miles from this shore.

ISLANDS.

St. Rosa is a narrow sandy island, extending from the mouth of Pensacola bay, opposite to the fort of Barrancas, to the pass of L'Este, a distance of near fifty miles. It is about half a mile in breadth, and is conspicuous for its pure white sand hills, which

at a distance appear like hills of snow. It is very barren: a few crooked live oaks and pitch pine grow in spots on the north side of the island; while scrub oaks and yapon, tangled with vines, form impenetrable thickets on the northern sides of the sand hills; these are excellent shelters for deer, which are numerous during winter; abundance of water fowls cover the fresh water ponds, which are found in all the valleys. There is usually a heavy surf on the south shore of the island; during storms it is tremendous; several vessels have been wrecked here. A small fort and pilot house formerly stood near the west end of the island, they are both in ruins.

Opposite the mouth of St. Andrew's bay, are three small islands: the first is Sand island, three miles from the shore, and about one mile in length. Except some bunches of tall grass, (*uniola latifolia*,) and some scurvy grass, or as it is called here, sea-kale, it is totally barren. During summer, it is wholly covered with the eggs of sea fowl. A shoal extends from the shore to this island, except a narrow channel in which there is eight feet water.

Hummock island commences a mile and one-fourth south-east of Sand island, and extends, parallel with the coast, six miles; it is quite narrow, and has no timber, but is covered with the same kind of tall grass. Immediately after passing either end of this island, vessels may anchor in perfect safety, close along shore. A ridge of low sand hills extends along the west side of this island. On Gauld's chart, this and Sand island, are laid down as forming the west point of St. Andrews; and Crooked island, alone, is laid as separate from the shore. It is not improbable, that these islands have been separated by some late eruption.

Crooked island lies a mile south of the latter. Its north-east point approaches very near to the shore, past which, however, there is a deep channel. It is nearly as long as Hummock island, but lies in form of a crescent. It is half a mile wide, at the north end, but becomes narrower at the southern end. This island has on it a considerable grove of pine trees. Between Sand and Hummock island, the channel is more than half a mile wide. To enter, sail within a mile of the centre of the island, where the channel opens between a shoal one mile below Sand island, and another

shoal which stretches west from the centre of Hummock island. After entering between these two shoals, run within a quarter of a mile of Hummock island, then haul up north. If you wish to enter the bay, pass close to the north-east point of Sand island. If the object be merely to make a harbour, you may lay round the north end of Hummock Island, in four fathom water and muddy bottom.

St. Vincent's island is on the west of Appalachicola bay; its form is a triangle; the north and west sides about ten miles long, and the eastern from five to six miles. It is thickly covered with timber, lofty pines shade the seacoast, while the eastern shore, within the bay, is diversified with live oaks, magnolias, and palms, which give it the resemblance of a fine park, rather than a lonely uninhabited island. An excellent stream of fresh water enters the bay from about the middle of the east side. The northern shore is marshy and broken by large lagoons.

St. George's island is about forty miles long, and from a half to two miles wide. Its west end is about opposite, and eight miles south of the mouth of Appalachicola river. For about four miles, its direction is E. by S.; it then turns NE. The east end is about three miles from shore. The southern shore of the island is thrown up into two or three parallel ridges of a yellowish-brown sand; some of them forty, some fifty feet high. The centre of the island is usually covered with pine forests, among which there are some hammocks of good hard timber land. The northern shore is marshy, and indented with numerous bays and lagoons. On this side, the island seems to be increasing in size. The east end is low and barren.

Dog island lies in the same direction as St. George's, and about the same distance from the shore. It is seven miles long, and one and a half wide. It is similar in surface to St. George's. At the north-east end there is an excellent harbour for small vessels. It is three miles distant from St. George's. The tide runs with great force between them.

James island lies between New river and Ocklockney bay. It is made by a branch of the Ocklockney, called Crooked river, which branches off to the west from the head of Ocklockney bay. It is twenty miles long, and from five to twelve miles wide.

Alligator harbour is in the south-east corner of this island; South cape is part of the peninsula that forms the harbour. This island is, in general, a poor pine barren, broken by ponds of water, and skirted, especially on the east end, with extensive salt marshes.

There are four or five small islands between the Appalache and Suwannee rivers. Within the mouths of several rivers, also, especially the Chactawhatchee, Appalachiecola, and Suwannee, there are several extensive low islands; but they are little known, and can be of little consequence until some enterprising planters shall bank the water off them. They will then become the richest cane lands in the territory.

RIVERS.

The Perdido river is of little importance, except as forming part of the boundary line between Alabama and Florida. It rises about thirty miles within the state of Alabama, increases rapidly from large springs, and empties into the bay of the same name. It is navigable seven miles above the bay, to some saw-mills, which have done considerable business.

The Connejuh rises in the south-east part of Alabama. Its general course is south-west, until it meets the Escambia river, near the north line of the territory. It there loses its name for that of Escambia, a much smaller river. Here it turns a south-east course, and enters the north-west end of Escambia bay, through several deep channels. Its principal tributary streams are, Sepulgas, Murder creek, the Big and Little Escambia. The lands, on the banks of this river, are rich, but are often overflowed, which renders planting, on the intervals, a hazardous employment. In autumn, they are also subject to agues and fevers. An opinion is prevalent here, that the soil is so open, that the waters cannot be banked out. The experiment has never yet been made; should it ever prove successful, as I think it will, some of the finest land that the territory affords will be reclaimed.

The Yellow Water also rises in Alabama. Its course is south-east, till it enters the bay of the same name. It receives from

the south-east, near its mouth, Shoal river and Titi creek. About ten miles from its mouth, the Yellow Water is obstructed by extensive rafts, which wholly impede the navigation. There is a very good settlement of industrious farmers on this river, forty miles above the bay. These lands stand the droughts of summer better than any other lands in the country. On Shoal river, also, there is very good land in small bodies, some of which is settled.

The Alaqua rises north of the Chaetawhatchee bay, and increases rapidly from large springs, some of which are large enough to turn mills at their source. It is navigable for boats, fifteen miles, to Vaughn's. It runs through one of the pleasantest wild countries in Florida, and empties into a large lagoon north of the bay.

The Chaetawhatchee rises near the east line of Alabama; its general course is south and west, till it arrives at the Cow ford, thirty miles from its mouth; it then runs west to the bay, which it enters through numerous channels. It receives in its course Pea river, and Uchee creek, from the west; and Big Barren, Holmes, and Pond creeks, from the south-east. The United States' road, to St. Augustine, crosses at the Cow ford; three miles below, the river divides, and makes an island ten miles long: the eastern branch is called East river. The western branch is cut up with innumerable islands, and the water running very rapid, the navigation of this branch is difficult. Boats have ascended this river one hundred miles. The Big spring of Chaetawhatchee, rises about one mile and a half south-east of Holmes creek, and joins it about the same distance from the Chaetawhatchee: six or seven feet water may be carried up to the spring head. This has been a considerable landing place for several years past. The banks and every sunken log in this river, are covered, most of the year, with a profusion of wild flowers; turtles and water-snakes, are scarcely less numerous.

The Econfina has a short course; it rises from large springs and ponds, south and south-east from Oak Hill, in Washington county, and falls into the north arm of St. Andrew's bay: it is navigable to the natural bridge, fifteen miles from the mouth, where the United States' road crosses.

The Chapola is a western branch of the Appalachicola. It rises

in several very large springs, on both sides of the north line of the territory, in Jackson county; after running twenty miles, and receiving considerable accessions from both sides, it divides, and both branches sink into the earth; the eastern branch continues under ground several hundred yards; the western branch but a few rods: these streams unite again about half a mile below. To this place the Chapola is navigable. About half a mile west of the natural bridge, a large stream hursts from the base of a gentle hill, and joins the Chapola a miie below; it is large enough for boat navigation. Five miles below the natural bridge, the Big spring of Chapola rises, three miles east of the river; this spring is, also, navigable to its source. Thirty miles below this spring, an arm of the Appalachicola has lately burst into the Chapola, and formed a lake twenty miles in length, and seven wide, in which the forests are yet standing. This river enters the Appalachicola nine miles above Colinton, or fort Gadsden. The banks of the Chapola are usually low. The upper part of the river has a swamp on one or both sides, a mile or more in width. The adjoining lands are among the best in the territory, and generally settled with able planters.

The Appalachicola is formed by the junction of the Chattohoche, and Flint. The former rises near the corners of the four states of Tennessee, South Carolina, Georgia, and Alabama. Its course lies through a country of excellent land. The Flint is a much smaller stream. The junction is one hundred miles from the sea. To this place considerable sized schooners have sailed. Boat navigation extends three hundred miles higher. This river was formerly the boundary line betwixt East and West Florida, until the line was removed to the Suwannee, by an ordinance of general Jackson, in 1821. The current of this river is swift, the channel deep, narrow, and crooked. It overflows its banks to a considerable extent. The lands on its margin are very rich. It has carried a considerable Delta into the bay of the same name, which it enters among numerous low marshy islands.

The Ocklockney rises in Georgia, has a general course SSW. passes through the north-west corner of Leon county, through the eastern part of Gadsden, and enters the gulf on both sides of James island. Little river, Robinson's creek, and Rocky Cum-

fort, branches of this river, pass through a large tract of excellent land, in the heart of Gadsden county.

The Appalache is formed at the fort of St. Marks, by the junction of the Wakully and St. Marks rivers; it is only nine miles to the sea. Schooners, drawing seven feet water, have ascended the Wakully to Francis town, seven miles above the fort, and the St. Marks, four miles, to the watering place. In the winter of 1826, the Franklin schooner came up to the fort, drawing nine feet; but seven is as much as can be usually depended on: numerous oyster shoals render the channel excessively crooked. Business on this river is rapidly increasing. Large boats may ascend the Wakully to its source, which is eleven miles and a half north-west from St. Marks fort. For two miles the upper part of the river is full of islands, and the whole surface of the water is covered with grass, like a green meadow. Boats may also ascend the St. Marks river nineteen miles and a half, to the place where it emerges in a considerable pond; this, also, is wholly covered with grass and rushes, although several fathom deep. The outlet of this pond is rapid, narrow and rocky. It is an excellent situation for mills. The water is at all seasons equally abundant, and the timber in the neighbourhood plenty and of a good quality. Below this rapid the river becomes broad and deep, but there are two more rapids below; the one six and the other ten miles above the fort: the latter is half a mile in extent. The pine barrens usually approach very near the river. A few small mill streams enter on each side, on which are found tolerable hammock lands. All the lands within the forks of Wakully and St. Marks, for four miles back, are very rich, but low, and cleared of timber; by banking two or three miles, on each river, a plantation might be redeemed that would become invaluable. Situate at the head of schooner navigation, near the seat of government, with the great road passing through the centre, no situation in Florida would have greater advantages.

The Oscilla rises just south of the north line of the territory, in several large lakes and ponds; it passes through the centre of Leon county, and enters the sea twelve miles east of the Appalache; it has five feet water on the bar, after which there is a con-

siderable depth for twelve miles; above that the river sinks in the earth for a considerable distance.

The Acheenahatchee and Chattahatchee are considerable streams, which enter the gulf east of Oscilla, but they are little known.

The Histahatchee enters the bay of the same name about fifteen miles west of Suwannee; it is navigable nine miles, to the falls, where it branches into several small creeks. The banks of this river present rocky shores scooped out into very singular fantastic shapes.

The Suwannee is a very pleasant river, and, but for a shoal bar at its mouth, would be of great importance in navigation. Its principal stream comes from the Oquafanoka swamp. It receives two large branches from Georgia, the Allapahaw and Ouithlacouchee. Its course is west for a considerable distance; it then makes a great bend, quite round to the east, where it meets the Santafée; it then turns a south-west course to the sea.

This river is yet but little known. It is said to be generally deep. At its mouth it is divided into a great many channels, among a wide extent of low keys: none of them has been found to possess five feet water. The ruins of an old town have been discovered, just below Ouithlacouchee, on the western bank. And on the same side, below its junction with Santafée, the remains of old Suwannee town are still to be seen. A little below the Santafée is the Great Maneto spring. This spring is on the south-east side of the Suwannee river, below the Santafée, at the foot of the Upland hills; the basin is circular, fifty yards in diameter, of a bluish green colour, but perfectly transparent, and exceedingly deep. It is a kind of jet, emitting the waters with great force for nearly half a minute, and then subsiding for the same length of time; the stream, issuing from this fountain, is forty or fifty feet wide and very deep, it abounds in fish and alligators; and the Indians state that the maneto, or seaweed, used to resort to it. This is nearly the size of the Chapola Big spring. The general course of this river is through a pine barren country. There are, however, on its borders, some considerably extensive hammocks of good land. A few Americans are about settling near the mouth of the river, for the purpose of cultivating the sugar cane.

LAKES.

The central parts of Florida are interspersed with a great number of lakes and ponds: some of them are natural reservoirs of water drained from the surrounding country, and some are expansions of subterranean rivers, which frequently pervade the country.

Mickasukee lake is situated fifteen miles north-east from Tallahassee; it is twelve miles long from south to north; the western part is, in form, a triangle; from the south-east point, an arm, one or two miles broad, extends quite into Georgia. There is some good hammock land on its borders. And many old Indian fields remain covered with peach trees.

Lake Jackson lies north-west from Tallahassee. It is eight miles long, and from two to three miles wide. This is a very pretty sheet of water. On its shores are some of the best lands in the country.

Lake Iamony is about fourteen miles north of Tallahassee; it is eight miles long and three broad. This lake is said to contain a great number of fish. Its banks are generally good land. Its outlet communicates with the Ocklockney river.

The Old Tallahassee lake lies five miles east of the seat of government, in La Fayette's township. Chefixico's old town was situate on the south shore; here are extensive peach orchards. It is three miles from east to west, and about a mile wide.

Lake Wimico is situate in Washington county, between the mouth of Appalachicola river and St. Joseph's bay. It is seven miles long, and two or three broad.

The Inundation, or Hort's lake, is, to appearance, newly formed, on the Chapola river, by a part of the Appalachicola bursting out and inundating the country; it is from ten to twenty feet deep, yet the forests are standing in the water. It is the longest lake in the country, being twenty miles long and seven broad.

Dennard's lake, betwixt the Cow ford and St. Andrew's bay, in Washington county, is twelve miles long and five wide; it is little known.

ANIMALS.

The native horses of Florida are a small breed of ponies, hardy, and easy to support, but not fit for the harness. They will keep fat on the wild grass and herbage of the country; they are excellent swimmers, and are better for travelling in a new country than English horses; endure very long journeys with ease, but are not heavy enough for the harness. They were originally brought from Andalusia by the Spaniards.

Mules are rarely raised here, but are frequently brought from Campeachy; are principally used for draught, and they are very long-lived. It is believed, that a mixed breed of native and English horses would unite most of the qualities desirable in that useful animal.

The cattle are a large breed, with broad horns and close hair; they are good breeders, but have not been highly valued for the dairy. They often become very fat on the wild grass, but it does not so much increase their milk. Very few oxen are used; when yoked, they are always managed with a line, like horses.

Sheep would succeed well, did not the inhabitants prefer to keep an immoderate number of useless, thieving dogs, to worry them. The barking, yelping, and howling, of a congregation of half starved whelps, is music to the ear of a native Floridian; even if, by supporting them, his children be reduced to the same miserable circumstances. It is not surprising, that there are few sheep in Florida.

Goats are raised with ease; very little care is expended about them; they even seem to prosper best, when neglected.

Hogs grow well; but corn is always too dear to fatten them; most of our pork is, and will be, brought from a distance.

Of wild animals, the deer is most numerous. Panthers, bears, and wild-cats are plenty, in some parts: wolves are sometimes seen; foxes are rare. The Mexican opossum is very numerous; even in the city of Pensacola, they often rob the hen-roosts. Racoons and skunks are frequent in the interior.

There are two kinds of squirrel; the large fox squirrel, and the small gray. The former is much admired as a pet, especially,

when it is found with a white face, and a rich brown colour. The Salamander is a large mole, about half the size of a rat. It penetrates the earth in every direction, especially the pine barrens, which it throws up in the form of ant-hills. Otters and minks are numerous, in the water courses. Rats and mice are very troublesome, every where.

The Gopher is a very peculiar animal. It delights in black jack ridges, which are easily penetrated with its burrows. They are easily caught, by digging pits at the mouth of their holes, into which, if they fall, they remain prisoners. Soups and gum-boes, made of their flesh, are much esteemed. They are a harmless animal, of the turtle species. They feed, night and morning, on the dewy herbs, near their burrows. They lay several eggs, in the sand, about the size of a hen's, but quite round, and leave them to hatch by the heat of the sun.

REPTILES.

The alligator stands at the head of this class. He is, undoubtedly, the ugliest creature living. Floating on the water, he appears like a rotten log; on land, he appears like a huge snake, with the addition of sprawling claws. But it is in the wallows, large mud holes among the rushes, that the alligator appears herself; surrounded by a hundred young imps of ugliness, all barking like puppies, and chased by the male for food. The female then adds rage to her native deformity, and she often kills her whelps by the strokes of her tail, made in their defence. Yet these reptiles are more terrific than dangerous. Persons often bathe within a few yards of them, in perfect safety; nor have they been known, in this country, to injure any human being. They have sometimes caught hogs and dogs, but very rarely. Almost every night, they leave the salt water, to wallow in some pool of fresh water, in the vicinity; but they usually return before morning. Some of them, however, live in fresh ponds, forty miles inland. Salt lagoons are their favourite residences, where fish, and other reptiles are abundant; and they are not delicate in their choice of food. It is sometimes difficult for a stranger to sleep near their residences, for their bellowing. About the Gulf of

Mexico, they are abroad during the whole winter. Their nests are truly described by Bartram. They usually consist of five to seven tiers, or alternate layers, of eggs and vegetables; the whole plastered with mud. When hatched, by the fermentation of the vegetables, and the sun's rays, the young whelps all crawl from one hole, near the top of the cone, and, instinctively, seek their mother, in the adjoining wallow.

The other lizards of Florida are very small; the largest is about seven inches long, with sides striped, alternately, red and brown, and has large red gills; he is a disgusting reptile, and somewhat impudent withal, often intruding himself into the houses of new settlers; he is in other respects innocent. The old inhabitants call him the scorpion.

The northern blue tailed lizard is sometimes, but rarely, seen.

The chameleon is the least ugly of the species; he is very frequently seen, and has much the contour and manners of a dandy. He will often sit on a green leaf, and puff out his under lip like a bladder, speckled with rubies, looking you all the time in the face, with great assurance.

The rattlesnake, moccasin, and viper, are all dangerous snakes, and highly poisonous; but they are very rare. Many are killed by the fires that frequently run over the country. Some are killed by the deer, who wage an eternal war with them. And the king snake kills them whenever they cross his path. There is a little ground rattlesnake, that escapes the fires in his burrow, he is very diminutive, being not more than twelve inches long, but his bite is very poisonous. A water moccasin, that covers the old logs, in the rivers near tide water, is a large dreadful looking snake, but it is said not to be poisonous. On the contrary, a livid looking mud asp, that has sometimes been mistaken for an eel, has, in several instances, proved fatal to those who expose themselves by wading in muddy creeks.

The king snake is clothed with a variegated coat of black, brown, red, yellow, and white, in rings of about an inch long. his bite is innocent, but he has the credit of tyrannizing over his fellow crawlers of the desert.

Black snakes are tolerably frequent, both on land and in the water: the former, sometimes, catch chickens, ducks, and gos-

lings. The coach-whip is most frequently seen in the pine barrens; he perfectly resembles a coach-whip, with a black handle; but is very innocent.

The garter, riband, green, chequered, and glass snakes, make up the account of this species, in West Florida.

Although the lands of Florida may not, all of them at least, produce forty bushels of frogs to the acre, as has been asserted by a late traveller in that country; yet, it cannot be denied, that they are very numerous, and very noisy. The Bell or Virginia frog, is only found in the eastern district; and there they are not numerous. The bull-frog is numerous every where: a stranger would imagine, that he often strained his lungs, to imitate the voice of the lordly alligator. The red and black toads are common and useful reptiles; in destroying insects they are extremely expert. The shad-frog, speckled, and green frogs, are confined usually to the water. The house-frog always becomes very musical before a rain; and may be termed the poor man's barometer. The little green garden frog changes colour like the chameleon, and his barking imitates, to perfection, the voice of a puppy. Except the little savanna-frog, these embrace all the species with which we are acquainted.

INSECTS.

Of these the jigger is the most troublesome; it enters the skin, most usually of the feet, and produces an excessive itching and inflammation. Frequent sea-bathing, and constant cleanliness, are the best guards against them. When once lodged under the skin, it is very difficult to expel them.

Red bugs are numerous, especially in mossy woods; they are nearly imperceptible to the naked eye; but the poisoned shirt of Dejanira could scarcely be a greater torment, than these little pests are to the body. Sea-bathing, or rubbing the body with spirits, will destroy them, if immediately applied. If this be not done, they will continue painful eight or nine days.

Our hammocks are infested with fleas; the sea-beach with sand-flies; the uplands with gnats: and the low grounds with musquitoes.

In most parts of West Florida, the inhabitants sleep under musquitoe bars; and every person travelling the country, in the summer season, should carry a bar with him.

Too little attention has been paid to the insects and reptiles of Florida: an examination of these subjects, as well as that of Conchology, and Ichthyology, is in progression, and may hereafter be published.

BIRDS.

Our Ornithology is also very imperfect; the following is a list of those birds which are most common.

OF EAGLES. *Falco*, we have Parroquet. *Psitticus carolinaensis*.
The Bald eagle. *F. leucocephalus*.

WOODPECKERS.

Fishing eagle. *F. piscatorius*. White-back. *Picus principalis*.
Hen Hawk. *F. gallinareus*. Red-crested. *P. pileatus*.
Chicken Hawk. *F. pullenarius*. Red-headed. *P. erythrocephalus*.
Pigeon Hawk. *F. columbarius*. Red-bellied. *P. carolinus*.
Marsh Hawk. *F. ranivorus*. Black and white. *P. pubescens*.
Sharp Winged blue. *F. subceruleus*—rare. Yellow-bellied. *P. varius*.
Nuthatch. *P. varia ventre*.

OWLS. *Strix*.

Great Horned. *S. arcticus*. Brown Creeper. *Certhia rufa*.
Whooping. *S. acclamator*. Pine Creeper. *C. pinus*.
Screech. *S. assio*. King Fisher. *Aluco alceon*.
Humming bird. *Trochilus calubris*.

VULTURES.

Turkey Buzzard. *Vultur aura*. Butcher Bird. *Lanius garrulus*.
Carrion Crow. *V. atratus*.

CROWS.

Raven. *Corvus carverius*. Black-head fly catcher. *Muscitapa*.
Rook. *C. maratinus*. Yellow-bellied do. *M. cristata*.
Common Crow. *C. frugivorus*. Little Olive do. *M. subviridis*.
Florida Jay. *C. Floridanus*. Green Wren. *M. cantatrix*.
Jackdaw. *Gracula quiscula*. Pigeon. *Columba migratoria*—rare.
Crow Blackbird. *G. purpurea*.

- Turtle Dove. *C. carolinaensis*—abundant.
- Ground Dove. *C. passerina*.
- Brown Meadow Lark. *Alauda*.
- Robin. *Turdus migratorius*—whole year.
- Thrush. *T. rufus*.
- Mocking Bird. *T. polyglottas*—incomparable singer.
- Red bird. *Merula marylandica*—a good singer.
- Cat Bird. *Lucar lividus*—a fine singer.
- Cedar Bird. *Amphelis garrulus*.
- Wild Turkey. *Meleagris americana*—plenty.
- Quail. *Tetrao minor*—plenty.
- Red Bird. *Loxia cardinalis*.
- Cross Beak. *L. rastro*.
- Rice bird. *Emberiza oryzivora*—this bird changes his colour.
- Finch. *Linaria ciris*—several kinds.
- Linnet. *L. cyanea*.
- Tewe. *Fringilla*—several kinds, the Hemp Bird and Sparrow most common.
- House Sparrow. *Passer domesticus*.
- Red Sparrow. *P. palustris*.
- Field Sparrow. *P. agrestis*.
- Sterling. *Stirvus predatorius*.
- Cow Pen Bird. *S. stercorarius*.
- Blue bird. *Motacilla sialis*.
- Water Wagtail. *M. fluvialis*.
- Wren. *M. domestica*.
- Do. do. *palustris*, and
- Do. do. *caroliniana*—several kinds.
- Titmouse. *Lucinda philomela*.
- Yellow Bird. *Parvus luteus*—of this bird there are many kinds.
- Swallow. *Hirundo pelasgia*.
- Purple Martin. *H. purpurea*.
- Chimney Swallow. *H. cerdo*.
- Night Hawk. *Caprimulgus americanus*.
- Muckawis. *C. rufus*.
- Crane. *Grus pratensis*—these birds inhabit the pine barrens, in flocks or pairs, and feed on grass and seeds, but withdraw to the coast in the evening, and stand in great flocks together near the waters edge during the night. They are three feet high, of a cinerous grey colour; usually very fat and equal to turkey. Every person who has passed down the Mississippi, will recollect their evening music.
- Heron, Gray. *Ardea herodius*.
- White Heron. *A. immaculata*.
- Small do. *A. minor*.
- Crab Catcher. *A. maculata*.
- Marsh Bittern. *A. mugitans*.
- Frog Catcher. *A. clamator*.
- Blue Bittern. *A. violacca*.
- Poke. *A. viriscens*.
- Spoonbill. *Platatea ajaja*.
- Pelican. *Tantalus loquator*.

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|------------------------------------------------------------------|---------------------------------------------|
| White Curlew. <i>T. alba.</i> | Speckled. <i>A. rustica.</i> |
| Speckled do. <i>T. pictus</i> —the screamer. | Dipper. <i>A. maculata.</i> |
| Gannet, or Ibis. <i>T. Ichthyophagus.</i> | Teal, several kinds. |
| White Godwit. <i>Numenius.</i> | Whistling Teal. <i>Fistulosa.</i> |
| Red-breast do. <i>N. pectoreruso,</i> abundant in Appalache bay. | Fishers. <i>Mergus</i> —three kinds. |
| Pool Snipe. <i>N. fluviialis.</i> | Cormorant. <i>Corymbus floridanus.</i> |
| Sea Curlew. <i>N. magnus.</i> | Snake Cormorant. <i>C. calubrianus.</i> |
| Little do. <i>N. cinerius.</i> | Loon, Pied. <i>C. musicus.</i> |
| Field do. <i>N. campestris.</i> | Diver. <i>C. arcticus.</i> |
| Meadow Snipe. <i>Scalopax americana.</i> | White Gull. <i>Lanus alber.</i> |
| Tring, several species. <i>Parva T.</i> —abundant. | Grey do. <i>L. griceus.</i> |
| <i>T. Maculata</i> —do. | River do. <i>L. minor.</i> |
| Canadian Goose. <i>Anser canadensis.</i> | Sea Pelican. <i>Onocraticus americanus.</i> |
| Grey do. <i>A. maculata.</i> | Booby. <i>P. rula.</i> |
| Duck and Mallard. <i>Anas.</i> | Noddy. <i>Sterna stolidus.</i> |
| Black Wood Duck. <i>A. nig. maxima.</i> | Kildea. <i>Charadnus vociferus.</i> |
| Blue-bill. <i>A. subcerulea.</i> | Ringneck Plover. <i>C. minor.</i> |
| Spring-tail. <i>A. caudacuta.</i> | Coot. <i>Fulca floridana.</i> |
| | Water Rail. <i>Rollus minor.</i> |
| | Brown do. <i>R. rufus.</i> |
| | Blue do. <i>R. major.</i> |

ANTIQUITIES.

The central parts of West Florida, display abundant evidences of an ancient, and dense population. History is silent on the subject, and Indian tradition sheds but a faint and uncertain light on that period of distant years. Great roads, were the first objects which caught the attention of a traveller, while this country was yet uninhabited. Bartram, the younger, mentions them in his Tour and Remarks, that they would be conspicuous for a hundred years to come. Three years ago, they might be easily traced on both sides of the Ocklockney river, for fifty miles, nearly in a straight line, east and west. The prominent ridges,

which they crossed, were dug down, and causeways were constructed over the swamps. The principal highway, running through the site which is now the seat of government, was often crossed, at right angles, by other roads: near Tallahassee these were very frequent. At a little distance south-east of the town, however, the minor roads crossed at very acute angles. It is remarkable, that although the Indian paths often cross this great road, they never follow it; but wind away from it, with almost a religious caution.

Extensive forts were erected, on many commanding eminences. Fort St. Lewis was situate two miles west of Tallahassee. Its form was an irregular parallelogram; the eastern, and longest side, was fifty-two paces. Within the moat, two brick edifices had been erected; one sixty by forty, and the other thirty by twenty feet. There were bastions at each corner. The outward defences were extensive. A covered way led to a spring, in a deep ravine, under the north-east wing of the fort. Here were discovered two broken cannon, one of them having only the muzzle broken off: this has been removed to Tallahassee, and again awakens the echoes of the distant hills, on days of rejoicing. Many articles of old iron have been discovered about this ruin. Before it, trees and grape vines grow, in the order in which they were planted: the rows are distinctly traced, although overrun with a more recent forest.

Three miles east of Tallahassee, on a hill, at the base of which is a small but deep pond, is a fort, about a hundred and fifty paces long, and sixty broad, with regular bastions, ditches, &c. both without and within. In this fort are to be seen the ruins of brick buildings: within the fortifications, twenty, or more, gun-barrels were found, but little injured by the rust; on one of them, was discovered the tower stamp. This fact, however, does not prove that the English possessed the fort; since that nation has long manufactured arms, as well as other articles, for the world. Mr. John M'Iver has erected a dwellinghouse within the walls of this fort; and it is expected, when he removes the rubbish of the old brick edifices, that valuable discoveries will be made. He has lately discovered a large well, which has not yet been cleared out. On a higher hill, about half a mile north-east of this, are

the outlines of a larger, and apparently more regular fortress: but the Indians have, for a number of years, cultivated the spot, and obliterated the most distinguished features of the work. Even now, the inhabitants often dig up numerous spikes, hinges, pieces of saw-plate, and tools of various kinds, which marks a population of civilized people. About half a mile south of Tallahassee, and near the dwelling of his excellency governor Duvall, are the ruins of several small fortifications, which appear to have been hastily thrown up; near one of these, a large wooden building appears to have been destroyed by fire; some large timbers of the frame, completely charred, have been preserved; very large spikes, locks, keys, and hinges, have been discovered here: among other things, a porcelain lion, in a good state of preservation: it appears to have been an ornament for a chimney piece. At some distance under the surface, a floor was discovered, formed of a composition of lime, and other materials, very hard and smooth. On a part of the floor, was piled a quantity of charred corn and filberts, perfect in form, but very tender.

On the east side of Ocklockney bay, and about two miles from the mouth, are the ruins of an extensive fort. This is said, by the Indians, to have been the last place occupied by the old civilized inhabitants of Florida, when the country was conquered by the Muscogulge tribes. A town, called Oldenberg, was founded near this place, by the English.

At the junction of the Chattahoche and Flint rivers, on the eastern bank, are the ruins of an extensive and regular built fortification. The bank is two or three hundred feet high; it commands a beautiful and extensive wild prospect of the Appalachicola, and its tributary streams. The Spaniards are said to have abandoned this, in favour of fort St. Marks; the latter being easier of approach.

Regular avenues are frequently seen, usually about one hundred feet wide, extending in a straight line, for a mile or more; on each side, large oaks are growing, in the wild disorder dictated by nature; while the centre is filled, very thickly, with young pine poles.

On the west side of Suwannee river, and near St. Pedro lake, there are ruins, nearly as extensive as those described in the

neighbourhood of Tallahassee: but the country is yet unsettled, and the objects of antiquity have not been much examined. A ruined monastery is particularly spoken of, the broken bell of which, has long been a subject of wonder to the Indians.

Tumuli are not so common here, as in the valley of the Mississippi; they, however, are occasionally seen; most usually, on hammocks; and always in situations where they command extensive views.

Near Histahatchee, places have been discovered where the aborigines, long since, manufactured arrow and spear heads from the reef flint: large piles of chips mark the spots; among these are found the half formed weapons, which some unlucky stroke had spoiled: some are found nearly perfect. The arrow heads are, usually, one and a half, the spear heads three inches long; one half the length is spear shaped, the other half a shaft, notched to fasten to the reed. These arrow heads are often discovered, in the newly cultivated countries of the northern states; and are sometimes called elf stones.

NATURAL CURIOSITIES.

These consist, principally, of natural caverns, sinking rivers, great springs, and natural bridges.

The Arch cave is situated near the public road, about three miles west of the ferries on Chapola river, in Jackson county. It opens, to the east, an aperture under a vast limestone rock; about five feet high, and thirty feet wide. This passage descends gently, for three or four rods; the cavern then opens, to the extent of a hundred feet wide, and fifty feet high. A deep channel, of transparent water, skirts the south side, for some distance; it then breaks off in wells, and finally disappears altogether. The course of the cave now turns north-west; it grows narrower, and resembles an arch of the gothic order. After proceeding about sixty yards, the cave is crossed by a stream twenty feet wide, and five deep; in this, numbers of craw fish are seen: after passing this stream, the passage turns north of east, and presents a hall, one hundred feet in length; pretty straight, with a very uneven floor of red clay, covered with the debris of the decomposed rock.

A row, or rather cluster of stalactical columns, supports the centre of this hall; while thousands of stalactites stretch down their long tubes towards the white bases, which are growing up to meet them, from the floor. Many large holes, in the rock above, are filled with bats, which, on the approach of lights, flit off to other dark recesses, with a roaring sound, like heavy wind.

The passage now becomes crooked and intricate, for a few rods; and then opens into another lofty apartment; from which, there are many avenues, most of which remain unexplored; as well as two water courses, one of which bounds the passage.

This cave has been explored about four hundred yards. The congelations, on the sides of the walls, have the appearance of grey ice; through which, a sparkling crystallization appears: they often project into curls and folds, representing draperies, and mouldings of inimitable forms: the projections are nearly white, but the same sparkling crystalline appearance continues. The regular stalactites are hollow; the outside a soft chalky decomposition; the centre irregular sparry crystals, of a yellowish hue.

In the neighbourhood of the Arch cave, colonel Stone attempted, in three several places, to sink wells; but in every instance, he came to hollow spaces in the earth; and the well-digger becoming at length frightened, at the danger of entombing himself in some fathomless cavern, abandoned his work.

The Ladies' cave is about one mile south-east from the Arch cave; it opens to the north-west; the entrance is wider, and easier of access, than the former; it is, also, more spacious within. About fifteen paces from the entrance, it is divided into two passages; the left, about fifty yards in extent, terminates in a deep river, which passes to the north, under a bold arch of sparry congelations, which has not been, nor cannot, without a boat, be explored; the banks are bold, rocky, and difficult of access. The right hand passage is formed of rugged rocks, bold projecting pillars, curious excavations, and fanciful galleries, which it would be difficult to describe. The congelations are fine and infinitely various. The passage terminates in a narrow chasm, which has the appearance of a water-course; through which, at about three rods distance, another room appears: this has been but imperfectly explored. To the right of this last branch of the cave, the exca-

vation has been examined about one hundred feet; many holes appear to lead off in different directions; some of these may lead to other caverns.

Two miles south-east from the Ladies' cave, is the natural bridge, over the Chapola river. The water at this place sinks through a stratum of limestone rock, until meeting some impediment in its course, it rises again, and flows on the surface of the earth. A great road formerly crossed this bridge: it is now travelled by some persons, during the summer; in winter, the whole is overflowed: a stranger, crossing here, would not be led to discover any difference in the appearance of the ground, from the river bottom, in any other place; the heavy forest timber appears the same, and there is no variation of ground.

The Econfina river passes under a similar natural bridge, but it is narrow. The United States' road, from Pensacola to St. Augustine, crosses this bridge; but an addition of timber is now added.

The Oscilla river, in Leon county, sinks for nearly a mile; a division of general Jackson's army once crossed here, without suspecting that a river existed near them.

The course of subterranean rivers, can usually be traced by persons acquainted with the country, by the growth of timber, and by frequent sink holes, which usually occur at short distances from each other.

The Wakully river, rising from the earth, presents the finest spring in West Florida; probably in the world. It is of an oval form; the longest diameter about six rods. It is of an unknown depth, and perfectly transparent. In looking into it, the colour is similar to a clear sky; except, that the reflection of the surrounding verdure, gives it a slight shade of green: the eastern side presents a rugged rocky precipice; all else, is an abyss of boundless depth. Squadrons of fishes are seen, careering round "their own world," in perfect security. The water is not very cold; but it is highly impregnated with lime. The beauty of the fountain; the luxuriance of the foliage around it; the calm retirement of the whole scenery, renders this a charming spot.

The Big spring of Chapola, offers a very different scene; here another river bursts from the gaping rocks, with giant force, and

furious rapidity: as though impatient of its long confinement. The orifice opens to the south-west, under a high bank; it is near thirty feet one way, by eight the other: a large rock seems to divide the opening in two parts, at some depth below the surface. The water acts as a prism; all the objects seen through it, in a sunshine day, reflect the colours of the rainbow. It at once forms a river six rods wide, and eight feet deep. The Wakully rises gently from a retired dell, in a low level country; surrounded by deep embowering groves of trees, hung with festoons of a hundred different vines. The Chapola spring bursts from the side of a hill, in an open country, thinly scattered with oaks. There all is calm unruffled quiet: here all is life, activity, and animation.

The Chapola river is almost wholly formed from large springs; one of them rises at the foot of a gentle hill, on the farm of judge Robinson, near the natural bridge. It is nearly as large as the Big spring, above described; boats may ascend quite into the fountain; it is peopled with a great variety of fish.

The Big spring of Chaetawhatchee rises eight miles above the Cow ford, on that river. It is a round basin of a few rods in circuit, very deep, and very clear, but much filled up with timber; it throws out a constant gentle current, eight feet deep, and five or six yards wide, which, in a mile and a half from the spring, joins Holmes' creek, about the same distance from the Chaetawhatchee river. This spring has, for many years past, been a general landing place for the country trade; a large store is now kept there, by Mr. Cummins, a merchant from Philadelphia.

Several medicinal springs are scattered over the country; the largest and most numerous are in, and on the borders of the Wakully and St. Marks rivers. They usually cover the aquatic plants in their vicinity, with a bluish white gelatinous matter; some of them indicate chalybeate and sulphurous qualities; none of them, however, have been analyzed.

PRODUCTIONS.

These vary, according to the soil on which they are produced. The soils of West Florida, may, perhaps, all be comprised in five kinds, to wit: Pine barrens, uplands, hammocks, swamps,

and marshes. If we estimate the quantity of land at 10,560,000 acres, and deduct one fourth part for bays, lakes, rivers, &c., there will remain 7,920,000. Of this quantity, two thirds, or 5,280,000 acres may be covered with pine barrens; 800,000 with tillable upland; 600,000 with hammocks; 500,000 with swamp; and 400,000 with marsh.

The pine barrens are composed, principally, of silicious sand, more or less mixed with calcareous and vegetable matter, and often divested of every fertilizing principle, by the frequent fires which run over them. Barrens are found on the seacoast, and on the ridges, between the large water courses. All the lands covered with pine timber, are by no means barren; on the contrary, some of the best uplands are wholly, or nearly all, covered with yellow pines. And some of the burnt barrens will not produce even pine or scrub oaks, but are usually partially covered with clumps of savin. West of Cape St. Blass, the sands are usually of a pure white; east of that point, they become more coloured, and of course, more fertile. Very few trees grow on this soil; those most frequent, are,

Pine, pitch. *Pinus rigida*—a low poor timbered tree, but produces turpentine and tar.

Pine, many cored. *Pinus seratina*—a useless tree, found on the banks of lakes and lagoons.

Pine, loblolly. *Pinus tæda*—a large tree, in valleys, has much sap.

Pine, yellow. *Pinus palustris*—this is a large and most useful tree, it is the principal timber used for plank and scantling in the southern states; and also produces turpentine and tar.

Oak, high willow. *Quercus cinera*—on barren hills.

Black Jack. *Quercus nigra*—on the poorest sand ridges—excellent firewood.

Andromeda. *A. rigida*—on the edges of savannas and streams.

SHRUBS.

Shallow Cup. *Quercus pumilla*—round the borders of hammocks.

Live-oak shrub. *Q. maratima*—near the sea coast, very fruitful.

Holly-leaved. *Q. ilicifolia*, do. the branches often bent to the ground with acorns, excellent for swine.

Hickory grubs. *Juglans tormentosa*—the better kind of barrens.

- Haw, winter. *Cratagus parviflora*—ridges, fruit green or yellow, eatable.
- Haw, summer. *C. flava*—sea islands and dry plains.
C. apifolia—edges of savannas and streams.
- Azalea. *A. Bicolor* and *nudiflora*, do. do.
- Chinquapin. *Castanea nana*—dry ridges, edge of hammocks, nuts fine.
- Andromeda. *A. feruginea*—dry ridges, edge of hammocks, nuts fine.
- Huckleberry. *Vaccinum myrsinites*—dry ridges, berry small, black.
- Whortleberry. *V. staminium*—dry ridges, berry larger.
V. dumosum—plains, dark purple.
- Blueberry. *V. frondosum*—damp flat plains, berry blue.
V. glaucum, do. larger fruit, on a smaller shrub.

HERBS *are abundant, to wit:*

- Wild Sunflower. *Helianthes atranubus*—pine woods.
H. pubescens—banks of streams.
H. mollis—ridges.
H. hispidulus—ridges.
H. tormentosus—do.
H. decapitatus—do.
- Goldenrod. *Salidago reflecta*—ridges.
S. laterifolia—pine woods.
S. pyrimidata, do.
S. bicolor, plains.
S. pulverulenta, do.
S. elata, do.
- Aster. *A. ericoides*—dry ridges.
A. squarosus—pine woods.
A. concolor, do.
A. surculusus, do.
A. undulatus, do.
A. cenearefoleus, do.
- Dittany. *Cunila mariana*, do.
- Wild Pennyroyal. *A. pugloides*, do.
- Woundwort. *Stachys sylvatica*—barren fields.

S. hysopafolia—barren fields.

S. aspera, do.

Wild Mallows. *Hybiscus scaber*, do.

Origanum. *Monarda punctata*, do.

Spiderwort. *Tradescantia virginica*, do.

T. tripetalous, do.

Wild Indigo. *Baptista perfoliata*, do.

B. lanceolata—pine woods.

B. tinctoria, do. this is a most valuable

plant; it produces the best indigo, with less trouble than any other of the species.

Agrimony. *Eupatoreum alleum*—barren plains.

E. rotundifolium, do.

E. linearifolium, do.

E. fœniculaseum. do.

Penstemon. *P. pubescens*—pine woods.

P. lævagatum, do.

Chrysopsis. *C. argentea*—dry ridges.

C. graminifolia, do.

C. pinifolia, do.

C. trychophylla, do.

Ophrys. *Neottia tortillis*—sandy plains.

Balsam Cuphilla. *C. viscosissima*, do.

Gerardia. *G. linifolia*—sandy plains, flower blossoms four months.

Scull cap. *Scutellaria villosa*—pine woods.

S. pilosa, do.

Silkweed. *Asclepias phytolachoides*—sandy plains, and sea islands. This beautiful plant has already, by the French nation, been cultivated to advantage. The pappus is spun with raw silk for gloves, the juice collected for opium, and the leaf used in dying.

Asclepias connivens—sandy plains and sea islands.

A. obtusifolia, do. do.

A. amplexicoides, do. do.

A. lanifolia, do. do.

A. tuberosa, do. do.

Violet. *Viola villosa*.

- Button Root. *Eryngia*.
 Lupin. *Lupinus perennis*—pine woods.
 L. villosus, do.
 Glycine. *G. argentosa*—dry plains.
 G. peduncularis, do.
 Sensitive plant. *Mimosa sensitiva*, do.
 White Lilly. *Crinum*—pine woods.
 Nightbelle. *Ipomea bona nox*, do.
 Sand Lilly. *Convolvulus spithamacus*—dry plains.
 C. obtusilobus, do. and sea islands.
 Granadilla. *Passiflora incarnata*, do.
 P. lutea, do.
 Phlox. *P. parviculatus*, do,
 P. pyramidalis, do.
 P. glaberima—damp plains.
 Verbena. *V. corymbosa*.
 V. unticiflora.
 Graphalum. *G. purpureum*.
 Anona. *A. grandiflora*.
 Ruellia. *R. strepens*.
 R. oblongifolia.
 Salvia. *S. graviolens*.
 S. lyrata.
 Prenanthus. *P. virgata*.
 P. alba.
 Chrysomachia. *C. acaulis*.
 Galega. *G. chrysophylla*.
 Hypoxis. *H. folafilia*.
 Comelina. *C. erecta*.
 Black root. *Pychnastaticum*.
 Blackberry. *Rubus villosus*.
 Dewberry. *R. cunefolius*.
 R. trivialis.
 Strawberry. *Fragaria virginiana*.
 F. canadensis.
 Tormentilla. *T. officinalis*.
 Wood-anemony. *A. nemorosa*.

VINES.

- Muscadine grape. *Vitis rotundifolia*—heads of small streams, thick skin.
- Briar, China. *Smilax China*—grows everywhere, but best in damp soils, near streams. It often extends one hundred feet; the root is similar to a cluster of potatoes. The Indians grate them, or bruise them in a large wooden mortar, then throw on water, strain the starch through baskets, dry and pulverize it; the colour is a redish brown. They mix it with fine homony, and make cakes; with honey and warm water, it becomes a fine jelly: toasted and mixed with sweet milk, it is a delicious food
- Briar, China. *S. Ovata*.
S. Caduca.
- Morning-glory. *Convolvulus purpureus*.
C. dracrorhizus.
- Cypress vine *Ipomoea coccinea*.
I. nil.
I. dissecta.
- Traveller's Joy. *Clematis holosericea*.
C. walteri.
C. reticulata.
- Crimson woodbine. *Lonicera sempervirens*.
- Yellow do. *L. flavium*.
L. parvaflora.
- Climbing Ivy. *Cissus hederacea*.
- Yellow Jessamine. *Gelseminum sempervirens*—dry plains.
- The grasses are also numerous; there are very few spots, indeed, of pine barren, that are not covered with grass: in many dry ridges, the heat of the summer kills the stem, while the roots remain entire; and fire is thought to improve its growth; the herdsmen, accordingly, fire the barrens, at regular seasons. Deer, as well as cattle, may always be found on places recently burnt over.
- Twisted Xyris. *X. flexuosa*—flat grounds.
X. fimbriata.
X. brevefolia.
- Rough-head Fuerina. *F. squarosa*—flat grounds.
- Rush-like *F. scirpoida*—savanna edges.
- Killingia. *K. pumila*. do.

Rhynchospera. *R. plumosa*—dry plains.

Schoenus. *S. Sparsus*—pine woods.

Nut grass. *Cyperus hydra*—on cultivated sandy land, and almost every place; it is the greatest curse to planters: the Riband cane is said to keep it down, but nothing has been found to eradicate it. The root is fibrous like horse hairs, strung at a few inches apart with tubers of the size of a musket ball, which descend into the sand, in every direction, frequently to the depth of five feet.

C. compressus.

C. mariscoides.

C. odoratus.

C. distans—pine woods.

Mariscus. *M. retrofractus*—sandy plains.

Scirpus. *S. capellaceus*—dried savannas, forms a close carpet soft as silk.

S. autumnalis—savanna edges.

S. ferugineus—pine woods.

S. exaltatus, do. grows to a great height—ten feet.

S. lineatus, do.

S. divaricatus.

White button. *Duchromena leucocephala*—wet barrens.

D. ciliata, do.

Cockspur. *Cenchrus tribuloides*—old sandy uncultivated fields.

Low cane. *Arundinaria tecta*—around spring heads.

Muhlenbergia erecta—pine woods.

Fringed Aulaxanthus. *A. ciliatus*—ridges.

A. rufus.

Fringed Paspalum. *P. ciliatifolium*—old fields which have been cultivated.

P. floridanum.

Smooth Panic grass. *P. lævigatum*—ridges.

P. glaucum.

Cocksfoot. *P. grus-galli*—round savannas.

P. hians.

Broad-leaved Panic grass. *P. latifolium*—pine woods.

P. amarum—sand ridges.

P. ciliatum—wet barrens, evergreen.

P. divergens—sand hills.

Crab Grass. *Digitaria sanguinalis*.

Bermuda grass. *D. dactylon*—these, as well as *P. divergens*, ought to be cultivated: these in dry, that in wet soils.

Silky *Agrostis*. *A. senicea*—sand hills—may be cultivated wherever there is calcareous matter in the soil.

A. trichopodes—sand hills.

A. juncea—sand hills, not fit for hay.

Purple *Aristida*. *A. spiciformis*, do.

Woolly do. *A. lanosa*, do. do.

Fringed *Andropogon*. *A. ciliatus*, do. if mown early, the hay is tolerable, but coarse.

Nodding *Andropogon*. *A. nutans*—finer.

A. purpurea—stem coarse, few leaves.

A. argentus, do.

Broom Grass. *Lateralis*—tall, coarse, and often used for sweeping.

Purple *Aira*. *A. purpurea*—sea islands.

Hairy *Poa*. *P. hirsuta*—old fields.

Green do. *P. viridis*, do.

P. nitida, do.

Rough do. *P. rigida*—pine woods.

Purple do. *quinquefida*—makes excellent hay.

Oat grass. *Uniola paniculata*—sea islands.

U. gracillis—pine woods.

Slender *Fescue*. *Festuca tenella*—barren plains.

F. parvaflora—pine woods.

Hairy do. *F. mycinus*—ridges.

F. nutans—most common in the barrens.

Crows Foot. *Eleusine indica*—old fields, an exotic probably.

Tooth-ache Grass. *Monocera aromatica*.—This is a singular grass; it has a naked stalk four feet high, spikelets in two close rows, on one side of the stem, at top; straight when young, but bends with age, and finally curling in a spiry coil. It affects the breath and milk of cows, who eat it when young and tender. The root is bitter, and affects the salivary glands.

UPLANDS.

Uplands are formations of clay, which arise gradually on the subtending limestone; they usually commence about twenty miles from the coast. The first stratum of clay is usually white; red

clay succeeds; while the surface is covered with a mulatto or chocolate coloured loam. The trees, on this soil, are abundant, and form the pleasantest groves imaginable. The following are most common:

Oaks, Hemispherical. *Quercus laurefolia*.

Q. imbricaria.

Black. *Q. tinctoria*.

Red. *Q. coccinea*.

Yellow. *Q. rubra*.

Spanish. *Q. falcata*; *triloba*.

Post. *Q. obtusiloba*.

White. *Q. alba*—the most useful tree in America.

Yellow Pine. *Pinus palustris*.

Black Hickory. *Juglans nigra*.

Thick shelled do. *J. sulcata*.

J. tormentosa—the common Hickory of Florida.

Magnolia. *M. grandiflora*.

Umbrella tree. *M. tripetala*.

Yellow Poplar. *Liriodendron tulipifera*.

Dogwood. *Cornus florida*.

Wild Cherry. *Cerassus virginiana*.

Persimmon. *Diospyros virginiana*.

Holly. *Ilex opaca*.

Sassafras. *Laurus sassafras*.

Mulberry. *Morus rubra*.

White do. *M. alba*, or *pubescens*.

Black Gum. *Nyssa sylvatica*.

Sorrel tree. *Andromeda arborea*.

Catalpa. *C. bignonia*.

Scarlet maple. *Acer rubrum*.

Plumb, red and yellow. *Prunus chicasa*.

Anona. *Asimina triloba*, or Pawpaw.

Gordonia. *G. lacinthus*.

Hopea. *H. tinctoria*.

White Locust. *Robinia pseud acacia*.

R. viscosa.

Beach. *Fagus sylvatica*.

Chesnut. *Castanea vesca*.

- Birch, white. *Betula alba*.
 Iron wood. *Carpinus ostrya*.
 Sycamore. *Platanus occidentalis*.
 White Ash. *Fraxinus epiptora*.
 F. triptera.
 Honey Locust. *Gleditschia triacanthos*.

The uplands produce few shrubs; the following are found about spring heads, banks of rivers, lakes, and savannas:

- Anana. *A. grandiflora*.
 A. pygmea.
 Lantana. *L. camara*.
 Stratia. *S. virginica*.
 Hopea. *H. pumila*.
 Shrub Locust. *Robinea hispida*.
 Baccharis. *B. halimifolia*.
 Carylus. *C. americana*.
 Chinquapin. *Castanea pumila*.
 Myrtle. *Myrica cerifera*—rare.
 Prickly Ash. *Zanthoxylon tricarpium*.
 Service Berry. *Prinos verticillatus*.
 White Fringe tree. *Chionanthus virginica*.
 Azalea. *A. viscosa*—rare.
 Hydrangea. *H. Nivea*—on limestone rocks.

The herbs, vines, and grasses, on the hammocks, are, many of them, similar, but of more numerous species than those on the uplands; the same classes of trees and shrubs also grow on the hammocks, but there is also a greater variety of species; those which are common to both, will therefore not be again enumerated; but such as are peculiar to the hammocks will be noted.

Sweet Bay. *Laurus borbonia*.—This tree produces timber inferior only to mahogany, which it closely resembles. The young leaves are often used for tea, which is a most pleasant and healthful beverage. Cattle eat the herbage with avidity.

- Pond Spicewood. *L. geniculata*.
 American Olive. *Olea americana*.
 Spotted Haw. *Fothergilia punctata*.

F. coccinea.

Cabbage Palm. *Chæmarops palmetto*.—The greatest ornament of our sea-coast; they sometimes rise on a straight column eighty feet. The timber resists the gulf worm, so destructive to vessels. Hats, baskets, mats, &c. are manufactured from the leaves. The embryo head is excellent food. Bears and other animals feed on the berries. Confined to the coast and islands; not seen farther west than St. Andrew's bay.

Cotton Tree. *Populus grandidentata*.

P. angulata.

Juniper. *Juniperus alba*.

Red Cedar. *J. virginiana*.

Sweet Gum. *Liriodendron styraciflua*—rivers, hammocks.

Live Oak. *Quercus virens*.

Cettis. *C. occidentalis*.

Mulberry. *Morus rubra*.

M. alba.

Saponaria. *Sapindus saponaria*.

Sidiroxelon. *Bumelia lycoides*.

B. languinosa.

Halesia. *H. tetraptera*.

SHRUBS.

Azalea. *A. calendulacea*—the most beautiful native shrub of Florida. Flame coloured, pink, yellow, streaked and mottled with every intermediate shade.

Haw. *Cratægus grus galli*.

C. lucida.

C. flava.

Salicifolia. *Spinæa salicifolia*.

S. tomentosa.

Andromeda. *A. axillaris*.

A. acuminata.

A. mariana.

Hammock Berries. *Vaccinium myrtilloides*—about the size of a cherry, usually grows near streams, ten feet high.

Clethera. *C. tomentosa*.

Styrax. *S. grandifolium*.

S. læve.

S. glabrum.

Hydrangia. *H. quercifolia.*

Ananna. *A. incarnata*—five feet high, flowers large, white, many on a large panicle; fruit size of a small cucumber; pulp yellow, and tastes like custard.

Sumach. *Rhus vernix.*

Sensitive Shrub. *Mimosa eburnea*—the first plant which grows on the sea sand; excellent for hedges, and ornament.

HERBS.

Scull Cap. *Scutularia hysopifolia.*

Blue do. *S. laterifolia.*

Coral Tree. *Erythrina herbacea.*

E. coralodendron.

Cassia. *Sesbania macrocarpa.*

Senna. *S. marylandica.*

S. tora.

S. occidentalis.

S. ligustrina.

S. aspera.

Lindernia. *L. dilatata.*

Bellwort. *Uvularia sessilifolia.*

U. perfoliata.

Fairy Flax. *Houstonia cœrulea.*

Star of Bethlehem. *Hypoxis erecta.*

Slender Lobelia. *L. kalmia.*

Indian Tobacco. *L. inflata.*

Ladies traces. *Neottia tortillis.*

Domestic Ipecacuanha. *Gillenia trifoliata.*

Scabious. *Erigeron philadelphicum.*

E. hederophyllum.

Asclepias. *A. tuberosa.*

Pentstemon. *P. pubescens.*

Starwort. *Aster lineafolium.*

A. solidaginoides.

A. flexuosus.

A. sparsiflorus.

A. reticulatus.

A. virgatus.

- Wild Sunflower. *Helianthus truncatus*.
 H. longifolius.
 H. multiflorus.
- Annemona. *A. thalictroides*.
- Milkwort. *Polygala purpurea*.
- Pogonia. *P. verticillata*.
- Smilacina. *S. canadensis*.
- Cancer Root. *Orobanche virginica*.
 O. unifolia.
- Wormseed. *Chenopodium anthelminticum*.
- Lambs Quarter. *C. alleum*.
 C. botrys.
 C. ambrossoides.
- Poke. *Phytolacca decandria*.
- Sheep Sorrel. *Oxalis acetosilla*.
- Spanish Moss. *Tilandsia usneoides*.
- Indian Agave. *A. virginiana*.
- Ground Sorrel. *Rumex acetosa*.
- Jimson. *Stramoneum datura*.
- Phlox. *P. carolina*.
 P. uniflora.
- Broad Thistle. *Sonchus macrophyllus*.
- Cotton do. *S. oleraceus*.
- Narrow leaf. *S. floridanus*.
- Small yellow. *S. carolinianus*.
- Milk Thistle. *S. acuminiatus*.
- Wild Baum. *Melissa*.
- Golden Rod. *Solidago reflexa*.
 S. laterifolia.
 S. rugosa.
 S. villosa.
 S. ulmifolia.
- Tarragon. *Artemissia caudata*.
- Wild parsnip. *Sison trifoliatum*.
- Ranunculus. *R. recurvatus*.
 R. muricatus.

Poppy. Papaver—white and yellow, petals four, stamens many, pistil one, leaves jagged and thorny, sap a yellow juice somewhat corrosive; these plants are new to me, and although very common on the shores and old fields, it is doubtful whether they are not exotics naturalized.

Mallows. *Malvus virginicus*.

M. militaris.

M. speciosus.

Water Cress. *Sisymbrium nasturtium*.

S. amphibium.—This plant is found on sea islands in other respects barren, and on the shore; the sands often drift over it, but it shoots through again; it is a delicious and most healthy herb, especially in scorbutic affections.

White nettle. *Urtica alba*.

U. pumila.

Domestic Euphorbium. *E. cordifolia*.

E. polygonifolia.

E. gracilis.

E. helioscapia.

E. paniculata.

Aurantium. *A. coccinia*.

Veronica. *V. angustifolia*.

V. præalta.

Eupatoreum. *E. fœniculaceum*.

E. coronopifolium.

E. hysopifolium.

E. aromaticum.

E. cœlestinum.

Graphalium. *G. polycephalum*.

G. purpureum.

G. plantaginum.

Senecio. *S. hieracifolium*.

S. suaviolens.

Chrysopsis *C. pinifolia*.

Verbesina. *V. sinuata*.

Cancer Weed. *Salvia lyrata*.

S. coccinia.

S. azurea.

S. aborata.

VINES.

- Fox grape. *Vitis vulpina*.
 V. cordifolia.
 V. riparia.
 V. æstivalis—usually cultivated for arbours, it is
 also a good wine grape.
- Bignonia. *B. radicans*.
 B. crucigera.
- Rhus. *R. radicans*.
- Poison Vine. *R. toxicodendron*.
- Crimson Woodbine. *Caprifolium sempervirens*.
- Yellow do. *C. flavum*.
- Supple Jack. *Rhamnus volubilis*.—Twisted walking canes of
 this vine are much admired.
 R. carolinianus.
- Yellow Bell Flower. *Convolvulus obtusilobus*.
 C. panduratus.
- Ipomea. *I. coccinea*.
 I. tricarpa.
- Ivy Vine. *Cessus hederacea*.
- Yellow Jessamine. *Gelsemum sempervirens*.
- Yellow Echites. *E. diformis*.
- Aristolachea. *A. tomentosa*.
- Purple Thyrsa. *Thyrsanthus frutescens*.

SWAMPS.

These may be divided into three kinds. First, those formed on the borders of rivers, by inundation; these are the richest swamps, and the most extensive. They are usually separated from the stream by a ridge of dry land, formed by the heaviest parts of the alluvial matter, which is deposited immediately after leaving the current; this ridge, or natural embankment, prevents the waters from draining off, as the surface of the rivers subside. They are, usually, densely covered with heavy timber, and this tangled with innumerable vines, which renders them almost impenetrable. Secondly, pine barren swamps, which are natural basins, containing the waters of the surrounding country. These swamps, when covered with small coast cypress trees and knees, are usually, but improperly, termed cypress galls. Cypress

knees are hollow cones, which rise from the roots of the cypress tree, from one to six feet high, and terminate in a blunt point. These never shoot up into trees, as has been imagined, from the circumstance of large cypresses being supported on hollow cones, similar in appearance; in the latter case, the tree first grows up straight, and the cone gradually swells out underneath it, as high as the highest stage of the water. Savannas are no more than natural reservoirs of water like the swamps; except that they are covered with grass and herbs instead of trees and vines; they are usually founded on clay or marle, but sometimes only on a hard sand. They are frequently extensive, and form excellent grazing lands. The third kind of swamps are those spongy tracts, where the waters continually ooze through the soil, and finally collect in streams and pass off. These are properly termed galls, sometimes sour, sometimes bitter lands. They are the coldest soils we have, and the waters arising through them are frequently impregnated with sulphur, vitriol, and iron. When their foundation is alluvial matter, it is usually very thin, like quagmire: the land may be shaken for acres in extent. When the base is sand, it is always a lively quicksand, very dangerous for cattle. These galls are usually covered with titi and other andromedas, loblolly and other laurels, vaccinum and vines.

The trees most peculiar to swamps, are,

Cypress. *Cupressus disticha*.—A large and beautiful tree, often rising one hundred feet, makes excellent boards, scantling, palings, &c.

Coast do.	<i>C. thyoides</i> .
Pine barren do.	<i>C. imbricaria</i> .
Swamp Ash.	<i>Fraxinus epiptera</i> .
White do.	<i>F. acuminata</i> .
Oval-leaved.	<i>F. platycarpa</i> .
Black.	<i>F. pubescens</i> .
Willow Oak.	<i>Quercus phellos</i> .
Water do.	<i>Q. aquatica</i> .
Lyre-leaved.	<i>Q. lyrata</i> .
Chesnut do.	<i>Q. prinus</i> .
Velutinian.	<i>Q. michauxii</i> .
Pignut.	<i>Juglans porcena</i> .

- Tupelo. *Nyssa unifolia*.
 Ogechee Lime. *N. capitata*.
 N. aquatica.
 Loblolly. *Laurus caroliniensis*—grows in every kind of swamp,
 from ten to seventy feet high; the beauty and aroma of its
 flower is well known.
 Swamp Magnolia. *M. glauca*.
 Swamp Poplar. *Populus angulata*—river swamp.
 Whahoo. *Ulmus alata*—high pine barren.
 Bumelia. *B. lycoides*—galls.
 Plane Tree. *Planera gmelini*—grows in river swamps, and re-
 sembles elm.
 Soap Tree. *Sapindus saponaria*, do. near the coast.
 Winter Plumb. *Prunus hiemalis*, do. back from the coast.
 Gordonia. *G. lasianthus*, do.

SHRUBS.

- Buttonwood. *Cephalanthus occidentalis*—near the coast.
 Swamp Dogwood. *Cornus canadensis*.
 Amorpha. *A. frutescens*—river swamps.
 Strawberry Tree. *Euonimus americanus*, do.
 Viburnus. *Viburnum dentatum*, do.
 Swamp Haw. *V. nudum*, do.
 Sambucus. *S. canadensis*—deep inland swamps.
 Laurel. *Laurus millisafolium*, do. and in galls.
 Andromeda. *A. axillaris*.
 A. acuminata.
 A. ligustrina.
 A. racemosa.
 A. speciosa.
 Titi. *A. angustifolia*.—This class furnishes most of the shrubs
 found in our swamps; the titi, in particular, occupies the same
 situation south of Georgia that the alder does in the northern
 states. It grows from six to twelve feet high; the stoles are
 slender and set so thickly together that their shade keeps the
 small streams cool for a great distance from their fountains.
 In March, their racemes of white flowers are abundant and very
 ornamental, and their singular strings of three cornered seeds
 often hang on the bushes till winter.

Billberry. *Vaccinum corymbosum*.
V. virgatum.

Spicewood. *Laurus benzoin*.

HERBS.

Bird Shot. *Canna indica*—river swamps.
C. flaccida.

Herbaceous *Canna*. *C. salicornia*—savannas.

Spring Callitriche. *C. callitriche*—galls.

Virginian Gratiola. *G. virginica*—ditches.

Yellow do. *G. aurea*—pine barren swamps.

Hairy do. *G. pilosa*—near swamps.

Round Fruit. *G. sphærocarpa*—lake shores, and savannas.
G. quadridentata, do.

Square-stemmed. *G. tetragona*, do.

Lindernia. *L. dilatata*, do.

L. attenuata, do.

Round Micranthemum. *M. orbiculatum*, do.

Big-leaved do. *M. emarginatum*, do.

Floating Utriculare. *U. inflata*, do. in still water, fresh.

Purple do. *U. saccata*, do.

Yellow do. *U. longirostris*, do.

Small do. *U. biflora*, do.

Bristle-stalked. *U. setacca*—pine barren swamps and savannas.

Narrow-leaved *Lycopus*. *L. europius*, do.

Sallop-leaved do. *L. sinuatus*, do.

Blue *Tripterella*. *T. cœrulea*, do.

Variegated Iris. *I. versicolor*, do. the root is a remedy for dropsy.

Three-petaled. *I. tripetala*, do. rare.

Blue. *I. hexagona*—rich river swamps.

Yellow *Tricoma*. *Lachnanthes tinctoria*—pine barren swamps and ponds.

Creeping *Comelina*. *C. communis*, do.

Blue do. *C. longifolia*, do.

Moss-leaved *Syena*. *S. fluviatilis*—bay galls.

Proserpina. *Proserpinaca palustris*, do.

P. pectinata do. and savannas.

- Tetragon. *Diorea tetragona*—galls.
- Three-leaved Galium. *G. trifidum*, do.
- Centaurella. *C. verna*, do.
C. paniculata, do. and swamps.
- Sanguisorba. *S. canadensis*, do.
S. media.
- Potamogiton. *P. pinnatum*—stagnant fresh water.
P. verticillatum, do.
- Villarsia. *V. trachysperma*, do.
- Lysimaehia. *L. ciliata*—savannas.
- Phlox. *P. divaricata*—low river swamps.
- Cardinal flower. *Lobelia cardinalis*, do. beautiful scarlet.
L. amæna, do. blue.
- Pinckneya. *P. pubens*—galls and savannas.
- Solanum. *S. nigrum*—savannas.
S. mammosum—low swamps.
- Swamp Milkweed. *Aselepias parviflora*, do.
- Hydrolea. *H. quadravalvis*—galls.
H. corymbosa, do.
- Eryngium. *E. latidum*, do.
E. gracile, do.
- Hydrocotyle. *H. interrupta*—stagnant water.
H. umbellata—swamps.
- Wild Annise. *Ammi copillaceum*—galls.
A. costatum—swamps.
- Cicuta. *C. maculata*, do.
- Sundew *Drasera*. *D. rotundifolia*—galls.
D. longifolia, do.
- Spanish Moss. *Tilandsia usneoides*—swamps.
T. recurvata, do.
- Wampee. *Pontederia cordata*—galls and savannas.
- Paneratium. *P. mexicanum*—savannas.
- Smooth Palmetto. *Yucca gloriosa*—galls near the sea shore.
- Calamus. *Acorus calamus*—muddy galls.
- Cats Tail. *Typha latifolia*, do.
- Soft Rush. *Juncus effusus*—galls and savannas.
J. setaceus, do.
J. triflorus—river swamp edges.

J. polycephalos—savannas.

Rumex. N. britannicus—shady swamps.

Nectris. N. aquatica, do.

Swamp Lilly. Saururus cernuus—galls.

Rhexea. R. virginica, do.

R. lutea.

Blue Scull-cap. Scutellaria laterifolia—swamps and galls.

Polygonum. P. hirsutum, do.

P. persecaria, do. and ponds.

P. mite.

P. incarnatum.

Penthorum. P. sedoides, do.

White Pond Lilly. Nymphaea odorata—in swamps, ponds, and ditches.

Sarracena. S. purpurea—swamps, galls, and savannas.

S. rubra, do.

S. flava.

S. catsbei.

S. variolis.—The leaf of this singular plant is a tube which widens towards the top in the three latter species; in the two former, they are contracted near the top. The inside of the tube is covered with viscid hairs, which prevent insects from retreating, when once they have entered for shelter or food. They are always partly filled with insects. The leaf is beautiful, both as to shape and colour, and the flower is of a deep gaudy redish brown, and remarkable for having two calyces.

Hypericum. H. parviflorum.

H. amærum.

H. nudiflorum.

H. glaucum.

Elodea. E. virginica.

Ranunculus. R. hederaceus.

R. oblongifolius.

R. nitidus.

Caltha. C. ficoloides—swamps.

C. brassera—ponds.

- Cyamus. *C. luteus*, or Yellow Water Chesnut, do.
 Polygala. *P. lutea*—ponds and galls.
 P. corymbosa, do.
 Winged Dolichos. *D. luteolus*, do.
 Aromatic Liatris. *L. odoratus*—galls and savannas.
 Purple Veronica. *V. oligophylla*—edge of swamps.
 Eupatorium. *E. perfoliatum*, do. A decoction of this
 plant operates as a gentle emetic. Indians use it as a sudorific
 in fevers.
 Conyza. *C. marylandica*.
 Black Root. *Pterocaulon pycnostachyum*.—The famous Indian
 remedy for pulmonary disorders.
 Butter Weed. *Senecio lobatus*—swamps.
 Slender Aster. *A. carolinianus*, do.
 A. dracunculoides, do.
 A. junceus, do.
 A. paniculatus, do.
 Solidago. *S. virgata*, do.
 S. pulverulenta, do.
 Baltonia. *B. asteroides*, do.
 Heleneum. *H. autumnale*, do.
 H. quadridentatum, do.
 Yellow Bidens. *B. coreopsis*—ditches and galls.
 Chana. *C. capitata*, do.
 Duck-meat. *Lemna minor*—stagnant waters.
 Bristly Typha. *T. latafolia*, do.
 Sparganium. *S. americanum*, do.
 Carex. *C. stipata*—swamps.
 C. scirpoides, do.
 C. scoparia, do.
 C. crineta, do.
 C. trichocarpa, do.
 C. furcata, do.
 Orchis. *O. ciliaris*, do. and galls.
 O. cristata, do.
 Calopogon. *C. pulchellus*, do.
 Sagittaria. *S. sagittifolia*, do.

S. graminea—swamps and galls.

- Arum. *A. dracontium*, do.
A. triphyllum, do.
A. alba, do.

VINES.

- Cissus. *C. ampelopsis*—swamps.
 Echites. *E. diformis*, do.
 Dolychos. *D. luteolus*, do. near salt water.
 Apios. *A. tuberosa*, do. This vine has numerous tubers of the size of hickory nuts. The Seminoles raised great quantities for food.
 Glycine. *G. reflexa*, do.
 Grape. *Vitis labrusca*—in all swamps.
 Muscadine. *V. rotundifolia*—edges.
 Smilax. *S. pastata*, do. every where.
 Smooth Briar. *S. bona nox*.
 S. quadrangularis.
 S. walteri.
 S. sarsaparilla.
 S. pseudo china.
 S. caduca.—These briars cover wet lands of every description.

Pistache. *Amphicarpe monoica*.—This is a singular plant, stem decumbent, climbing angular, red at the base, light green above, branching, twenty inches to two feet long. Leaves ternate, lanceolate, ovate. Common petiole three to five inches long. Stipules ovate, subulate, hairy; flowers in pendulous racemes; calyx tubular, four toothed. Corolla white, tinged with violet. Legume wrinkled, one to three seeded, most frequently two. The petaled flowers are barren, but stems, furnished with a calyx and the part of a style, shoot from the stalk into the ground, and there produce pods. They were greatly cultivated by the Seminoles, and are now much used by the Americans of West Florida. This vine produces a large crop on sandy land. They are baked or roasted in the shell, and are much used by the confectioners. The pistache is a native of Spain, from which it was, but a few years since, transferred to the

gardens of France and Italy. With us it is perfectly naturalized.

GRASSES.

- Rhynchospora. *R. cymosa*—galls and savannas.
R. distans, do.
R. sparsa, do.
- Cyperus. *C. articulatus*, do.
C. vegetus, do.
- Spanish Grass. *C. virens*, do.
- Yellow Cyperus. *C. flavescens*, do.
C. tenuiflorus, do.
C. odoratus—edge of rivers.
C. strigosus—galls and savannas.
C. speciosus, do.
C. enslenii, do.
- Scirpus. *S. filiformis*, do.
S. validus—in lakes and ponds.
S. minimus—galls and savannas.
- Fringe leaved. *S. ciliatifolius*—savannas.
- Dichromena. *D. ciliata*—margin of ponds and swamps.
D. latifolia.
- Trichophorum. *T. cyperinum*—savannas.
- Cane. *Arundinaria macrosperma*.
A. tecta—edge of swamps and marshes.
- Spring Trichodeum. *T. laxiflorum*—swamps.
- Leersia. *L. oryzoides*, do. inland.
- Phalaris. *P. americana*, do. fresh and brackish.
- Early Paspalum. *P. precox*, do.
- Joint Grass. *P. distichum*, do.
- Large Spiked Panicum. *P. italicum*, do.
- Cockfoot. *P. grus-galli*, do.
- Water Panicum. *P. geniculatum*, do.
- Compressed. *P. anceps*, do.
- Sword-leaved. *P. ensifolium*—galls.
- Aira. *A. palustris*—swamps and savannas.
- Proserpinaca. *P. palustris*, do.
P. pectinata, do.
- Arenarea. *A. glabra*, do.

Liatris. *L. tormentosa*, do.

Veronica. *V. oligophylla*, do.

Awlwort. *Sibularia aquatica*—river swamps, and wet sea beach.

MARSHES,

Are of two kinds, fresh and salt. The former are usually situate on the borders of some large body of water, in the interior of the country. The latter on the seacoast, or near the estuaries of rivers. There is a great diversity of marshes; much depends on the substratum, on which they are based. For instance, the most extensive marshes of West Florida are based on limestone, which renders them extremely fertile in aquatic vegetables: some of the fresh marshes, on the contrary, are merely quicksands, covered with a very thin soil, and are of course quite barren. Others have a clay foundation, and may be cultivated to advantage. Marshes produce no trees; a few shrubs sometimes skirt the edges of them. The herbs most common, are,

Micranthemum. *M. orbiculatum*—fresh marsh.

Tripteleria. *T. cœrulca*, do.

Creeping Comelina. *C. communis*, do.

Convolvulus. *C. sagittifolius*—salt.

C. repens, do. near the mouth of rivers.

Marsh Rosemary. *Statice limonium*—salt marsh near the shores.

Paneratium. *P. mexicanum*—fresh.

Dracocephalum. *D. variegatum*, do.

Cardamine. *C. pennsylvanica*—salt—near the sandy shore.

Pistia. *P. spathulata*—brackish—mouths of rivers.

Sagittaria. *S. laucifolia*, do.

Arum. *A. virginicum*, do. and fresh.

Iresine. *I. celosioides*—salt and fresh.

Aenida. *A. rusocarpa*—fresh.

Water Plantain. *Alisma plantago*—brackish.

GRASSES.

Schœnus. *S. effusus*—fresh marsh.

Rhynchospora. *R. longirostris*, do.

Scirpus. *S. simplex*, do.

S. palustris, do.

Round-head. *S. capitatus*—salt marsh.

- S. mucronatus*, do.
 Large Marsh. *S. lacustris*, do.
 Salt Rush. *S. spadicus*, do.
 Downy Flower. *S. ferrugineus*, do.
 S. maratinus, do.
 Eriophorum. *E. virginicum*—fresh—in boggy clumps.
 White Rush. *Spartina juncea*—salt—forming also tufts.
 S. polystachya—brackish.
 Salt Marsh Grass. *S. glabra*—salt.
 Ceresia. *C. fluitans*—fresh.
 Smooth Panicum. *P. lævigatum*—fresh.
 Soft do. *P. molle*, do.
 Sea-shore do. *P. virgatum*, do.
 Johnny Bartram. *Lycium carolinianum*—salt.
 Black Rush. *Juncus acutus*—brackish.
 Arenaria. *A. canadensis*, do.
 Aster. *A. flexuosus*, do.
 A. subulatus, do.
 Zizanea. *Z. aquatica*.—This is the most common grass at the mouths of rivers where the marsh is often overflowed, grows six to ten feet high, is eaten freely by cattle and horses. *Miliacea* is not eaten by either.
 Z. fluitans.
 Z. miliacea.

AGRICULTURE.

The productions of agriculture in this country, at present, are not very numerous. Cotton engrosses the most attention. Three kinds are cultivated.—The sea island, Mexican, and green seed cotton. The sea island, or black seed, is only raised on the sea-coast; hammock lands, where the sea-breezes are felt, are most congenial to its perfection; on them it often grows to the height of fifteen feet, throws off extensive branches, and bears a large beautiful yellow flower. The cocoons, or capsules, are longer than those of the other kinds. The seeds are black and smooth, the herb long, of a silky lustre; the colour a glossy yellowish white. It is sown in February and March, in drills, according to the quality of the soil, from five to seven feet apart: the stalks from seven to twelve inches.

It is sometimes cultivated on the uplands. There the drills are usually from ten to twelve feet apart. The cocoons open from September to December, when they are usually killed by the frost; the cotton should be gathered as the pods open, as a rain is then of great injury to the colour and strength of the herl. The cotton is separated from the seed by a pair of small wooden rollers, less than an inch in diameter, and from twelve to fifteen inches long; these are turned by a crank with the hand or foot. One slave will clean from twenty to twenty-six pounds of cotton in a day. The expense of cleaning the sea island cotton, is greater than that of the other kinds, although the machinery is much less expensive. When well handled, it brings more than double the price of green seed cotton, and has a more certain market. Whether this plant is indigenous to America, or an exotic, is still uncertain. The green seed cotton is most commonly cultivated in the country: this is the true *Gossypium*, brought formerly from Siam. Its height rarely exceeds four feet; the flower is white, the capsule shorter and thicker than that of the sea island, or Mexican; the herl is shorter and whiter than the former; it grows so firmly to the seed that it requires a gin with steel saws to separate it; the bark of the seed being torn by these, forms the little black motes so hard to separate from the cloth.

A red clay soil is most congenial to the growth of the green seed. This is the kind of cotton usually cultivated in France, Malta, Italy, and Egypt. It is said to have been introduced into Georgia by a Dr. Turnbull.

The Mexican cotton is an intermediate species, between the two former; it is a native of Mexico and Peru. It grows better in the country than on the seacoast; the seed is green, but the staple long, fine, and white. It produces well, and is yearly coming more in use.

As the sea island cotton is only cultivated within the range of the sea breezes, and as the quantity of good land on the seacoast is comparatively small, this article is never likely to be produced in sufficient quantities to glut the market. It will always be a safe crop to cultivate. It is much to be wished, that all our fine hammock lands were improved in its cultivation. They

uniformly afford delightful residences for the farmer. They will, besides cotton, produce all the necessaries of life. Their situations on the seacoast are usually healthy; and the abundance of fish in all the bays and creeks are a great convenience to a farmer. Fruits and vines are produced with great ease, and in great perfection. The only apparent inconvenience is their detached situation, not being usually large enough to support a neighbourhood; they must be retired residences, though they are certainly very pleasant ones.

Rice is the next article that merits the attention of the Florida farmer. This grain is raised with equal success in the marsh, the hammock, and the upland; and on the pine barrens when trod, or as the term is here, cowpenned. A general opinion has prevailed, that rice can be cultivated successfully only in situations where water can be raised upon it. Humboldt has stated, that the Mexicans neglected the culture, for want of this convenience. But constant experience teaches us, that, although it is easier to kill the weeds among rice by water, than by the hoe, yet that it is no more essential to the growth of rice than of corn. Next to sea island cotton, this is the most profitable crop in Florida. Cattle, in winter, eat the straw with as good an appetite as they do hay; sixty bushels of rough rice is a usual crop, on cowpenned pine land, per acre; low rich lands often produce eighty bushels; seventy-five cents is the usual price per bushel in market, or from four to five dollars per hundred when cleaned from the husk. A barrel of cleaned rice contains as much nutriment as a barrel of flour. It preserves much better in a warm climate. On the rich valleys of the Mississippi and Ohio, it is doubtless more profitable to raise corn; but in this climate rice is a more certain crop, and much more profitable.

Corn should be raised by every planter for his own family, but not for market. It grows well on some of our uplands, and better on the alluvial grounds of our rivers, but they often overflow while the crop is still on the ground; it is, therefore, a business of much risk; and besides, our river bottoms are quite subject to bilious complaints in autumn. The hammock lands produce very good corn, when early planted; but if planted late, they are often overrun with worms, which destroy the ear. On our rich

land, therefore, it will be more profitable to raise sugar and cotton, and purchase bacon and flour.

Sugar is becoming an object of attention. Several farmers have, for the three last years, 1824, 1825, and 1826, been increasing their fields of cane. In many parts of Jackson, Gadsden, and Leon counties, it grows to great perfection; the climate and soil are very appropriate, and there is no doubt that sugar, in a few years, will become an article of the first importance to our planters. An acre of sugar cane has, in one year, produced three thousand pounds of sugar. In Louisiana, one thousand pounds per acre is considered a good crop. A farmer near Tallahassee, has this year made three barrels of excellent sugar from an acre of cane, besides a barrel half full of thick syrup, with his usual family utensils alone: and he reserved cuttings for planting, to the value of one hundred and sixty dollars from that same acre.

The Otaheite cane has been principally cultivated in Florida. In Louisiana, the riband cane is likely to supersede all others. This species of cane was introduced, only six years ago, by Mr. Cairon, of Terre aux Bœuf. He procured it from Georgia, where it had a short time before been introduced, from the Philippine islands. Mr. Cairon was not, at first, aware of the importance of the plant of which he had become possessed. Experience has shown, that it stifles the nut grass, (*coco.*) It ripens a month earlier than any other cane, and stands the cold better; when blown down, it does not become sour so soon. The rattons never decay: it will succeed on much poorer land than any other cane. A middling crop will produce one thousand five hundred pounds to the acre.

The sweet potato, (*convolvulus batata,*) is probably as much used for food, in this country, as any other vegetable whatever; the pine barren is its natural soil. It is agreeable to almost every taste; there is no vegetable, the Irish potato excepted, which produces so much nutriment from the same quantity of ground. It is a very healthy food, as useful to animals as to man; and is, in this climate, the best substitute for bread, that exists.

The Irish potato, (*solanum tuberosum,*) is considerably cultivated here; and when planted early, and covered with sea-weed or some compost, to shield its roots from the rays of the sun,

it usually succeeds well: the red clay uplands suit this vegetable better than any of our soils. The Irish potato, raised here, does not last through the season, so well as those brought from the north.

The sweet tobacco of Cuba, (*nicotiana*,) has been cultivated here, in small quantities, with perfect success. The cultivation of this plant should take place of the green seed cotton; it is a more certain crop, and always finds a more certain market. Florida is the native country of this plant. It was first introduced into Europe, from this place, in 1560. One species of it, (*nicotiana rustica*,) still grows wild in our hammocks. While the British had possession of Florida, tobacco was a considerable article of exportation.

Indigo, (*indigofera*, *sp.*) however, was most extensively cultivated by the English, as an article of exportation. Caracas, alone, was able to rival Florida, in this article; forty thousand pounds sterling, in one year, has been paid in London for Florida indigo; yet at this time not a pound is raised in the territory, for sale; a few planters cultivate it for the use of their families: yet it is raised with less trouble than any other crop, and any female slave can manufacture it. This plant, also, is a native of Florida: its natural soil is the pine barrens.

The small grains have been little attended to. Rye has been cultivated with success on the uplands. Wheat cannot be expected to grow near the seacoast. It is believed that barley might be raised advantageously.

The palmachriste, (*ricinus*,) and the benne plant, (*sessamum*,) produce profitable crops on any of our lands.

The lady pea (*dolichos*) is extensively cultivated for table use; it is a pleasant food, both green and dry, is also healthy, and contains much nutriment; it is usually planted in corn-fields after the hoeing is finished, and in this way it is raised with very little trouble. The cow pea is raised in the same manner, and is sometimes used for food; but more generally for provender, for horses and cattle.

Pumpkins, water-melons, musk-melons, and cucumbers, are raised with great ease, and in great perfection; squashes are more difficult to cultivate; cabbage and carrots do well; but beets,

parsnips, and onions, are raised with difficulty. Lettuce and radishes come to great perfection. But the egg plant, (*solanum*,) and tomata are used more generally, than most other garden vegetables, during the summer season.

Grasses have been very little cultivated; the whole country is covered with wild grasses, of almost every description; many of them might be cultivated with great advantage. The guinea grass has been raised successfully by judge Robinson, of Gadsden county. It has succeeded, to admiration, on the sandy peninsula, occupied by judge Brackenridge, opposite to Pensacola. The Bermuda grass forms a very soft carpet for our yards; but the nut grass is an intolerable curse to our gardens. Red and white clover grow wild in many places, and there can be no doubt of their succeeding, as well as lucerne, on a large scale of cultivation.

Of fruits, the fig is produced with less care than any other. It grows spontaneously; by selecting the best kinds, and keeping them pruned, any quantity might be raised with a trifling expense. There are several varieties, of which the black are largest; but the small yellow or *cœleste* fig, is the sweetest. They usually produce two, sometimes three crops in one year; they bear plentifully the third year after planting.

There are several varieties of the Chicasa plum, all nearly in a state of nature. Where they have been transplanted from the woods to the garden, they have been greatly improved.

The sweet orange has been successfully cultivated, in and near Pensacola; but the cold season of 1822, killed all the trees: they are again beginning to bear fruit. This is a tender tree, and requires considerable care in the cultivation, especially in sheltering it from violent storms and extreme frosts. They usually bear in six or seven years from the time of planting the seeds. The young trees should be transplanted from the nursery the second or third year; they should be set in good land, about twenty-three feet apart, in a quincunx form, and kept clear from weeds; when arrived at maturity, they will, on an average, produce one thousand oranges per year: some trees in St. Augustine, have been known to produce six thousand in one year.

In a good soil they have been known to live a hundred and fifty years. It is well to plant one or two rows of sour orange, on the side of the grove next the sea, to break the force of the storms.

The sour orange is much more hardy; the acid juice of the fruit and the peel are the only parts used.

The bitter sweet is a native kind of orange, that grows wild in many parts of the peninsula, especially near the St. Johns river.

Of late years it is considerably cultivated; many estimate the mild acid of its fruit, before the sweet orange; the peel alone is bitter. This is the most hardy of the orange trees, and when cultivation shall have brought it to the perfection it is capable of attaining, it may become, in all respects, the most estimable fruit.

The pomegranate is a beautiful ornamental shrub, and the fruit is considered healthy; it arrives at perfection here; and almost every garden is ornamented with it. Mr. Darby recommends this shrub for hedges; it certainly would be very ornamental, and if interspersed with our *mimosa eburnea* and Spanish dagger, (*yucca draconis*,) the hedge would be also formidable.

The quince is also common in our gardens, but it does not possess the fine aroma of the northern fruit; want of attention in the cultivation may be one reason for the difference.

Apple trees grow here, but produce little fruit; they blossom abundantly; probably they are blasted by the sea breezes; when fruit is produced it is but indifferent. This fruit might perhaps succeed better on the clay uplands, at a distance from the coast.

Few pears have been raised; they are said to do well and produce very good fruit in the country. The persimmon is a native of our hammocks, and the pawpaw of the river bottoms. The wild cherry is a common timber tree on the hammocks and uplands; the fruit is very indifferent, but the wood is superior to the northern cherry in firmness and texture. The bilberry (*vaccinium arboreum*,) and the whortleberry (*vaccinium stamineum*,) are found in the sandy edges of the hammocks, and near small streams.—And the blueberry, (*vaccinium resinsum*,) in the pine lands. The blackberry, (*rubus villosus*,) is common in most grounds, and the dewberry (*rubus fruticosus*,) on the

pine barrens, and on the sea-beach. Wild strawberries are confined to the prairies and savannas, but our gardens produce a superior quality.

The only mode of improving our lands has been the penning of cattle on them; this improves the sandy lands by rendering them more compact, as well as manuring them. Our gardens are sometimes manured imperfectly. Great improvements might be made, by mixing clay with the sand, and thereby rendering it more retentive of moisture. Burning renders the clay still more fruitful. Sea-weed may be collected, in any quantities, on our seacoast; this forms an excellent manure for every kind of produce; especially so, for the sea island cotton, and Irish potatoes. Extensive banks of shells are also found every where near the coast; for clay soils nothing can be better. Peat beds are also frequent: this, when trodden or fermented in piles of compost, forms an excellent manure.

MANUFACTURES.

As yet there are none in West Florida; if we except the domestic clothing, made by the planters for their own families. It is not probable, that manufactures will ever be greatly extended in this country; as the staple articles of commerce will always employ the inhabitants more profitably: certainly that will be the case for many years to come. Some of the most important productions of this country, however, require to be manufactured on the spot where they are produced:—such as sugar, indigo, myrtle wax, quereitron bark, sumach, benne, and palma christi. Bricks are now manufactured here; cargoes of them are weekly shipped to Orleans. Fire bricks, in particular, are in great demand, and bring a very good price.

Lime has often been shipped abroad: our shell banks are very extensive, and will not be exhausted for many years. In proportion as sugar cane shall be cultivated, taffia may be manufactured. Cigars have often been made from the tobacco raised here, in no particular inferior to Havana cigars. This business ought to be increased.

Our shores are peculiarly well calculated for the making of salt. It is said that a company is forming to establish salt works

at St. Andrew's bay. Glass might be made here to great advantage; all the materials are furnished in the neighbourhood, in perfection and abundance. Peach brandy will, ere long, be made in the country; as peach orchards are rapidly increasing. Few pursuits offer better prospects of success than this.

COMMERCE,

Is yet in infancy; a moderate coasting trade is all that West Florida can yet boast. Foreign goods are principally imported from New-York: provisions and groceries from New-Orleans. Our exports consist of cotton, cedar logs, boards, staves, deer skins and horns, beeswax, tallow, hides, peltry, and bricks.

INDIANS.

When Ponce de Leon first visited Florida, in 1500, the natives were a hardy warlike race. They were very independent; but like all ignorant people, they were also very superstitious. The following portrait of the manners and customs of that period, is translated from *The Beauties of American History*, published at Paris in 1806.

They worshipped a demon called *Toya*, to whom they offered human sacrifices. The priests were called *Jauvas*, who disguised themselves in a variety of extravagant forms, to impose on the credulous, and to extort rewards for alleviating their fears.

In the morning, every Indian presented himself at the entrance of his cabin, and extending his hands towards the sun, as his first ray beamed from the eastern horizon, he addressed a rude but fervent hymn of admiration to its glory. At noon they performed a similar act in token of their gratitude. And to the setting sun they addressed their thanks for all the bounties, which they conceived, he had bestowed upon them during the day: and they were particularly careful that his last ray should strike their heads.

They had four quarterly feasts or holy days, which they celebrated, by assembling together on the highest ground in the vicinity of their villages, where altars were raised for the purpose, on which they sacrificed aromatic plants and honey, prostrating themselves at the same time in adoration. The chief *Jauva* also spread on a smooth stone, corn, an offering to the birds, in

acknowledgment for their melody. These rites being performed, they devoted themselves to dancing and joy. At exact noon the sacrifices were renewed, and cages were opened, and multitudes of birds, which had been procured for the occasion, were turned loose to the air, whose joyful notes celebrated their freedom: to their flight great attention was paid by the Jauvas, who thence prognosticated future events. It was in cases of great calamity only, that human sacrifices were offered to their demon. In some districts, the first-born male infant was required to be sacrificed to the sun; in other districts a handsome girl, of a good family, was sacrificed to the moon; and in both cases the mother was required to assist at the immolation of her offspring.

Heaven, or the higher world, they called Hamanpacha. Hell, or the lower world, Ucupacha; and Cupai the evil spirit.

That all the branches of quackery might be united in the same persons, the Jauvas carried by their sides, when not engaged in spiritual affairs, a bag of various simples to cure disorders; and their experience, says our author, had probably rendered them as efficacious as the nostrums of our civilized practitioners. These priestly physicians, dressed in mantles made of skins, cut in bands and fastened by a belt round the waist, the legs and arms naked, the head covered with a cap of the same skin terminating in a point, and ornamented at bottom with a garland of feathers, carried a kind of drum to announce their approach. The Jauvas were consulted before they went to war, and a kind of consecration was performed by sprinkling water in the air over the assembly. Valiant warriors were honoured by various funeral rites, and their widows were allowed the honour of depositing their hair on the tomb of their husbands. But they were not permitted to marry again until their hair had grown so as to cover their shoulders.

The adulterous woman was stripped of her clothing and hair, and thus exposed to the insults of her own sex, and then sent to her parents, who hid her in some secret recess. They usually remained naked until twelve or fifteen years of age; they then used leggins and mantles of fur.

Not many of the modern Indians of Florida, are, probably, even the descendants of those who inhabited the coast in the days

of Ponce de Leon; yet their habits and manners are not extremely dissimilar. During a term of two hundred years there is a great hiatus in the Indian history, see judge Brackenridge's letter, Appendix, No. 1. Tradition says, that about one hundred years ago the Yamases inhabited this country; but that white men also had towns and cultivated fields among them; that they lived in peace and intermarried with each other. But the Muscogulgee tribes commenced a war on them, which continued a long time; during which the forts were erected, whose ruins are still seen: that the Muscogulgees finally conquered; that the white men were at last all driven to Fort St. Lewis, and from that to the Ocklockney fort, from which they embarked on the Big water, and left the country. That the remainder of the Yamases were taken prisoners, and made slaves to the conquerors. That the Muscogulgees then abandoned the country, because they had destroyed the means of subsistence. Many years of desolation succeeded; till at length vagrants from different tribes strayed into the unoccupied regions, and united with the remnant of the Seminole nation. These traditions are gathered from the old men of the Fowl towns, and however uncertain, are the only authorities within our reach. After the battles of Emuckfaw, and the Horseshoe, &c. many of the fugitive Creeks fled into Florida, and joined the Seminoles.

The Indian villages west of the Suwanney river, and Mickasuky lake, were called the Fowl towns, when the territory was transferred to the United States. They were six in number, viz: Cahallihatchee, Old Tallahassee, Taphulgee, Allikhadja, Etatulga, and Mickasuky, besides several minor settlements.

By the treaty made at Camp Moultrie, in 1824, the Indians of Florida relinquished their lands, in the centre of the territory, for a district of country on the peninsula; to which they were removed in 1825: and a military post was established at Tampa bay, for the purpose of supplying them with necessaries, and keeping them in order. Their improvements were immediately occupied by emigrants from different parts of the United States, and the rest of the country is now rapidly settling. A few sections of good land were reserved to their chiefs. The land, to which they are *legally banished*, consists of dry sand ridges

and interminable swamps, almost wholly unfit for cultivation; where it has cost the United States more than their land was worth to support them; they are now in a starving condition; they have killed the stock of the American settlers, in every part of the territory, to support themselves already; and there is no present prospect of their situation becoming improved. Their number, in 1824, amounted to one thousand one hundred, of which three hundred and eighty-five were warriors. These Indians, before their removal, depended principally on hunting for their meat. The women raised vegetables in considerable quantities, especially corn, sweet potatoes, pistache nuts, beans, melons, and pumpkins. They also manufactured a kind of bread from the tuberous root of the great bamboo, or china briar, (*smilax pseudo china*,) which they grated fine, and separated the starch from the fibres. They appeared to live happily among themselves; they were quite republican, and watched the conduct of their chiefs with jealous care. The men were much handsomer than the women, and dressed with better taste. The inferiority of the women was probably a natural consequence of their servile situation. Their children appeared healthy, active, and intelligent. The female Seminole usually carried her infant in her arms; not on her back like the northern Indians. Education was unknown here. Children were under no restraint; they neither laboured nor hunted till they did it from choice. This tribe paid much attention to the raising of cattle and horses; and the women raised hogs and fowls. Indeed their savage character was much broken; and had they continued to cultivate the rich fields of Mickasuky and Tallahassee, they would soon have attained a considerable degree of civilization.

TOWNS.

Pensacola is situate on the north bank of the bay, in latitude $30^{\circ} 23' 43''$. Longitude $10^{\circ} 5'$ west of Washington, and is the only ancient town that remains in West Florida. For a century, this was little more than a military post, established and supported for the purpose of maintaining the sovereignty of the soil, and of securing the trade of the Indians. Like most other military posts, it has suffered by the strife of rival and contending

powers; and has, at different times, belonged to several successful competitors.

It was at first established by the Spaniards, in 1696, by Riola, as a check on the French settlements on the Mississippi river, and at the Baloxi bay. Jealousies arose from proximity of situation, and a mutual desire of extending their possessions, until war actually broke out in 1719. During this year Pensacola changed masters three times, and was at last burned by the French. The first attack was made by Monsieur Bienville, with a party of Canadian French, from Louisiana, and four hundred Indians. With this force he invested the town in the rear, while three armed vessels made an attack in front. To avoid an escalade, the Spanish commander capitulated, in March, and saved the post from pillage; and the prisoners were sent to Havana.

In the month of August, of the same year, a Spanish flotilla appeared before the town, and means were found to excite a mutiny among the French soldiery, which occasioned an immediate surrender; and the prisoners were, in their turn, sent to Havana.

Bienville, in September, again invested the town, while the French fleet entered the harbour, set fire to the place, and demolished the fortifications. The truce of 1722, again put the Spaniards in possession. From this time the Perdido bay was considered as the boundary, betwixt the possessions of France and Spain.

In 1763, Florida was ceded to Great Britain, and possession was given the following year. They held the province eighteen years; during this period Pensacola was greatly improved. Agriculture was encouraged in the neighbourhood, and commerce, in lumber, naval stores, indigo, skins, peltries, &c. was greatly extended. The town was laid out at right angles, in squares of four hundred by two hundred and fifty feet; the streets sixty feet wide, with a large common fronting on the bay, one thousand six hundred feet from east to west, by nine hundred north and south. Most of our principal buildings were erected during this period. The three largest, the two barracks, and the mansion-house of Cassa Blanca, have since been burnt down at different periods.

The gardens of Pensacola were the pride of Florida; every city lot had, appended to it, a garden lot in the suburbs; their ruins are still to be seen, overrun with weeds, bushes, and vines.

In 1781, Pensacola, then commanded by general Campbell, was again conquered by the Spaniards under count de Galvez, governor of Louisiana. In this attack a red hot shot from the Spanish camp entered the British magazine of Fort St. Mitchel, which blew it up. From this period it appears to have declined. In 1814, the plan of the city was altered; the gardens in the suburbs were cut up into arpent lots and sold at auction; after which none of them were improved. Some of the streets were blockaded by erecting houses in them, or shutting them up as lots. The fine common was cut up into lots, and distributed to different persons; a slice to one, and a corner to another. Some were disposed of by the intendant, to suit his own purposes; some were disposed of at auction by the Ayuntamiento, to serve theirs. Streets were laid off to meet the general confusion; some thirty, some forty, and some sixty feet wide; some short and some long, to suit the present exigence. Out of this massacre of order and decency, two small squares were saved, one on the east and one on the west ends of the old common; one was named the square of Seville, and the other the square of Ferdinand, each five hundred feet long by three hundred broad.

At the general treaty of peace, in 1783, Florida was ceded to Spain, who held it without intermission till 1814, when an English fleet entered the harbour of Pensacola, and furnished the Creek and Seminole Indians with arms and ammunition, and excited them to hostilities against the United States; took possession of the Spanish forts, and set the province in hostile array against us, in open violation of the professed neutrality of Spain. General Jackson, then at Mobile, after several ineffectual remonstrances and demands on the Spanish authorities, to cause their neutrality to be respected by the English, at length marched his army to Pensacola, and took possession of the fortifications; drove the English fleet from the harbour, and frightened the Indians into the interior. He then retired from the place, and left it in the hands of the Spaniards.

At length the Seminole war broke out; and the Americans

were again obliged to visit their faithless neighbours. In 1818, Jackson again took possession of Pensacola, formed a temporary government, and sent the Spanish troops to Havana: but it was soon given up, and the Spanish authorities reinstated.

In 1819, a treaty was concluded between the United States and Spain, by which the Floridas were ceded to the former, in consideration of spoliations made by the latter on American commerce. This treaty, however, was not ratified by Spain until 1820. On the 17th of July, 1821, the provinces were delivered over to the American commissioners; and they are now held in full property and sovereignty by the United States. By this treaty, our government has peaceably acquired a country, which, on investigation, proves to be of much greater intrinsic value, than was at first anticipated; they have, at once, cut from the root a thousand fruitful sources of contention and war. Our enemies can no longer take advantage of the weakness of our neutral neighbours, to excite the savages on our frontiers, or possess themselves of positions to annoy the vital parts of our domain.

The public buildings in Pensacola are a court-house, church, market-house, custom-house, and public store.

The court-house is a two story wooden building, and was formerly the government house of the Spaniards. It stands near the bay on the old common. It has lately been refitted and painted by order of government, and the yard enclosed with a handsome paling. But the orangery and out houses have been suffered to go to ruin.

The church stands on the beach. It was formerly a warehouse, and is large enough for present use; but very inconvenient, and ill calculated for the purpose to which it is now appropriated.

The market-house is a neat new building, situate near the beach, at the foot of the square of Ferdinand.

The custom-house is one of the old block-houses formerly erected for the defence of the town; this is also near the bay, on the square of Ferdinand. The public store was formerly a hospital; it is situate at the corner of Government and Palafox streets: this building has also been repaired by government.

The market is still small, but is increasing. Beef is plenty

and cheap, and very good, except in winter. Mutton and veal are scarce and dear. Pork is usually plenty, but double the price of beef. Butter, made in the neighbourhood, is, for the most part, badly prepared for market, and soon spoils. The northern butter, when well put up, is generally preferred to that brought into market by the planters. The market is usually well supplied with chickens, at a high price. Ducks are considerably plenty; but turkeys are always scarce and dear. Geese are never brought to market. Venison is, at some seasons, plenty and cheap. Irish potatoes are usually dear; sweet potatoes plenty and cheap. Fish are abundant, cheap, and excellent. Oysters and crabs are the only shell-fish; but they are plenty, and very good.

Although there is no part of America where gardens are cultivated more successfully, yet vegetables are very dear. The vegetable market is, however, evidently improving; and as the demand increases, we have reason to believe that supplies will increase, at a reasonable price.

The government of the city is vested in a mayor, and nine aldermen, to whom is committed the police and fiscal concerns. The health and quarantine regulations are committed to a board of health, appointed by the city council; which is the title assumed by the mayor and aldermen, when assembled for business.

The revenue of the city amounts to about two thousand dollars per annum; drawn principally from a tax on real estate, slaves, pleasure carriages, saddle horses, and licenses on shops, stores, taverns, billiard tables, and carts.

Good schools are not encouraged as they ought to be. Science is scarcely thought to be a subject worthy of conversation. Swarms of children are running about the streets, improving rapidly in dissipation and vice.

MANNERS AND CUSTOMS.

The manners and customs of the Floridians, are various as their different origins. The country having, at different periods, been conquered by the English, French, and Spaniards, the inhabitants of these countries were much intermixed in complexion, language, and manners. The Creoles had, before the transfer to

the United States, assumed something of a national character. Florida was little more than a military position. Most of the respectable inhabitants held commissions in the army, or in some of the departments of government; they lived on their salaries, paid no taxes, and were rarely called to a strict account for their conduct. The balance of the people kept little shops, cultivated small gardens, or followed fishing and hunting. They were almost wholly confined to their towns; a few cow-pens in the country formed the only exceptions. They were a temperate, quiet, and rather an indolent people. Affectionate and friendly to each other, and kind to their slaves, the even tenor of their way was not often interrupted by business of any kind. Dances, card-parties, and patgoes, were frequently indulged in, but never to excess. The bustle and exertion of a mixed American population, for a time, threw the old inhabitants into the back ground; but meeting with little success, the new comers at present seem disposed rather to settle down to the easy lives of their neighbours, than to pursue a course of exertion, which has once proved unsuccessful. It was a misfortune that most of the American emigrants to this country brought with them expectations of accumulating rapid fortunes; being disappointed in their hopes, many left the country in disgust, and many relaxed in their exertions; but the few, who settled down in a course of patient industry, are realizing a decent independence. Could the old and new inhabitants be induced to unite in establishing a rational system of education, all distinctions would, in a few years, be lost; and Florida would enjoy a happy population.

The amusements of the citizens are few. Balls are the most common, and they are less frequent than they formerly were. Patgoes are a kind of introduction to a dance. A wooden bird is fixed on a pole, and carried through the city by some slave; on presenting it to the ladies, they make an offering of a piece of riband, of any length or colour, which may suit their fancy or convenience. This is fixed to the bird, which thus becomes decked with an abundant and gaudy plumage. A time and place is then set apart for the fair patrons of the patgoe to assemble, who are usually attended by their beaux, armed with rifles or fowling pieces. The patgoe is shot at; and the fortunate marksman, who

first succeeds in *kill*ing it, is proclaimed king. The patgoe becomes his, by right of custom; and is by him presented to the fair lady he loves best, who, by accepting it, becomes his queen; and he is also entitled to the invaluable privilege of paying all the expenses of the next ball, over which his majesty and his consort preside.

Sherrivarees are parties of idle people, who dress themselves in masquerade, whenever a widow or widower are married. They often parade about, and play buffoon tricks, for two or three days; haunting the residence of the married pair, and disturbing the whole city with their riots, until they can be bought off with money or liquor.

The only religion professed here is the Roman Catholic. The Americans are so divided in their religious creeds, or so lack religion altogether, that no form of worship is kept up among them.

Tallahassee, the seat of government for the territory, is situate in Leon county, about twenty-two miles north by west from Fort St. Marks, and about midway between the eastern and western extremities of the territory, on a high commanding eminence, in the bosom of a fertile and picturesque country. A pleasant mill stream, the collected waters of several fine springs, winds along the eastern border of the city, until it falls, fifteen or sixteen feet, into a gulf, scooped out by its own current, and finally sinks into a cleft of the rock, at the base of an opposite hill. Numerous springs flow from the southern border of the town. In every part of the place, good water may be obtained by sinking wells from six to thirty feet. In the spring of 1824, the first house was erected in Tallahassee. The first legislative council sat there, in the winter of the same year. In the winter of 1825, it was incorporated, and the government of the city was vested in an intendant and five aldermen. It now contains eight hundred inhabitants, and a hundred and twenty houses. The corner stone of the state-house was laid in January, 1826; and one wing of the building erected during that season. Several religious societies have been established, a Masonic Lodge, and Agricultural Society. The market is yet small, but well supplied with meats. Beef, mutton, and pork, are plenty and cheap. Venison, tame and wild fowls, and fish, are also reasonably low.

Bread stuffs have yet been dear, owing to the rapid increase of population; which has outrun the expectation of the eight or ten merchants established there. Few towns in America have increased more rapidly than Tallahassee; and population and improvement continue, without any abatement. It must in a few years become a charming place of residence; though it will probably never become a place of great commercial importance.

Several demonstrations at town-making have been essayed, in West Florida, but most of them have ended in bushes, where they began. During the possession of the English, a town was begun about seven miles north-east from Pensacola, called Campbellstown. Another on the east side of St. Andrews' bay, called Wells. A third on the east side of Ocklockney bay, called Oldenburgh, near to the ruins of the old fort. It is impossible, at this time, to obtain an exact knowledge of the population or extent of either. They, however, could have been no more than infant establishments; as they all fell to decay directly after the English evacuated the country.

During the administration of governor Folch, at Pensacola, he laid off a town at Barrancas, made a partial sale of lots, and had several dwelling houses erected; it was said that he intended to remove all the inhabitants from Pensacola to Barrancas; but when he was recalled from the government, his town fell to decay. During general Jackson's administration, two towns were named, at the head of Escambia bay, the one Beelersville, and the other Florida. They both continue there in statu quo.

Quincy, the seat of justice for Gadsden county, was laid out in 1825, in a very pleasant tract of country, and is said to be improving very handsomely.

COUNTIES.

West Florida is divided into six counties, viz: Walton, Escambia, Washington, Jackson, Gadsden, and Leon.

Escambia county is bounded west by the bay and river of Perdido; north by the thirty-first degree of north latitude; east by a line drawn southwardly, from the place where Black Water creek crosses the aforesaid line, to the east end of St. Rosa Island; south by the Gulf of Mexico. It is forty-eight miles long from

north to south, and forty-four wide from east to west. A large proportion of the land, in this county, is pine barren; and generally very poor. The Bay of Pensacola enters into the heart of this county, and the lagoons and rivers, connected with it, spread through every part, bringing a good navigation to the very doors of the inhabitants. The Big lagoon is attached to the mouth of Pensacola bay, and extends within three-fourths of a mile of Perdido bay; and might, with very little expense, be connected with it. There are small hammocks on all the waters of Pensacola bay, which afford charming country seats. The river bottoms on the Escambia are rich, but are subject to overflow. A kind of second bottom, resembling hammock, rises between the interval and pine barren; these are mostly cultivated, and produce very good crops: they usually embrace springs of excellent water. The peninsula, between the Pensacola bay, and Yellow-Water bay, is, generally, covered with pine timber: there are some savannas of a good moist grazing land, and some fine hammocks. The Pine Level lies north of Yellow-Water bay; it is a tract of high level land, watered by springs, which form the Cold Water and Black Water creeks. The soil is a sandy clay, which yields very good crops of cotton, rice, peas, and potatoes. But this tract of country is peculiarly adapted to the production of fruits; peaches, figs, and grapes in particular, come to maturity in a short time, and are excellent of the kind. The peninsula, between Pensacola bay and St. Rosa sound, is in general a pine barren, interspersed with black jack ridges, and savannas of moist grazing land. On each shore there are small hammocks, excellent for sea-island cotton; and would form beautiful country residences. The sound, a charming sheet of water, connecting the Pensacola and Chactawhatchee bays, is from half a mile to two and a half miles wide; admits of vessels drawing twelve feet water, to the narrows, fifty miles from Pensacola, and five feet through the Chactawhatchee bay to the sea, by the Pass L'Este. The seas are broken by the Island of St. Rosa, which defends the peninsula on the south. Fish, in amazing quantities, float in vast shoals in this sound: at some seasons the shoals cover the surface of the water for miles. Of these, mullets are most numerous; but red-fish, pompinos, sheephead, drums, and trouts, are abundant.

In Pensacola bay, oysters are plenty; and there are a considerable quantity in St. Rosa sound. Escambia county, the river bottom of Escambia alone excepted, is unusually healthy; the sea breezes cool the air, and temper the heat of the sun; and there is no part of America where sea bathing is enjoyed with more pleasure or benefit.

Walton county is bounded west by Escambia; north by the thirty-first degree of north latitude; east by Jackson and Washington counties; and south by Washington county, and the Gulf of Mexico, at Pass L'Este. It is about the size of Escambia county. The Chactawhatchee bay crosses the south end of the county, and the river of the same name skirts the eastern border. These afford a good navigation, and plenty of fine fish. On the shores are many excellent hammocks, but as yet uncultivated. A high ridge divides the Chactawhatchee bay from Shoal river; on this the land is poor and barren; but the noblest springs issue from its sides, descending with a rapid current to the bay on the south, and to the river on the north. In a course of three or four miles from their sources, they often become deep enough to navigate with large boats; their waters are very pure and cold. Betwixt the ridge and the bay, besides several excellent hammocks, there is a space of from three to five miles of good pine land, excellent for grazing. Four considerable streams are formed, and run into the north side of the bay. At the west end, Twin creek is the first; it enters a large lagoon or arm, which extends seven or eight miles into the country. Boggy creeks unite about four miles from the bay: there are three principal branches, that, when united, form a considerable river. Rock creek is also large enough for navigation, seven miles from the bay.

Alaqua is the largest stream that enters from the ridge. It is navigable fifteen miles into the country; it then divides into three principal branches, each of which have a course of twenty miles. The springs, of the two eastern branches of this river, rise gradually in cane patches, and flow through a beautiful undulating country of good land. They interlock with the heads of Shoal river and Uche creek; and the great ridge here terminates in a succession of high peaks. This river enters the bay over a bar

of five feet water. The settlers, on the Alaqua, are a race of plain industrious farmers, who have few slaves, yet they appear to enjoy much comfort and independence; they seem to estimate the benefits of education and industry, more correctly than many other new settlements. Good crops of grain are raised here; and cattle thrive with little care; the soil is rich but rather thin; the substratum is a kind of soap-stone, with many fossil impressions. It is sufficiently solid for building.

The Yellow Water settlement is in the north-west part of the county, on the banks of the river of that name. Here is a small body of excellent land, very well improved, for a new country. Crops stand the droughts of summer better here, than in any other part of Florida. Cotton and corn are their principal crops: the pine lands, for six miles from the river, produce equally well as the river bottoms. Twelve miles south, there is another settlement, commencing on Shoal river. There they have a similar tract of land, founded on the same kind of soap-stone as at the Alaqua. The Uche creek rises north of the Alaqua; and after running a course of forty miles south-east, it falls into the Chactawhatchee river, five miles above the Big spring. The Uche valley is among the best lands of the county: it has a substratum of limestone. Crops here are often scorched by the sun; and are not so good in dry, as in wet seasons: here is a large settlement of industrious farmers, who, with very few slaves, are improving in property and respectability. On the north line of Walton county, there is a small settlement formed around M'David's pond, a very pure and handsome sheet of water of an oval form: it is about three miles long and two broad. The land on its borders is clayey; but produces good crops of corn, potatoes, peas, &c. A large creek issues from this pond, and forms one considerable branch of Shoal river. About two miles south of M'David's pond, there is a very singular hammock of excellent land, containing about four hundred acres. It is in a pine barren country, where a branch of Shoal river rises, which, after running a short course, divides, and loses itself in a narrow swamp, which entirely surrounds this hammock, with a thicket so impervious, that until the surveyors were obliged to push a line through it, no

one had suspected any thing but swamp existed there. On penetrating the narrow border, however, they were surprised to find a high rich tract of land, of considerable extent. At the south-west side of the hammock, the waters again collect, and run off in a fine current.

Near one-third of Walton county, is good tillable upland and hammock land: the rest is pine barren. In the western part, the streams burst in large torrents from the ridges, and pursue their course to the bay, in deep ravines; but north and east of the Alaqua, the streams head in gentle vales, like grass savannas in the outward circle; but further inward, thickly covered with reed cane (*arundo tecta*,) and still farther, where the water rises, it is always surrounded with titi bushes, almost as thickly set as hairs; as the valley extends, groves of oak, hickory, magnolia, gum and poplar, cover the surface. On the whole, the eastern part of Walton county is a pleasant and excellent grazing country.

Jackson county lies east of Walton. It is bounded on the north, by the thirty-first degree of north latitude; east, by Gadsden, and south by Washington county. It is sixty miles long from east to west, and thirty miles wide. The western part of Jackson, with the exception of Holmes Valley, and Oak and Hickory Hills, is poor pine barren land. Holmes Valley commences near the Chaatawchatchee river, and extends eastwardly ten or twelve miles, parallel with Holmes creek, from which it is separated by a sand ridge one or two miles wide. It contains from eight to ten sections of good land, sunk nearly one hundred feet below the surface of the surrounding country. The soil is a dark sandy loam, covered with white, black, and yellow oak, white ash, black gum, wild cherry, red bay, magnolia, with sassafras, pawpaw, witch-hazel, and haw shrubs; the whole being mixed with wild cane. A good mill stream runs through it, collected from springs which issue abundantly from the precipitous sides of the valley. Near these springs, in the pine woods, the inhabitants usually build their houses.

Holmes creek rises in Alabama, runs through the north-west corner of Jackson county, and falls into the Chaatawchatchee river, about seven miles above the Cow ford. The Big Spring

rises about five miles south of Holmes valley, and enters the creek about one and a half miles from its junction with the river. This has been long known as a common landing place. This creek has a deeper channel than the Chactawhatchee river, and by the enterprise of Messrs. Shackelford & Merlet, it has this season (1826) been rendered navigable for boats, forty miles into the country. Groves of fine cypress cover the extensive swamps on the streams, and a few good hammocks skirt the banks. Oak and Hickory hills are almost the only hills of note in this part of Florida. They stand insulated in the midst of extensive pine barrens, above which they are elevated some hundreds of feet. The land on them is excellent upland, similar to the rich red clays of Leon county; they are clothed with heavy forests of oak, hickory, chesnut, gum, sorel tree, and magnolia. Oak hill is nearly round, and may contain one and a half sections of good land. It is thirty miles east of the Big spring of Chactawhatchee, and two miles east of Hickory hill. The latter throws off to the south-west, a ridge five or six miles in length. Both these hills derive their names from the timber which predominates on them. Hickory hill may cover four or five sections of land. The head springs of Hardlabour, and Dry creeks, and Econfina river, rise in these hills. Near the middle of the north line of the county, Spring creek rises, which, with several other large springs on both sides of the line, form the Chapola river. This river passes through the heart of the county; on its margin is some of the best land in the territory. The most extensive settlements are on its western border, extending from one to five miles in width, and thirty in length. The soil is a chocolate-coloured sandy loam on red clay, supported by amorphous limestone. The timber, a mixture of oak, pine, hickory and dogwood, filled up with cane. Corn, cotton, and sugar cane are the most important crops. Much of the tract of country between the Chapola and Chattahechee, is poor pine barren. The caves, natural bridges, and noble springs, of this region, are more particularly described under the head of curiosities. The limestone, which subtends the whole of this county, varies considerably in quality, in different parts, which has an evident effect on the natural productions of the soil. Nearly one-third part of

Jackson county, is believed to be excellent tillable land, and a considerable part of that, first rate soil. It contains at least four thousand inhabitants, and bids fair to become one of the richest counties in the territory.

Washington county lies along the seacoast, south of Walton and Jackson counties. It is one hundred miles from east to west, and forty miles broad on the Appalachicola river, and three miles at the west end, on the pass L' Este. It is a misshapen tract of worthless land, in general; a few hammocks on St. Andrew's bay, the south edges of Oak and Hickory hills, a part of Holmes valley, and the borders of Econfina river, are valuable exceptions. The St. Andrew's bay, which covers one-half of the county, is an excellent harbour and a pleasant sheet of water, well stocked with fish. It will, at some future day, become a place of great business. The eastern arm may be connected with the Chapola and Chattahoochee rivers, by a canal of three miles. This would open a very extensive inland trade, through the frontier counties of Georgia and Alabama, which are becoming rich in southern productions. St. Joseph's bay, also, lies in the south-west corner of this county. The eastern part of the county is low, flat, and cut up with lakes and lagoons. A few families are settled at the head of St. Andrew's, and along the Econfina river. This county acknowledges no civil authorities, nor laws. It owes its origin to political quackery alone. Nearly the whole of it is covered by a claim of John Forbes and Company.

Gadsden county extends from the thirty-first degree of north latitude, to the gulf. It is bounded by the Appalachicola river on the west, and by the Ocklockney river on the east. St. George's, James, and the Dog islands are embraced in its boundaries. It is near one hundred miles from north to south, and thirty-six from east to west. There are some very rich cane lands on the Appalachicola river; some of them, however, are occasionally overflowed. On the Musquito creek, a little below the north line of the county, there is said to be a considerable body of good unsettled land. On the Rocky Comfort, Robinson's creek, Attapulgas and Little river, branches of the Ocklockney, there are considerable tracts of excellent upland, which are rapidly settling. Quincy, the county seat for Gadsden, is situate on the west side of the

Attapulgas, near the centre of the county. Betwixt the Appalachicola and the western branches of Little river, the land is generally a poor pine barren. The southern part of the county, near the seacoast, is covered with saw palmettoes, ponds and swamps. Low marsh lands border the Ocklockney bay, which lies in the south-east corner; Alligator harbour lies south of it. One-fourth of Gadsden county, is supposed to be tillable land. It contains upwards of three thousand inhabitants. Near one-half of this county is claimed by the assignees of Pantou, Leslie, & Co.

Leon county is bounded west by the Ocklockney river, north by part of Georgia, east by the Suwannee river, and south by the Gulf of Mexico. It is more than one hundred miles long, and from forty to sixty broad. The western part only is inhabited. The seacoast of this county is generally marshy; four miles east of the Ocklockney bay, there is a considerable archipelago of low islands, some of them covered with live oak and cedar, and many with only grass and reeds. The Appalachee bay makes a large sweep, of something like one hundred miles; the curve however is very gradual. The water is shoal, for several miles into the sea; the bottom, a soft amorphous or chalky limestone, with nodules of flint. Masses of oysters grow to the rock, and grass is so abundant, even to the depth of several feet, that the coast has the appearance of a green meadow. The forests rarely approach within three or four miles of the tide. On the marshes, however, there are frequent keys, which rise like small islands, covered with live oak, cedar, and tall cabbage palms. These are most frequent, where streams of water enter the bay. The high grounds bordering the marshes are usually rocky, but covered with a great variety of heavy timber. A ridge of rocks runs parallel with the coast, at about eight or nine miles distance; it does not rise much above the surface, but causes falls or ripples in all the streams, betwixt the Wakullee and Suwannee.

There are many rich hammocks on the borders of the Appalachee bay, and much of the pine land, for some distance from the coast, has a rich soil, and is very productive. The streams are usually covered with grass, so as to render their navigation troublesome. The whole county abounds in lakes, ponds, subterranean rivers, and large springs. The streams are uniformly pure

before they sink into the ground; after emerging, they are always highly impregnated with lime. To the distance of fifteen or twenty miles from the coast, the rock is but slightly covered with sand; small streams are rather scarce; sink holes are frequent, in which the water is cool, but like the rivers highly tinged with lime, which gives it a transparent blue colour. This tract of country is generally covered with excellent yellow pine timber, under which the wild grass grows luxuriantly. It is a good grazing country, and much of it might be profitably cultivated, especially so far as the sea breezes extend, where sea island cotton succeeds to admiration. This plant produces a larger crop, and a much better quality of cotton on a thin soil, than on a rich loam, where it produces too much stalk.

From the level tract of pine land, above described, the country rises over gentle swells of red and white clay, covered with an excellent brown soil, and crowned with wide spreading oaks and tall hickories, mixed with liriodendron, magnolia and gum. Between these swells, abundant streams of pure water enliven every valley; they, however, all sink into the earth, before they leave the high country. This kind of land, in some places, extends into Georgia; in other parts, the pine barrens make large indentations from various directions. This high ground furnishes the head springs of all the rivers that fall into the Appalachee bay, within the county of Leon. The argillaceous region extends, with some interruptions, through this county, from east to west. It rarely approaches within eighteen miles of the sea. In width, it is from ten to twenty miles. The traces of subterranean rivers, which often burst from the earth, and immediately sink again; the very great variety of soil, timber and scenery, renders the county of Leon a subject of much interest to the curious. One fourth part of the lands in this county, are very good, and a much greater proportion tillable. It is rapidly settling with men of wealth. Corn and vegetables have been the principal crops raised here, but extensive fields of cane are now in cultivation, and it is believed by the best planters, that this will shortly become the universal crop cultivated in this county. Leon is supposed to have received an accession of two thousand inhabitants, during the last year. Judge Brackenridge, in a letter addressed to co-

lonel White, in January 1827, has related many curious particulars respecting this interesting district of country; especially in that part, which he translated from the Spanish history of La Vega; and I feel a particular pleasure in acknowledging his politeness, in permitting me to insert it in the Appendix to this work, where it will be read with great interest. See Appendix, No. I.

The Atlantic coast of East Florida, Georgia and Carolina, varies in many respects from the coast within the Gulf of Mexico. On the Atlantic coast, the tide rises six feet; in the gulf, it rises only three feet. On the Atlantic, the soil is a deep alluvion; in the gulf from the Appalachee bay to the cape, the coast is a calcareous formation. On the Atlantic, the coast is level for a great distance inland, and the tides ascend an hundred or more miles up the rivers. In the gulf, the tide rarely ascends ten miles up the rivers, and the same high rolling red clay lands approach within eighteen or twenty miles of the coast, which in the Atlantic states occupy the centre of the country between the tide waters and the mountains. The extensive marshes of the Atlantic, from their depth of soil, are invaluable for the cultivation of rice; and the more southwardly parts, for the sugar cane; but they ever will be subject to fevers and bilious affections, and will probably always require negroes to cultivate them. Within the gulf, the calcareous substratum is thinly overlaid by alluvial matter, but it is equally fertile, and produces vegetation perhaps as luxuriantly as any soil on earth. Whether it will be as unhealthy as the deeper and more extensive marshes of the Atlantic, time and experience must determine. It is hoped that the proximity of the highlands will have a beneficial effect on the health of the coast. The marshy coast of Appalachee and Vacassar bays, are enclosed by a belt of rocky land, covered with a heavy growth of timber, which comprises almost every kind of trees found in the country. The space betwixt this and the highlands, is nearly the same pine and palmetto soil, found on the Atlantic coast; with this difference, that the sand of this region, is supported by a substratum of imperfect chalk. West of Cape St. Blass, the palmetto region is much more extensive, and reaches quite to the sea-shore. It is almost impossible to cultivate this kind of land, although it is

often rich; for the root of the palmetto usually covers the surface of the ground, and it is equally difficult to kill or eradicate it.

HISTORY.

Sebastian Cabot, sailing under the flag of England, first 1497 discovered the coast of Florida, but he did not explore the country.

Twenty-two years afterwards, Ponce de Leon, a Spanish 1512 adventurer of Hispaniola, was led by the fictions of a Carib girl, to explore the country of Florida, in search of a fountain which was famed for renovating old age. But old age and infirmities grew upon him during his search, for which he never found a remedy. He landed with a considerable force, in the month of April, on the eastern coast. On account of the verdant appearance beyond the beach, he named the country, Florida Blanca. The name of Florida has since, at times, been applied in history to all the northern continent. This, and a second voyage of de Leon, proved equally disastrous to the Spaniards.

Grijalva, six years afterwards, landed on the Florida 1518 coast, and was received and treated in a friendly manner by the natives, who presented him with several ornaments of gold, silver, and pearl; but the monster rewarded their good will by an act of infamous treachery; he seized as many of them as he could stow on board his vessels, set sail with them, and sold them to the islanders for slaves.

Two years after, Grijalva returned for another cargo of 1520 slaves, but the natives were not again to be deceived; they fell upon the kidnappers and killed two hundred of them. The rest were glad to escape to their vessels, and leave the coast.

By this time Florida had acquired some importance in 1524 the eyes of the Spaniards. These savages, said they, would never fight with such desperation, had they not mines of gold to defend. A grant of the country was solicited by Francis de Guerray, which was obtained from the crown of Spain; but the proprietor dying soon after, he was succeeded by De Allyon, who raised forces, and proceeded to take possession

of his province. Instead of gold mines, he found only hostile tribes of Indians, armed and prepared to dispute with him every inch of the soil. He was soon driven from the coast.

Pamphillo de Narvaez succeeded to the honour of 1528 invading the new province; he landed without opposition in Appalachee bay; and suffered himself to be decoyed into the heart of the country in search of gold. On a sudden he found himself encompassed by hostile enemies, who making a desperate attack, soon routed his forces with great slaughter. De Narvaez died fighting; few of the Spaniards made good their retreat to the vessels; and those were reduced to the necessity of eating their companions, for want of other food.

It was some time before a leader could be found, to 1539 re-assert the Spanish claim to Florida. At length Ferdinand de Soto took up the cause; rather stimulated than discouraged, by the misfortunes of his predecessors. He was a man of invincible courage, aspiring talents, and unbounded enterprise. He sailed, with a large force, to the western side of the peninsula, and made a landing in Tampa bay, where he established a small post; and then marched with great rapidity into the heart of the country, attacked the Indian towns in succession, and destroyed them. The nations had not time to concentrate their strength; single tribes were unable to oppose the disciplined Spaniards, led by such a man as Soto: they were conquered in detail. Three years were spent in the Floridas, and finding nothing more to do, Soto crossed the Mississippi, and ascending the Red river, he was taken sick, and died in the spring

1542 of 1542. The Spaniards, without a leader, could not long sustain a warlike attitude; they retired to the coast of the Appalachee bay; where they, for some time, sustained themselves by hunting and fishing; at length they were, by necessity, reduced to manual labour. The country was fertile; self-preservation obliged them to treat the natives with respect, and they of course became friendly. The impression made on them by Soto, paved the way for conciliatory feelings; success and prosperity were the consequence; the Spanish population soon spread over the fine country betwixt the Ocklockney and Suwannee rivers; and by intermarriages, and good example, they induced many of the natives to adopt the arts of civilized life. Wholly lost to, or

neglected by the mother country, they grew up in the wilderness of Florida, planted towns, extended highways, and built fortifications, whose ruins still cover the country. Becoming effeminate, they at length fell a prey to the Seminoles, Muscogees, and other northern tribes, perhaps one hundred and thirty years ago.

From the death of Soto, Florida seems to have been forgotten by the nations of Europe; until Ribault, a protestant of 1562 France, conducted a colony of his persecuted brethren to East Florida, and settled them near the mouth of St. John's river. About the same time, Mendez, a Spanish officer, commenced a Spanish settlement forty miles south, near the present site of St. Augustine; the barbarian soon discovered the French colony in his neighbourhood, and lost no time in 1565 destroying them; with scarcely the exception of man, woman, or child. As soon as the cruel event was known in France, Dominique de Gorgues, a private gentleman of Normandy, fitted out a small fleet at his own expense, and arriving at St. Johns, about two years and a half after the massacre, he found many of the skeletons, of his former friends, 1568 still hanging to the limbs of trees. He took an ample revenge, by hanging Mendez and his assassins upon the same gibbets. The French then evacuated the country. The Spaniards that escaped, commenced the city of St. Augustine, which gradually received accessions from the islands, and 1586 from Spain, and in a few years became a place of some importance. It was attacked and pillaged by Sir Francis Drake, in one of his voyages of discovery. Twenty-five 1611 years after this misfortune, the Indians obtained possession of the town, which they pillaged and burned. And 1665 fifty-four years after, captain Davis, an English buccaneer, repeated similar devastations on the devoted place.

About the year 1696, Monsieur Bienville planted a French colony on the shore of Baloxi bay, opposite to ship island; 1696 and the Spanish court directed Riola, to establish a fortified post at the entrance of Pensacola bay, in order to keep the French in check.

East Florida was soon after invaded by the Georgia militia, under their governor (Moore;) but the Floridians expelled

1702 them with considerable loss. It was probably about this time, that Moore, with the Muscogulgee tribes, destroyed the fertile country of the Appalachee, now Leon county.

Twenty-three years after the establishment had been made by Riola, it was attacked by Bienville, then governor of 1719 Louisiana. He arrived at the bay of Pensacola in the month of March, and the post was surrendered to him. In August, a Spanish fleet arrived and anchored in the bay; a mutiny was raised in the fort; and it was surrendered to its former owners without any fighting. But in September, of the same year, Bienville again appeared with a strong force by land and sea; the fort was retaken and demolished, and the dwellings of the Spaniards burned to the ground. It was restored to Spain by the treaty of 1722.

During this year, East Florida was invaded by colonel 1725 Palmer, with a detachment of Georgians; but they were compelled to retreat. Governor Oglethorpe, with a large force, repeated the invasion; but was repulsed with great loss. It is probable, from the traditions of the Seminoles, that the fort of St. Mark's was erected about this time. The Spaniards first entered the Appalachicola bay, and ascended the river to the junction of the Chattahoochee and Flint, where they erected a strong fortress, on the high ridge which rises south-east of the latter river. This fort perfectly commanded all these rivers for several miles, but it was too far inland; the river is swift, and difficult to ascend: the post was finally abandoned, and the force removed to St. Mark's. From St. Mark's a considerable colony was extended up into the country of Tallahassee, the old country of the Yamasees, and Fort St. Louis was built for their protection; but in 1736, a party of Americans from Charleston, South Carolina, and several tribes of Creek Indians, attacked and destroyed it. The Spaniards, after this, confined themselves to the fortifications of St. Mark's; and the two provinces remained 1763 in peace nearly forty years, when they were ceded to Great Britain by treaty.

Very great exertions were made by the English, during the eighteen years they held possession of Florida, to encourage improvements in the interior of the country, by cultivation, as well

as to extend the commerce of the two sea-ports, St. Augustine and Pensacola. Emigrations were promoted by grants of land, and agriculture was fostered by bounties on produce; on indigo in particular, which was then the staple commodity of the country. Neatness, cheerfulness, and plenty, were conspicuous in the houses; and industry, health, and abundance, in the gardens and fields.

The re-cession of the Floridas to Spain, operated as a 1784 blight over the whole face of the country. The English population removed en masse; abandoning their villages and fields in the country, and their houses and gardens in the cities, they sought shelter among the islands of the West Indies. They were succeeded by a military population, who barely existed on their pay, wholly inattentive to improvements: the fields and gardens grew up in briars and bushes, and the fences and houses either rotted down, or were burned for fuel. In the space of forty years, the once flourishing settlements of Florida dwindled down to two ragged towns, which, with all their dependencies, could not muster six thousand inhabitants.

During the struggle between the royal and republican 1811 factions in Spain, general Matthews was sent by the President of the United States to the frontiers of Georgia, to accept from the constituted authorities of East Florida a temporary occupation of the country, should it be invaded by any foreign power. The proximity of Matthews encouraged, to say the least of it, an insurrection in East Florida; and he ultimately took possession of Amelia Island, and held it a considerable time. Spain became alarmed, and procured the interference of the British minister at Washington, whose expostulations procured the recall and disgrace of general Matthews; and Amelia Island was restored to Spain.

In the month of August, 1814, colonel Nichols brought 1814 into the bay of Pensacola a British fleet, from which he manned the forts of Barrancas and St. Michael with troops, and hoisted the British flag. On the 31st, he published a proclamation, dated at "*Head Quarters, Pensacola,*" in which he calls on the people of Louisiana and Kentucky to join his standard, and release themselves from the slavish yoke of the

United States. The Indians were abundantly furnished with arms and ammunition, and commissioned to butcher the defenceless inhabitants of the frontier states; ten dollars a-piece were offered for the scalps of men, women, or children.

On the 6th of November, general Jackson, with five thousand Tennessee militia, and a considerable Indian force, arrived in the neighbourhood of Pensacola, and sent major Pierre with a flag, to inform governor Manriquez of the object of his visit. On approaching one of the fortifications, the flag was fired on by the cannon of the fort, on which the major returned. General Jackson, with the adjutant-general and a small escort, immediately reconnoitred the fort, and found it manned with British and Spanish soldiers. He returned, encamped for the night, and prepared to carry the town by storm in the morning. On the morning of the 7th, he marched with the regulars of the third, thirty-ninth, and forty-fourth infantry, part of general Coffee's brigade, the Mississippi dragoons, part of the West Tennessee regiment, commanded by lieutenant-colonel Hammond, and part of the Chactaws, commanded by major Blue of the thirty-ninth, and Major Kennedy of the Mississippi troops. Jackson had encamped on the north side of the town, on the Blakeley road, which passed by the forts St. Bernard and St. Michael.

The British naturally supposed that the attack would
 1814 be made from that quarter, and were prepared to rake
 Nov. 14 the road with their batteries. To cherish this idea, a
 part of the mounted men were ordered to show themselves in that direction, while the army was marched past the rear of the forts, to the east of the town, undiscovered, till within a mile of the streets. They were now fully exposed to Fort St. Michael on the right, and seven armed vessels on the left: several block-houses and batteries of cannon defended the streets. They however marched into the town with perfect firmness, and with trifling loss. As the centre column, composed of the regulars, entered, a battery of two cannon was opened on it, with ball and grape, and a shower of musketry from the houses and fences. They had made but three fires, when the battery was stormed by captain Laval,* and the fire of the regulars soon silenced the

* This promising officer was killed in the act of storming the battery.

musketry. Governor Manriquez met the troops in the streets, and begged colonels Williamson and Smith, the first officers he met, to show mercy to the town ; which request, by the orders of the general, was granted, on an unconditional surrender of the town and forts. This was agreed to ; and the citizens, with their property, were protected. Still Spanish treachery could not be evaded : the fort St. Michael was withheld till twelve o'clock at night. On the morning of the 8th, the fort of Barrancas was blown up with a tremendous explosion, all the cannon spiked except two, and every combustible matter burnt to ashes. This act enabled Nichols to escape from the harbour with his fleet. Captain Woodbine and the Red Sticks were conveyed by Nichols to the Appalachicola river, where a strong fort was built, about twenty-five miles above the mouth, and manned with three hundred troops, to which there was an immediate resort of Indians and runaway negroes. A small fort was also built, about two miles below the junction of the Chatthaohocsee and Flint rivers, and one mile south of the old Appalachicola fort.

The principal fortifications of the harbour being destroyed at Pensacola, general Jackson evacuated the town, after holding possession only two days. Major Blue was despatched, with a thousand mounted men, against the forts on the Appalachicola, while the general proceeded to the defence of New-Orleans.

The Spaniards immediately commenced rebuilding the fortifications at Barrancas, in which Nichols proffered his assistance, but the governor answered him, that when he needed any assistance, he would call on his friend general Jackson. The whole conduct of the general appears to have been satisfactory to the Spaniards. At parting, he notified them, if any injuries had been done to private property, to draw on him for payment : no demands were made ; and although many thousand dollars damages were in 1825 proven to have been suffered, yet it was ever the opinion of general Jackson, that five hundred dollars of damage had not been sustained.

About the first of August, colonel Clinch received advice from general Gaines, that he had ordered a supply of provisions, two eighteen-pounders, a five-inch howitzer, and a quantity of ordnance stores, to ascend the Appalachicola

river to Camp Crawford ; and in case any opposition should be made by the negro fort, he was instructed to reduce it. He immediately despatched Laforka, an Indian chief, to the bay, for intelligence. He returned on the 15th, with news of the arrival of lieutenant Loomis in the bay, with two gun vessels, and two transports, laden with provisions, ordnance, stores, &c. On the 17th, the colonel descended the river with one hundred and sixteen chosen men, in two companies, the one commanded by major Muhlenberg, and the other by captain Taylor. On the same evening, he was joined by major M'Intosh, with one hundred and fifty Indians ; and the next day, by captain Isaacs and Mad Tyger, with a large body of Indians, badly armed. The meeting was accidental : the Indians were on a long projected expedition against the negroes, with an intention of restoring them to their owners. A council was held, and an agreement entered into, respecting the campaign. The Indians were ordered to keep parties in advance, and secure every negro that could be found. On the 19th, they brought in a prisoner taken with a scalp, who said that the black commandant of the fort, and a Chactaw chief, with a party of men, had returned the day before to the fort from the bay, where they had taken a boat and killed several Americans. On the 20th, at two o'clock in the morning, they arrived within cannon-shot of the fort, and landed behind a skirt of woods. Major M'Intosh was ordered to surround the fort with one-third of his men, and keep up an irregular fire, while Laforka was sent to notify lieutenant Loomis of the arrival of the troops. The enemy retired within the fort, and kept up a constant roar of artillery, which did no execution, and only frightened the Indians.

On the 23d, lieutenant Loomis sent intelligence that he had sent out a watering party, who were attacked by the negroes and Indians ; that a midshipman and two sailors were killed, one sailor taken, and one made his escape : he asked assistance to convoy up the boats. In the evening, the Indians demanded a surrender of the forts, but were treated with great contempt by the negroes, who hoisted a red flag with the English jack over it.

On the 24th, lieutenant Wilson was ordered to descend the river with a party, to assist in bringing up the boats. On the

26th, they arrived within four miles of the fort; and the colonel went on board the gun-boat 149. After reconnoitring the river in company with the commander of the boat, he ordered major Muhlenberg and captain Taylor to cross over to the west side of the river, with their companies, to erect a battery; while lieutenant M. Garrick, with a party of men, and the main body of Indians, were left to secure the rear.

The battery was immediately commenced; the vessels were ordered up, and the transport *Similante* was directed to be in readiness to land the artillery under cover of the night. At six in the morning, the two gun-boats sailed up in handsome style, and made fast near the battery. In a few minutes after, they received a shot from a 32-pounder: it was immediately returned in a gallant manner. On the fifth discharge, a hot shot from gun-boat No. 154 entered the magazine, and blew up the fort—the explosion was awful, and the scene horrible beyond description. The fort contained about one hundred men, and two hundred women and children: not more than one sixth part were saved. The cries of the wounded, and the yells of the Indians, rendered the confusion most dreadful. The fort was situated on a beautiful high bluff, with a large creek below, and a swamp above, which rendered an approach with artillery extremely difficult. The parapet was fifteen feet high and eighteen thick, and was defended by one 32, three 24's, two 9's, and two 6 pounders, with an elegant 5½ inch howitzer.

The property taken and destroyed amounted to two hundred thousand dollars: three thousand stands of arms, and six hundred barrels of powder, were destroyed; one magazine, containing one hundred and sixty-three barrels of powder, was saved.

The negro force had been rapidly increasing from runaways: their fields extended fifty miles up the river. The Chactaw chief, and the negro commandant, named Garçon, were put to death by the Indians.

On the 30th, the ordnance and stores were sent to Camp Crawford, in small boats.

On the 1st of September, colonel Clinch received notice that a large Seminole force was descending the river to attack him. He immediately placed himself in a position to receive them;

but they dispersed without making an attack, or even showing themselves.

The Seminole Indians, together with many vagabond Creeks, excited by Nichols and Woodbine, began, soon after the establishment at Appalachicola, to commit depredations on the frontiers of Georgia. General Gaines, stationed at Fort Scott, demanded the murderers: the Seminoles refused to give them up.

A requisition was made on Georgia for five hundred more troops. The Seminole force was estimated at two thousand five hundred. The whole force under general Gaines, when joined by general Glascock from Georgia, and six hundred Cherokees, amounted to two thousand five hundred. But the Georgia militia were raised for a term of two months only: they were scarcely collected before they were dismissed, without having effected any essential service.

The Seminoles are said to have sprung from a wandering tribe of Creeks or Muscogulgees, who, many years ago, came from the north-west; they were kindly treated by the Appalachee and Yamasee Indians of Florida. They increased in numbers and strength, and pushed new settlements up the Chattahoochee, to Coweta. They at length excited the jealousy of the Appalachians; a war ensued, in which the Appalachees were destroyed. The original Seminoles retained the settlements on the Tallahassee, Mickasukey and Suwannee, while the colonies, at the heads of the water-courses, became independent and warlike nations. The latter, after a severe war with the United States, had made peace with general Jackson: many of their warriors, however, had fled to Florida, and assisted in exciting the Seminoles to hostilities.

In December, general Gaines despatched major Twigs with two hundred and fifty men, to an Indian town, near the Flint river, with orders to bring the chiefs to the fort. He arrived early in the morning, and was fired on by the Indians; he then returned their fire, and killed four warriors, and wounded many more. In the cabin of Enemathla, the chief, was found a British uniform, of scarlet cloth, with gold epauletts, and a certificate, signed by the secretary of Nichols, stating that Enemathla was a faithful British subject, &c. In a few days after, colonel

Arbuckle, with three hundred men, was attacked about twelve miles from Fort Scott; one of his men was killed, and three wounded. The Indians were defeated with a loss of ten killed. General Gaines despatched lieutenant Scott, with fifty men, down the river, to meet and support major Muhlenberg, who was ascending with two boats loaded with provisions. The Seminoles formed an ambuscade on the bank of the Appalachicola, about a mile below the junction of the Flint and Chattahoochee rivers, at a place where the boats had to pass near the shore. On the first discharge, lieutenant Scott and the best of his men fell; only six men escaped; four of these were badly wounded: there were seven women on board, who shared the common fate of the soldiers. Lieutenant Scott had met major Muhlenberg; had left twenty of his men, and received as many sick, and the women, with some regimental clothing, and was returning to the fort. Two covered boats were sent down the river, under the command of captain Clinch, to support Scott; he passed the scene of action on the night after the engagement. On the 15th, the transports, under major Muhlenberg, were attacked by an Indian force, amounting to twelve hundred, placed on both sides of the river.

The attack was continued, with little intermission, to the 19th; but little impression was made, as the boats were fortified with bulwarks, to secure the men from the enemy's shot. During the four days of the attack, only two men were killed, and thirteen wounded. The boats finally arrived safely at Fort Scott. About this time, captain M'Intosh was attacked in a small house, twelve miles from Fort Scott; although surrounded several days, he defended himself without loss. The Indians at length retired with considerable loss, and the party was called into the fort.

On the 22d of January, general Jackson concluded a 1818. treaty with the Creek Indians; and in February, the Creek warriors agreed to march, under their chief, M'Intosh, to fight the Seminoles in Florida.

About the 1st of March, general Jackson arrived at Fort Scott, and took command of the southern army. M'Intosh, with his Creeks, marched down the west bank of the Chattahoochee, with provisions for six days only. On the 12th of March, they arriv-

ed at Chaubulle creek; the waters being high, the Indians were obliged to leave their baggage and provisions, and swim a considerable distance, as the swamp was six miles wide. The Hitchetaw town, commanded by the Red-ground king, Econchatti Micco, was surrounded; but he escaped. The Indians were starving; but here they obtained food, and then pursued the fugitives; came up with them, and took fifty-six men, and one hundred and eighty women and children: the rest escaped. A quantity of cattle were taken.

On the 26th, general Jackson left Fort Gadsden, and marched towards the Mickasukey towns, in East Florida.* On the 14th, he met an abundant supply of provisions. His force consisted of five hundred regulars, one thousand militia, and eighteen hundred Indians. M'Intosh had not joined him with his seven hundred Creeks. On the 1st of April, the Mickasukey towns were destroyed, and the Fowl towns directly after. The Indians made little resistance. One thousand head of fine cattle, and many thousand bushels of corn, were taken. Jackson then proceeded to St. Mark's: the fort surrendered. Arbuthnot, the prophet Francis, and another Indian chief, were taken here. The two latter were immediately hanged. The fort was strongly fortified, and mounted twenty pieces of heavy ordnance. The garrison were sent to Pensacola. M'Intosh here took about one hundred Indian prisoners.

At Mickasukey, three hundred scalps were found; fifty of them were suspended over the square, on a painted war-pole. They were of every description; men's, women's, and infants': and most of them fresh.

Early in April, general Jackson marched for Suwannee, where about two thousand Indians and negroes were collected, acting under the orders of Arbuthnot, who had a schooner, loaded with arms, ammunition, and military stores, lying opposite the mouth of the Suwannee river, in Vacassar bay. On the approach of our troops, a show of resistance was made; but the main body of the Indians fled to St. Augustine. They were pursued some distance, when a camp of negroes was discovered in

* Appalachicola river was then the boundary of the two provinces:

the night; they fought desperately, and did not give way until eighty out of three hundred and forty, were killed. Three hundred Indian women and children were taken prisoners; a great many cattle were taken; and the Indians killed many more, to prevent their falling into our hands.

Arbuthnot, ignorant of the proximity of Jackson, approached the camp in a canoe, with two negroes and an Indian, in the evening, and was taken; some boats were then sent down the river, and the schooner seized. On the 1st of May, a court martial was held on Arbuthnot and Ambrister, of which general Gaines was president. The charges were, exciting the Indians and negroes to commit murders, and supplying them with arms and ammunition; and, secondly, acting as spies. They were both found guilty: Arbuthnot was sentenced to be hung, and Ambrister to be shot. The sentence was immediately executed. Arbuthnot was the bosom friend of Woodbine; had been in every part of Florida, exciting the Indians and negroes; and was the author of this war. Ambrister was, in appearance, a fine young man, about twenty-five years old, and was a lieutenant of engineers. He was sometimes called Warburton. He died like a weak woman.

The Indian war being thus despatched, the general discharged the Tennessee volunteers; and, with the regulars and friendly Indians, marched for Pensacola.

On the 13th of April, M'Intosh met M'Queen, with a party of Seminoles and fugitive Red Sticks, thirty miles east of Mickasukee; a running fight took place; M'Queen retreated, and M'Intosh pursued, about three hours; killed thirty-seven, took one hundred women and children and six men prisoners, and seven hundred head of cattle. M'Intosh then joined general Jackson at Suwannee.

About the last of this month, lieutenant Eddy was attacked by a party of Indians, while ascending the Escambia river with a boat loaded with provisions: he had one man killed, and two wounded. Major Young, at Fort Montgomery, put himself at the head of seventy-five mounted men, and pursued the murderers within one mile of Pensacola, where he encountered them at the bayou Texar, killed thirty, and took seventy-four prisoners.

When Jackson had arrived in the neighbourhood of Pensacola, and learned that the governor had refused permission for boats loaded with provisions, bearing the American flag, to ascend the Escambia, to furnish his troops—while they had issued provisions, arms, and ammunition to the savages—he determined to enter the town again, and expel the treacherous Spaniards. The governor was apprised of his approach, and sent to warn him that he would be opposed by the whole Spanish force. The general said he would answer him the next morning, and continued his march. At nine o'clock the next morning, he took possession without opposition. The governor had abandoned it, and taken shelter in the fort of Barrancas.

Three days after, the army was marched to the
1818. Barrancas, and a situation taken about four hundred
May 28. yards west of the fort, where the men were set to
work during the night, to erect a breastwork. In the
morning it was discovered by the Spaniards, who commenced
firing on it with two twenty-four pounders; the fire was return-
ed by a howitzer. At three o'clock a flag was sent by the fort,
and a capitulation followed. The governor and garrison were
sent to Havana.

Captain Girt was sent, with a company, to scour the country between the Pensacola and Perdido bays; and captain Bowles to perform a similar service, about the Uche and Holmes's old fields, on the Chactawhatchee.

Colonel King was left in the command of Pensacola, while general Jackson marched with the volunteers to Tennessee.

A treaty of amity, settlement, and limits, was at
1819. length concluded between His Catholic Majesty and
Feb. 22. the United States, by which the two Floridas and the
adjacent islands were ceded to the latter. West Flo-
rida then extended westwardly to the Appalachicola river. The
exchange of flags under this treaty, took place on the 17th of
June, 1821, when general Jackson was appointed governor of
the Floridas, with very ample legislative, judicial, and executive
powers.

The Spaniards carried away with them to the Havana, very important documents relating to the property of the provinces,

in violation of the second article of the treaty. Many titles have, by these means, been rendered obscure. Individuals have been put to great expense, in obtaining copies from Havana; and, at the same time, great facilities have been given to swindling speculators, in support of fraudulent claims.

The energetic measures of the governor saved several boxes of important papers; though, to accomplish it, he was obliged to imprison the ex-governor, Calleava, with some of his officers.

Governor Jackson removed the dividing line between East and West Florida, from the Appalachicola to the Suwannee river, thus rendering them more equal in size; and established in each, courts with civil and criminal jurisdiction. At the same time, he published several ordinances for their direction in the distribution of public justice.

On the 30th of March, congress passed an act, erecting 1822. into a territory the two Floridas; and his excellency, William P. Duval, was appointed governor. A legislative council was formed, which held its first session in June. At this council, West Florida was divided into two counties, Escambia and Jackson. East Florida was also divided into Duval and St. John's counties. Congress had, at their last session, established a superior court, to be held in each district of the territory, corresponding to Jackson's division.*

The legislative council, in June, passed an act, appoint- 1823. ing commissioners to locate a common seat of government. In October, the site was fixed near the Old Fields of Tallahassee, the centre of the Fowl towns. The town was surveyed the next winter, and the public offices were soon after removed to that place, where the legislative council have since held their sessions.

* The territory was, in 1826, divided into three judicial districts.

APPENDIX.

No. I.

ANTIQUITIES OF FLORIDA.

Copy of a Letter from JUDGE BRACKENRIDGE, *of Florida,*
to COL. WHITE, *Delegate in Congress from that Terri-*
tory.

Washington, January 14, 1827.

SIR: In compliance with your request, I will now proceed to give a brief topographical and historical sketch of the curious and interesting part of our territory, in which our capital, Tallahassee, is situated. The twenty townships exposed to sale last May twelvemonth, contain a very large proportion of excellent land, which has been nearly all purchased, with a view of settlement. In appearance, it is entirely unlike any part of the United States, so near the seaboard. Instead of being a plain of unvaried surface, it resembles the high lands above the falls of the rivers in the Atlantic states, and is beautifully diversified by hill and dale, and rendered picturesque by the number of lakes, whose pure waters reflect the forests of oak, which frequently clothe the sides of the hills, down to their very margins. These lakes receive a number of streams, which flow from the higher grounds, and lose themselves in their placid bosoms. The largest of them are called the Iamony, Jackson, and Mickasukey, each of which is from thirty to forty miles in circumference; but there are many others of a smaller size, affording many beautiful situations for country residences, where the natural open groves of oak, hickory, beech, and magnolia grandiflora, surpass in magnificence the proudest parks of the English nobility. The soil of the uplands bears a strong resemblance to the best part of Prince George's county, Maryland; and the face of the country is not unlike the

south side of the Potōmac, opposite Washington city. In the valleys, there is a much heavier growth of timber, and frequently deep cane-brakes. There are, also, frequently to be met with, grassy ponds, surrounded by glades, which afford excellent pasture. The strawberry, the wild grape, and plum, are found every where, and the numerous flowers which embalm the air, during a great part of the year, may, perhaps, have occasioned the name of Florida to be given; for I will presently show, that, after Mexico, this was the first part of the American continent which became the scene of Spanish adventure. The only regret which I feel in contemplating this beautiful region, is its very limited extent—an Oasis, which appears to have been formed by nature, in one of her most sportive and fantastic humours. The general substratum, perhaps a few feet above the level of the sea, is a soft limestone, of recent formation. In the pine wood plain, which stretches towards the highlands of Tallahassee, the stone is often found in masses on the surface.

About sixteen miles from the port of St. Mark's, we begin to ascend, and enter the country already described; the ridge forming, in some measure, a barrier to the passage of the water to the sea; on the contrary, the streams, in general, rising near the summits of the hills, descend, until they reach the general bed of the limestone, where they either sink into the fissures of the rock, or spread out in lakes, which have their subterranean passages; but they again rise on the south side of the ridge, and form some of the largest springs in the world. The Wakully comes forth at once, a noble river, two hundred yards in width, its source not less than one hundred feet in depth, and so transparent, that a person standing by the side of it, feels as though he were on the edge of a precipice. The lakes of Tallahassee abound in fish; the trout, bream, perch, and soft-shelled turtle; and in winter, with wild fowl. The soil, as well on the uplands as in the valley, is adapted to the culture of the sugar cane, rice, sea-island cotton, and Indian corn. Hitherto it has been healthy, and it is fair to presume that it will continue so: the winters are of course mild, and being within the reach of the sea breeze, the heat of summer is greatly moderated.

The appearances of a dense population, which seems at one

time to have covered this country, has induced me to make some inquiry. While at Havana, I could learn nothing; but while at Charleston, I met with an English work, Roberts's account of Florida, 1763, which gives a piece of history apparently but little known. The district of Appalachee, it appears, was inhabited by a race called Atimaeo Indians, with whom the Spaniards had become intermingled. The Yamasee Indians, who lived near St. Augustine, backed by those of Appalachee, made frequent excursions into the new settlements of South Carolina, threatening them with total destruction. In consequence of this, Col. Moore, governor of that state, made three inroads into their country in the years 1702, 1704 and 1706, marching to the Flint river, and then taking a direction to the south, towards Tallahassee. In his last expedition, he entirely defeated the Spanish governor, a Don Juan Mexia, killing and taking prisoners above eight hundred of the Spaniards and Indians—Don Mexia himself being one of the prisoners. Col. Moore transported fourteen hundred of the Indians, and fixed them in a settlement near the Savannah river. The settlements were completely destroyed. This agrees tolerably well with the traditionary account of the old Indian Chefixico, who says that his father told him the settlements formed by the intermarriage of the Spaniards and Indians, had been destroyed by a great warrior, after three different invasions. Chefixico says that when a boy, the country was so open as to be scarce of game, and was not resorted to by the Indians until the forests grew up; that it was then full of orange and fig trees, and the roads and bridges still to be seen. The traces of the roads are still visible, and also numerous sites of villages, forts, and private residences. A number of towns are laid down on the old maps, the principal of which are, St. Matthew, St. Juan, Aspalaga, Ocon, Tapalaga, St. Mark de Appalachee, Ayavala, San Pedro, &c. No such place as St. Louis is marked, and I am at a loss to know on what authority the ruins of a fort near Tallahassee has been called by that name.

The district of Appalachee, we learn, from Gareillaso de la Vega, was very populous at a period much more remote. Pamphile de Narvaez was the first who discovered the bay of Appalachee, but was compelled to retreat on board his vessels with great loss. This is the same person who had been appointed by the governor

of Cuba to supersede Cortes in the conquest of Mexico. Eleven years after the landing of Narvaez, that is, in 1530, the celebrated Ferdinand de Soto landed at Tampa bay, and marched along the coast, until he came to Appalachee, of which a very curious and interesting description is given. "The governor and his companions having been informed, in the town of Osachile, that the province of Appalachee, which they had heard so highly praised, as well on account of the abundance and fertility of the soil, as for the valour of its inhabitants, was now at no great distance, were desirous to see whether it was as fertile as it was represented to be." After a slow and tedious march, opposed at every step by parties of Indians, and after several bloody engagements, he reached the province. "At daylight," he observes, "the Spaniards proceeded through extensive fields of corn, beans, pumpkins, and other vegetables, which extended on either side of the road, farther than the eye could reach. Between the fields, a great number of houses were scattered about, without any order, as in the villages. On the next day the governor went in advance with two hundred cavalry and one hundred infantry, and reached the principal town, which he found deserted. It consisted of two hundred and fifty large and good houses, in which he lodged his army, while he himself occupied the residence of the cacique. Besides this town, there was throughout the whole district, at the distance of half a league, a league, and a league and a half, villages containing sixty or a hundred houses, besides a vast number of dwellings scattered about without order. The face of the whole province is delightful, the land fertile, with a great abundance of provisions, and a plenty of fish, which the natives catch all the year and preserve for use. The governor and his followers were delighted to see this country and its fertility, but found the Indians fierce and warlike. To show the fertility of this province, it suffices to say, that the whole of the Spanish army, together with the Indians in their service, exceeding fifteen hundred, and three hundred horses, subsisted on the supplies taken at first, and when they stood in need of any addition, they never went more than a league and a half to procure it. The country is also well suited to the rearing of every kind of live stock, having fine woods, excellent water, lakes, ponds, and reeds, which cattle eat so readily, as not to re-

quire any kind of grain in addition. It is also well adapted to the culture of silk, from the great quantity of mulberry trees; and there is, besides, an abundance of fish, of an excellent quality." This description is wonderfully accurate. The settlement of this country may perhaps be dated from the year 1530, which, until the destruction in 1706, would be nearly two hundred years. It is probable that a part of De Soto's army remained in possession; we have, however, no authentic account of the exact period at which the Spaniards made their settlements. It is stated by Roberts, that previous to their destruction by governor Moore, they carried on a considerable trade with Havana by small vessels. After the destruction, the country appears to have been lost sight of by European powers; the Spaniards made no attempt to settle it again, and it was not until about the year 1763, that the British built the present fort of St. Mark's, but formed no settlement, perhaps on account of the hostility of the Muskogee Indians; who then possessed it. During the period the Spaniards subsequently possessed it, the Seminoles and Muscogeas carefully forbade any one to enter it. As a proof how little it was known to the Spaniards, I will mention the fact, that there is not a single Spanish grant in the whole of it; the grant of Forbes, merely approaches its borders. In some old maps it is marked 'the Apalache old fields.' The march of general Jackson into this district, in 1818, in pursuit of the Seminole Indians, was the first notice we ever had of it. It is now about three years since our settlements began, and contains a population of about two thousand souls, which is rapidly increasing. By the last census, Tallahassee contained about eight hundred, and five or six mercantile establishments, which do an extensive business. One wing of the Capitol, a handsome brick building, is now completed, and occupied this winter by the legislative council. The country begins to wear the appearance of cultivation; good roads are made in all directions, and carts, wagons, and carriages, are constantly travelling them. The grant to general Lafayette, containing 23,000 acres of the best land, adjoining the town, remains a wilderness; but it is to be hoped, that something will be done with it before long: for, so large a body of land remaining unimproved, must undoubtedly tend to retard the progress of the

town. If the grape, the olive, and the silk worm, can succeed any where in America, it must be here. This present to the good old General, no doubt, frequently occupies his thoughts, not as an object of sordid speculation, but as the means of uniting his name, and his interests, with the very soil of our Republic.

I am, respectfully,

Your most obdt. servt.

H. M. BRACKENRIDGE.

Col. J. M. WHITE,

Delegate from Florida.

No. II.

LAND TITLES IN FLORIDA.

The lands in West Florida, at the exchange of governments, were generally royal domains. The population was mostly confined to the city of Pensacola. The few settlements made in the country, were held under conditional grants, sales, or compromises. Conditional grants or concessions were made to "each newly arrived family, possessed of the necessary qualifications, to be admitted among the cultivators of the province," on the conditions of pasturage and cultivation; the cultivation to be made within three years after the date of the grant; and before this was performed, the holder could not alienate the property. The grantee must be a native, or a naturalized subject of Spain, and he was required to make oath, that no stranger was interested in the application, and that no sale should in future be made to a stranger; that he would fulfil the conditions of the grant, and that he had received no anterior grant.

The first step necessary to obtain a grant, was to present a petition to the sub-delegate, or the person empowered to sell or grant lands; *he* referred the petition to the surveyor general, to learn whether the land applied for was vacant, and royal domain. It was then submitted to the fiscal, or attorney general, who determined whether there were any legal objections to the

grant. When both the preceding reports were favourable, the sub-delegate fixed the terms, and made the concession. It was then sent to the office of the intendant, for confirmation. The sub-delegate did, in some instances, grant concessions, without the previous formalities, but then he was supposed to do it on his own responsibility.

The quantity granted, was regulated by the capacity of the petitioner to improve it. It was never to exceed eight hundred arpents, but when that was improved agreeable to the terms of the grant, an additional quantity might be obtained. On this subject, the sub-delegates were usually very liberal. If a man, possessing many cattle and negroes, presented his petition, he was generally indulged with a large grant, perhaps half a league square.

SALES.

In purchasing lands, the same qualifications were required of the purchaser, as were required of the grantee, and no one was allowed to purchase any more than he could pasture or cultivate. Lands were always sold at auction, as they might be demanded, a price being first affixed by the fiscal, or by appraisers, appointed by him: below that price, they could not be sold. Sales were also reported to the intendant, for completing the title. All titles were to be recorded in the office of finances.

COMPROMISE.

When a petitioner stated that he had rendered services to the king, suffered losses in his service, or by his servants, or that debts were due him by the government, lands were often granted him by way of compromise. In that case, it was regular to have his audited account filed on the protocol; indorsed as discharged, by the indemnity; and the certificate of conveyance certified the whole transaction.

In 1823, a board of commissioners was appointed by congress, to ascertain the titles to lands in each district of Florida. The board for West Florida, completed their labours in the beginning of 1825, much to the satisfaction of government, and to the inhabitants of the country in general. A small portion of the lands in this district, were confirmed by the commissioners, a few

tracts over five thousand acres, remain to be decided, among which, the most conspicuous are the claims of John Forbes and Company, Ferdinand Yerra, Pedro Alba, Millan de Carrera, and Margaret Gouquet.

John Forbes & Co., claimed a large tract of land, east of the Appalachian river, under a treaty of cession from the Seminole and Tallapoosa Indians, which grant was confirmed by governor Folch. The same company also claim a large tract, adjoining the former, as surviving partners of Panton, Leslie & Co. These two claims embrace nearly the whole county of Gadsden, and part of Leon, estimated at 1,200,000 acres. The commissioners gave it as their opinion, that neither the Indians, nor governor Folch, had any power or authority to make such grants. A third tract, on the west side of Appalachian river, nearly equal in size to the two former, was claimed by the same company. The consideration for these several grants, was certain spoliations and robberies committed by the Indians, on the trading establishments of these companies. The principal objection to the title of the last claim, is want of a reference to the king.

Yerra claimed twenty-five thousand arpents of land, on the Co-necuh river. The commissioners reported this claim to be a forgery.

Carrera claimed ten thousand arpents of land on the Escambia river, in consideration of having built mills, &c. The commissioners think the claim a valid one.

The claim of Gouquet to ten thousand arpents, on the Big Spring of Chapola, is reported to have been antedated or forged.

A claim of Pedro Alba to 18,900 arpents, on the peninsula, opposite to Pensacola. Reported no evidence of title.

The ordinance of Ferdinand VI., 1754, forms the basis of all the Spanish land claims. But that ordinance has not been found in Florida. The commissioners were guided principally by the regulations of Morales, intendant of Louisiana, published 17th July 1799

In the winter of 1825, the boards of commissioners were superseded, by the appointment of a register and receiver, at Tallahassee, the seat of government; and twenty-four townships of land, situate in Leon county, were sold at public auction. About

the same quantity, situate in Leon and Gadsden counties, is advertised to be sold, in January 1827. [adjourned till May] A large proportion of the lands in West, and several townships in East Florida, are surveyed.

In the month of February, 1826, a bill was introduced in the house of representatives of the United States, giving the right of pre-emption to certain actual settlers, on the public lands in Florida. The following discussions, which took place on that subject, will show the principles involved in the question. The bill finally passed, and became a law.

Pre-emption Rights in Florida.

The house being in committee of the whole, Mr. Forsyth in the chair, on the following bill:

“A bill giving the right of pre-emption, in the purchase of lands, to certain settlers in the territory of Florida.

Be it enacted, &c. That every person, or the legal representatives of any person, who, being either the head of a family, or twenty-one years of age, did, on or before the 1st day of January, in the year 1825, actually inhabit and cultivate a tract of land situated in the territory of Florida, which tract is not rightfully claimed by any other person, and who shall not have removed from the said territory, shall be entitled to the right of pre-emption in the purchase thereof, under the same terms, restrictions, conditions, provisions and regulations, in every respect, as are directed by the act, entitled ‘an act giving the right of pre-emption, in the purchase of lands, to certain settlers in the Illinois territory,’ passed 5th February, 1813. *Provided,* That no person shall be entitled to the provisions of this section, who claims any tract of land in said territory, by virtue of a confirmation of the commissioners, or by virtue of any act of congress.

SECT. 2. *And be it further enacted,* That any person, and the legal representative of any person, entitled to a preference in becoming the purchaser from the United States of a tract of land at private sale, according to the provisions of this act, who is settled on the fraction of a section, or a fractional quarter section, containing less than one hundred and sixty acres, shall have the privilege of purchasing one or more adjoining fraction-

al quarter sections, or the adjoining quarter section, including their improvements, or the fraction improved by them, at their option.

SECT. 3. *And be it further enacted*, That, in cases where two or more persons entitled to the right of pre-emption shall be settled on one quarter, or fractional quarter section of land, each person shall be authorized to purchase one or more quarter sections, or fractional quarter sections of the section, or fractional section of land on which they are so settled, or the next adjoining section; and the section, or fractional section of land, upon which such persons are settled, shall be equally divided between them, in such manner as the register and receiver, within whose district the land lies, shall direct and determine, so as to secure, as far as may be practicable, to every such person, their improvements, respectively; and where the improvements of such person shall be upon two or more quarter sections, or two or more fractional quarter sections, such person shall be entitled to purchase the quarter sections, or fractional quarter sections upon which his improvements shall be.

SECT. 4. *And be it further enacted*, That any person or persons who have settled on and improved any of the lands in the said territory, reserved for the use of schools, before the survey of such lands were actually made, and who would have had the right of pre-emption thereto by existing laws, had not the same been so reserved, shall have the right of pre-emption thereto, under the same terms and conditions, and subject to the same restrictions, provided for in other cases of a right of pre-emption in said territory; and the register and receiver of the proper land district, shall have power to select any other vacant and unappropriated lands, in the same township, and as near adjacent as lands of equal quantity, and like quality can be obtained, in lieu of the section, or parts of a section, which shall have been entered in right of pre-emption, according to the provisions of this section."

The bill having been read—

Mr. WHITE, of Florida, said, if this were a subject introduced for the first time to the consideration of congress, he should approach it with some embarrassment, not for the want of confi-

dence in its justice, but, at the introduction of a new system of policy in the disposition of the public lands; and from a reluctance which every one must feel, in proposing innovations on established law and usage. This is, however, no new proposition in the legislation of the country—it is coeval with the origin of our government; was practised, previously, by the former sovereign in all the colonies—is identified with our legislative history, and has been pursued, with unbroken continuity, with various, but unessential modifications, from the year 1788 to the present period. He did not perceive any thing to justify a departure from it, at this time, either in the condition of the government, or of the inhabitants of Florida. If there was any thing erroneous in principle, defective in practice, or injurious in its consequences, it ought, and would have been discovered and exploded long since; the fact, however, of its having received the sanction of all the administrations for upwards of thirty years, and of almost every successive congress, is an undoubted argument in favour of its justice and policy; and it would be admitting the last sister into the Union, most ungraciously, to deny her rights which the munificent legislation of the nation has conferred on every other new state and territory. Sir, I should not like to be the messenger of such unwelcome intelligence, to a people proud to acknowledge the repeated evidences of your liberal and expanded policy; and who would not like to recur to so signal an instance of a departure from precedent, so inconsistent with the liberal spirit that has characterized your legislation, and so blighting to their hopes and prospects. The policy of all the governments on this side of the Atlantic, has been to extend their settlements as widely as possible, to attach the inhabitants to the country, and their government, by giving them an actual share in the real property, that they might not, in times of difficulty, return the answer of the Roman people on Mount Aventine, to the ambassadors of the senate. Pioneers and adventurers of new colonies and settlements, formed under so many difficulties and privations, at the sacrifice of so many comforts, and contributing so many important benefits to the country, in increasing its facilities, extending its empire, and protecting its orders, have always been, and ought to be rewarded. Influenced

by these considerations, the governments of France, England, and Spain, have made gratuitous grants of land to their subjects who improve, inhabit, and cultivate them. The exercise of this indulgence has been so universal, that it is considered inseparable from the colonial state. The United States, recollecting the favours extended to themselves by the parent government, and animated by the same just and liberal policy, have not been less bountiful to their citizens.

A recurrence to the laws of the United States, will demonstrate that the petitions of the people of Florida, upon which the land committee have reported this bill, are neither new nor unreasonable, but that they have been sanctioned by numerous precedents. He conceived there was no reason deemed sufficiently forcible to justify a departure from the system in Florida. Previously to making a particular reference to those laws, it might remove some obscurity, and obviate some objections, to notice a misapprehension of many gentlemen, in regard to settlements on the public lands. It has been alleged, that the existing laws forbid settlements on the public lands, and denounce heavy penalties against all such intruders, who were located there without authority; and some call them squatters, which, so far as it is intended, as either descriptive or derogatory, was entirely unjustifiable. These inhabitants are small planters, whose lands in the old states have been exhausted by cultivation, and who, animated with the laudable desire of improving their condition, and that of their rising families, have encountered all the hardships of penetrating to the borders of the country, disregarding the difficulties of the journey, and unappalled, either by the labours of the forest, or the enemy in its bosom. Any imputations upon their motives, or question as to their right, would be the strongest censure upon our own forefathers, who sought this continent, influenced by the same praiseworthy considerations. A more respectable population is not to be found in any of the states. If, however, sir, there was a law of the United States interdicting settlements upon the public lands, I could plead, as an excuse for them, the uniform legislation of congress rewarding its violaters, and quote the old maxim, "*communis error, facit jus*"—he was fortunately, however, not reduced to such an alternative.

The law does not prohibit such settlements, and he would show that the act of 1807, which was considered the basis of such exclusion, did not embrace this class of settlers; and if it had, that law was practically repealed. That act, which is entitled "An act to prevent intrusions on the public lands," provides, that if any one shall take possession of, or attempt to survey lands ceded to the United States, he shall forfeit his claim, and the president may remove him by force. This law was passed not long after the cession of Louisiana to the United States, and its evident object was to prevent surveys of large claims, the validity of which were doubted, and to prohibit those having unlocated floating permits, from being surveyed and settled on the best lands of that rich territory, and hence they employ the phraseology "forfeit his claim." The government were desirous of prohibiting by force, if necessary, the location of these floating and fraudulent claims, that the occupancy of them, after the change, might not be pleaded as a prescriptive right. Another consideration which probably impelled the enactment of that law, was to enable the president, in a summary way, to preserve the valuable timber, by the expulsion of intruders, without a resort to the tedious and protracted process of law, and the consequent destruction of the public property, in the meantime. It never was, and could not be, the intention of that law, or any other of the United States, to prohibit settlements upon the public lands. The register was authorized to grant permits to settlers. The act of 1807, was re-enacted in express terms in that of 26th of March, 1816; contains the same provisions, so far as the settlements were concerned, and superseded that act. This statute expired, by its own limitation, one year thereafter, in 1817, when an act was passed, obviously to remedy the defects of the other, and to provide more effectually for the same object. The necessity of one part having been dispensed with, in the adjustment of land titles, it was provided that the secretary of the navy, under the direction of the president, should lay off districts which might be useful for public timber, and, by proclamation, to prohibit intrusions on those reserved districts, under severe penalties; if any order of this kind had been made, or any districts selected, and the public notified by proclamation, all who settled within the pro-

hibited district, would incur the imputation and penalty imposed by the act of 1807. Since the passage of the last act, there has been no authority given under the laws of the United States to registers, to grant permits, because none were necessary to authorize a settlement upon the public lands; they have, on the contrary, been rewarded by a privilege of purchase similar to what is proposed in this bill. This, however, gives as small a quantity as ever has been given, and smaller than has been accorded in many places, as a reference to the laws providing for the right of pre-emption will demonstrate. In Ohio, a grant of this kind was made to the United Brethren on the Muskingum; and one million of acres afterwards given to John C. Symmes, upon condition, which having failed, 600,000 acres were given to settlers at the government price, with the privilege of entering six hundred and forty acres by each individual; the same right was extended by law, to the settlers at Gallipolis, and in the district of Cincinnati.

In Illinois, by an act of congress passed in 1814, after donations had been given by law, the right of pre-emption was given, up to February, 1813, of not less than one hundred and sixty, nor more than six hundred and forty acres: in Indiana, up to 1813, both subsequent to the law of 1807. In Michigan, to 1804, with other indulgences to the settlers. In Mississippi, after great liberality in granting donations, pre-emptions were allowed up to 1807, and the purchasers given to 1813 to pay for the lands. In Missouri, Louisiana, and Arkansas, the same rights were given to settlers. It is manifest, sir, from a reference to these laws, that the system has been adopted, and continued almost uniformly, in all the states and territories where there were public lands; and, if it was inexpedient, why has it not been arrested before now? All that is solicited for Florida, is what has been granted elsewhere. This bill does not provide to the same extent that others have. In Louisiana and Mississippi, these rights were given to settlers for ten years after the change of government. The country he had the honour to represent, was surrendered in 1821; this bill only provides for four years instead of *ten*; in some others they were allowed three hundred and twenty, and six hundred and forty acres of land; and, in

most instances, time has been given for payment. By the terms of the bill under consideration, they have the right of purchase for one hundred and sixty acres, for which they pay cash. This, sir, is a most reasonable request, as is shown by the foregoing comparison, if it is granted. As it is an exercise of bounty, the people of Florida will not stop to inquire what has been done elsewhere, but offer their sincere benedictions for the government that has protected their families in the enjoyment of their homes; in the formation of which they have expended their only means of purchasing, in competition with others, attracted by their improvements.

Are there any circumstances or difficulties connected with the settlement of Louisiana or Mississippi, to distinguish them from, or give them a preference over, this territory? If there was any difference in point of peril and privation, it was on the side of Florida. After the change of government, the present inhabitants travelled, from the southern states, several hundred miles through the Creek nation, or around it, through forests, cutting roads and constructing bridges, swimming creeks and rivers, and after their arrival, for the first two or three years, under the necessity of purchasing provisions at three or four times the amount they now cost.

Is it equitable or proper, that men who have encountered all these difficulties, submitted to these dangers and privations, and furnished these facilities for others to get into the country, should be put into equal competition with those who have made no expenditures, and availed themselves of the conveniences of their more intrepid pioneers? Is it just, sir, that one who has, by improving the country, increased the value of all the contiguous lands, and whose labour alone has given additional value to the spot on which he has located his family, shall be expelled without an equivalent, from his home, by affording to the ruthless speculator, an opportunity to buy it over him? Sir, some have pretended to doubt the policy of these laws, from the beginning. I would inquire of such, how would you ever sell those frontier lands without roads and settlers? If any gentleman supposes, that, upon an enlarged view of this subject, the United States will lose by the passage of this law, he will be greatly mistaken, unless they avail them-

selves of the labour of those adventurous citizens, without a fair equivalent. The value above the government price is derived from their labour, and the means they have furnished in penetrating the country. See the returns of the sales in Tallahassee; refer to the price of lands in the states; when it sells for twelve dollars per acre, ten of that is derived from the improvement, because land in its vacant state requires that sum to improve it. I do not hesitate to believe, that the land in the state in which these settlers found it, was not worth more than the sum they are required to pay by this law. It is a sound principle in politics and ethics, that he who benefits the public, is entitled to his reward. That the country has been greatly improved by the labour of these individuals, cannot be denied; and what will be their reward if this law does not pass? Their means of purchasing have been exhausted in the improvements of the country, and the high price of provisions; and the inevitable consequence will be, that they will be turned from their houses, forced from their plantations, by the rapacity of the heartless speculator, with but an inconsiderable augmentation to the treasury. You cannot conceive, sir, the distress that it will occasion. They have, on account of the causes enumerated, but moderate means. They cannot enter the lists of competition with those who are attracted by their improvements, the result of toil and labour, in which they had no participation, and for which they feel no sympathy.

Mr. White could not, in justice to the subject, dispense with the necessity of informing the house, how these things were managed. A sale of public lands is advertised—the sharpers of the adjoining states, strengthened by the aids of usurers and banks, club together their funds—flock to the country like vultures, at “death’s prophetic knell,” traverse all the roads made by the honest settlers; survey the whole district; take notes of every well-improved place; ascertain whether there is a spot endeared to a planter, on account of its containing the bones of a wife, child, or friend; and when the sale begins, the planters are informed privately, that unless they pay so much to this “*holy alliance*,” their farms and houses will be taken from them. The unpleasant alternative is presented, either to tender the bribe, or

abandon the possession. If it is given either in money or in bond, all others are forbidden to bid for the land, and it is purchased at the price proposed in this bill, from the United States, and perhaps the same sum to the company. Should it not be given, the land is purchased for a few dollars more than the means of the honest settler, who is sacrificed, and the public treasury augmented a few cents. It is to prevent this vile bartering, or the consequent injuries to those who will not engage in it, that this law is desirable. Such were the excesses to which these practices were carried, in the southern part of Alabama, that their courts were crowded with suits, upon notes of this description. Instances equally distressing have occurred, and will again occur, in Florida.

By the passage of this law, you save from ruin an industrious, enterprising class of men, who have confided in your munificence, from a knowledge of your long continued legislation on the same subject. It is also important in a political point of view. The lands on our borders and frontiers, should be occupied by men who are competent and willing to repel the first invasion of our country. Should this class be driven from the lands, and they were succeeded by the quarters of southern planters and speculators, what will be our condition in time of war? It is important that small planters should be encouraged, and a dense and efficient population invited and encouraged at the limits of the confederacy, devoted to the government, by a grateful recollection of its favours. One successful sortie of an enemy, and the occupation of a favourable point, might cost the government more than all the lands in a district would sell for, to remove him.

In every view of the subject, precedent, good faith, and policy, in my humble judgment, this law ought to pass.

Wednesday, Feb. 22.

Pre-emption Rights.—The act giving the right of pre-emption in the purchase of lands, to certain settlers in the Territory of Florida, was read a third time; and on the question of its passage—

Mr. Vinton of Ohio said, that when this bill was yesterday before a committee of the whole, indisposition had prevented

him from offering any remarks in relation to it. He was of opinion that the bill ought not to pass. From the experience he had had since he was a member of the committee, he was satisfied the House must break down its legislation on this subject, or this policy would break down the land system. The land policy not only embraced the actual sale of lands, but the regulation and settlement of lands. Donation and pre-emption rights originated in different causes, some of which are complicated, and require legislative interference. There is, however, a class of donation and pre-emption rights, which unless checked, would lead to the consequences which he feared. Many of these, like those in the bill before the house, have reference to individuals who are merely trespassers on the public lands; and who come without any grounds of justice, to ask the house to give them sanction and privilege. No man has a right to take possession of the public property in this way. It was a violation of the great principle on which the right of property rests. It had been argued yesterday, that we are bound to do this for Florida, because we have adopted the policy in other states. This, in his opinion, instead of being an argument in favour of the measure, was rather an argument against it. It evinces a power which is already injurious, and which will soon become too powerful to be resisted. All the country which remains to be settled will thus be brought into the same situation, and the land system will by this means be either trammelled or broken down. He thought the house would be of opinion that we had gone far enough, and, because we had sanctioned former trespassers, would not go on to extend these evils.

He was of opinion that some of the precedents which gentlemen had yesterday brought forward, were by no means analogous to this case. The instances of John Cleves Symmes and the Moravian Brethren, had been cited as precedents. There was no analogy between these cases and the present bill. The grant to the Moravian Brethren, which was for the purpose of extending the blessings of Christianity, could not be made analogous to the cases of trespassers, who came there unlawfully to settle on the public lands. There could be no kind of analogy between the two cases. The claim of John Cleves Symmes also differed

from this case, and rested on a basis of equity. It was a case in which the parties claiming relief had held under contract with Symmes, and they could not, in justice, be considered as trespassers on the public lands. There was no case in the state of Ohio in which trespassers had received countenance; yet it was yesterday argued that this provision had already been extended to every other part of the country.

A few words on the effects of this system. This policy of extending donations and pre-emption rights to trespassers, had been adopted by Michigan three or four years ago, when a bill passed in congress, giving these rights to settlers in Mackinac previous to 1812, if they rendered obedience and submission to the laws of the United States. It was known, that among these people, there were persons who had been attached to the British interests, and to the British service, during the late war. The commissioners provided under this act, by an extraordinary construction of its meaning, decided that they would require no evidence of allegiance; but would wait until the record of conviction for treason should be exhibited against any of these settlers. It turned out, that not only had some of these claimants been in British service, but that one of them had actually commanded the expedition which took Fort Michillimackinac, and had let in a flood of Indians on our territory.—In Missouri and Illinois, similar grants had been made. Some five years ago, a treaty had been negotiated with the Cherokees, by which lands were ceded to them on the west of the Mississippi; a territory, as was presumed, beyond the reach of settlement, as it had been beyond the reach of surveys. When the Indians, under this treaty, went to take possession of the lands, they found other settlers upon them; and, at the very last congress, an act had passed, giving pre-emption rights to the individuals who had been found there. By another treaty, a tract of land west of the Mississippi had been given to the Indians in exchange for a tract on the east of that river. The land ceded to the Indians in this instance, was situated in the territory of Arkansas. When the Indians went into Arkansas to settle, they found the lands settled by persons, to the number, he believed, of two or three thousand, who were determined not to surrender their lands.—During the last winter, a delega-

tion of Indians had come hither to induce the government to remove those trespassers.

It had been urged also, that as we had given pre-emption rights and donations in Arkansas, and also in Louisiana, we are therefore to give a sanction to other settlers to overrun the public lands in Florida. A call was made, some time since, by a gentleman from Florida, for information, which produced a correspondence from the General Land Office, from which it appeared, that, in consequence of the many donations and pre-emption grants, the public lands could not be surveyed and sold.

This bill proposes to give to every settler the right of obtaining his lands, let their value be what it will, let them be cotton or sugar lands. This holds out an encouragement to all who hear of this act of legislation, to go on the new lands and settle. These settlers have hitherto stood in the way of our surveys, annoyed our posts, and will, if encouraged, throw a clog in the way of the whole of our land system.

The land system, which is admirable in itself, will, if we proceed with this legislation, be virtually broken down.—We know not what is going on where there are no surveys and no settlers. If we pass this bill, no one can know the extent of the grant, or of the consequences which will result from it, until these consequences shall become so important as to interfere with the operations of the government; and then it will be too late to correct the evil. The whole country between the Pacific and the Mississippi must be settled by the government; and it is of great importance, where all the public wealth is in land, that the settlement of the country should be regulated and controlled by law. If we permit settlements of this kind to be made, they will interfere with our Indian relations.

It is not from any particular hostility to this bill, that he made this remark. If the House intended to proceed on this system, the present bill ought to pass; but if the House concurred with him in the propriety of checking it, it would be right to reject this bill. If we go on, he would ask why the trespassers of 1824, in the states of Indiana and Ohio, do not stand on the same ground with the trespassers in Michigan and Florida? The House must be prepared to grant equal privileges to all. By the passing of

this bill, if you throw open the gates, and admit any more trespassers, the consequence must be, that the present land system will be broken down.

Mr. White, of Florida, said, after the explanation which had been given of the principle and policy on which the bill now under consideration was founded, and no amendment having been proposed in committee of the whole, he could not have anticipated such formidable opposition on its final passage, and particularly from the gentleman from Ohio. He has said it was time to break down the system, and denounced all who are intended to be embraced by this bill, as trespassers on the public lands; and has also asserted that their improvements cover all the good lands of the territory. He denied that either of the propositions were correct. The inhabitants, whose rights were intended to be secured by the passage of this bill, were not trespassers. The act of 1807, entitled "An act to prevent intrusions upon the public lands," was passed shortly after Louisiana was surrendered to the United States. There were, at that time, numerous unlocated claims derived from the French and Spanish governments, founded on permits, requests, and floating concessions.

That act was intended to prevent the location and survey of those incomplete titles, and at the same time to authorize the president of the United States to preserve, by force, if necessary, not only the domain, as this government acquired it, in the treaty with France, but also, to invest him with discretionary power to prevent these locations of claims, many of which were considered invalid, and in the hands of those who did not intend to become citizens of the United States; the pretext for locating which, might have led to serious disturbances in the condition that country was in at that time. Another consideration, which induced the passage of that law, was the preservation of the public timber on the lands of the United States.

It never was either the intention or policy of the government of the United States to prohibit settlements on their vacant lands; on the contrary, they have encouraged it, by a long continued system of legislation, both before and after the act, to which alone, the gentleman must refer, in pronouncing them trespassers. By the provisions of that act, the register of the Land Office was

authorized to grant permits of settlements to every American citizen who should apply for that privilege. Does this look like an intention of the government, at the time of the enactment of that law, to interdict settlements on the public lands? No sir, neither that law, nor any other to be found in the Statute Book of the United States, will justify the statement of the gentleman.

In the act of 1818, the same provisions are incorporated, and the same permission given. That act expired in one year, and with it expired the only law then in force, or which has been subsequently enacted, to provide for granting permits to emigrants settling on the public lands. Every citizen, looking to the history of our legislation, feeling himself justified by established precedents, and in the absence of any prohibition, could settle any where on the public lands he thought proper, without incurring the imputation of trespassing, or the penalties of intrusion.

From the expiration of the act of 1816, in the year 1817, to the present time, there has been no law interdicting settlements on the public lands of the United States.

One of the great objects in the act of 1807, the preservation of the public timber, was provided for in another and better mode in 1817. He alluded to the law authorizing the secretary of the navy to reserve certain districts, which might, in the estimation of the executive, be useful for timber. With this enactment, and the final adjustment of land claims in Louisiana, terminated the law and its necessity, under which the gentleman has considered it proper to denominate the citizens for whose benefit the law was intended, as "intruders and trespassers,"—appellations which neither the law, nor the character of the inhabitants, would authorize as appropriate or descriptive.

The gentleman says we have gone far enough; it is time to stop. Sir, he ought to have been here thirty years ago, when you were voting away such extensive donations to the state he represents; his arguments might have been more forcible then than now; but how does the account stand? Ohio has gotten all that she could ask, and it is time to stop; "the system is a bad one." Is this consistent with the equality and propriety that should characterize the legislation of this great nation? Ohio has been satisfied, and it is time to stop. The gentleman has attempt-

ed to explain how these grants were made to the state of Ohio; and, however ingenious he may be, and is capable of being, in the explanation, he cannot separate it from the present bill. One million of acres of land was given to John C. Symmes, upon certain conditions; they were not complied with; the land reverted to the United States; and by law, six hundred thousand acres were given to purchasers at the government price. Yes, sir, by a law of congress; and the gentleman attempts to explain it by saying, that they were purchasers under Symmes. Does this constitute any equitable or legal claim on the United States? Whatever might have been their demands on the original grantee, they assuredly had none on our government; and this act in favour of Ohio, was a bounty of six hundred thousand acres to them, on the same terms that this bill proposes, to give one or two hundred to the settlers in Florida. If that gentleman could have been here, and by the power of his arguments prevented the passage of that law, he would have saved more to the government than will be saved by preventing the passage of this. But is this all that has been granted to Ohio? Sir, I have taken a note of all the laws which have been passed on this subject, and I find in that catalogue, a grant to the "United Brethren," in Ohio, on the Muskingum; a grant to the French settlers at Gallipolis; I find, also, a grant to settlers in the land district of Cincinnati. How much has been given to this favoured state by all this munificent legislation, I have not taken the trouble to estimate; but since Ohio has received all that she can get, and is now rich and powerful, "it is time to stop;" we have gone far enough. Sir, this logic may suit that gentleman, but it would sound most ungraciously in the ears of those I have the honour to represent; and it would have been, some years ago, most unwelcome intelligence to those he now represents. The gentleman has told us of the abuses which have been practised in Michigan and Louisiana, under similar laws to the one under consideration. If such have existed, it is the misfortune of the government and its agents. It does not grow out of the system itself, and is no argument against its propriety. If he had read this bill, however, with his accustomed perspicacity, he would not have anticipated any such results as he has deprecated, in regard to the obstructions of the surveys.

This law cannot create any such inconvenience. It proposes to give to each settler a quarter section of land at a specified price, to be bounded by sectional lines, if the surveys are completed; if not, to be bounded in the same way when they shall be completed; and, in this way, all the difficulties in regard to the surveys are obviated.

Sir, I do not ask for the people I represent, more than has been conceded elsewhere; and it is difficult for me to perceive the force or propriety of adopting an uninterrupted system, continued and uniform, sanctioned by nearly every congress for thirty years; and when you reach the most exposed and frontier country of all your new territories, say it is time to stop. We are told, however, that, by a law passed, and one in contemplation, eighty thousand acres are already given. The donations up to 1819, when the treaty was concluded, were only eighteen in number, as will be seen by the reports of the commissioners; and I do not believe that the land, if sold, would pay for the surveying. The other class in contemplation, in Escambia county, where the greatest number reside, is of the same character. Those further east are more valuable; but, admitting that the whole was good land, and add to it that proposed to be embraced by this bill, and how will it compare with the six hundred thousand acres in Ohio? This, however, is not to be considered as purely donation. By the regulations and ordinances of the Spanish authorities, in force in Florida, every person who settled in these provinces, and inhabited and cultivated the land for a particular number of years, was entitled to a gratuitous concession from that government; and by the treaty between Spain and the United States, the latter covenanted to confirm all titles to the same extent, that would have been confirmed under the Spanish government. The actual occupation under that government, has always been considered as constituting an inchoate right, or equitable title, to be perfected in the same manner that such titles would have been under the Spanish government. Upon this principle, the United States have adjusted all the equitable, as well as legal claims, up to the change of government. Such were the laws for Missouri, Mississippi, and Louisiana. The pre-emption laws have originated from considerations entirely

different. I have shown in the remarks I had the honour to offer in explanation of the objects of the bill on yesterday, what was granted to Illinois, Indiana, Michigan, Missouri, Mississippi, and Louisiana. The gentleman says there are no recent instances, and that it ought to be stopped. In Arkansas, I think so late as the year 1823 or 1824, congress passed an act, giving pre-emption to all the settlers embraced in a treaty with the Chactaws, any where in that territory—Cherokees, I am informed by the honourable gentleman from Arkansas—and in lieu of pre-emptions granted by an act of 1814. I thank the gentleman for the information, but it does not alter my argument. It is to show that this house have recently legislated upon the subject, and the extension that we contend for has been granted to Arkansas. The gentleman is equally mistaken in supposing that this law will cover all the good lands. The Indians were removed in the fall of 1824. This bill extends the right of preference in purchasing, to the 1st of January, 1825. It would be most surprising, if many could have “inhabited and cultivated” the lands occupied by them until October or November, 1824, before the 1st of January, 1825. Besides, sir, if that were the fact, I contend that the government of the United States have no equitable or moral right to more than the lands are worth in their unimproved state.

The gentleman has attempted to give an estimate of the lands, and their value; let him look to the returns of the sales of unimproved lands in the vicinity of the seat of government; it did not average two dollars per acre in the immediate neighbourhood of Tallahassee. This sale will demonstrate what lands are worth in the woods. It is proper, however, to remark, that there were other causes, which, in some measure, produced this result. If, then, sir, the lands on which these settlers live, are worth more at this time, from what is it derived? Their own labour: and is it just, that the government should appropriate the labours of its own citizens to fill its coffers? Sir, it would be making slaves of the most deserving of our population. If the land is worth one dollar and a quarter or two dollars, in the woods, and it costs ten dollars to clear it, is it fair, honest, or magnanimous, to take from the settler, encouraged to locate himself there by your

laws, more than the value of the land in its unimproved condition? Look, then, to the sales in the woods in that country, and you have the estimate, and very near to the sum proposed to be given by this law. Mr. White said that he had attempted on yesterday, to prove that the United States would make but little by the refusal to pass this law; whilst this deserving class of inhabitants, who have cut roads, constructed bridges, and felled the forests, would be placed at the mercy of a class of speculators, who are so well disciplined in the arts of their profession, and so familiar with the distress they have occasioned, that the people have as little hope of compassion from them as from an inquisitor, or mercy from a Shylock.

It is impossible to prevent combinations at those sales. No matter what the demand is, to a certain extent it has and will be continued. By passing this law, the individuals who are embraced by it (and their numbers have been greatly exaggerated), will be secure, and the government have a fair equivalent for the land in the state they found it—when you take in connexion the increased value of the land around their settlements, in consequence of the facilities they have created to get to them, and the comforts and conveniences they afford to new emigrants. Whenever improvements are found to be valuable, the company of speculators, through their foreman, notify the farmer, whose means of purchasing has been exhausted in the improvement of the country, and in purchasing every article at four times its present price, that unless he will pay so much to the company, they will bid for the land against him. In this way the honest planter is obliged to compromise, and perhaps pay them as much as the government, or be sacrificed.

It is to prevent this, sir, that this bill is intended, and to reward the enterprise of your adventurous citizens; who have encountered all the perils and difficulties of a settlement in that country. Another consideration has great force in recommending the passage of this bill. Florida is your most exposed frontier, having an extensive seacoast. It is, therefore, the policy of the government to have as dense a population as possible, and every advisable means should be adopted for that object. Should the lands fall into the hands of speculators, or large planters, who

will quarter their negroes near your borders and coasts, the consequence will be equally injurious to the population of the territory, and the security of the country. For these reasons, sir, and those I had the honour to submit on yesterday, I trust the bill may pass.

The question was then taken, and the bill was passed, and sent to the senate for concurrence.

No. III.

CANALS.

The internal navigation of Florida is a subject equally important to the territory, the adjoining states, and the whole American republic. The seacoast is about twelve hundred miles in extent, and the southern part in particular, the most dangerous, perhaps, of the western continent. It has been found, that the insurance offices of the Atlantic cities, during the year 1826, lost, by wrecks on the coast of Florida, the enormous sum of 500,000 dollars; a sum more than sufficient to complete a ship canal across the peninsula, from the St. John's to the Suwannee river. The draught of water on the St. John's, as well as on the Mississippi bar, is about twelve feet, at middle tide: that, of course, ought to be the depth of water in the canal. The highest ground, between the two rivers, is estimated at forty feet; but, for safety, let us say sixty feet, in the deepest cut. Col. White estimates the distance here at eighteen miles: for his very valuable letters to the secretary at war, and the committee on roads and canals, here inserted, I am indebted to his politeness. But, instead of eighteen miles, let us take forty miles as the length of the canal, and estimate the expense, per mile, at eleven thousand dollars; and it will amount to no more than 440,000 dollars: sixty thousand dollars, therefore, would be saved in one year, over and above all the expenses of the work; and hundreds of lives would be saved annually, in addition. This would disarm the southern navigation of all its dan-

gers, and all its terrors. This canal would, in effect, bring New-Orleans, and the Mexican ports, eight hundred miles nearer to the Atlantic states. It would unite the eastern and western states more closely than any other public improvement could do. In times of war, the advantages resulting from such a canal would be incalculable. It is around our numerous capes and islands, projecting far into the gulf of Mexico, that our commerce is most vulnerable: there, it is exposed to the sudden attacks of foreign cruisers and pirates of every description. This canal would save our government from the necessity of keeping a fleet in the gulf of Mexico, in times of peace; and in times of war, it would facilitate the transportation of troops and military stores from the eastern and western shores, and afford a safe retreat for the small prizes, which might be taken in the southern waters. By increasing the value of land in its vicinity, it would throw a large fund into the national treasury; and by increasing the population, it would greatly strengthen the southern frontier of our republic. To the inhabitants of the territory, it would afford employment, encourage industry and enterprise, and bring a market to their doors.

Since the accomplishment of the New-York canal, the difficulties to be encountered in the construction of such works are greatly diminished; and a canal of forty miles, in a comparatively level country, although drawing twelve feet of water, bears but a small proportion to one of three hundred miles, carried over rivers, valleys, and mountains.

To the westward of the peninsula, the navigation of the sea-coast is comparatively safe; but an internal boat navigation can be so easily obtained, and it would so greatly facilitate the communication from every part of the territory, that there can be no doubt of its early completion. Eleven miles, at most, of canal, would complete an inward passage from the Appalachee to the Perdido bay, a distance, by water, of three hundred miles.

The Appalachee and Appalachicola bays are already connected by St. George's sound. The navigation, by vessels drawing six feet water, is good, with the exception of one narrow oyster bar, which crosses the sound about midway; through this, a channel

could easily be opened: at present, at low tide, there is not more than four feet water on this bar.

To connect the bays of Appalachicola and St. Andrew's, three routes are presented:—

1st. Up the Appalachicola river, thirty-five miles, to its junction with the Chapola river; then up the Chapola, and Hort's lake, ten miles, opposite to the heads of Wetappo creek; thence by a canal, three miles, to the Wetappo; thence down the Wetappo, seven miles, to the east arm of St. Andrew's bay.

2d. Up the Appalachicola river, seven miles, to Wimico lake; thence across the lake, seven miles; thence by a canal, three miles, into St. Joseph's bay; thence across the bay, twenty miles; thence round Cape False to the sound, behind Crooked and Hummock islands, twelve miles; thence through the sound to St. Andrew's, twenty miles.

3d. From the Appalachicola bay, through the Indian pass, to the peninsula south of St. Joseph's, sixteen miles; then by a canal across the peninsula, to avoid Cape St. Blass, one mile; thence round Cape False, as before.

In these three routes, there is only one mile of difference in the distance. In the first route, the currents of the rivers are to be overcome: in the second, the west end of Wimico lake, and the south shore of St. Joseph's bay, are quite shoal: in the third route, both sides of the peninsula are shoal, and the Indian pass is also considerably obstructed by oyster bars.

A canal of five miles would connect the Wapaluxy creek, of St. Andrew's, with the Pond branch of the Chactawhatchee river. A canal of one mile would connect the Big Lagoon, below Barrancas, with the Perdido bay. And a canal of four and a half miles would connect the La Lance creek, of the Perdido, with Bonsecure, a creek and bay of Mobile harbour.

The following is extracted from the Macon Messenger (Ga.) of Jan. 14, 1826, and probably expresses some views of the subject, more correctly than it could be done in other words:—

“But I understand, from high authority, that congress would prefer that a state, territory, or a company, should execute any of those canals she has in contemplation, to doing it herself out of the national funds: but she would require ample assurance

that the object be effected agreeably to the designs laid down in her system ; to the end that chartered companies may not become an encumbrance to her and the community, by a partial execution of the work upon those localities, and deprive her, hereafter, of doing it in a manner and magnitude beneficial to the Union. Hence, the above canal would be considered as the foundation of canalling in the southern states ; and if executed upon a smaller scale than above described, would be inadequate to the connecting purposes which it should be ultimately calculated to combine. The territory of Florida is anxious for this canal to be effected, and will give every assistance in its power congenial with its territorial rights. As she is at this time unable to effect it herself, she is desirous it may be done by congress, or a company chartered for that purpose ; and as congress, by her system, cannot arrive at this canal, for the purpose of executing the work, in probably less than twelve or fifteen years, it would be a great acquisition to the states on the west and east of the peninsula, for a company to be organized, and commence it with as little delay as possible. If it could be completed in five years from the next session of congress, there is but little doubt, by the time she would be ready to commence this canal, it would half pay for itself in tolls, besides the facilities it would afford to wealth and commerce, the community, and the world at large. A party, consisting of an assistant engineer and a first rate surveyor, together with other requisite assistance, is now made up, provided a civil engineer of established science in levelling, measuring work, and making out estimates, can be procured to head the survey. Exertions are making to procure the service of an engineer, whose experience and judgment are adequate to the importance of this object ; which, if found in time to enter upon the route by the first of December, the practicability and expense can be ascertained, and if found favourable, returned to congress, with a memorial for a charter, before the rising of the next session.

“If practicable, the stock, more than sufficient, may be said to be already made up. It is unfortunate that an engineer of the qualities required cannot at this time be heard of in the southern

states.* Two months' services would suffice to lay the foundation of this canal, and for the incorporation of the company. If he could not attend upon the execution of the work, it would be immaterial: the canal could go on, whilst he might be engaged in the survey of other localities for canals; in some other section of the country.

“Having pointed out the locality, together with a few outlines of the proposed canal, let us now attempt to enumerate some of the advantages. It will at once strike the competent and reflecting mind, that the distance from the northern ports, to that class of our numerous coasting vessels, trading to the gulf of Mexico, Orleans, Tampico, Vera Cruz, Honduras, &c. would be materially shortened, and rendered far more secure than by way of the Bahamas and Cuba; thereby cutting off that long, circuitous, dangerous, and piratical route, and preserving the lives of hundreds of our northern countrymen from shipwreck, and from those lawless piratical savages of the ocean. With regard to military and naval advantages, it will also strike the reflecting mind, that in case of war, at some future day, in which it is not impossible that the United States may be enveloped, in the course of fifteen or twenty years, (and perhaps less) with some foreign power, it would, in such an event, become a matter of *deep* interest to congress, to avail herself of *all* the advantages the southern section of the Union could afford. Consequently, looking ahead, she would find it indispensably necessary to establish another naval depot in the southern states, upon the eastern side of the peninsula of Florida, to act in concert with Pensacola, in annoying the enemy in southern latitudes, and in defence of the south. Thus it will be readily perceived, that an enemy might be annoyed and weakened, with treble the ease, success, and security, from the suggested co-operation, in such case, through the Florida canal, between the resources of Pensacola, and the resources of a naval depot and fortress upon the Atlantic side of the Floridas, than from the northern ports. Their union would still be strengthened, in at least a threefold degree, by the superior advantages of this canal, through which they could be readily sup-

* Lieutenant Swift was sent to examine the ground, in the beginning of the winter; but he has not yet reported.

plied and supported from the interior of South Carolina, Georgia, Alabama, Mississippi, Tennessee, and Kentucky, at either point, vice versa, with provisions, munitions of war, troops, &c. &c. Again: suppose we were now at war, and our navy or privateersmen were to take a prize in the West Indian seas? Could they not stand a far better chance of getting such prize into Pensacola, or a southern naval depot upon the eastern side of the peninsula, than into one of the northern ports? Particularly in case of inclemency of the winter season in northern latitudes, and the coast perhaps lined, as it were, with the ships of our enemy. Hence this canal would unite a common cause between the Union, South Carolina, Georgia, the Floridas, Alabama, Mississippi, Tennessee, and Kentucky, in case of an invasion by a foreign enemy in the south. They could then receive the invaders upon the margin of the ocean, and send them back, with a *conviction* that republican governments are based upon the virtue and wisdom of their legislators, and the union of the people. Thus it may be foreseen that *many* important naval and military advantages may in the course of time and events be expected to arise, with the increasing importance and wealth of the Floridas, and the southern and western sections of the United States, from this proposed large canal. With regard to its mercantile and commercial advantages, it will be perceived that the vessels and steam-boats, which this canal would be calculated to float between the Atlantic, Mobile, and the gulf of Mexico, would literally *sweep* the mouths of all those noble rivers, that flow from a wealthy interior into the bays of Appalachee, Appalachicola, and Mobile; thereby concentrating hereafter a reciprocal and extensive safe inland trade, between the western waters and sections of the Union, with the Atlantic. The states on each side of the isthmus would be more reciprocally benefited by this canal, than Florida. From the mouth of the St. John's, steam-boats can, and do even now, avail themselves of a safe inland passage, in the rear of the numerous islands upon the coast of Georgia and South Carolina, as far north as Charleston and Georgetown, even up to Cheraw. If bound to either of the latter ports, they would find as safe a passage from St. John's to Savannah river, through Augustine creek, in the rear of Wilmington island, into Calaboga sound, as they

now find from Savannah to Charleston ; which city would probably attract a considerable share of the western trade, by the way of the St. John's. This, I conceive, in some instances might be the case, as it would be impossible to prevent, by coercion, the western merchants and planters from centring where there is the most capital, European and West India shipping, and large importing and exporting merchants, if their interests or inclination should lead them to such a port. I lay it down as a general rule, that agriculture and commerce are always prone to come together at the most habitual point of concentration upon the margin of the ocean, or at the head of navigation for European shipping, upon a river, or bay, where a city, from its long standing and locality, holds out the greatest capital, and has got the trade, both by sea and from the interior, turned and settled in its favour.

“Consequently, each seeking their actual interests, let us suppose a ship to leave Liverpool in pursuit of Alabama cotton. She must cross the Atlantic within two to four days' sail of Charleston, Savannah, or St. Mary's, (being the only three ports of note into which she could gain an entrance;) from thence she must now keep away, make the Man of War Keys, sail down the *dangerous* coast of Abaco island, pass the Hole in the Wall, cross the Bahama banks, (if not cast away on the Abaco,) steering her course through numerous small islands and keys of rock in every direction, for the Double-head Shot Keys; then steer up the north side of Cuba, through piratical waters, sail the extent north-westwardly of the gulf of Mexico to the Balize, and from thence ascend the rapid current of the Mississippi, one hundred and thirty miles to New-Orleans. This would comprise a circuitous and dangerous route of at least fifteen or eighteen hundred miles' sailing distance, from the point where she was within two to four days' sail of Charleston, Savannah, or St. Mary's; where, at either port, by the facilities of the above proposed canal, she could obtain her cargo of Alabama cotton, and be on her return voyage to Liverpool, before she could, upon an average calculation of the winds, arrive at New-Orleans; and at the same time, while saving the worst half of her voyage, would avoid those dangers, which are sometimes incalculable.

“It must be recollected, that sloops and schooners cannot carry more than two or three hundred bales of cotton at a load; whereas steam-boats can transport, in less time, eight hundred or a thousand bales at each cargo, with equal safety; consequently, they would have the superiority over the present coasting vessels from Mobile to New-Orleans and New-York, by way of the Balize, and the cape of Florida; and thereby change the channel of that part of the trade to New-York, through some of the ports on the coast of Georgia and South Carolina; thereby facilitating a mutual interest, by this improvement, from Mobile through the ports of Georgia and South Carolina to New-York. Again, it is natural to calculate, that European and American merchants would prefer giving more for Alabama cotton in either of the above Atlantic ports, than to run all those hazards and delays with their shipping and cargoes, together with additional insurance, by proceeding from Liverpool or the northern ports to New-Orleans, by the way of Cuba, in pursuit of this cotton.—Hence I feel warranted in saying, besides the numerous and important advantages to the southern section of the Union, in case of war, and to the world at large, with regard to commerce, together with the protection of our coasting trade to the gulf of Mexico, and the preservation of the lives of our northern mariners from shipwreck and pirates, the tolls of this canal would prove vastly lucrative to the stockholders.”

HOUSE OF REPRESENTATIVES.

Tuesday, February 21st, 1826.

Mr. White, of Florida, moved to postpone all the orders of the day, in order to take up the bill for a survey of a route for a canal between the Atlantic and the Gulf of Mexico.

Mr. White said he would briefly state to the House his reasons for claiming their indulgence, before the important question that engrossed their attention was disposed of. The season was now far advanced, and unless the bill was speedily passed, it would be impossible that the survey and estimates could be made before the summer or fall months, when it would be too unpleasant and

hazardous for the engineers to execute the work; and if it was postponed until fall, no report could be made in time to be considered and acted upon at the next session of congress. Mr. W. did not wish to be importunate; but, in a question of such magnitude, involving considerations of political and commercial importance, so intimately connected with the trade, security and defence of the nation, he trusted the House would indulge him with the passage, at this time, of the bill, having for its object the procurement of information in which every section of the continent has so deep an interest. If he could suppose that it would produce any discussion, he would not press it, but believing that every gentleman had given so much consideration to the subject, as would justify their voting directly upon it, he trusted the orders of the day would be postponed, and that the House would resolve itself into a committee of the whole for its consideration.

He was authorized by the kind indulgence of the gentleman entitled to the floor, to call up this subject, on account of its importance and immediate necessity.

The question was then taken on the postponement of all the other orders of the day—Ayes 78, Noes 55.

IN SENATE OF THE UNITED STATES.

January 19, 1826.

Mr. Hendricks, from the select committee on roads and canals, to whom was referred "a bill for the survey of a route for a canal between the Atlantic and the Gulf of Mexico," reported:

That they have given the subject all the examination which the means afforded enabled them to bestow. No documents accompanying the bill, they have availed themselves of the information of several gentlemen acquainted with the character of the country through which the proposed canal is intended to pass; and from the best lights afforded, they have no hesitation in forming the opinion, that the great importance of a canal communication between the waters of the Atlantic coast and the

Gulf of Mexico, justifies the expenditure proposed, to determine the fact whether such communication be practicable or not. Nor would the committee hesitate in recommending the measure, were the probability of a favourable result to the examination much more remote than it is. The committee are of opinion, from all the information which they have been able to procure, that this work is not only practicable, but much more easily accomplished than former estimates and opinions have supposed.

The committee would further remark, that, from an examination of the maps and charts of the coast from the mouth of the Mississippi river to the Appalachicola, or the Vaccassar bay, and from information to be relied on in relation to that coast, they are induced to report an amendment to the bill, by which the survey will be extended west, through the bays of St. Andrew's, St. Rosa, Pensacola, Perdido, Mobile, and Pascagoula, and through lakes Borgne and Pontchartrain, to the Mississippi, by the Iberville, or the canal Carondelet. It is believed that through the lakes, bays, and inlets of this coast, a perfect inland navigation may be effected to the Vaccassar bay, a distance of three hundred and fifty miles, by cutting, at a few points, in all not exceeding twelve miles. The appropriation proposed in the bill, it is believed, will be sufficient for this additional purpose.

Much valuable information on these subjects is contained in the letter from Mr. White, the delegate from the territory of Florida, addressed to the committee, and to which they ask leave to refer as part of their report.

All of which is respectfully submitted.

Washington, January 18th, 1826.

Sir: In obedience to your request, I herewith send a copy of a letter I had the honour to address to the secretary of war, requesting a survey and estimate of a canal, or ship channel, across the promontory of Florida, with a copy of his answer, stating that the appropriation for such objects having been exhausted, the reconnoissance could not be made, unless the necessary funds were placed under the direction of his department.

It will be seen, by a perusal of that letter, that I had intended to communicate some interesting facts, in regard to the practica-

bility of forming an inland navigation, from the Mississippi to the point at which the proposed ship channel should commence on the Gulf of Mexico. Since the introduction of the bill referred to your committee in the senate, I take the liberty to suggest the propriety of an additional provision, directing a continuation of the survey, from the Appalachicola river to the Mississippi; and availing myself of your invitation, will now say, what I intended, under other circumstances, to address to the secretary of war.

It will be observed that the Mississippi, after receiving to its bosom all the streams that flow from the mountains, through the fertile regions of the west, its bed is unable to contain them. Large navigable rivers and bayous burst from its sides, and, flowing through the valley, some of them find an outlet in the gulf. Of this description is the Manshae or Iberville, about ninety miles above New-Orleans, running into Lake Maurepas, which communicates with the gulf through Lakes Pontchartrain and Borgne. The Manshae runs into Amite river, and from their junction, sixteen miles from the Mississippi, the united streams present a fine body of water to the lakes, sufficient for all the purposes of navigation. The depth of the water in Pontchartrain is generally from eighteen to twenty feet. The bay of Manshae was opened some years since by general Wilkinson, wide enough for the passage of boats; but, during the late war, the American commander, apprehending the approach of the British troops through that channel, ordered it to be obstructed, by falling a quantity of cypress trees across it, which presents an obstacle to navigation, until they are removed. It is believed, that, by clearing out these obstructions, deepening and widening the bed, constructing small levees for a short distance, and cutting off a small point at the mouth of this estuary, a considerable portion of the waters of that immense river would find an outlet to the gulf, through the lakes; which would greatly improve their navigation, by an accumulation of water, sufficient to overcome the feeble resistance of the tides, and form a current outward to the Gulf of Mexico. By this mode of conducting off the surplus waters of the Mississippi, two great evils would be avoided; the incumbent waters in the river, and the reflux from the swamps.

both of which have been found to be detrimental to the planters on its borders.

It is believed by every person, practical or scientific, that the levees cannot be extended farther up the Mississippi, without manifest danger to New-Orleans and the contiguous country; and every one must be convinced, that they are inferior to artificial sluices or canals, that would convey the superabundant water to the sea by other routes than the river. It will be seen by Cuvier's Essay on the Theory of the Earth, that the learned M. de Prouy had communicated important facts, to explain the changes which took place on the shores of the Adriatic: having been appointed to examine into the causes of the devastations occasioned by the overflowings of the Po, he ascertained that this river, since it was confined by dykes, had, by deposits, so raised the level of its bottom, that its surface was higher than the roofs of the houses in Ferrara.

The Adige and the Po, like the Mississippi, are higher than the adjacent country; and the remedy against the disasters of annual overflowings is suggested, by opening new channels to discharge the waters.

I beg leave to make an extract from a work of the most learned and philosophical writer that I have seen, of all who have written upon the subject of the Mississippi. "A deep canal ought to be cut, to carry a current from the river, at all seasons, and above and below its efflux, a strong levee formed, from the river, to whatever lake was made the deposite. We are far from expecting that this improvement will be carried into effect, though its beneficial consequences are too obvious to demand demonstration. Two causes oppose themselves to all human improvements; the difficulty of convincing the public of their utility and practicability, and the greater difficulty of withdrawing men from their habitual course." When the waters of the main stream flow out through the valley, and meet with no deposite or outlet, such as the lakes, they rest on the back lands, and produce a reflux towards the river. By forming this communication, all these evils to the inhabitants are obviated, and the terrors of a cr evasse in the lev ee, with its consequent destruction, avoided.

It is not incumbent upon me to discuss this subject here, further than to exhibit such a view of it, as will demonstrate to the committee the necessity of at least a survey, that congress may be enabled to act upon the certain information, and official responsibility, of its own engineers. There are several points below the Manshae, at which communications might be formed with Lake Pontchartrain by cutting less than five miles. One at Bennet quarrè, where it is said that the river, at low water, is ten feet higher than the lake; the greatest elevation of the river, at that point, during the spring floods, is estimated at twenty-three feet; this quantity expanding over such a surface as the lake, would produce but a slight effect, whilst it would greatly diminish the body, and consequently the danger of the river.

Should either of those two points be found too difficult, or impracticable, a canal has been projected and surveyed, at or near New-Orleans, from the river into the lake; either of which will accomplish the object of a commencement of an inland navigation from the Mississippi, around our southern coast, to the Atlantic. Through the lakes, and behind the islands, which stretch along the coast of the gulf, there is a safe interior passage to Mobile bay, a distance of one hundred and seventy miles, free for vessels of any size that might be employed in that trade, without any impediments, except the slight obstructions between the river and lakes. Between the bays of Mobile and Pensacola, a distance of fifty miles, there are but two interruptions to the water communication—a portage from Bon Secours bay to Perdido, of four and a half miles, and a half mile from the latter to the Grand Lagoon, which communicates with Pensacola bay, near the point lately selected by the United States for a navy yard, and naval depot; making an inland navigation for that distance, by cutting five miles only, almost in a direct line, through a level country, and a soil mixed with clay and sand, furnishing every prospect of easy excavation.

But, sir, to show that nature herself intended this route to be continued, I beg leave to point the attention of the committee to the facilities it embraces. Santa Rosa sound makes out from the bay of Pensacola forty miles, to Chactawhatchee bay, of about the same length: from the end of which, a few miles up East

river, will reach a point within five miles of the west end of St. Andrew's bay, through a soil and surface, presenting no difficulties to the continuation of the work; from that point to the east end of the bay, in a line with the whole route, is about twenty-four miles; from thence to the Chapola river, at a point near which there is a large, open, natural communication, from the Appalachicola, is about two miles. Thus, with the inconsiderable obstructions at the Mississippi, the removal of small impediments at a few points, and the cutting of twelve miles, an inland navigation may be effected of three hundred and fifty miles, from the Mississippi to the Appalachicola, the place at which the survey is to terminate, by the bill referred to your committee.

It is seldom that nature is so bountiful to a people, as to those of the southern and western states; bountiful in the luxuriance of soil, and in the value and variety of products, and bountiful to excess in the facilities of commerce. The rivers that flow into the Mississippi connect together the western states, while the southern are connected by the sounds, lakes, and bayous, which form, and the rivers which flow into this great inland channel, extending around our southern coast. The body and branches of this mighty river and canal, will hold them united by the indissoluble link of trade, interest, and intercourse, whilst the ship channel will connect them with the east, at every harbour, port, and point of contact, from the Alleghany to the gulf, and from the Sabine to the Atlantic.

To effect an inland navigation of unbroken continuity, for three hundred and fifty miles, by cutting twelve miles,—such is the labour to be performed; so cheap, natural, and so essential to an uninterrupted communication from the north and east, to the west, and from the west to the extreme south, and from thence to the Atlantic! Moreover, sir, the states of Tennessee and Alabama contemplate a canal from the Tennessee to the Alabama river; of which the bay of Mobile will be the outlet; thus rendering this canal important to those states, and more valuable to the Union. The people of the west have long had to contend against difficulties and dangers in transporting their produce to a foreign market. Though nature had given them a great outlet to

the sea, it is far removed from the course of European trade; plunging into the Gulf of Mexico, they have many perils to brave, many leagues to traverse, before they reach the Atlantic. The dangers of the navigation subject them, on their outward passage, to shipwreck and plunder. Should they be fortunate enough to escape, on their return home, with the produce of their enterprise, they are retarded by the Gulf Stream, Florida eapes, and the still more appalling dangers of pirates.

Nature has given to the west the finest river in the world : and if the government will remedy the defects of its distant dis-embogement, they start with their Atlantic brethren, in the equal race of wealth and prosperity, on the great highway of European commerce, and the issue is left to their energy.

From the lowness of its banks, and the fragility of its levées, the Mississippi often bursts its embankments, and overwhelms the farms that cover its bottoms; and it would be idle to say to the committee that such inundations over fields of cotton and sugar are ruinous in the extreme. To diminish this danger in the slightest degree, would be a national benefit, far greater than would be commensurate with the cost to be incurred. I have, therefore, suggested, that, by clearing out the Manshae, the first stage in the great route of natural canalling, you give to the Mississippi an outlet through which much of its surplus volume would pass, into the lakes first, and then into the gulf, without hazard to its borders, and with manifest relief to its levées. It is thus that another eligible mouth is created, where it is so eminently useful; a portion of its waters, too great for its bed, and current drawn off, a surplus ruinous to its settlers, and hazardous to New-Orleans. By this work the marshes are drained, the hot-bed of fever broken up, and death strangled in its cradle. By draining the delta of the Mississippi, millions of acres of land are reclaimed from inundation; a boundless field for industry and enterprise opened to the growers of sugar, and, in the course of time, our country freed from the tribute she now pays to the West India Islands, for the purchase of this necessary article of consumption.

This canal would connect all the bays and rivers of the gulf, furnish a safe and easy conveyance from all their ramifications, of the valuable timber and productions of their borders, to the

ports from which they could be most conveniently shipped, give an increased value to the public lands through which it would pass, and thus remunerate the government for its expenditures.

In the letter to the secretary of war, as in this communication, I have advanced opinions with confidence, which, in some particulars, perhaps in many, may be erroneous: but that confidence has been inspired by a conviction of their general correctness, from observations during nearly four years' residence in the country, and the best information which I have been enabled to obtain from intelligent persons, whose attention has been directed to its examination. In my humble judgment, the expense of the work has been greatly overrated. When Mr. Gallatin estimated the expense of the canal from the Mississippi to the Atlantic, at three millions of dollars, he had not the most remote conception that nature had done so much towards its accomplishment. What a different estimate would he have made, if he had known, that in three hundred and fifty miles of that distance, only twelve miles of excavation was required!

When the subject of canals is introduced, the mind is involuntarily led to the estimate, from a comparison with other works; and as there is but one of great magnitude in the United States, that is selected. A moment's consideration will expose the fallacy of such a calculation. The grand canal of New-York has been cut through a region where mountains were to be cut down, and valleys to be filled up; miles of solid granite to be excavated, rivers to be crossed by stupendous aqueducts:—a just comparison would demonstrate that several miles might be cut in Florida, where one could be in New-York.

The peninsula of Florida has been variously and erroneously represented, as it suited the visionary speculations of those who have written on the subject. I have lately seen it asserted, by one writer, that it was a solid mass of limestone; by another, that it was a sand bank; both equally remote from the truth. Limestone in masses, may be found in situations more elevated and remote from the sea; but in this peninsula it occurs in irregular strata, with the interstices occupied by earths and exuvia. This general character is demonstrated not only in the numerous sinks and cavities which indent the superstrata, but by the infinite number and variety of subterranean water-courses that pe-

netrate and pervade the bowels of the earth. And it is important to remark, that although the presence of limestone is a prominent feature, yet it is only a portion of the general mass, for, within a short distance of the margin of the great Alachua prairie, and near the centre of the peninsula, a well of thirty-two feet deep, penetrated twenty-nine of the distance through an uninterrupted bed of clay, to a compost of clay, sand, and shells, where water was obtained; and at another well, distant three miles, but near the same prairie, limestone occurred, but it opposed no other obstacles to excavation than what were easily surmounted by the axe and the spade. From these data, therefore, and others afforded by the spacious and deep beds of the lakes with which this region abounds, it is evident that the work of excavation for a canal is in a great measure performed by nature, and that the remainder may be completed, without encountering any of the difficulties inseparable from regions characterized by primary formation.

The route of this canal will pass through a country abounding with lakes and natural channels, and where excavation may be necessary, it will be in clay and argillaceous soil, and occasional limestone, and the banks could be secured, if occasion required, by the cedar and cypress, of which the vicinity furnishes an ample supply. As the object is to obtain more accurate information, by the employment of scientific engineers, any further remarks on this subject would be superfluous.

The attention of the American people has been strongly directed to internal improvements. The brilliant example of Great Britain in the old world, and of the states of New-York and Ohio in the new, furnish a happy augury of its extended utility to the citizens of this Union. The waters of the Eastern Main, are already connected with the lakes of the North, which, in their turn, by the enterprise of Ohio, will soon pour out their waters into the Ohio river, burthened with the produce of a mighty nation. To descant on the utility of a measure like this, would be useless. By it, the products of the soil are wafted to a distant depot; the tiller of the soil, no matter in what latitude he may live, no matter how distant his destinies may have thrown him from the ocean, finds, by the bounties of Providence, and the enterprise of government, the merchant at his door ready to ex-

change for his labours the price of its value, and thus new facilities are added to the channels of commerce, which have been scattered by the bountiful God of nature, with so prodigal a hand, over our continent.

Fifty years ago, canals were unknown in England, and within that period, fifteen millions have been expended in their construction; their foreign commerce has been enlarged, and their internal trade has far exceeded it in extent, value, and importance. One hundred and sixty-five acts of parliament have been passed for making and perfecting them. What results may not be anticipated from this internal navigation in the United States? By the completion of this work, the commerce of the whole continent will be changed; boats will pass with safety from St. Louis and Pittsburg, to the interior of Mississippi, Alabama, and Georgia; these states will return their products through the same channels to the centre of the Union, or meet shipping for foreign ports, around the Florida coast, at the most convenient ports. The period is not distant, when a boat starting at New-York will pass up the grand canal through the lakes, Ohio canal, and thence down the Mississippi along this channel, and discharge her cargo at Mobile, Pensacola, and St. Marks, Augustine, Savannah, or Charleston, by a safe navigation. The heavy item of transportation in time of war, is diminished ten fold. Cuba ceases to be of any importance to us in a political point of view; the Moro Castle has no terrors in time of war; the pirates are broken up; an expensive naval armament is no longer necessary; the public lands are enhanced in value; the commerce of the Indies, and of the southern continent, will pass through our borders, and the various commercial, military, and political advantages of this great nation "rising into destinies beyond the reach of mortal eye," will be developed and called into practical operation.

I beg leave to call the particular attention of the committee to the maps sent herewith.

I have the honour to be,

With high considerations of respect,

Your most obedient servant,

JOS. M. WHITE.

HON. WM. HENDRICKS,

Chairman of roads and canals in the Senate.

Extract of a Letter from J. M. WHITE, Esq. Delegate from the Territory of Florida, to the Secretary of War.

WASHINGTON, Nov. 20, 1825.

SIR: As delegate from the territory of Florida, I deem it my duty to address you on some of the subjects of internal improvement, in that portion of our empire immediately under the control of your department.

It is known to you that the territory of Florida has a defenceless seacoast of twelve hundred miles, bounded by the Gulf of Mexico on the west, and on the east by the Atlantic. From Suwannee river to Tampa bay, and from thence to St. Augustine, a distance of seven or eight hundred miles, there is no safe anchorage, and scarcely a settlement on the coast. It is proposed, by a canal or thorough-cut from Vaccassar bay, near the mouth of the Suwannee river, to the St. John's river, to connect the waters of the gulf and the Atlantic. The distance across the peninsula is said to be about ninety miles, and the distance of cutting, to unite the waters of both, is said to be, by one route, eighteen miles, and by another *only twelve miles*. The Suwannee river discharges itself into Vaccassar bay, which is represented to be spacious, affording a good harbour and anchorage. It is very probable, that, should engineers report in favour of a ship channel, which will be more particularly referred to hereafter, it may require double the distance of canalling, say twenty-four or thirty-six miles, to avoid the sinuosities of the streams; or some other points more advantageous for its commencement and termination may present themselves to intelligent and skilful engineers, who may be ordered to the spot; but I am assured the distance of canalling will not exceed the last mentioned distance.

The facilities of this enterprise are at once visible from an examination of the map; its advantages to a comprehensive mind will readily occur from the same inspection. The largest portion of East Florida is a peninsula, four or five hundred miles from the Georgia line on the north, to cape Sable on the south, and only ninety from east to west. The produce of the Western States rolling down the Mississippi, and that of the states of Missis-

issippi, Alabama and Georgia, and the territory of Florida, by their numerous rivers, pass into the gulf and along the coast of Florida, around the peninsula, twelve hundred miles. By a canal or thorough-cut, the distance would be shortened about one thousand. The navigation around the capes of Florida is the most dangerous on the American coast. The Tortugas banks, Florida reefs, and shoals of the Bahamas, combined with the depredations of pirates, occasion to our citizens an annual loss, estimated at five hundred thousand dollars. It would be needless to say that this canal or cut would furnish a safe navigation, as well as a short one, and the annual loss we now sustain would be doubly, perhaps four-fold sufficient to complete it.

I would beg leave strongly to call your attention to this subject at the present moment. Congress, at the last session, appropriated thirty thousand dollars to make estimates and surveys for internal improvement on an extensive plan; and, whilst we are yet a territory; that the withering doctrine of state rights may not blight the hopes of a rising country, we ask your aid. After the survey is completed, such an appropriation as was made by congress to connect the waters of the Muskingum with the Cuyahoga, a stream of Lake Erie, or the one subsequently made to connect the Wabash and the St. Mary's, and the Plein and Chicago flowing into Lake Michigan, will be entirely adequate.

The great duty of a government is to defend the territory committed to its charge, and its first policy, to invite emigration to its borders. The United States have in Florida about twenty millions of acres of lands. These have been partly surveyed, and one inconsiderable sale effected, and much of it is yet unknown and unexplored. By this canal, emigration would be invited to the interior, and extend its progress to the rich streams with which it would communicate. Farm houses and villages would spring up in what is now a wilderness, and the tide of population roll on to the shores of the ocean. Lands which are now a lake or morass, would bloom with rice or cotton.

It is not in this alone that a canal would benefit the territory. It would give to her means and facilities of defence which the nature of her coast has denied: it would make her ports the depots of foreign wealth, and the emporium of western products.

To the government, an immense profit would accrue, from the increased value of public lands; many thousand acres may be reclaimed from inundation, and a considerable saving, by what then would no longer be necessary, the expensive equipment of vessels, for the suppression of piracy. This canal has much higher claims to the attention of the government than the single interest of the territory can give it. The Western States of our Union are vitally interested in the measure. The Mississippi rolls its majestic course through four thousand miles of our richest territory; the numerous branches which contribute to its grandeur, are, themselves, mighty rivers, running from the north and from the south, from the east and west, fertilizing the regions through which they flow, and connecting, by the links of commerce, the whole Western world.

If, in a tract of internal navigation, so widely extended and diffused, spreading its wealth, facilities, and its blessings, over mountains, plains, and deserts, the pioneer of commerce should meet with some obstructions left there by nature, for the enterprise of man, it is his duty to remove them. It is for this that government is instituted, that the congregated wealth, energies, and intellect of a people, should be united, and directed to the diffusion of general good, when individual means would fail. It is for this, too, that our government has, or ought to have, the power, in its confederated union, that the national means might be applied alternately, with undivided strength, to the perfection of each of its parts, in all the power of national wealth, energy, and intercourse. We are not a nation of soldiers; and, but for an object such as this, our Union, in time of peace, would hang on the wearied limbs of the confederacy, like a rusty coat of armour, unseemly to the eye, and burthensome to the shoulders.

It is estimated that the produce boated down the Mississippi alone, amounts to nearly one-third of all the exports of the United States. This, passing into the gulf, draws its wearied way round the capes of Florida to the Atlantic coast. By the proposed canal, more than a thousand miles of sailing would be saved, the manifold dangers I have enumerated shunned, and the frequent wrecks, resulting in the ruin of thousands, totally avoided. I would ask, if these are not deep and important advantages? If these are not appalling responsibilities for that government to

incur, who will leave longer undone a work so cheap in the execution—so deeply freighted with blessings to one-half of its population? I would ask, if this would not stab deeper into the vitals of piracy, than any armament the government can equip? No naval force can approach their haunts, embosomed in creeks, forests, and morasses. No piratical force can approach our commerce, embosomed in a canal, through the heart of our country. The islands that afford them shelter, are approached no longer, and the vile trade is destroyed by robbing them of their victims. Such ports as Key West will no longer be a grave-yard for our brave seamen, and the occupation of their shores will cease with the cessation of their cause and necessity; our navy may then breathe a purer atmosphere, and boast a nobler service.

These, sir, are some few of its advantages in time of peace: but, should our happy country be again visited with the calamities of war, we should have, from Massachusetts to Mississippi, from Mississippi to St. Augustine, from one end to the other of our wide-spread empire, one connected chain of internal communication. The most distant sections of our country may then interchange their products, without the hazard of foreign aggression. The trade of the north and New-York, will pass up the great canal to Lake Erie, and from thence through the Ohio canal to New-Orleans; and from thence, through an internal navigation, which I shall have the honour to submit, in some future communication, to Mobile, Pensacola, and the coast of Florida, and up the numerous rivers of Alabama and Georgia; and these states, by the same route, will send back their sugar, rice, fruits, cotton, and timber. The government would find a facility and safety in the transportation of soldiers and munitions of war, hitherto so much desired; and, by the introduction of steam, which already spreads its benign influence over the world, extending to the noblest objects of art, and not disdaining the meanest, the transportation of the mail would be expedited; and commerce, communication, trade, and a common interest, unite together, by a chain of gold, the east and the west—shiver the fabric of sectional prejudice, and bring, by the annihilation of space and distance, the settlers on opposite frontiers into immediate neighbourhood with each other.

~ But, sir, in the now enlightened, though tardy policy of our government, it has been deemed sufficient, for the construction of a public work, that it was attended with local advantages alone. The grand canal of New-York, which pours into her treasury, like the fabled lap of Danae, showers of gold, is local, and partial in its benefits. The hundred canals of England, which intersect that country, are local and partial also ; and so with the contemplated junction of Ohio and Erie, of Chesapeake and the Delaware ; and these form a sufficient impulse to their construction.

In the canal for which we ask, I trust, sir, I have shown the deep local interest of my constituents. I trust I have done more ; that I have shown the deep interest of the government itself, and of all the states west of the Alleghany. I think I have shown it to be the most efficacious mode of suppressing piracy in those seas, in which they are nested, by deserting the seas themselves, and forcing them to seek a more honest subsistence, by diverting the commerce, on which they fatten, to a safer channel. At St. Augustine, or the mouth of the St. John's, where our commerce would flow into the Atlantic, you well know, sir, there are no islands, or forests, or imbecile governments, to whom they could fly for protection. It is all a boundless and friendly ocean, too remote from their harbours to dread their presence.

We have yet farther claims on the government for assistance. The youthful republic of Mexico has already signalized its independence by a projected ship channel, connecting the waters of the Pacific and Atlantic, through the isthmus of Nicaragua. This done, the commerce of the southern continent would disembogue itself in the gulf of Mexico, and pass directly along the coast of Florida. Thus, not only the western states, who trade directly through the gulf and around the peninsula, to the Atlantic, are interested in the Florida canal : but, make it a ship channel, or thorough-cut, and the whole eastern section of our seacoast and country, by a shorter navigation, a safer and better, through Florida to the gulf, and through Nicaragua to the Pacific, will find an outlet for their commerce. The mouths into the gulf of Mexico, of the two channels, as proposed by the projectors, are nearly opposite to each other ; and commerce would be saved around the coast of Mexico, of Guatemala, and Cape Horn.

four thousand miles of perilous navigation, and more than one thousand around the capes of Florida.

I hope, sir, these will not be considered the day-dreams of a visionary projector. The practicability of the scheme would be manifest to your engineers, on an inspection of the country. The expenses of the work cannot be compared with those of any other canal, because no similar experiment has been made; an estimate from the expenditures in the excavation of canals through the granitic and calcareous regions, it will readily occur to you, would be entirely fallacious. The soil through which this would pass, is of the description denominated by the geologist sea sand and river alluvion, passing below where the mountains terminate near the gulf, with few undulations, and requiring, in all probability, no locks or aqueducts. The greatest argument in favour of a thorough-cut, or ship channel without locks, across the peninsula, will be found in the situation of the gulf, and the consequences resulting from the fact, that the waters of the gulf are higher than the Atlantic by several feet, owing to two causes—the tropical trade wind blowing from the coast of Africa in that direction, and impelling the waves in the same course for twelve hundred leagues, until encountered by the east wind, the water is heaped up in the circle, or what is called by the natives *cul de sac*, formed by the shores of Mexico, Louisiana, and Florida. This is accounted for, as you have no doubt observed, by philosophical writers, on the same principles of analogy as the flood tide in the Mediterranean, and the accumulation of waters in the harbour of Marseilles, and the Red Sea at Suez. To this may be added an auxiliary cause, the discharge of all the waters of the tributary streams into the gulf. This, however, is of minor importance in producing the constant current known to mariners as the Gulf Stream, when its extent and magnitude are considered, and when we advert to the fact, that, of all the streams that flow into the Mediterranean, a greater quantity is taken off by evaporation, which is demonstrated by the influx of water at the Straits of Gibraltar. Whatever may be the speculations in regard to the cause of the elevation of the waters of the gulf, one fact is clear, that it must seek its equilibrium in some direction. This it cannot do between Yucatan and Cuba, because the double

current of air and water sets in from that quarter. The only channel left is on the north side of Cuba, along the Florida coast, and channel of the Bahamas. Being unobstructed in that course by the trade winds, and protected by the island of Cuba and the Bahamas, it pursues its direction with considerable velocity around the Atlantic coast, to the Banks of Newfoundland. It is apparent, therefore, that a communication once effected through the peninsula, the waters, which have the greatest accumulation on that part of the coast of the gulf, would seek an outlet by a gentle current, similar to the one on the Bahama banks. These facts, however, can be made known to you when the levels are ascertained by skilful engineers, with mathematical certainty. Should it be found, upon examination, that the current from the gulf to the St. John's was too strong for a vessel to stem, the distance is so short that steam-boats would rapidly ply along the channel, as they now do in the Mississippi, and tow the labouring vessel to its destined harbour. It will not escape you, that vessels coming around the cape, from the eastward, would avoid the influence of this stream for one thousand miles, where it is most dangerous. By this scheme, Cuba ceases to be, what she now is, the key to the Gulf of Mexico. The trade of America would then pass by neither of her coasts; and into whatever hands she may fall, whether the Patriots, who now threaten her shores, or remain under the dominion of pirates, who have long governed her councils, is of no moment to us, who have by this found an outlet of our own, distant alike from each section of her treacherous channel.

I have now endeavoured to present the facilities, advantages, and practicability, of a channel through Florida. If I have trespassed too long on your time and attention, I beg you to look to the importance of the subject, to the deep interest involved, of the territory, the government, the Union, and the world.—The necessity of extending to settlers the inducement to emigration; of protecting our coasts now so much exposed; of extending to the trade of your western country the protection of your parental care; of breaking up the nest of hornets who infest our trade, by making it our interest to desert those seas in which alone they can harbour themselves; of counteracting the influ-

ence of the Gulf Stream, in the intercourse from east to west; of facilitating the intercourse by mail of our distant regions; of giving to government, in time of peace or war, the facilities of universal internal transportation; and, finally, rendering the commerce of all nations that trade in that quarter, tributary to our shores, by making it their interest to pass from east to west, from west to east, from one great ocean that circles the globe to the other, directly through our soil. Such, sir, are some few of the advantages of a Florida channel, that I have attempted imperfectly to press upon your attention. The undivided interests of a mighty empire like this, are always pressing and urgent; and now that our climate is most congenial to the health of strangers, I would beg leave to suggest the propriety of an immediate survey—that the report may be made before the end of the session, and the great work, teeming with blessings to thousands, may be immediately consummated. I could here add, sir, that our government has abandoned the imposition of taxes for the purposes of revenue; and whilst we rely for that object on imposts and custom-house duties, there are no means so certain to increase them, as the opening of new ports, and constructing new channels of commerce. And whilst I believe that such incalculable benefits will result from the work proposed, the millions who will be enriched will never fail to remember in their benedictions the munificent government which achieved it.

I have the honour to be,

With high considerations of respect,

Your obedient servant,

JOSEPH M. WHITE.

HON. JAMES BARBOUR, *Secretary of War.*

Copy of a Letter from the Secretary of War to J. M. WHITE, Esq.

WAR DEPARTMENT, *November 29th, 1825.*

Sir: I have the honour to acknowledge the receipt of your memoir, dated the 28th instant, disclosing the great benefit which would result from a canal, to be cut through the territory of Florida, by which a short and safe passage might be substituted for the present circuitous and dangerous one around the Florida

escape; and recommending it to the attention of the executive, so far as to obtain a reconnoissance of the country by the United States' engineers.

It is due to the occasion to acknowledge, that the view you have presented imparts a high interest to the subject, and is entitled to the most respectful consideration. But, at this time, it is impossible to cause the inspection you request, as the means and persons under the control of this department are both wanting. Should it be the pleasure of congress to place under the control of the executive the necessary means for making further surveys of our country, the measure you suggest will claim its earliest attention, with every prospect, from its magnitude, of a favourable decision.

I am, very respectfully, sir,

Your obedient servant,

JAMES BARBOUR.

Hon. Jos. M. WHITE,

Delegate from Florida, now at Washington.

HOUSE OF REPRESENTATIVES.

Feb. 3, 1827.

Mr. Mercer, from the Committee on Roads and Canals, to which the subject had been referred, made the following Report:

The Committee on Roads and Canals, who were instructed "to inquire into the expediency of making an appropriation for opening and improving the inland navigation from St. Mary's river to the Tortugas, and from Appalachicola river, through St. Andrew's bay, to Chaactawhatchee, sufficient for steam navigation, in the territory of Florida," report in part:

That, among the objects of internal improvement submitted to the investigation of the committee, no one has been regarded as more interesting to the safety of the inland navigation of the United States, or more easy of execution, than the extension, where necessary, along the Atlantic sea board, of such short canals across the peninsulas which now intercept that long contemplated navigation, as shall render it continuous and uniform

throughout, so as to be, for vessels of suitable draft, secure in war from the depredations of a maritime foe, and, in peace, from the dangers of the sea along a hazardous coast.

In furtherance of this sentiment, the committee had designed to comprehend, in a general report, embracing many objects referred to them, a recommendation of a survey, with a view to the future removal of the obstructions of so much of this line as borders the Florida coast, and especially at that inconsiderable bar between Amelia Island and the adjacent continent which intercepts the inland approach from the Bay of St. Mary's to the River St. John's. It is one of the shortest links in the chain of inland navigation, which, leading from Barnstable across the first northern obstruction in the above line to Buzzard's bay, may be conducted to the borders of the Mexican province of Texas.

The River St. John's, the committee are assured, affords, at present, from its mouth at the southern extremity of Amelia island, eight feet water as high up as Lake George, or for a distance of one hundred miles; and six feet water thence, for———miles, to Lake Monroe, near the centre of Cape Florida.

The shoal between Amelia Island and the continent, one mile and a half in length, is reported to the committee to be covered with four feet water at high tide, and to be exposed at the ebb so as to be four feet above the adjacent navigable water, and, consequently, so elevated as to be impassable at any time by a vessel drawing more than four feet water. To deepen or cut around this shoal a six feet channel, would admit, from St. Mary's to the head of the River St. John's, a vessel drawing not more than six feet water.

So that besides the short but essential link of an extensive chain of inland seaboard navigation, which this short excavation will supply, it will, at the same time, perfect, for steamboats drawing less than six feet water, a secure passage from Charleston, in South Carolina, by Savannah, in Georgia, and St. Mary's, to the head of the River St. John's, and open to the purchasers of the unappropriated lands on both sides of that river, about to be offered at public sale, an access to those important markets for their future productions.

From such an improvement, which the committee are assured

can be completed for ten thousand dollars, an appreciation of those lands to an extent very greatly exceeding that sum, may, therefore, be confidently expected.

Involving the exercise of an unquestionable power of the Federal government over one of its territories, being presented to the consideration of the committee by a resolution of the House, and a letter from the delegate of Florida, addressed to the chairman of the committee, and making a part of this report, accompanied by a map of a Spanish survey; a chart founded on an examination of the coast of Florida, by order of the secretary of the navy, and an extract from the letter of a gentleman, reported to the committee to be a man of practical science, all of which render it easy to measure its probable cost, that cost being of inconsiderable amount, and to be incurred only after the previous examination and favourable report of the United States' Board of Engineers; and the work, if practicable and successfully executed, being calculated as well to subserve the future interests of the United States in peace and war, as to enhance the value of very extensive tracts of public land about to be sold; the committee, referring to the accompanying evidence, and the advantages which the contemplated improvement promises to realize, have considered it expedient to report.

WASHINGTON CITY, *December*, 1826.

SIR: A resolution which I had the honour to offer in the house of representatives, on the——instant, proposing an inquiry into the expediency of making an appropriation for opening and improving an inland water communication from St. Mary's to Cape Florida, and from Appalachicola, through St. Andrew's bay, to Chactawhatchee, was referred to the committee of which you are chairman.

I beg leave to submit, for the consideration of the committee, such suggestions as induced me to propose the inquiry, and which I trust will be considered of sufficient national importance to justify the inconsiderable expenditure that would be required. As both these objects are connected with the contemplated canal

across the promontory of Florida, to connect the waters of the gulf of Mexico and the Atlantic, the one being at its disembogement on the Atlantic coast, and the other in the line of interior navigation along the coast of the gulf to the Mississippi; a few preliminary remarks on the subject of that great national object may not be inappropriate or uninteresting.

The result of the preliminary surveys which have been made of the line of the Florida canal, is, in every respect, such as to justify the patronage extended to this work by congress at the last session. It was evidently the sense of the national legislature, that, while the proposed canal would, in its first operation, benefit the country through which it passed, open the public domain to rapid population, bring to a ready sale the public lands, and add to the aggregate of national wealth the products of a region probably not equalled in the United States, in the number and variety of articles to whose growth it is adapted; it would, in its indirect operation, afford the most important facilities to the whole coasting trade of the northern and eastern states, and to the whole inland navigation of the western waters.

It is in the highest degree gratifying to learn, that a work of such singular, and I may say unexampled utility, is found, on survey, to be capable of being excavated on terms far within the general loose estimates which had been previously formed. There is every prospect that this all-important communication between the two great portions of the Union between the Atlantic and the western waters, can be opened for a moderate sum; at the same time, the truest public economy would justify its being undertaken and executed even at the highest cost at which it has ever been estimated. A single supposition will prove the justice of this remark. Let us suppose that the hand of nature had already opened a communication, by a deep navigable river, between the mouth of St. Mary's, for instance, and that of the Suwannee, and that some foreign power being in possession of the Florida peninsula, should attempt to shut us out from the navigation of such a river. It is not too much to say, that the attempt would be thought an adequate cause of war; and that the blood and treasure of this Union would be expended to any amount to force the enjoyment of such a passage. It cannot then but be admitted, that

an expenditure of one or two millions would be most profitably and economically made, to construct an artificial communication, which, if already existing, it would be thought all important to preserve, at whatever cost or sacrifice. It was a position often assumed by Mr. Jefferson, that the natural situation of Cuba gave to that island such an effective command of the navigation of the gulf of Mexico and of the Mississippi, that they ought all to belong to a common jurisdiction; and that the possession of Cuba was, for this reason, an object which the United States ought never to lose from their sight; that this island was essential as the bulwark of our coastwise communication between the Atlantic and western waters of the country. Mr. Jefferson went so far, a year or two before his decease, as to assure a gentleman, from whom I had the information, that it was with a view to this policy that he recommended the construction of gunboats. That their use for harbour defence, in a war with Great Britain, was not the main thing he had in view; which *was a descent on Cuba*. It wants but a moment's reflection on the character of Mr. Jefferson's policy, to understand that no motive of aggrandizement, or thirst for conquest, could, in his mind, have laid at the bottom of these views. He regarded Cuba as a great fortress, standing midway on the route of our coastwise intercommunication; and at a point where nature has superadded so many obstacles to navigation, that even a feeble force, entrenched at the Havana, might hold our whole trade in check in this quarter. Such a fortress, he saw and felt, ought, by the great law of self preservation, to belong to the United States. Now, it is one of the most important views, which can be taken of the proposed Canal across the Floridian peninsula, that it almost wholly destroys the power of Cuba, as a check over our trade; this canal would be, of choice, the route of every vessel bound into, or out of the gulf of Mexico. Instead of passing ourselves along the shores of Cuba, all the foreign navigation, both of European powers and the colonies, and of the new American republics, would prefer this passage to the difficult and dangerous navigation of those already existing by nature. The United States would, consequently, lay a very considerable portion of the commerce between America and Europe, under direct contribution, in the

form of the tolls, which would justly be exacted, for the passage of this canal, and which, as they would be adequate to all the expenses of its preservation and repair, would leave the free passage a gratuitous advantage to American vessels.

Such would be the importance of the canal, even in the present state of the neighbouring regions. But when we look to the prospect of the opening of a canal through the Isthmus of Central America, we immediately perceive other and most important bearings of the Florida canal on the public prosperity. When the two works are executed, they will constitute the two keys to the navigation from the Atlantic to the Pacific. The exclusive possession of the Florida canal will enable the United States to make terms for a free passage through the canal of Central America; because, if this be denied us, we can condemn every vessel bound to the Guatemalian, to stem the Gulf Stream. The republics of Central America and of the United States, already on the most friendly footing, will be bound together by this new tie of a mutual interest. The Florida canal, therefore, will be of the utmost importance as the means of ensuring the United States every desirable privilege in any system of communication across the American isthmus to the Pacific—a communication which will unquestionably be burdened with heavy duties and tolls against all states not possessing such an offset. But in addition to this, and on a wider view of the subject, the moment the isthmus shall be excavated, then will the Florida canal become the highway of the trade, between Europe on the one side, and Asia on the other; and it is not too much to anticipate a change in the direction of the world's commerce, like that effected by the circumnavigation of the Cape of Good Hope.

Every subsidiary circumstance, favours and co-operates with the execution of the main design. The deficiency of harbours, felt to a considerable degree in every part of the southern coast, has been regarded as one of the great obstacles to be contended with, in perfecting a system of navigation like that now projected. It appears, however, from the researches of the engineers, that the bay of St. Joseph's, situated due north of Cape St. Blass, on the coast of West Florida, is perhaps the most valuable bay possessed by the United States, with the exception of that of

Pensacola, south of Chesapeake bay. Of its two entrances, the eastern has at least a depth of twenty-two feet, and the western of thirty; and its position on the Florida coast, is the most favourable that could be imagined, in reference to the proposed line of communication from the great western waters to the Atlantic.

The details of the interior surveys for the route of the canal across the peninsula, not being yet digested and reported to the department, are known only in the general result, which, as already stated, is in the highest degree favourable. Meantime, however, the surveys of St. Mary's, St. John's, the Atlantic coast of Florida to Boca Raton, and the interior course of the St. John's up to lake Monroe, lay open a field for internal navigation and intercourse of a magnitude and interest wholly unexpected.

Let us first consider the navigation of the St. John's, with its tributary streams, and the line of lakes which it connects with each other. This is truly a magnificent river. It preserves an average breadth of two miles for an hundred miles from its mouth, often spreading into lakes of four or five miles in width; its banks are covered with forests; it is navigable for large merchant vessels for a great distance, and for vessels of thirty tons as high as lake George, and on the bar of that lake there are six feet water; beyond this the water deepens, and it is navigable for vessels of the same size to its source: in other words, it admits a steamboat navigation as far south in the territory as $28^{\circ} 30'$. Almost all the land through which it passes, is public land; the growth of timber is pine, cypress, live oak and cedar, unequalled in quantity and quality in the United States. Whenever the lands are cleared, they become adapted to the culture of sugar, oranges, lemons, limes, almonds, olives, the gourd, rice, &c. according to the particular locality of the spot. All these articles have been, and at this moment are, produced in the territory, and their culture is capable of indefinite extension. To lay open this region to convenient access, and make it contribute in consequence to the public and individual advantage, would require but little labour and expenditure to be bestowed in straightening and deepening the channel. An expense estimated at ten thousand dollars,

in the opinion of competent judges, would completely open an inland tide navigation from $28^{\circ} 30'$, the head of the navigation of the St. John's, to Cape Roman in South Carolina, in $38^{\circ} 8'$, bringing to the Atlantic markets from our own territory all the products which can be brought from the West Indies.

Nor is the facility for a secure line of inland navigation on the eastern coast of Florida, less important to the immediate growth of the territory itself, and the consequent advantage of the Union. From St. Mary's to St. John's, within Amelia island, a safe and convenient route already exists, with the aid of some inconsiderable improvement. A canal of seven miles in length would, by means of Pablo river and North river, connect the mouth of the St. John's with the harbour of St. Augustine. A second cut of six miles, would open a communication from Matanza to Musquito, by means of the intermediate rivers and sounds. From Musquito to Indian river a passage would be opened by a cut of one half mile. Thus, by three portions of canal, extending in the whole about thirteen and an half miles, a line of coast of five hundred and eighty-six miles would be opened to a safe and commodious inland communication from St. Mary's to Tortugas. The nature of the soil affords every facility for the works necessary for this object. The lines necessary to be opened, pass through low grounds of a mean elevation of about seventeen inches above the tide water, and afford every facility for excavation, as they consist of marl, clay, sand, and vegetable deposite. It has been estimated that fifty thousand dollars would be more than sufficient to effect the whole work of opening this line of communication. The accomplishment, at so trifling an expense, of the project indicated, would extend our line of steam-boat communication along the southern coast for near a thousand miles; and within reach, by a short passage, of the island of Cuba, the whole West Indian Archipelago, the coasts of the Gulf of Mexico, and whatever passage may be opened to the Pacific.

The map of the globe may probably be searched in vain for a combination of similar natural advantages, requiring so little artificial aid, to be turned to such a prolific account of private and public benefit. It is confidently hoped that congress will pursue the course they promptly struck out last winter, and enter on the

execution of these most auspicious operations, in which the national revenue, the sale of the public domain, the population of a territory, the opening of new markets of demand and supply, the security of our coastwise navigation in all its extent, and our *command* of large branches of commerce, in which, hitherto, we have only *participated*, are but a portion of the great objects to be attained.

The map which I have the honour to enclose, will furnish the committee a more accurate idea of the localities of the country, than any description that could be given. It was made with a view of presenting each point, and is marked in reference to them, in such a manner as to furnish the most satisfactory information, upon the first inspection. My predecessor, general Hernandez, who first introduced the subject of this interior navigation to the attention of our government, has furnished me with a copy of a letter written to one of the departments here, several years ago, in which an interesting account is given of a captain in the Spanish service, who was sent by the provincial government with despatches to the captain general of Cuba, in 1812, in a canoe, with four men, through those sounds and rivers, and occasionally at sea, from the mouth of one inlet to another, until he arrived at Cape Florida; and from thence through the keys is said to be a safe navigation to the Tortugas, and from that point to Cuba is only about sixty miles. The committee will also derive much information of this country from the interesting report of colonel Gadsden, who was charged with the survey of the road from St. Augustine to Cape Florida. This line of communication from the southern extremity of our continent to South Carolina, derives an additional importance from the contemplated connexion of Charleston harbour with the Dismal Swamp canal, which will furnish an interior passage, at very trifling expense, to the seat of government of the United States, and to all the points on our southern coast, connected by their numerous rivers with this communication. If I may be permitted to anticipate the completion of this work, and to refer to the advantages it would secure, it promises results the most astonishing, to those who have never reflected on the subject, and develops the advantages we shall derive from the acquisition of that much neglected territory, ceded to us

in the late treaty with Spain. The island of Cuba, in its geographical extent, is very little greater than one of our largest states, and yet the exports of that island are about two-thirds of those of the whole twenty-four states. This great disproportion is in consequence of the greater value of their productions, in exchange or for market.

The territory of Florida, which is capable of producing nearly all the articles of Cuba, has scarcely attracted, in five years which it has been in the possession of the United States, any attention, in consequence of the desolation occasioned by the invasion of 1812, from which it is but just now recovering; the unadjusted state of land titles, from the delays of our government; the very limited information of its resources, and the want of this communication, by which its valuable productions could be carried from the southern extremity of the peninsula to Savannah and Charleston, and from those places to the eastern cities, in their numerous and regular packet ships and merchant vessels, or to the centre of the Union, by means of the Dismal Swamp canal, as before alluded to.

There are annually gathered at St. Augustine about twelve hundred thousand oranges, and in the vicinity about three hundred thousand more; there are some trees supposed to be one hundred and twenty years old, which bear, at this time, four thousand oranges. This quantity does not supply the United States with one twentieth part of the consumption of this valuable article of necessity, as well as luxury, and we are compelled to depend on Portugal, Spain, Sicily, France, the West Indies, and South America, for this delicious fruit, as well as limes, lemons, citrons, and olives, when they can be cultivated in Florida, in quantities sufficient to supply the whole demand of the United States. It is estimated that an orange grove of ten acres, which requires the attention of but two hands, will produce as much as a cotton or sugar plantation, by the employment and labour of forty. The inducements to such cultivation, will soon stimulate the activity and enterprise of those who are not so wedded to old habits, as to resist the impulses of interest, and the convictions of reason. I need not mention to the committee the valuable staples of sugar, rice, indigo, and sea island, or the long staple, Bourbon cotton, the last of which is very little in-

ferior to that of Brazil, and which is now cultivated extensively for a considerable distance from the sea shore, on the gulf and Atlantic side of the Peninsula, and westward towards St. Mark's and Pensacola.

The rice lands of Carolina are now selling at two hundred dollars per acre, and those of Florida, equally well suited to the cultivation of that article, are selling at only two or three dollars; and it is supposed by good agriculturists, that, in the vicinity of Indian river, the rice would not be inferior to that of Hispaniola. It has been ascertained that the tobacco of which cigars are manufactured in Havana, can be cultivated to great advantage in Florida, and yields more to the labour employed than any other cultivation. The quantity of cigars and tobacco imported into the United States, is supposed to amount to about five millions of dollars annually: the whole of this sum might be saved to the country, by a course of policy that would make it the interest of planters to direct their attention to such objects.

There is no part of our continent so well adapted to the culture of the vine, of every description, as Florida. On gravelly or sandy soil, it is known the vine produces less fruit, but of better flavour. The vineyards in France are generally on an argillaceous soil, such as those of Montpellier and Bordeaux, as well as many others in Germany, Italy, Spain, and Portugal; and with the same kind of soil and the same temperature of climate, we have reason to expect corresponding results.

There can be no doubt that the culture of silk, which has lately attracted public attention, and has been made the subject of congressional inquiry, can be as successfully carried on as that lucrative branch of manufacture and commerce is in the south of France or Spain.

Experiments have already been made, which demonstrate the adaptation of our climate to the growth of the mulberry tree, and practicability of producing the silk worm in as great abundance as they have it in Languedoc and Valencia. I will not, however, detain the committee with speculations upon the advantages of these fruitful subjects for public and individual enterprise: they are too obvious to escape attention, and have only

been alluded to in connexion with the subject, to present a miniature view of the advantages the government would derive from such a work. This channel would not only return to the public treasury ten times the amount of the sum expended in improvement in the increased value of the public lands, suited to such valuable staples, but would open a fine field for enterprises of a different character:—the fisheries at the Florida keys, the manufacture of salt, and wrecking, all of which are objects of great importance, worthy of, and have received the attention of our government.

It will afford the means of transporting the live oak, and other valuable timber, to our navy yards, and to market, from every part of the coast of East Florida: whether the ship canal shall enter the ocean at St. Augustine, St. John's, or St. Mary's, it will leave the whole coast, north and south of it, the bartering ground for the trade of the Mississippi. St. Augustine, which was pronounced by Mr. Volney, the finest climate on the continent, and Fernandina, will become great depots, and acquire a consequence which their natural and local positions give them elevated claims to; and the public property, in their vicinity, will receive a corresponding improvement in value.

Upon the subject of the other branch of the resolution, which proposes an examination into the propriety of opening the communication between Appalachicola, through St. Andrew's bay, to Chactawhatchee, I beg to refer to a letter, addressed, at the last session of congress, to the committee of roads and canals in the senate, to be found among the printed documents of that body, for a detail of the situation of that country, which has become more interesting from its contiguity to St. Joseph's bay. A cut of two miles would unite the waters of the Appalachicola, which is navigable for steam-boats several hundred miles, and St. Andrew's bay, and from thence to Chactawhatchee, another cut of four miles only would connect them together. From the point of connexion westward, through St. Rosa's bay and sound, by Pensacola, to within one half mile of Perdido, there is an open steam-boat navigation; and from Perdido to Mobile bay, a cut of four miles further would make the whole communication open to New-Orleans. It is believed that the whole work of excavation,

from the Mississippi to Appalachicola, being only about twelve miles, might be accomplished for one hundred thousand dollars, and the one the more immediate object of this inquiry, for about twenty thousand. The accomplishment of this work would open an interior steam-boat navigation of about three hundred and fifty miles coastwise, in almost a direct line from the Mississippi to the Atlantic, which would be necessarily connected with the ship channel across the peninsula, which has not only attracted the attention, but enlisted the support of the ablest men of the Union; an object which claims pre-eminence of all others, for the purposes of universal national benefit, as a saving to the government; as a source of incalculable profit to every commercial and agricultural citizen of this Union. It would save to the government the annual naval appropriation for the suppression of piracy: it would save half the amount in transportation of naval and military stores: it would save thousands in the article of mail carrying: to merchants of the north it would save an annual loss of two millions of dollars, arising from wrecks and pirates, beside the expenses of insurance: to the people of the west it would save the heavy loss they now incur by their unnatural trade of selling their produce at New-Orleans, and buying their goods in the Atlantic cities, when their merchandise should be returned to them through the same channel in which their productions are transported to market. It would, in a word, shorten the dangerous navigation of four weeks, avoid the Scylla and Charybdis of the United States, and succour our exposed frontier in time of foreign invasion; give an outlet to our local commerce, and an inlet to our foreign, safe from the dangers of the sea and the perils of warfare; opening by a cheap route, a ship, sloop, or steam-boat navigation from the Atlantic to the Mississippi, that would bid defiance to the British navy, lessen our dependence on, and solicitude about Cuba. These are some of the advantages of a work, I have ventured to pronounce, in national importance, paramount to all others. To suppose that it will not, at a period not far distant, be accomplished, would be to suppose the nation hoodwinked, or destitute of that energy and enterprise that has produced its present glory, and the prospects of its perpetuity.

The improvements which are now proposed are subsidiary to the great object, and derive an importance in connexion with it; but as local measures alone are deemed of sufficient consequence to justify the appropriation, and are of infinitely more consequence, in a national point of view, than many improvements provided for in a bill which passed last year, "for improving certain harbours, and the navigation of certain rivers and creeks," &c.

If, in the opinion of the committee, preparatory surveys should be necessary, the engineers are now at the place, and could make them in a few days; and I trust that the bill now in the house of representatives will be so modified and supported at this session, that provision shall be made by law, for the survey between Pensacola and Mobile bay, which is a most important link in the chain of communication I have attempted hastily to describe, and for a more accurate knowledge of which I must refer to the report of the committee of the senate at the last session.

The people of Alabama have too much intelligence and liberality, to make any objections to the communication between Mobile and Pensacola bays. They must be sensible, that the flourishing city of Mobile will command a considerable portion of the trade of the Mississippi, in its transit to the eastward, and will enjoy the benefits of a new traffic, in which heretofore they have never participated,—the returning commerce from the Atlantic intended for the markets of the western country, and particularly that which is destined for the upper parts of that rapidly increasing, enterprising, and respectable state.

In the distribution of the favours of the government, I am sensible of the force and justice of the sentiment, that a wise and expanded policy should be pursued, and that appropriations should not have the appearance of greater local benefits in one quarter of the country than another; but when works of an exclusive national character are proposed, in which the whole Union are interested, where not only the facilities of commerce, the augmentation of the value of the public domain, the improvement of an infant territory, belonging almost entirely to the government of the United States, but where, also, the treasury itself will be increased, rather than diminished, by the inconsi-

derable expenditure, it is confidently hoped that considerations of a local nature will not be permitted to have any influence on the present application. The small sums which have already been appropriated in Florida for roads, have, at the only public sale that has taken place in the territory, been returned to the public treasury in the increased price of the lands contiguous to them; and the twenty thousand dollars generously given at the last session of congress, for a survey of the canal, will be returned three-fold at the next sale, by competition of enterprising citizens, who have been attracted to the country from a belief that such improvements were practicable, and would be undertaken.

The improvement of the territory is nothing more than an improvement of the property of the nation; and to neglect any means of promoting their prosperity, would be as unwise as for a parent to neglect the patrimony of his children during their minority.

It has been a part of the policy of every liberal and enlightened government, to promote its provinces and colonies; and we may hope, that works combining such singular and pre-eminent advantages, will be executed by the United States.

I have the honour to be, with high considerations of respect,

Your obedient servant,

JOS. M. WHITE.

HON. CHARLES F. MERCER,

Chairman of the com. of roads and canals.

Allow me to add the following extract of a letter to me, from Z. Kingsley, a respectable gentleman in East Florida.

JOS. M. WHITE.

HON. C. F. MERCER.

Extract of a letter from Z. Kingsley, Esq.

“To obtain this great national, as well as individual advantage, and lay all this part of Florida open to convenient inland navigation, would require only a trifling labour, in straightening the present crooked channel between St. Mary’s and St. John’s, and deepening the middle, (which is dry at low water,) about

four feet—this would give eight feet at high water, in common tides; or by cutting new channels of connexion through the marsh, between the creeks, amounting in all to about one and a half miles of excavation in length, which would have the same effect.

This work, if economically performed, would not, in my estimation, exceed ten thousand dollars, and would complete an entire inland tide navigation from lat. $28^{\circ} 30'$, the head of the navigation of the river St. John's in Florida, to Cape Roman in South Carolina, lat. $33^{\circ} 8'$."

Mr. Everett's Letter to Col. White, on the subject of Canals.

Washington, January 14, 1826.

HON. JOSEPH M. WHITE,

Dear Sir—When you yesterday expressed the wish that I would furnish you with any facts in my possession, on the subject of canals, of a nature to throw any light on the projected junction of the waters of the Gulf of Mexico with those of the Atlantic, I did not omit to caution you against expecting from me any thing but a few facts of a very general nature. On looking for a few notes which I had formerly made on the subject, I am sorry to find that I have left them at home; and that what I have to offer you, is still less likely, than I was sensible it under any circumstances would prove, to be of sufficient importance to be communicated to the committee of the senate. The object, however, is one of such deep and general concern, that I think it a duty to contribute in any way, however imperfectly, to its accomplishment.

The construction of ship canals, has, from the earliest period of antiquity, been one of the most favourite means, to which powerful states have resorted, of improving the condition of their subjects, by an extension of the facilities of commerce. Several noble projects of this kind have succeeded: some have failed; particularly those where a too sanguine expectation has been raised of uniting seas that lie near each other, by the agency of rivers respectively flowing into them, while their head waters spring perhaps from the same mountains, without reflecting on the

insuperable obstacles which the peculiar character of the mountains or the rivers, may throw in the way. This remark is particularly applicable to the plans attempted and pursued, at such vast expense, in Sweden, for uniting the Wener lake with the sea. This case, and numerous others, are sufficient to convince us, that it is of vastly less importance that the seas to be united should be very near each other, than that the intervening space should be favourable to the object.

The first undertaking of this kind, of which we have any particular account, is the canal, by which a communication was opened between the Red Sea and the Nile. The character of the intervening country, is admirably adapted for the opening of such a communication; and it may be doubted whether the surface of the globe presents more than one other region, over which an artificial navigation could be effected, with such general advantage to the commerce of the world. I allude of course to that which separates, by a narrow isthmus, the Atlantic and Pacific Oceans. This ancient canal, if the accounts are not erroneous, was unnecessarily wide; and, from ignorance of the principles of hydraulics, was attempted for ages, before it was accomplished. Under the Ptolemies, however, it afforded the means of carrying on a most valuable commerce with Arabia and India; and was unquestionably a great source of the prosperity of Egypt, under the princes of that house. It went to ruins, with every thing else in Egypt, on the decline of the Roman empire; but its route is said, in some parts, to be still visible.

The abortive attempts so often made to divide the isthmus of Corinth, by a navigable canal, is another illustration of the fallacy of all hopes founded on extreme vicinity of the seas to be united. From the height of ground of the isthmus, and the want of water, it would probably be impossible to effect the communication through this very narrow strip of land.

On the other hand, in consequence of a favourable configuration of the soil, and abundance of water, we behold, in China, the astonishing spectacle of a canal extending from Canton to Peking, a distance of more than eight hundred miles, with a breadth of fifty, and a depth of nine feet; and, vast as it is, forming but a small part of the inland navigation of that empire. So, too,

we behold the Caspian and the Neva united, in the Russian empire, by the grand chain of their lakes and canals; where, however, the resort which has been had to the channels of the rivers and lakes, in some parts of the route, to the exclusion of artificial works, has rendered portions of the line almost useless in dry seasons.

I have already alluded to the canal uniting Gottenburg with the lake Wener, and forming part of an inland communication between the Sound and the Gulf of Bothnia. What the actual state of this enterprise—for so many ages pursued in Sweden—may be, I am uninformed. Parts of the line have long been, at vast expense, but with corresponding utility to the country, completed, traversed, and navigated by a very busy inland trade. Portions of the works between the Wener lake and Gottenburg, are the admiration of every traveller.

A canal has been for some time completed, in the neighbouring region, to unite the German ocean with the Baltic, by means of the river Eyder; and thus to avoid the necessity of doubling the point of Jutland, and winding through the Sound. This canal was projected to be of a depth of ten feet, but I believe it has been executed on a smaller scale, so as to afford accommodation only to the lighter coasting craft. The want of such a canal was a chief cause of the growth of Lubeck, which became a depot between the Sound and the Baltic on the one side, and the Elbe on the other.

To restore to Lubeck the trade diverted from it by the opening of the Holstein canal, it has been proposed to cut another canal directly from Lubeck to Hamburg. The distance is short, and the intervening space favourable; but an enterprise of magnitude and expense is hardly to be expected from the petty princes, through whose domains a portion of this canal must pass.

The two canals most important in the present connexion, are certainly the Caledonian canal in Scotland, and that which extends from the Helder to Amsterdam, in Holland.

The entire history of the Caledonian canal—its rise and progress, and every article relative to its construction—may be found in a series of twenty-one reports, made by the commis-

sioners to the house of commons, and comprised in two folio volumes of the parliamentary reports. A sketch of the work as projected, may be found at the close of Phillips's History of Inland Navigation; and a condensed account of it, as completed, is contained in Dupin on the Commercial Power of Great Britain, vol. ii. p. 201. A great deal, however, may of course be learned from the commissioners' reports alluded to, which is not to be found in Dupin.

The first suggestion of this grand work was made by the illustrious Watt, in 1773. Its object was to combine the several lakes known under the names of Loch Ness, Loch Oich, Loch Lochi, Loch Eil, and Loch Lymche, into one unbroken communication between Fort William and Inverness. These lakes lie in the middle of Scotland; and, by opening this canal, vessels would be enabled to pass from the North Sea into the Atlantic Ocean, or the Irish Channel, without making the dangerous circuit of the Orkneys and the Hebrides. The work was effected by excavating, in the whole, about twenty-one miles of canal, and thus obtaining a navigable line of seventy miles. The breadth of the canal is fifty feet, its depth twenty, and it is navigable for frigates of thirty-two guns. There are twenty-three locks on the line, eight of which form one continuous series, at the southwestern extremity of the canal, and are known by the name of Neptune's Stairs.

In the construction of this canal, numerous and formidable obstacles were encountered, owing to the necessity of deepening the lakes, which formed a part of the line, and in consequence, also, of the impetuous character of some of the streams, partly depended on as feeders. The whole was accomplished in nineteen years from the first survey, by parliamentary grants, at an expense of about four millions of dollars. It was opened on the 23d of October, 1822, when a steam-boat and two sloops of war passed from the locks at Muirton, near Inverness, to Fort William. The passage from sea to sea, a distance of sixty-nine miles, was effected in thirteen hours, including the time requisite for clearing twenty-two locks. Dupin, vol. ii. 217.

The canal from the Helder to Amsterdam, is a work of which the possibility would hardly have been conceived by any other

people than that by whom it has been achieved, and who unite, in equal degrees, the qualities of patience and enterprise. No inconsiderable portion of the route of this canal, lies over a tract as low or lower than the level of the neighbouring seas; and it is through a region like this, that patience and enterprise have carried a canal, near fifty miles in length, navigable for vessels of war.

The object of this canal was to enable vessels of burthen to come up to Amsterdam, and thereby to avoid the delay and expense of carrying on the foreign commerce of that city by means of trans-shipment and lighters. Very interesting and scientific statements were published about a year since, I believe, by Loammi Baldwin, esq., in one of the newspapers of Boston. I had supposed that the remarks of this accomplished civil engineer were in my possession at the time I undertook to communicate to you some data on this subject; and it is with real concern that I find them not to be among my papers. I have, however, sent for them to Boston. Meantime, the following letter from Mr. Parker, consul of the United States at Amsterdam, which I find in another Boston paper, will serve to give some general ideas on the subject.

“Amsterdam, 3d January, 1825.

“Sir: I presume it is not generally known to the merchants and ship owners of the United States, that a canal has been cut from the Helder to this city, for the purpose of enabling large vessels to come up and discharge their cargoes here, thereby avoiding the expense and inconvenience of employing lighters. After a labour of several years, attended with great expense and many difficulties, the work is now nearly completed, and the canals have been opened. A frigate and several merchantmen have passed through, proving, beyond a doubt, notwithstanding all that prejudice and ill-nature have said to the contrary, the accomplishment of the great object in contemplation.

“The whole length of the canal from this city (Amsterdam) to the Helder, is forty-eight English miles. The depth is now sixteen feet; but it will be increased to twenty in the course of the ensuing summer. Steam-boats are now building, for the purpose

of towing large ships; smaller ones may be drawn by horses; and when the wind is favourable, the canal regulations permit the use of fore and aft sails. It is calculated, that six horses will tow a ship of three hundred tons, with her full cargo on board; and that when the path for horses is completed, such a vessel may be brought from the Helder to our harbour in two days, at an expense not exceeding one hundred florins (about forty-two dollars.) The frigate *Bellona*, was four days on her passage to the Helder, owing to circumstances which it may be proper to explain. The canal having been opened, it was the wish of government, that a national ship of war should be the first to pass through it; and this was accomplished under every disadvantage. The weather was extremely boisterous, and the days very short; there being only nine hours daylight. The ship drew as much water as the depth of the canal; and the want of posts (dolphins,) at the different turnings, made it extremely difficult to steer a ship of such great length. But the most serious difficulty was the want of a path for horses; and the road at the side of the canal being covered by ground newly thrown up, could not support the weight of the horses, so that they sunk in the mire.

“I am authorized to state, that in the course of a few months, every obstacle will be removed. Posts will be placed at short distances, along the whole canal, to assist in steering, and for making vessels fast when necessary; and the horse path will be put in proper order, so as to give every facility for the thorough accomplishment of the object in view.

“Since the above was written, several large vessels have come through the canal: some without the assistance of horses. An English frigate made the passage from the Helder, in thirty-four hours.”

It would be a waste of time for me to enlarge on those circumstances, which point out the proposed route of the canal across the Floridian peninsula, as peculiarly adapted for such an enterprise. The whole Atlantic coast, and the whole western country, seem equally interested in it. Its feasibility must, of course, be ascertained by accurate survey. As far as the maps can be relied on, the country interposed between the St. John's and Vaecassar bay, is highly favourable to the work. Of this, however, no one

is better able to speak than yourself. Permit me, dear sir, to express the hope, that we may, before many years have elapsed, behold in the Florida canal the most important link in that grand chain of communication which was projected by Mr. Madison in 1796, in a national road extending from Viscasset to Savannah; and matured by Mr. Gallatin, during the administration of Mr. Jefferson, in a series of canals co-extensive with the Atlantic coast of the United States. The subsequent accession of Florida has not only presented a point where an artificial communication will be of more general utility to the country, than any one of the Atlantic canals proposed in that admirable report of Mr. Gallatin, (which will ever stand as the text book of the American system of internal improvements;) while the territorial relation of Florida to the Union, as you have justly observed in your letter on this subject to the secretary of war, removes all scruple as to the constitutional power of congress to engage in the work.

I am, dear sir, with the highest respect,

Your friend and servant,

EDWARD EVERETT.

THE END.





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