

F
1523
.5
B4
phot.

BENARD

NICARAGUA
AND THE
INTEROCEANIC
CANAL

BANCROFT

The Bancroft Library

University of California • Berkeley

Digitized for Microsoft Corporation

by the Internet Archive in 2007.

From University of California Libraries.

May be used for non-commercial, personal, research,
or educational purposes, or any fair use.

May not be indexed in a commercial service.

NICARAGUA

AND THE

INTEROCEANIC CANAL,

EMILIO BENARD,

ORDINARY AND MINISTER PLENIPOTENTIARY OF
THE REPUBLIC IN THE UNITED STATES.

WASHINGTON CITY,

1874.

A FEW CONSIDERATIONS

RESPECTING

THE NICARAGUA SHIP CANAL.

The discovery of the new world, and the project of cutting a canal through it to facilitate communication between the Atlantic and Pacific oceans, are coetaneous. But the elaboration of those deeds which mark an epoch is slow. Great events often need centuries to be executed, and the previous discussions to which they from time to time give rise, are only the forerunners of their future realization.

While the various countries of America were still colonies, the canal was not forgotten, it is true, although no adequate efforts were made to secure its construction. The commerce of those days did not demand such an auxiliary. When, however, the entire continent began to share that liberty which was first secured and proclaimed by the United States; when it found itself the arbiter of its own destinies, every section that possessed an isthmus became enthusiastic for the construction of the great work, thinking that the time for its accomplishment had arrived.

Such was the feeling in Central America, and especially in Nicaragua, when that country became a sovereign nation, for Nicaragua thinks that the canal will be the most speedy and efficacious means to promote her prosperity, and that its construction is only a question of time.

Entertaining this conviction, the Nicaraguan Government has always received proposals for the construction of the work with enthusiasm. It may be confidently asserted that so great joy never prevailed in that Republic,

as when the California gold mines were discovered, because it was thought that, by reason of the impetus which would thus be given to emigration and to the commerce of all nations, the longed-for moment was at hand.

Over-haste, resulting from the conviction above referred to, has, at various times, been a source of disappointment to the Republic, negotiations having been entered into with parties who were powerless to fulfill their engagements. These disappointments, however, have not discouraged her; she has remained unshaken in her belief that the interest of the world at large will one day cause the powerful hand to be uplifted, which is to open communication between the two oceans.

The United States, that enterprising nation, which has the gift of accomplishing what it designs, and which has the genius and the power to thrust aside all obstacles that stand in the way of great things, have doubtless inspired the men who control their destinies, and who will, beyond a doubt, satisfy their noble aspirations.

This Government has sent various exploring expeditions to examine the routes by which the work was considered practicable. This shows the lively interest with which this matter is regarded at the present time, and furnishes evidence that it will hereafter receive the consideration that it deserves.

In view of the many facts now in possession of the public, which it is unnecessary to repeat here, the expeditions which have visited Nicaragua are satisfied that they have found the route marked out by nature.

If Nicaragua would be gratified to see the canal constructed through the territory of any nation on this continent, inasmuch as they are all her sisters, and the benefits accruing from such a work would be enjoyed more or less by all, her gratification would of course be greater should the territory selected be her own.

The engineers who have examined the Nicaraguan isthmus have seen that there are no serious obstacles in the

way of the enterprise, and although their observations were confined to the line of the canal, they nevertheless gained a clear idea of the elements of wealth in which that favored region abounds; still, a short description will not be superfluous, for the benefit of those who have not visited the country, and of those who may have become or who may desire to become directly interested in the matter.

I.

The healthfulness of the Nicaraguan coast, on either ocean, could not be greater than it is; it is exceptional, because the coasts of tropical countries on this continent are for the most part sickly. At San Juan del Norte, Capo Gracias, Corinto and San Juan del Sur, families, both native and foreign, have been living for many years, and have never found it necessary to emigrate on account of diseases prevailing in those places. When the journey to California was made via Nicaragua, hundreds of thousands of persons crossed that isthmus, and, notwithstanding the delays rendered necessary by a defective transit, the health of travelers was never known to suffer from epidemics. This statement will be vouched for by the various exploring expeditions which this Government has recently sent to Nicaragua. The many persons composing the same have had a good opportunity to appreciate, during the performance of the long and painful tasks allotted to them, the incomparable salubrity of that delightful climate, which is cooled and purified by a constant breeze.

Along the river San Juan this salubrity is to be wondered at, when we consider that its banks are covered with the most luxuriant vegetation. Hundreds of *hulecos*, or rubber-hunters, penetrate those dense thickets, being engaged the whole year round in extracting that gum, the trade in which, such is its abundance, keeps many persons, both natives and foreigners, at San Juan del Norte,

there being not a few, who, with this one article, have amassed considerable fortunes. These intrepid developers of the country's wealth, whose life is passed in the midst of privations and hardships, enjoy the most perfect health.

It would be superfluous to speak of the interior of the country, where the climate is the most delightful that can be desired. Americans and Europeans who live there can best testify to the truth of this statement. However little knowledge one may have of that region, the excellency and variety of its climate will be readily perceived, the northeast wind blowing there during the entire year, and the country extending from the fertile plains of the Pacific to the elevated table-lands which overlook the Atlantic on the north.

II.

The Central American States, like almost the whole of America, are very mountainous, and the various mountain-chains and their branches intersect each other in every direction. Nicaragua alone is there an exception in this respect. Four of its departments, Rivas, Granada, Leon and Chinandega, the principal ones as regards the development of their agriculture, commerce and manufactures, are level, especially the one first named, which comprises the isthmus proper, and which has always been considered as the most suitable locality for the canal.

The Andes range of mountains, so lofty throughout its whole extent, is broken in Nicaragua, as if Nature had designed to remove this great obstacle, leaving the rest of the work only to be accomplished by the skill and labor of man.

III.

The materials which would be required for the construction of the work are found in inexhaustible quantities in

the departments referred to. The white and brown lime found in the numerous pits which they contain, is of so excellent a quality that mortar made from it is not inferior to Roman cement. Commander Edward P. Lull, U. S. N., and Mr. Aniceto G. Menocal, civil engineer, both distinguished explorers of that isthmus, were surprised at the solidity of sundry very old edifices built with this material, and have brought specimens of it to this country for the purpose of submitting them to scientific examinations.

Immense quarries, containing stone in every variety, are found in the immediate vicinity of the proposed line of the canal. Moreover, that none of the requisites for mason-work may be wanting, clay of a superior quality, suitable for the manufacture of brick, abounds in the same locality.

The abundance of timber which would be available for the enterprise, from San Juan del Norte to Brito, or any other point on the Pacific which might be selected as one of the termini of the canal, is still more prodigious, and not only is timber found suitable for the construction of buildings, vessels, or other preparatory works which might be required, but also of a quality which is remarkable on account of its durability when placed under ground or under water.

The engineers of the expeditions which have explored the isthmus, were frequently struck with astonishment at the lavish bounty with which nature had provided, along the entire route examined by them, all the materials that would be required.

The prodigality of Nature, however, did not end there. She also designed to facilitate the conveyance of these materials, and formed that wonderful chain of lakes, which extends from north to south throughout the centre of almost the entire Republic, thus creating a natural and permanent means of communication, which leaves nothing to be desired. She also formed the plains which lie be-

tween the lakes and the Pacific, and which are now intersected by wagon-roads in every direction.

IV.

While Nicaragua has, in abundance, the materials required for the work, she also has a population which understands its meaning; which desires it, and which will give it a decisive impulse by furnishing its quota of mechanics, and of intelligent, docile laborers, who are inured to every kind of toil. The wages of such persons, which are so high in other countries on account of the heavy cost of living, are in Nicaragua one dollar per diem for the class first mentioned, and fifty cents for the latter. The population of the Republic being three hundred thousand, it could easily furnish from three to five thousand men for the work in question, without prejudice to its agriculture and other branches of industry. The Nicaraguan laborer, moreover, must be considered as the most perfect model of what is required for work of this kind; having a thorough knowledge of the country, through his fondness for traveling, not being affected by the heat of the tropics, accustomed to labor, unmindful of the inclemency of the weather, frugal in his mode of life, of a cheerful disposition, and faithful to his employer, he seems to possess every condition needed in order to render his assistance valuable in the highest degree.

Not only Nicaragua, however, will furnish men to aid in the accomplishment of the great project. Her sisters and neighbors, the Republics of Central America, containing a population of two millions, will lend their powerful aid. It may be said that the laboring class of Guatemala, Salvador, Honduras, and Costa Rica is as well adapted to perform the labor which this work will require, and to support the hardships incident thereto, as is that of Nicaragua. Besides, the feeling which prevails among the people of those countries, and the friendly disposition of

their governments, are a guarantee of their hearty co-operation. The inhabitants of all those countries justly consider the Nicaragua canal as a national work, and as the most effective step which can be taken, in the way of peaceful measures, towards the establishment of a Central American Union. The official communications which have recently been addressed to Nicaragua by those Governments, and which will be found at the end of this pamphlet, furnish reliable evidence of these generous sentiments.

V

Now that I have spoken, although very briefly, of the favorable conditions presented by that portion of the Republic which extends along the Pacific, and of the peculiar facilities which it offers for agriculture, it will not be out of place to make some reference to the almost untouched wealth of the broad strip of land which borders on the Atlantic on the east.

The Departments of Segovia, Matagalpa, Chontales, and the Mosquito territory, which are situated in that region, could not have been more munificently endowed by nature. Favored, as they are, by the variety of climate resulting from the elevation of their mountains and the depth of their valleys, watered by innumerable rivers and streams, motive power and wealth of soil present themselves there at every step to the industry of man. Medicinal and fragrant plants, such as sarsaparilla, ginger, and vanilla, are everywhere met with; vast forests are found, consisting of logwood, moran-wood, mahogany, ebony and various other kinds of wood used in dyeing and fine cabinet-work; gums and balsams, such as copaiva, caoutchouc, balsamum nigrum and gutta percha abound. The richest deposits of gold, silver, quicksilver, copper, and other minerals are found at the very surface of the earth.

Who does not know that Chontales is called the gold

region? And what shall we say of the animal kingdom? So many are the varieties of which it is composed, that it would be necessary to write many pages in order merely to give an idea of them.

In those Departments we find, succeeding each other in admirable harmony, extensive plains of natural pasture, where vast herds of neat cattle and horses graze; fertile table-lands at a considerable height above the level of the sea, where wheat grows by the side of the sugar-cane; and, on the lofty and cold mountain-tops, wild silk and vegetable wax are produced in the immediate vicinity of the majestic forests of pitch-pine.

Those regions only need adequate means of communication in order to offer their incalculable wealth in the utmost abundance to the throngs of emigrants who annually leave their native land, fleeing from the sterility of a soil which has been impoverished by long and uninterrupted cultivation.

Few localities are so well adapted as those which I am now describing, to one of the imperative necessities of the canal. This is referred to by Hon. G. M. Robeson, Secretary of the Navy, in his report for 1872, in the following remarkable words: "The route of the proposed canal, besides geographical position, should, if possible, be through a locality capable of developing local population, wealth, trade, and agriculture; for these, in themselves, would be a protectorate and guardian of the great work, and would provide sufficient supplies, repairs, and other necessities to passing navigation, which, in localities less favored or more remote, could only be secured at great expense and under certain conditions."

VI.

Nicaragua, as everybody knows, possesses, among its various lakes, two which are especially worthy of attention, viz: Lake Managua and Lake Nicaragua, whose

waters could not be better than they are for all the ordinary uses of life. The former, which is smaller than the latter, flows into it through the Tipitapa river, and both, together with that natural canal, occupy an extent of nearly two hundred miles in length. Many never failing rivers and streams, which water the vast sides of the great basin of those lakes, discharge their waters during the entire year, more or less abundantly, into those immense reservoirs.

The smaller lake, which is highly picturesque, and on the shore of which stands the capital of the Republic, terminates at the north near the Pacific. A strip of land, eighteen miles in width, separates it from that ocean. This circumstance, together with that of its being connected with the great lake by the Tipitapa river, doubtless led the illustrious prisoner of Ham to suggest this line as the best for the proposed Nicaragua canal. Now that the question has been examined and discussed in all its bearings, science has demonstrated the superiority of that other portion of the isthmus, which was selected by Colonel Childs as being the best route, and which, in view of the additional light which has been thrown upon it by the recent expeditions of Commanders Hatfield and Lull, is the one which decidedly deserves the preference. The great lake and the Pacific are in such close proximity to each other, in this section, that the noise of the waves of both is often heard at the same time. The shortest distance between them is not greater than ten miles; and notwithstanding the curves of the line now proposed, which terminates at the port of Brito, the length of said line does not exceed sixteen miles.

If Lake Managna is, for many reasons, deserving of attention, Lake Nicaragua is infinitely more so. With a length of one hundred and ten, and a breadth of thirty-five miles, it cannot properly be called a lake; it is really an inland sea. The great body of water which it pours into the Atlantic through the San Juan river, and which is

estimated to be thirty times greater than the amount needed for the purposes of the canal; its small elevation above the average level of the two oceans (106 feet); the great relative depth of its waters; the constant breeze which cools it; the fertility, the abundant products, the population and the continual traffic of its shores; its excellent ports; its numerous and rich islands, among which Ometepe is a real wonder, on account of the majesty of its cone and the spontaneous growth of its vegetation; all these inestimable conditions make that great lake the true harbor of the canal, where all the squadrons of the world will at all times be able to find shelter.

VII.

As a complement of the advantageous circumstances which militate in favor of the proposed canal, it is necessary to give an idea of the total extent of the territory of Nicaragua, of the population which it is able to maintain, and of the desire of its inhabitants to promote immigration.

The Republic embraces a surface of 34,500 square miles of a soil whose fertility is such that it could easily support several millions of inhabitants. One third of this surface is owned by individuals, and by communities; the remaining two thirds are the property of the nation, and are one of the sources of income of the public treasury.

Foreigners, as well as natives, can now purchase these lands at the insignificant rate of from twenty to forty cents per acre, according to their quality, and the kind of wood which they contain; but they may even be obtained by the former without the payment of any money whatever. The people of Nicaragua, being well aware of the advantages consequent upon immigration, have taken various measures to promote it, among which may be mentioned the passage of the law of March 10, 1865, in relation to land-grants. Even if the Republic had

not, on sundry occasions, furnished incontestable evidence of its liberality and of its earnest desire to place itself in contact with the most advanced civilization, this law alone would be sufficient to prove to the whole world that selfishness has no hold upon the Nicaraguan people. The law in question authorizes the government to grant to any family (of whatever nationality) coming to the Republic with the intention of becoming naturalized, as many as one hundred and twenty *manzanas** of public land, such families being, moreover, entitled to use the lands of communities on the same terms as natives of the country. The same law exempts the immigrant for ten years from municipal service, and from the performance of military duty. There is no tax on property in Nicaragua.

VIII.

I now pass on briefly to sketch the distinguishing characteristics of the proposed Nicaragua canal in relation to its practicability as regards the work of the engineer, and the expectations of the capitalist; since the necessity of a ship-canal through one of the isthmuses of America is a question which no longer admits of debate.

IX.

It is very noteworthy that throughout the route proposed for the construction of the canal in Nicaragua, the maximum depth of the cut is so small, that the terrible bugbear of a tunnel is entirely eliminated.

The difficulties and dangers connected with such a work would be incalculable.

The exceptionally great width and height of such a subterranean passage, the quantity of timber that would be required even to begin the construction of so vast an arch, the enormous cost of the entire work, and finally,

*The *manzana* is a square containing ninety-two yards on each side.

the damage to which it would be liable from the formation of fissures and from the considerable filtration produced by the tropical rains, are obstacles of such magnitude that, were it necessary to overcome them, their influence in the scale of probabilities would be decidedly adverse.

X.

That inexhaustible body of water, the great lake to which I have alluded, is no less remarkable, situated, as it is, at the highest point of the route, and yet at such an elevation above the level of the oceans, that the descent will be very gradual.

The supply of water, in all plans for an inter oceanic canal to cross the American continent, has perhaps always been the most important problem, a satisfactory solution of which has never been found. The combinations which have been proposed, in order to supply this great want, have been very complicated, involving heavy outlays of money, exhausting the resources of the engineer, and utilizing every available drop of water, to form a reservoir at best but scanty and badly situated.

In Nicaragua this work is done, and on a grand scale, as nature alone could have done it. Not even the slightest effort on the part of the engineer is required there, and there is sufficient water not only for one, but for thirty canals.

Besides, the dimensions of that lake, and the other advantages which it possesses, make it, as I have already remarked, the true harbor of the canal. This circumstance lessens, very considerably, the importance of the harbors required by the work, and reduces them, so to speak, to mere points of entrance, having the required width and depth. On the Atlantic side this fact is more conspicuous. At a distance of six miles from the coast, following the line of the proposed canal, across an almost level section of country, is found Silvio lake, which is thor-

oughly sheltered from the winds, and the water of which is drinkable. It has a surface of two square miles, and a depth, at present, of sixteen feet, with a muddy bottom. Not a single lock would be needed between this lake and the ocean.

XI.

The subject of locks, in the estimates for the great work, is also one which has perplexed the engineer on all the isthmuses which have been explored. In some localities, an exorbitant number is proposed, thus impeding the general traffic; in others, the limited space in which they are to be constructed, requires complicated, expensive, and probably dangerous combinations.

In Nicaragua, the insignificant elevation of the great lake above the level of the oceans, simplifies this problem amazingly. Scarcely ten locks, of a moderate height, would be required to effect the ascent or descent of one hundred and six feet, which is the difference between the highest and the lowest part of the canal. Another very favorable circumstance for these locks is that they can be located on a right line, in advantageous situations, and at great distances apart, the difficulties being thus avoided which would naturally arise from the close proximity of such works.

XII.

The prevailing winds are also of capital importance regards the canal. Science will one day, perhaps, invent some means of locomotion as rapid as steam, and as cheap as sails, which will almost neutralize this importance. Meanwhile, we cannot overlook the advantages which that element offers to the immense traffic in productions of prime necessity.

Calms, which are often so detrimental to the progress of sailing vessels, are unknown on the coast of Nicaragua.

—a very different state of things from that which is observed on some of the neighboring coasts. In the Pacific, from the Gulf of Fonseca to Salinas Bay, and in the Atlantic, from Cape Gracias to the mouth of the San Juan, the winds never cease to blow. A vessel could enter and leave the canal in those regions at any season of the year without being subjected to any delay on account of calms.

The sagacity of the speculator and the intelligent eye of the navigator cannot regard so notable an advantage with indifference.

XIII.

The canal via Nicaragua has, among its many other advantages, some of which I have mentioned, the no less important one of short distances, which so sensibly affects the interests of North America especially.

It is well known that the commerce of South America is carried on mainly with Europe and the United States, and to the nations of that part of the globe it is almost a matter of indifference whether their vessels pass through the Isthmus of Darien, Nicaragua or Tehuantepec. They can have no very marked preference for any one of these routes. This is not the case with the northern portion of the continent, on whose Pacific coast there is so ardent a desire for rapid communication with that of the Atlantic.

The Isthmus of Tehuantepec, so far as distance is concerned, possesses, perhaps, the most favorable conditions for those regions; but the plan of uniting the two oceans through this isthmus has been abandoned. Its impracticability is too notorious; and, it being laid aside, the Nicaragua canal will offer the most speedy communication to the entire population of North America.

Comparing this route with that via the Isthmus of Darien, we find that, for a vessel sailing from any point on the Pacific coast north of Nicaragua, and bound to any point on the Atlantic coast north of that Republic, the

voyage by the former route will be at least eight hundred miles shorter. The distance thus economized represents an average saving of four days, with a corresponding avoidance of risks and expense.

Although the liberal character of the people of the United States leaves no ground for the supposition that they take so deep an interest in the accomplishment of this enterprise from merely selfish motives, it is very natural that the interests of their commerce should exercise a controlling influence upon their choice, and that they should prefer the route best calculated to promote those interests.

Immigration and railroads are developing the production of this country so prodigiously, and its coastwise traffic is so considerable, that the necessity is felt of giving to this great movement a wider field, by laying open to it a broad navigable channel across the continent.

XIV.

It remains for me to give some idea of the cost of the work, and of the relation which such cost would bear to the benefits to be derived from it. In so doing, I shall base my statements upon the estimates made by the most recent expeditions which have explored the Isthmus of Nicaragua, and upon some abridged statistics of the commerce of certain parts of the world.

The important labors of the expeditions referred to, which were organized by the Government of the United States, were performed with the most scrupulous care. The high character of the gentlemen who composed them is a guarantee of the reliability of their assertions.

The entire length of the proposed canal, from ocean to ocean, is one hundred and eighty-one miles. It is intended that it shall be one hundred and fifty feet wide, and twenty-six deep. Deducting from the above length fifty-seven miles of sailing through the lake; and sixty-

three through the San Juan river, there remain but sixty-one miles of canal, properly so called. The average depth of the cut between the lake and the Pacific will be thirty feet; between the lake and the Atlantic it will be one foot and seven tenths.

The construction of the work requiring neither a tunnel nor the formation of a deposit of water, the length of the purely artificial canal being so limited, and considering the small number of locks, the cost of improving ports, and of accessory labor of less importance than will be required, I think I hazard nothing in saying that the estimate of \$65,000,000 made by these expeditions as the total cost, is a close approximation to the truth.

This outlay, which is by no means exorbitant for an enterprise of such transcendent importance, will be diminished to the amount of several millions by a more detailed location of the proposed line, by the value of the lands which Nicaragua has always been disposed to grant in favor of the canal, with the mines and other natural wealth which they contain, and by the sums with which she would now aid the immediate improvement of navigation in the San Juan river.

At such small cost, the undertaking must be a financial success.

Even supposing the amount required to be double the above estimate, the commerce of the world would insure a remunerative interest. The Suez canal, the cost of which cannot be placed at less than \$100,000,000, whose success was so long a matter of dispute, and whose importance will undoubtedly always be inferior to that of the American canal, is now an enterprise whose future success is assured.

The distinguished Professor J. E. Nourse, of the United States Naval Observatory, in his pamphlet published in 1870, in relation to the Suez canal, says, in comparing it with the American one:

"The probabilities are that a canal here would even far

"surpass in value that of Suez. It will be not for Southern Europe only, or for Asia, or coast-bound Africa only; "but for the world's trade." He adds that if the isthmus of Suez is the centre of the old continent, the other is "the centre of the great ocean, the Atlantic-Pacific; of "the water as well as of the land of our globe."

Speaking of the revenue of the Suez canal, he says: "Within the past twenty years the steam marine of England has increased 417 per cent.; that of France 613 per cent.; and that of Austria 637 per cent.

"The commercial returns of exports and imports for the Chinese Empire for the year 1855 were 281,000,000 francs; for the year 1868 they were 1,120,000,000 francs.

"The number of vessels entered and cleared in 1865 was 1,527, tonnage 529,222; and in 1868 was 14,075, tonnage 6,318,503.

"The Suez Canal Company, taking as their base the annual tonnage of Liverpool at six millions, Marseilles at five, and the trade around the Dardanelles and Black sea at six millions, expect six millions as the minimum through the canal, and a gross receipt of 60,000,000 francs."

Admitting these data, and in view of the success of the Suez canal, the approximate cost of that of Nicaragua being known, together with the superiority of its importance to that of the former, and not forgetting that the increase of trade is always in a direct ratio to the greater or less facility of communication, we cannot believe that the accomplishment of the project of an American inter-oceanic canal is longer to be delayed.

EMILIO BENARD.

WASHINGTON, June 20, 1874.

DOCUMENTS.

REPUBLIC OF HONDURAS,

MINISTRY OF FOREIGN RELATIONS.

SAN SALVADOR, April 16, 1874.

To His Excellency the Minister of Foreign Relations

of the Republic of Nicaragua.

SIR : I have had the honor to receive your note, in which you were pleased to inform this Government that the United States steamer "Gettysburg" anchored in the bay of San Juan del Norte on the 7th ultimo, having on board a new expedition commissioned to explore the isthmus of Nicaragua, and composed of distinguished American civil engineers, sent by the scientific commission at Washington for the express purpose of deciding upon the route to be selected for the great work of the interoceanic canal, stating that, according to all the information received by you, the decision of the expedition would be in favor of Nicaragua, and, in conclusion, urging the government of Honduras to instruct its representative at Washington to use his best efforts to bring about such a solution of this important question as should be favorable to the interests of Central America.

The Citizen President, to whom I have communicated the contents of your aforesaid note, has instructed me to assure the government of Nicaragua of the very deep interest which is felt by the government and people of Honduras in the accomplishment of that greatest and most important work of the age, which will at once change the face of Central America. Although Honduras has, as yet, no representative at Washington, it will make a point of accrediting an envoy extraordinary, if the government of Nicaragua shall think proper, to the end that the question of the canal may be settled in a manner calculated to promote the interests of Central America.

With the highest consideration, I have the honor to be

Your excellency's very obedient servant,

(Signed)

ADOLFO ZUNIGA.

MINISTRY OF FOREIGN RELATIONS OF THE
REPUBLIC OF SALVADOR.

SAN SALVADOR, April 8, 1874.

To the Minister of Foreign Relations of Nicaragua:

SIR: I have received your excellency's esteemed note of the 23d ultimo, whereby you were pleased to inform my Government that the United

States steamer Gettysburg anchored in the bay of San Juan del Norte on the 7th ult., having on board a new expedition commissioned to explore the isthmus of Nicaragua, which, after ascertaining certain facts, is to join another expedition under the command of Capt. Selfridge, the latter being under orders to re-examine the Atrato Napipi route, across the isthmus of Darien.

His excellency the President, to whom I have communicated the contents of your excellency's note, has directed me to say to you, in reply, that he is much gratified at the arrival of these expeditions, and that he earnestly hopes that their reports may induce the commission at Washington to decide in favor of the route via Nicaragua.

As your excellency is well aware, such a decision would be highly favorable to the interests of Central America; instructions are therefore this day communicated to the Minister of Salvador at Washington, to act, in this matter, entirely in harmony with the representative of your Government.

With the highest consideration, I have the honor to subscribe myself,

Your very obedient and faithful servant,

[Signed]

M. BRIOSO.

DEPARTMENT OF FOREIGN RELATIONS OF GUATEMALA.

GUATEMALA, April 16, 1871.

SIR: I have this day addressed the Licentiate Don Vicente Dardon, Minister Plenipotentiary and Envoy Extraordinary of this Republic in North America, sending him a copy of the esteemed note of your Department, dated the 23d ultimo, and instructing him to do all in his power in favor of the Nicaragua canal, in conjunction with the representative of your country.

In having the honor to state this to your excellency for the information of the Chief Magistrate of your Republic, I am happy to subscribe myself,

Your obedient and faithful servant,

(Signed)

MARCO A. SOTO.

To the Minister of Foreign Relations at Nicaragua.

6

This would need to spend only one iteration updating local variables and then
execute numerous reads at Stage 1, see and can potentially wait on many
interactions with the stage 1 computer before it could read enough local
information and update enough local variables and do global updates
and influences on system logic. Global control logic is often required

to coordinate the memory access between the
different components. It is better to have all components with
local storage and local logical address spaces. This makes the
interactions between different stages of the system much easier and
more efficient and reliable.

Local storage is also useful for the system to store
information about the system and its
status and history of operations.

Local storage is also useful for the system to store
information about the system and its
status and history of operations.

Local storage is also useful for the system to store
information about the system and its
status and history of operations.

Local storage is also useful for the system to store
information about the system and its
status and history of operations.

Local storage is also useful for the system to store
information about the system and its
status and history of operations.

Local storage is also useful for the system to store
information about the system and its
status and history of operations.

Local storage is also useful for the system to store
information about the system and its
status and history of operations.

Local storage is also useful for the system to store
information about the system and its
status and history of operations.

Local storage is also useful for the system to store
information about the system and its
status and history of operations.

Local storage is also useful for the system to store
information about the system and its
status and history of operations.

Local storage is also useful for the system to store
information about the system and its
status and history of operations.

