PANAMAR



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Congressional Party on Steps of Hotel Tivoli.

## PREFACE

On March 6, 1907, a party composed of forty-five members of the U. S. House of Representatives sailed from New York on the Steamer Panama for Colon. The personnel of the party was as follows:

Ernest F. Acheson, Washington, Pa. Henry C. Allen, Little Falls, N. J. Andrew J. Barchfeld, Pittsburg, Pa. Franklin E. Brooks, Colo. Springs, Col. Robert F. Brussard, New Iberia, La. Albert S. Burleson, Austin, Tex. John C. Chaney, Sullivan, Ind. Pleasant T. Chapman, Vienna, Ill. Ralph D. Cole, Findlay, O. John Dalzell, Pittsburg, Pa. Charles R. Davis, St. Peter, Minn. Beman G. Dawes, Marietta, O. Edgar C. Ellis, Kansas City, Mo. David J. Foster, Burlington, Vt. John H. Foster, Evansville, Ind.

Finis J. Garrett, Dresden, Tenn. Clarence C. Gilhams, La Grange, Ind. Oscar W. Gillespie, Fort Worth, Tex. Joseph V. Graff, Peoria, Ill. Daniel L. Granger, Providence, R. I. James M. Gudger, Ashville, N. C. Ebenezer J. Hill, Norwalk, Conn. Elias S. Holliday, Brazil, Ind. James A. Hughes, Huntingdon, W. Va. Benjamin Johnson, Bardstown, Ky. J. Warren Keifer, Springfield, O. James Kennedy, Youngstown, O. John W. Langley, Prestonburg, Ky. George L. Lilley, Waterbury, Conn. Mial E. Lilley, Towanda, Pa.

George A. Loud, AuSable, Mich. Samuel W. McCall, Winchester, Mass. Bird S. McGuire, Pawnee, Okla. Thomas F. Marshall, Oakes, N. D. Theobold Otjen, Milwaukee, Wis.
Richard Wayne Parker, Newark, N. J. Sereno E. Payne, Auburn, N. Y.
Ernest M. Pollard, Nehawka, Neb.
Jos. E. Ransdell, Lake Providence, La. Joseph T. Robinson, Lonoke, Ark.
William W. Rucker, Keytesville, Mo.
Edmund W. Samuel, Mt. Carmel, Pa.
Charles F. Scott, Iola, Kan.
Sylvester C. Smith, Bakersfield, Cal.
Edward L. Taylor, Columbus, O.

Mr. Payne acted as president of the delegation and Mr. Scott as secretary. Hon. Benjamin F. Harper, Auditor for the War Department, and his wife; Col. George W. Goethals and Maj. D. D. Gaillaid, two of the U. S. Engineers chosen by President Roosevelt as members of the re-organized Canal Commission, were passengers on the Panama and accompanied the party on its inspection of the Isthmus.

Before leaving home the writer had promised to send some letters to the Washington, Pa., Observer. Those who were members of the party will understand how fully the time was occupied and the great pressure under which the work was done. No opportunity for correction or revision of the articles was afforded as they were mailed when written. The writer is assured that those who are familiar with the circumstances will overlook errors and deal charitably with these hasty productions. This souvenir is printed at the suggestion of some members of the delegation who had read the newspaper letters.

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## First Day on the Isthmus

Colon, Panama, March 12.-The trip from New York to Colon in the month of March is most delightful, at least we found it so this year. The weather was fine throughout the entire voyage, the table was good, the state rooms comfortable and all the surroundings enjoyable. We came on the ship "Panama," owned by the Panama Railroad company, which now belongs to the Isthmian Canal commission. The distance between New York and Colon is 1,975 miles, and the "Panama" makes it in less than six days. It is a ship of five thousand seven hundred tons, only about one-half the size of one of the great ocean liners, yet more than sixty times as large as the boat in which Columbus first crossed the Atlantic.

One of the most interesting incidents of our voyage was the glimpse we had of San Salvador or Cat Island, on which Columbus first set foot. We passed within a half mile to the east, and could clearly see the pile of stones which has been erected as a monument to mark the spot where Columbus is said to have landed. This island is now designated on the map as Watling's island. Columbus called it San Salvador, "The land of the Holy Savior." The great navigator expected to reach Asia on this voyage, and
had letters to the Great Kahn of Tartary, whom he hoped to converi to Christianity. It would be thought that the name bestowed upon this island by the discoverer would have been accepted throughout all time, hut it has been rechristened and given the name of a man of whom the world knows nothing. We have many in stances of this in history, and in our own western Pennsylvania. One hundred and fifty years ago when Washington first crossed the Alleghenies he stood upon the mountain top in what is now Somerset county and looked down at the place where the Castleman river, the Youghiogheny river and Ursina creek unite. The coming together of three streams at one place was so unusual that Washington called it "Turkey Foot" and so it was known for more than a hundred years. A few years ago the people of that place who did not appreciate the unique character of the name, and the fact that it had been given by one of the most illustrious men in the world's history, had it changed to Confluence, a name which could mark the point of union of any two streams. So Bloody Kun in Bedford county, an historic spot since revolutionary days, was robbed of its name not long ago, and given the commonplace title of

Everett. Only recently a proposition has been made to change the name of the old town of Hickory in Washlngtion county to that of Wabash. Such vandalism should be discouraged.
The "Panama" is equipped with the De Forest system of wireless telegraphy. It is a never ceasing wonder. The operator sent messages for many of us to the station at Cape Hatteras and talked with other vessels at sea, many of which were so far away that we could not see them. He caught many messages flying through the air from Cuba and other points. The wireless telegraph is truly one of the marvelous inventions of the age.

When we reached the Gulf stream some one recalled the story of the old sea captain, who during the Civil war told the British that the Yankees would get even for their unfriendliness, by digging the Panama canal and turning the Gulf stream into the Pacific. It was a story which attracted some attention and caused speculation. Magellan, the discoverer, was quoted as having said that a volcanic eruption which would make a channel across the Isthmus of Panama, would deflect the Gulf stream to the Pacific, and convert England and Northern Europe into a territory as barren and desolate as Greenland. As the Gulf
stream is 80 miles wide and a thousand feet deep, with a current of two or three miles per hour, it is not likely that even a sea level canal across the Isthmus, 200 feet wide and 40 feet deep, would have the slightest effect upon it. Moreover the tide at Colon, as shown by a series of observations covering a period of five jears is less than one and a half feet, while at Panama on the Pacific side is nearly nineteen feet. In a sea-level canal at least one lock would be necessary to regulate the tide, and prevent the rush of water from the Pacific to the Atlantic. However, the type of canal as adopted involves its construction at a level of 85 feet above the sea.

The city of Colon has a bad reputation. It is less than two feet above sea level, and until recently has been notoriously unhealthy. It is surrounded by the miasmatic swamps of the Chagres river. When the French were at work on the canal twenty years ago, it was said that every cart load of earth which was handled near Colon represented a human life. Likewise it was stated that in the construction of the railroad across the Isthmus there was a death for every tie that was laid. Both these statements were exaggerations. The railroad is forty seven miles long, and twenty-five hundred ties are used in each mile. Some authorities here say that less than seven thousand persons who were
employed on these two enterprises died during their construction. However, the cemetery at Monkey Hill, just outside Colon, contains thirty thousand graves. Many thousands of these are the last resting places of adventurers, criminals and outcasts from every nation who were attracted to Panama by the great work going on, and were never able to leave. Rum caused the death of thousands. Those who use alcohol too freely cannot live in the tropics. As rum lost Russia the war with Japan, it also carried off thousands who came to Panama especially in those days before the proper sanitary measures were put into operation and yellow feyer was prevalent. Although Colon is not in the Canal zone, the Isthmian commission has control so far as sanitation and the preservation of the peace is concerned. The streets are being raised, paved and sewered, and it will not be long until the old Spanish town has more the appearance of a bustling American city.

Our party is to go across the Isthmus on the Panama railroad. This line is 47 miles in length and cost originally $\$ 8,000,000$. It was built by Americans, to whom a concession was granted in 1850. It was finished in 1855, and for years thereafter was said to be the best paying railroad in the world. It had a monopoly of railroad rights on the Isthmus. No one could build a
road of any kind between the two oceans. It paid for itself in four years. Columbia received $\$ 250,000$ a year for the concession. For thirty years it cost $\$ 25.00$ in gold for passage across the Isthmus, and the freight charges were $\$ 160.00$ per ton. As originally constructed the road had a five foot gauge and fifty-six pound rails. The ties were lignum vitae, so hard that it was necessary to bore holes to drive spikes. This was the only wood that could be used on account of the ants. The telegraph poles are iron. The big bridge across the Chagres river is said to have been the first steel structure of the kind. It is still standing and in excellent condition.

Colon is almost due south of Washington county. It is just a little east of the 80 th meridian, which passes through Bentleyville and Finleyville. It is a little north of the 9 th parallel The 40th parallel crosses southern Washington county.

We are to go from Colon today to Panama city on the Pacific coast. The route of the railroad and of the canal is from northwest to southeast. This is rather puzzling, as we naturally think the canal should be on an east and west line. However, the Isthmus, which is four hundred and eighty miles long and thirty-seven to one hundred and ten miles wide, runs almost east and west. Panama, the Pacific en-

trance to the canal, is almost twenty miles further east than Colon. As a local illustration we might say that if the Washington seminary stood on the site of Colon, the direction of the canal toward the Pacific, instead of being along Maiden street toward Main street, would be out East Maiden street toward Brady's hill.

One can see here something of the vast work done by the French. During the decade which they were at work, they spent over $\$ 250,000,000$. The United States paid $\$ 40,000,000$ to the French company for all its right, title and interest in the canal. It has been alleged that of what the French spent one third was stolen, one-third wasted and one-third went into the work of digging the canal. Already I find these figures questioned. Many of those who know a good deal about the canal say that while undoubtedly millions of dollars were squandered and stolen, that at least half the total expenditure was for work which will count in the completion of the canal. The total excavation under the French regime was about $88,000,000$ cubic yards. Much of the money which was squandered was in the purchase of useless machinery which is now out of date. Fully one-half of the excavation was in the backbone of the divide between the two oceans, and was useful work. The original French plans contem-
plated a sea level canal seventy-two feet wide and twenty-nine and a half feet deep, but the plan subsequently adopted was for a canal ninety-eight feet wide, and twenty-nine and a half feet deep.

According to the plan adopted by the United States, the great cut will be two hundred feet wide at the bottom and forty feet deep. It will be five hundred feet wide for twothirds of its length. When the French left the great cut the distance across the highest point was about seven hundred and fifty feet. When our canal is completed it will be about a thousand feet. The French erected over twenty-one hundred buildings of various kinds, and Mr. Wright, the architect who has charge of the work in that line for our government, tells me that they are of excellent design, material and construction. While the French erected fine hospitals, they did nothing for the preservation of health. Indeed they were not familiar with modern methods of preventing disease. Under their administration the employes were poorly fed and the mortality among them was appalling.

When the United States gave \$40,000,000 for the canal, the various parts of the work were estimated as follows:

Excavation, $\$ 27,500,000$; Panama railroad, $\$ 6,850,000$; maps, drawings and records, $\$ 2,000,000$, and buildings,
storehouses, hospitals, land, equipment, etc., $\$ 4,000,000$. This seems to have been a good bargain for Uncle Sam.

One of the greatest accomplishments of the Americans on the Isthmus has been the suppression of yellow fever. The mosquito has practlcally been put out of business. The medical authorities and scientific world now recognize the correctness of the mosquito theory as to yellow fever. The transmission of yellow fever has been prevented, and the disease stamped out, by destroying the "loaded" mosquito. Oil is scattered throughout all the swamps and stagnant pools where these mosquitoes breed. As a result no authentic case of yellow fever has been reported here for eighteen months, whereas it was ouce prevalent at all seasons.

While the theory that malaria is conveyed by mosquitoes is not yet so generally accepted, it is being demonstrated by actual experiments here to be correct. The medical men say that within a few months they will satisfy the scientific world that malaria is due to the mosquito, just as yellow fever is. Just as the malaria bearing mosquito is destroyed, the prevalence of malaria decreases. The authorities examine the blood of the West Indian negros who come here to work, and it is found that nine-ty-eight percent have malaria in their
systems. These men are required to sleep behind wire screens, and the malaria rapidly disappears. The same experiment has been made with the laborers from other countries. The Spanish workmen who live in unscreened quarters get malaria. Those who are housed behind screens escape it. Those who sleep in tents unscreened soon succumb to malaria.

The health of the people on the Isthmus in the Canal zone is wonder-
fully good. Upwards of seven thousand Americans, incIuding about one thousand five hundred women and children, are here, and no death has been reported for a year from disease. No government or no city ever made more intelligent and comprehensive arrangements for the health of its people than the United States has made for those who are to construct the Isthmian canal. The temperature here is lower than at many points in
the United States. The thermometer has never registered 100 degrees while the official thermometer at the weather bureau in Washington city has recorded a heat of 104 degrees. What is needed here is sanitation and the proper observance of the laws of health, and these the authorities are insisting upon. The French failed largely for the lack of these precautions. We shall succeed more easily because we have taken them.

## History of the Canal Project

Panama City, March 13.-This morning I saw the sun rise out of the Pacific ocean. Panama Clty is built upon a point of land which extends southward into Panama Bay. On account of the geographical situation the sun both rises from the Pacific and sets in the Pacific. The location is puzzling and it is some time before the sojourner can get the points of the compass. The sunrise was glorious. It is only a few minutes after old sol peeps above the horizon until he shines in all his splendor. The reflected light gives the appearance of two suns.

The bay is very quiet at all times. Numerous islands protect the shores, and while the wind sometimes blows
hard there is no sea. It is no wonder that Balboa, who was the first white man to look upon this ocean, called it the Pacific. It may be a misnomer as applying to the ocean as a whole, but this part of it is never visited by severe storms.

This morning our party went to Culebra cut, where the Isthmian Canal is to pass through the mountain range, and unite the waters of the Atlantic and Pacific. We had a special train and every facility was given us for seeing the tremendous work which is going on. Before speaking specifically of the Culebra cut, it may be well to refresh the recollection of your readers with a few facts about the canal.

The idea of cutting a canal across the Isthmus of Panama was conceived soon after its discovery, over cour hundred years ago. The first survey was made in 1581. From that time to the present more than a dozen different routes were examined, an 1 in 1881 the French began the work of constructing the canal between Limon Bay on the Atlantic and the Bay of Panama on the Pacific. The famous French promoter M de Lesseps, who built the Suez Canal, was in charge of the undertaking. When the French company failed, after expending over $\$ 250,000,000$, the United States government purchased its rights and title for $\$ 40,000,000$. The length of the canal is fifty miles from deep water
on the Atlantic to deep water on the Pacific. Beginning at the Atlantic end it will be a sea level canal 1,000 feet wide and 40 feet deep for a distance of seven miles. Then by the construction of three enormous locks, each having a lift of $281 / 3$ feet, ships will be raised to a height of 85 feet above the ocean. There they will enter Gatun lake, which is to be formed by huilding a dam 8,000 feet long, a half mile wide at the hottom and one hundred and thirty-five feet high. This lake will have an area of 110 square miles and will hack the water for a distance of thirty-two miles through the great divide to the Pedro Miguel lock (or Peter Magill, as the hoys here call it), on the Pacific side of the mountain; thence by Sosa lake deep water is extended for a distance of six miles to La Boca. The Peter Magill lock is to have a lift of thirty feet, and the two Sosa locks twenty-seven and a half feet each. From the Sosa locks a sea level channel is dredged a thousand feet wide and 40 feet deep, for a distance of four miles.

It is estimated that it will take a ship about twelve hours to pass through the canal. Each vessel will pay a toll of about $\$ 2.00$ per ton. They can well afford to do this, as the construction of the canal will shorten the distance by water hetween New York and San Francisco over eight thousand miles. The saving in distance to all
points on the Pacific will be in this proportion.

The greatest achievement of the Americans on the Isthmus has been the permanent driving out of yellow fever. The Isthmus is today as safe a place to visit, as almost any part of the world. The sanitary regulations are better ohserved here than in many places in the United States. Mosquitoes are sorupulously guarded against. Most of the houses have porches. These are screened; then the windows have screens, and in many cases mosquito bars on the heds are used. These precautions have heen effective, hut are coming to be unnecessary, because there are no mosquitoes. I have not seen a mosquito since I have been here. Dr. Gorgas, who has charge of the health hureau on the Canal zone, tells me that he has drained every swamp near the line of the canal where the expense would not be too great. If the cost is prohibitive, he uses oil and the surface of all the swamps is sprinkled with the oleagenous fluid. His department has used over two thousand harrels of California oil in this way. The pipe line extends clear across the Isthmus, within sight of the railroad and looks familiar to a visitor from Washington county.

The word Culebra is pronounced as though spelled coolavra, the letter " $h$ " having the sound of "v." Most of the natives give the " $e$ " the sound of "a."

The length of the cut through the range of hills is nine and a half miles. At the summit it will he 241 feet deep. As the water will be forty feet deep the traveler on the ships going through will look up the mountain side to the pinnacle 201 feet. The trip through the canal at this point in some respects will resemble the trip by the inland passage from Seattle to Alaska. The amount of excavation yet to be made in this cut is $52,000,000$ cuhic yards. Last month 639,000 yards were taken out and today 31,000 . Great steam shovels are at work, each of which lifts five yards of earth and can raise from ten to fifteen tons of rock at a time.

The Culebra cut is distinctively a railroad proposition. Given the time and the money there is no question as to the ability of the engineers to finsh the work successfully. The greatest difficulty is in the disposing of the material and it is this which leads to the estimate that it will take six or eight years. The engineers, foremen and all those in charge of the work are very enthusiastic and have no doubt of their ability to complete the joh within the time they have set. Most of them think the United States got a great hargain in its purchase of the canal for $\$ 40,000,000$. They speak well of the French and the work done by them.

One of the entertaining persons I
met on this trip was Judge Gudger, of the United States court for the Canal zone. This court is composed of three judges. They sit separately, and if an appeal is taken, en banc as a supreme court. They dispose of all cases, civil and criminal. No jury trials are held. This is said to be a great saving in time. It is estimated that the courts transact their business in less than one-third the time taken in similar cases in the United States. The lawyers waste little time in questioning witnesses, and even less in addressing the court. Yesterday Judge Gudger pronounced the death sentence on the first person to be convicted of murder on the Canal zone. The case has been appealed and will go to the supreme court of the United States, which must determine whether or not a prisoner can be convicted of a capital offense in the United States court without a jury trial. It will be an interesting argument, involving the question whether or not the constitution at all times follows the flag. The right of trial by jury is one of our sacred institutions, for which English speaking people have been willing to lay down their llves. In the Canal zone, however, about half the old Columbian laws are in force. The native Panamans do not like the trial by jury, and prefer to be tried before a single judge.
I had an interesting talk with G. R.

Shanton, who is the Captain of Police, and also United States Marshall, Coroner and Warden of the Penitentiary From him I learned that the average number of arrests per month were about six hundred. The estimated population of the Canal zone is now 70,000 . Every nationality on earth is represented. Considering this fact, the amount of crime is very small. The largest number of cases are lorg. eries, principally in altering the time checks. Assault and battery cases come next, and then the violation of the sanitary regulations. Failure to observe the health laws is a serious offense here. If anyone throws slops upon the ground or in any way violates the sanitary regulations, he is arrested and fined, and if the offense is repeated he is sent to jail. This vigilance accounts largely for the splendid health in the canal zone. I imagine the offenses of this kind are far fewer here than in the borough of Washington, which some are wont to regard as a model. C. M. Ruple, Esq., secretary of the board of health and Health Officer Carter have said that hundreds of the citizens of Washington disregard the sanitary laws constantly. If such persons were arrested and fined as they are here the borough treasury would be replenished rapidly.
The Canal zone is a safe place in which to live and seems to be freer
from serious crime than Washington county. During the past three years only ten homicides have occurred, and two cases of assault upon women. While I do not have the figures, I am sure that the records of the Washington county court will show a greater number. The police are vigilant. They make the people live decently whether they wish to or not. At this time the penitentiary contains 100 prisoners, a small number considering the character of many of the common laborers, who have come hither.
The Canal zone's police force consists of 180 persons, 80 white men, and 100 blacks from Jamaíca. The Jamacian negro, having lived under British rule, is a law abiding citizen, and makes a good officer. Each policeman must he at least five feet eight inches in height. The blacks are paid $\$ 40.00$ per month and board, and the whites $\$ 75.00$. After two years' service the whites receive $\$ 83.00$ per month, and the ten sergeants $\$ 125.00$ per month. Under the management of Captain Shanton it is a model police force. The captain was for twenty years a cow boy in Wyoming. He saw service with Buffalo Bill. When the Spanish war broke out he was sheriff of the county in which he lived, and resigned to become an officer in the army. President Roosevelt knew of his qualities, and put him in charge of the police department here. He is


Beautiful Palms and Road at Ancon Hospital.

certainly the right man in the right place.

This afternoon we visited the Ancon hospital. It is said to have the most beautiful location of any hospital in the world. Ancon is a voicanic mountain which rises for a height of 020 feet from the sea. Its top is withln a mile of Panama city. The French graded off the side of the mountain 200 feet above the ocean, and formed a plateau on which the numerous hospital buildings were erected. The outlook from the hospital grounds is magnificent, and the cool breezes are aiways in motion there. Extensive drives and walks have been laid which are amply protected from the torrential raln fall by heavy stone watertables and culverts. The entire expenditure for building and grounds is said to have been over $\$ 3,000,000$. Some say $\$ 5,000,000$ were expended, but the United States secured everything for $\$ 1,000,000$. Some of the buildings have been remodeled and enlarged.

A number of the patients who were spoken to were loud in their pralses of the treatment they had received. A young man from Washington city, whose leg had been amputated, sald he had been accorded every attention which could possibly have been given him at the national capital and congratulated himself that when misfortune came he was near what he considered the best hospital of which he had knowledge.
After visiting the splendid residence which was erected by the French engineer on the point of Ancon mountain, facing the Pacific, we went to the cemetery on the edge of the city, where it is claimed by some that the remains of Balboa were buried. This fact is questioned, however, and I have been unable to verify it. The discoverer of the Pacific seems to be the patron saint of Panama. His bust adorns all the money of the Republic and also ornaments its postage stamps. The story of his adventurous iife, read when a boy, comes back to
me amid the scenes of his great achievements. He escaped from his creditors in Spain, by being shipped to the West Indies in a cask. He was the best of the Spanish adventurers who came to this country at the close of the fifteenth century. It was his lot to be beheaded at the be hest of the worst of the many infamous Spanish governors who explolted this region.
In one part of the old cemetery can be seen a pile of human skulls and bones where the bodies have been burned. The old Spanish custom is to rent a grave for eighteen months, and after that, unless considerable additional rent is paid, the bodies are disinterred and burned. I remember seeing a large pit in a corner of the beautiful graveyard in Havana, where hundreds of exhumed human bodies had been thrown. But since the Americans came here this revolting manner of disposing of the dead has been abandoned.

## Random Notes on Panama

Ancon, Canal Zone, Panama, March 14.-A few random notes on Panama, its people and what can be seen and heard here, may perhaps prove interesting to some of the readers of the Observer.
Many inquiries have been made about positions under the Isthmian Canal Commission and the prospect of getting work here, by residents of Western Pennsylvania. After diligent inquiry one concludes that Panama is one of the best places to work in the world. No other location is more healthy and no place could be found in the tropics which is cooler than this. Certainly it would be difficult to discover another spot where sanitary regulations are so strictly enforced. The wages here are good. Most of the employes save money, perhaps because there is no way to waste It. Competent men can get positions at from $\$ 125.00$ to $\$ 175.00$ per month. This includes those who are fitted to serve as sanitary inspectors, brakemen, dumpmen, foremen of gangs on the railroad work, time-keepers, camp foremen, hotel managers and positions of that sort. A man can live in the company's quarters for $\$ 27.50$ per month for board. His rooms are furnished free. Single meals are 30c. Men who receive $\$ 75.00$ per month are
saving $\$ 45.00$ of it. Others with families, who get from $\$ 150.00$ to $\$ 200.00$ per month, can live on $\$ 50.00$. The employes with familles, after they have served the commission for six months, get a house with light and fuel free.

The Italian is highly esteemed as a common laborer. He is paid 20 c an hour, while the negroes are only glven 10c an hour. The foremen say that the difference in efficiency is greater than that represented by the disparlty of wages. One of the superintendents stated that he would rather have one Italian than six Jamaican negroes, or Panamans. Several hundred Spaniards have been imported, and they rank with the Italian laborers.

Thousands of negroes have come here from Jamaica. Sometimes as many as three hundred arrive in one ship. The Jamaican negro, however, will not work more than three days iu five. He can make enough in three days to live sumptuously. Many of them go off into the jungle and build shacks of their own, instead of occupying the Company houses. If they do not wish to work they can pick a living off of the trees. Oranges, bananas and sweet potatoes can be gathered in abundance. The sweet potatoes are a klnd of a yam and are
very palatable. Some negroes follow fishing for a livelihood. In the olden tlmes they had to fish about five days in the week to make a living. Since the Americans began work on the canal, prices have advanced and they get so much more for their catch that they will not fish more than three days in the week.

The Chinese are becoming the gardeners of Panama. They have the industry and give the growing vegetables the constant attention which is necessary for success. The Chinese are spoken of here as the Dutchmen of Panama. They raise a surprising amount of garden truck on a small patch, and they get good prices for it.

The old residents are vegetarians to a great extent. They eat fruit, vegetables and fish, avoiding the cold storage meats which come from the United States.

A University club has been formed In Panama City, and it has over two hundred members. An old residence has been rented and fitted up as a club house. The walls are ornamented with the colors of most of the prominent colleges of the United States. The members of the various Greek letter fraternities have organized Panama associations and are connected with the University club. Eight members
of Beta Theta Pi are connected with the club and other "frats" are as well represented.

If you wish to ascertain exactly how hot it is you have difficulty in finding a thermometer. The weather varies so little that no interest is exhihited in the rise and fall of the mercury. The thermometer has ranged from 74 to 85 degrees Fahrenheit, and this is about the average the year around. One day is so much like another that no one speaks of it. There is no sale for thermometers and the weather liar has no show whatever.

The beautiful lignum vitae trees with their yellow tops can be seen on the mountains, and give the landscape a picturesque beauty. As this is about the middle of the dry season, the country is somewhat parched and brown. The lignum vitae trees stand out most prominently on the hill tops. The wood of this tree is the hardest and can scarcely be cut with the ordinary tools. Some of the old ties of the Panama railroad are heing sawed into pieces to make canes, ink-stands, and other articles.

The currency of Panama is the Balhoa or dollar, half Balboa, twenty cent, and ten cent piece. This money has only half the purchasing power of the American silver. The Americans call it Monkey or Spigoti money. The term Spigoti is an abbreviation of the Panaman "No speak English." A
nickle was coined for sometime, but its coinage has heen discontinued and nickles now bring 20c in "Monkey money" apiece. The ladies are making bracelets and the gentlemen watch chains of the Panaman nickle piece, which is becoming quite scarce.

About $\$ 2,000,000$ per month are being paid out in the Canal Zone to employes. A large portion of this is sent back to the United States and to the West Indies. An average of 115,000 dollars in Postoffice money orders are sent away each week. Among the employes are many negroes from Barbadoes. A curious circumstance recently was that so many money orders from Panama reached the Barbadoes that it was necessary to call the legislature together to supply the deficiency of $\$ 10,000$, caused by cashing postoffice orders from the Canal Zone.

The Panama government receives forty per cent of the postoffice revenus of the Canal Zone, and the whole amount is practically clear money. Panama has been handsomely treated hy the United States, but many of its people do not appreciate what has been done for them. When Uncle Sam came here the city of Panama was a dirty hole with unpaved streets, uneven sidewalks and no sewage system. Our government put in a complete sewer system, built a reservoir and supplied the town with an abund-
ance of fresh water, and paved the streets with fire brick. It also cleaned up the premises around private houses and in some cases removed a carload of filth from a lot not more than twenty or thirty feet square- Before the Americans came water was hauled into town in carts and sold. Now good water is furnished through pipes. Yet three weeks after these improvements were completed and the streets paved at the expense of Uncle Sam, the local newspaper wanted to know why the Americans did not sprinkle the streets.
The work of the Young Men's Christian Association in the Canal Zone is in charge of A. Bruce Minear, who represents the International committee. Excellent work is being done under his direction. On the steamer "Panama" coming down I met Wm. H. Baxley, who is to manage the Association building at Culebra. For several years past he has been superintendent of the Association work at the Twenty-third St. branch in New York City. Having proven his capacity there he was selected for superintendent of the Culebra branch. Our party visited the new Y. M. C. A. building at Gorgona and found it admirably adapted to its purpose. The rooms are large and well arranged, and the building itself very attractive. A large room has been provided for dancing. One of the young men stated that at
some of the dances more girls were in attendance than boys, which is rather surprising. The nights are always cool, and dancing is pleasant.
To illustrate the rapidity with which the work on the canal is now golng forward, it may be stated that under the French regime the largest record for excavation in the Culebra Cut in any month was 220,000 cubic yards. During February last 639,112 cubic yards were taken out. The average is increasing almost daily. To-day the total was over 33,000 yards. The amount excavated in February equalled the number of cubic yards contained in the National capitol at Washington. The day President Roosevelt was here 7,000 cubic yards were excavated in the cut, and it was claimed at that time by critics of the enterprise that this was an exceptionally high record, and that everybody was hustling to make a good impresslon on the president. Yet to-day almost five times as much earth and rock were taken out of the great cut as the day Roosevelt visited it.
The railroad fare across the Ithmus is now $\$ 2.40$ first-class or less than one-tenth what it was in the old days of the California gold excitement. Among the early gold seekers in California were a number of residents of Washington county, who crossed the Isthmus on foot. I think James $W$. Kuntz was one of these. Danlel

Hodgens, of West Midletown rode across on a mule in 1854, before the railroad was completed.
U. S. Consul Shanklin receives many inquiries from the United States about lands. Judging from the stack of letters on his desk on that subject, many persons contemplate investing in real estate in Panama. The chief drawback to this has been that the land laws are very defective, and good titles cannot readily be secured. To meet this situation the president has called a special session of congress, which is to pass only upon this question. It is proposed to adopt some system for the sale of lands, by which the Republic of Panama will guarantee the title. Immigration is to be encouraged and an effort made to develop the resources of the Interior. The area of Panama is 31,570 sq. miles, or not quite three-fourth that of Pennsylvania. It is estimated that only three or four per cent of the soil is cultivated. Of course a large part is used for grazing, but at least onehalf the territory is unoccupied. The land is wonderfully fertile and all sorts of tropical fruits and vegetables thrive here. The rains are exceedingly heavy. During the wet season you may go riding through the country on horse back in the morning and cross many streams which are almost dry. When you come back in the afternoon you may have to swim your
horse across a raging torrent, fifteen feet deep. A resldent of the temperate zone can have no conception of the great waterfall. For this reason a native avoids the low ground. Most of the huts are built on the knolls. If you meet a native going to work, armed with his machete, he will say he is going to his mountain instead of hls farm or garden patch.

While the railroad across the Isthmus is the only one in the Republic, the telegraph and telephone systems are fairly good and cover the country pretty well. Panama is almost five hundred miles in length and most of its towns can only be reached by loat, either on the Atlantic or the Pacific coast, but you can communicate readily with all the important towns over the wires.
The native Panaman is small of stature. He has used liquor to excess, and as a result after several generations his physical power of resistence is very low. He is kindly, affectionate and good to his family. In a total population of 340,000 it is estimated that not more than ten per cent are responsible citizens, and not over five percent are educated. About five per cent of the population is white, and about ten per cent Indian. Of the remaining eighty-five per cent probably the proportion of mixed blood is twenty per cent white, forty per cent Indian and forty per cent negro. These


Cartagenita Village at Empire.
are the figures given by some of the Americans who have been on the Isthmus for years and have made careful inquiry. The native Panaman is indolent, and without ambition to accumulate property. He is satisfied to live from day to day on the frults which nature provides. It has been said that be can get along by swinging in a bammock, rocking it with bls toe and picking bananas with his hands. While a large percentage of the births are classed as illegitlmate, it cannot be said that the Panamanlans are immoral; rather they are unmoral. They are accustomed to the common law marriage. In many sections of the county priests are inaccessible, and for years the marrlage fees were so high that the natives would have to work for months before they could earn enough to pay for having a ceremony performed. Even now the clvil authorlties authorized to solemnize these marriages are often many miles away, and through centuries of indifference to the necessity of such marriage, the natives have become careless. Men and women live together all their lives as husband and wife, and are true to each other, and yet no formal marriage ceremony has ever been performed.
As a result of the revolution and the erection of the Republic of Panama the private monopolies bave been abolished. Formerly it was the custom of the

Columbian government to grant monopolies to one man to sell liquor, tobacco, salt or any necessity. A way was found to do this by whipping the devil around the stump. The import duty on a certain article would be fixed at a very high figure, and then some favored individual was given a concession to import that article free. The lottery is still in operation, because it has a vested concession, which does not expire until 1912. This concession will not be renewed.

Our ideas of geography are freshened up and made more definite by a visit to Panama. Here on the Pacific coast we find the mail for San Francisco being sent by way of New York. Going thus, it reaches its destination in twelve days, while it takes from twenty-two to twenty-eight days to go to San Francisco by the steamship on the Pacific.

The Canal Commission during the month of February furnished a million meals to its employes. Each employe must have a card before entering the dining room, showing that he worked nine hours during the previous day. He pays 30c for each meal.

While the liberal treatment accorded Panama by the United States government is not appreciated, it bas bad a good effect in all the countries of South America. The people of those countries are looking to the United States as their guide and friend. Mr.
F. A. Pezet the Peruvian minister, tells me that over two hundred young men from Peru are now attending college in the United States. He says many more would be glad to get an education in our colleges, if they could afford to pay the fare to North America. The Isthmian Canal Commission gives a special rate of $\$ 25.00$ to students of Panama who wish to go to New York on their steamers. The students from other South American countries must pay the regular fare of $\$ 90.00$. If the $\$ 25.00$ rate could be secured, and a similar rate on the steamship lines along the western coast of South America, Mr. Pezet believes that fully a thousand Peruvian boys would go to the United States each year to secure a liberal education.

At Empire on the line of the canal, I met William Fox, whose family resides on East Maiden street. He bas been here for twenty-five months and is now working as a blacksmith. During the first year, before the sanitary regulations were enforced, he was ill several times but since last December a year, has been in perfect health. Mr. Fox is eligible to membership in the society of the "Tropical Tramps;" as the Americans call themselves, after they have been in the Tropics for two years. The president is credited with having suggested that all the employes who have stuck to their work for two years without going back to the
states, be given a button of honor. He regards the men building the canal, as composing an army, similar to that which fought the hattles of the Clvil war. Many of them have enlisted for the campaign and propose to stick hy the job until the canal is finished. The president feels that all those who stay in the tropics for two years should have speclal recognition. Mr. Fox has already earned this distinction.

Balboa and Bolivar are the patron saints of this region. They both achieved lasting fame by great deeds.

It was in 1513 that Balboa looked out from one of these mountain tops on the Pacific and laid claim to all the land washed by its waters in the name of the King of Spain. It was Simon Bolivar who three centuries later led the South American Provinces to liberty. It was in 1826 that Bolivar called the first American Peace Conference to meet at Panama. It is noteworthy that the United States discouraged this movement, hecause the slave-holders feared a declaration against their cherished institution. More than a half century after Bolivar's attempt
to secure co-operation between all the American countries, a permanent PanAmerican congress was successfully established hy that illustrious son of Washington county, James G. Blaine. Bolivar's idea grows as the years pass, and to-day one hears more of the union of American countries, than at any time in the past. Only to-day a most intelligent observer of South American affairs, and a patriotic citizen of one of its Republics, declared his belief in the early union of all the countries of South America. It will be a glorious day when this is accomplished

## Mosquitoes on the Isthmus

Ancon, Canal Zone, Panama, March 15.-The mosquito is always an interesting subject of conversation on the Isthmus. To it is rightly attributed the transmission of the deadly and disabling diseases, yellow fever and malaria. Different species of mosquitaes spread different diseases. The yellow fever mosquito has his own breeding ground which he prefers. If the number of these pests increases suddenly the health officers know where to go. They can tell a yellow fever mosquito at a distance of six feet hy the black and white stripes on his legs. They generally rest on
a dark object so they can not be seen so readily. If one has on a dark coat and light trousers the mosquitoes will light on the coat. If the person is awake they will bite on the wrists or shins and then move instantly before he can hit them.

The yellow fever mosquito is harmless unless he has been infected by biting some one who has the fever. There is no risk in heing bitten unless yellow fever is in the neighhorhood. A light case of yellow fever may spread the deadly contagion and result in many deaths if the patient is not isolated.

A peculiarity of the yellow fever mosquito is that it stands perpedicular to the surface of the wall or ceiling and is therefore hard to see. All other varieties of mosquitoes and insects in general hold the body parallel to the resting surface. Observation of mosquitoes confined in glass cases shows that the female must have a drink of blood hefore she will lay eggs.

The health officers can locate their breeding places as readily as a boy can find a hird's nest. Their favorite haunts are low lands covered with water, possibly only a half inch deep.

They also breed around deeper water. A female mosquito will lay 200 eggs. A fish an inch long will eat 30 such larvae.

It is a mystery why some persons are immune from the yellow fever mosquito. The Jamaican negroes are remarkably free from it. A series of experiments with sixteen mosquitoes confined in a net showed that all would bite the hand of a white man which was stuck into the net. Sometimes one mosquito would bit the hand of a colored man, but usually none of them would touch it. One theory is that as yellow fever was perennial in Jamaica for centuries all the ancestors of the present generation who were susceptible to the fever had it and the descendants are immune. The medical name of the yellow fever mosquito is Stegomia. The last case of fever in the Canal Zone was in September, 1905, eighteen months ago.

The retail trade of the Canal Zone is almost exclusively in the hands of the Chinese. They keep all the stores. As the government has discontinued the coinage of the nickel or one-twentieth of a Balboa, the smallest coin is one-tenth of a Balboa or ten cent piece. Curiously enough a plug of tobacco is used in making change where the amount is a nickel. The Chinese used to sell large quantities of liquor and used dope freely there-
in. Now the board of health analyses all liquors sold.

## Sosa and La Boca Dams.

Today our party visited La Boca and examined the sites of the Sosa and La Boca dams. These two dams will make Sosa lake, which will have an area of eight square miles. Sosa hill is an isolated peak of volcanic formation 350 feet high. The Sosa dam extends for a mile north of and the La Boca dam west from Sosa hill. The Sosa dam will be eighty feet high, a quarter of a mile wide at the base, a mile long and will contain about $5,000,000$ cubic yards of earth and rock. The engineers say it can be built in one year.
The La Boca dam will be a mile and one-eighth in length and will contain about $6,000,000$ cuhic yards. The material for it will be dredged from the channel which will extend from the locks to deep water. This material will be lifted by the hydraulic method and it will take three years to do the work. The material for the construction of the Sosa dam is being brought from the Culebra cut. The two Sosa locks will have a lift of $321 / 2$ feet each. The channel to deep water will be one thousand feet wide and forty feet deep. The area of the Rio Grande valley which will drain into Sosa lake is 15 square miles, about half of which will be covered by water. The spillway is to be west of the hills
beyond the La Boca dam through a natural depression in the range of hills.
The saying that gray hairs are due to early piety is familiar. At Gatun I heard the Spanish version which is that they come from sitting too long in damp churches. In many towns in the tropics the churches with their thick adobe walls are the coolest places to be found and in the noon hours attract some worshippers who are not particularly noted for piety.

Laborers Well Cared For.
The common laborers on the Canal zone are as well treated as the bosses and foremen. Every man gets good meals of healthful food and has a comfortable bed. He also has a chance to take a bath whenever he wishes without charge. The quarters are arranged so that each man has his own shower bath and his own hook for clothes.
When the French were digging the canal the death rate from smallpox was as high as 80 per month. No case of smallpox has been reported in the zone for three years past, while it may be said to have been epidemic when the French were in control. It was among the troops at the time of the Revolution. American vigilance and energy have stamped it out.
The 18 public schools in the Canal zone which are in charge of American teachers are very successful. The
pupils are children of the laborers who are of many races and nationalities and of the natives who reside in the zone. Education is compulsory. The digging of the canal is helping to spread the English language and to hasten the day when it will become the universal language of mankind.

About 750 tons of soft coal are used on the Canal zone daily. It comes from the Pocahontas, W. Va., field via Norfolk. Pittsburg coal should be put down at New Orleans via the Ohio river cheaper than Pocahontas coal can be delivered by rail at Norfolk. The coal operators of Western Pennsylvania should aim to supply all the bituminous coal used in this region.

Panama has had rather a checkered political career. After Bolivar achieved independence for the Spanish nations of South America, it became a state of New Granada, then it was for several years independent, and afterwards joined its fortunes with Colombia as a separate state. Finally it declared its independence on November, 4, 1903, after the Colombian congress had refused to ratify the treaty giving the United States the right to construct the canal.

French Did Good Work.
Again and again one hears the work of the French complimented. Those who have had abundant opportunity to judge as to the character of the work say that it was first class.

There was graft at Paris and extravagance at Panama. Much of the French machinery is out of date and worthless. This is not surprising. Every manufacturer has this experience. Old methods must be discarded and the most improved modern machinery installed by those who wish to keep in the race for industrial supremacy.

American manufacturers have outstripped their European competitors because they are always ready to throw out the best machine in use if a better one is invented. They do not hesitate at the los incurred on old machines if new ones will do the same work quicker and better.

It is sald that it was Tom Scott, the first president of the Pennsylvania railroad, who found that it was cheaper to burn the cars after a bad wreck than incur the loss from delay by blocking the tracks while trying to save the cars. What he did was denounced at the time as reckless extravagance. What seems like waste is sometimes true economy. Our government is wise in employing only the most improved machinery in digging the canal and the French machines of two decades ago are out of date.

Ice is a necessity on the Canal zone and the factory installed by the commission is now turning out an abundant supply. Before this plant was put into operation ice sold at ten cents
per pound. Now it can be bought at 60 cents per hundred pounds.

The import duties of Panama are ten per cent ad valorem on most articles. The tariff on cattle imported is $\$ 20$ per head. A tax of $\$ 4$ per head is imposed on all cattle slaughtered. The duty on sugar is 4 and $15-16$ cents per pound or virtually prohibitive. This was imposed with a view of increasing the production of rum. You can purchase four glasses of rum now for 5 cents American money, so it is an easy matter to get drunk.
The Panamans have been rum drinkers for 400 years and their physical deterioration has been steady. More rum and cheaper rum will render them less capable of holding their own in the conflict of races which are subduing the earth.

Policemen Very Numerous.
Policemen are so numerous in Colon and Panama city that you can scarceIy walk 100 feet without meeting one. They are gorgeously arrayed in uniforms which are conspicuous for gold lace. The two towns have 964 policemen although Colon is credited with only 10,000 population and Panama with 25,000 . Each town has an area of about one square mile and each is surrounded by the territory ceded to the United States and constituting the Canal zone.

The policemen are nearly all native Panamans. They really constitute the
standing army of Panama. Whenever an ambitious politician becomes formidable to the government he is given a job on the police force. The policemen are paid $\$ 40$ per month in gold, so that Panama has an annual bill of $\$ 462,720$ for police protection for these two towns.

It is safe to assert that 50 able bodied Americans could preserve the peace better and constitute a more efficient and satisfactory force. The policemen are usually small in stature and insignificant in appearance. One of our burly Irish officers could handle several of them in a rough and tumble fight.

If any serious trouble occurs on the isthmus it is likely to come through the officiousness and lack of discretion of these Panama police. They are proud of their position and eager to show their authority. Several incidents have occurred which have been very aggravating to Americans. The police construe their rules strictly and do not appear to have capacity to distinguish between willful and persistent violations of the law and accidental or petty infractions of it. Most of the sidewalks are narrow, three or four feet only in width, and a pedestrian is not allowed to loiter or stand with an umbrella up when the streets are crowded.

The wife of an American happened to stop one day for a moment to look
at the goods displayed in the show window of a store, when a policeman stepped up, grabbed her umbrella, lowered it, and ordered her imperiously to move on. She resented his impudence with spirit.

Another rule is that any one who lays hands on an officer is guilty of assault. On one occasion recently a naval officer went ashore at Panama and wishing to make some inquiries, went to the police. He found several members of the force on a street corner conversing together. He stepped up to the party and spoke, but was not answered. To attract the attention of the leader of the party, who was a sergeant of police, he laid his hand on his shoulder. Immediately one of the officers knocked him down with his mace and when he tried to rise and resisted, the others pounded him severely. Of course an investigation followed. The Americans insisted that the policemen be discharged but they were let off with a fine of $\$ 25$ in gold.

It is such occurrences as these which cause friction and may lead to a serious outbreak. They prove that most of the Panamans are not fit to hold places of authority. They are domineering and anxious to display their authority. It would not be surprising if their ill treatment of an American one of these fine days results in such an ebullition as will stir the isthmus to the core. Lincoln said
our country could not exist half free and half slave. Likewise many Americans believe that work cannot go on smoothly and successfully for the next decade with a division of authority in police matters between Americans and Panamans.

Panama Elections a Farce.
The elections are dominated by the police and are generally regarded as a farce. The administration has entire control of the electoral machinery and it always wins. Two political parties are in existence, best described as "the ins" and "the outs." "The ins" control the registry of voters and enroll all who can be counted on to support their side; the others can look out for themselves. The police manage the elections and take the ballot box to every man who will vote right. It is alleged that at the last election 450 policemen in Panama city voted in every precinct and thus demonstrated their devotion to the government.

## Liquof a Curse to Isthmus.

While the congress has forbidden the sale of intoxicating liquors in government buildings, immigrant stations, and in soldiers' and sailors' homes, Uncle Sam is in the liquor business all right in the Canal zone. High license prevails. Liquor is sold at retail at about fifteen of the United States restaurants and at the Tivoli hotel at Ancon and the Washington hotel at Colon, which are run
by the Isthmian Canal commission for the accommodation of its employes and transient visitors. You cannot buy liquor at the government refrigerator from which the hatel bars and restaurants are supplied. The license fee is $\$ 100$ in gold per month.
Under the French regime liquors were sold freely and this policy accounts partly for the demoralization which characterized that period. Only five per cent as many places where liquor is sold are in existence today as were under the French. Still there seems to he no excuse for the existence of any licensed liquor saloon. Every one agrees that the use of alcoholic drinks in the tropics is dangerous and debilitating. Four centuries of practically free rum have ruined the native races and pulled their conquerors down to even a lower level.

The United States should not countenance the sale of intoxicating liquors on any territory in the tropics over which it has supreme authority. The Isthmian Canal commission is the creature of the president who has been given absolute control over the vast project of digging the canal. By his order the sale of liquor can be stopped and he should make that order at once to protect our young men who are at work on the canal and as an example to the representatives of the numerous races who are employed
in the great undertaking and who have suffered and heen debased by the legalized reign of rum. We should strive to elevate these poor people and not drag them down to lower levels by furnishing them with intoxicating liquors which deblitate and destroy ambition, energy and enterprise.

## Guarding Water Supply.

The importance of maintaining an adequate supply of pure water is keenly appreciated. Health officers patrol the reservoir sites day and night and the entire watershed supplying each reservoir is closely watched. No one can cross a water reservoir unless he is escorted by an officer. The diseases thus carefully guarded against are diarrhoea and typhoid fever. So rigid is this protection that the Canal zone with its tens of thousands of laborers has fewer cases of typhoid than the small villages in Washington county.
In the Pavaiso district which now has 3,800 population and had 800 two and a half years ago, only four cases of typhoid have occurred in that time. Yet it takes only two guärds on horseback, one on duty during the day and the other during the night, to protect its reservoir, Rio Grande No. 2, from contamination. If the water could be filtered through sand perhaps this rigid inspection could be dispensed with.
The Americans on the isthmus get
heartily tired of cold storage meats. So it happens that a live chicken on the Canal zone will bring $\$ 2.50$ monkey money, while 50 cents is considered a good price back in the country. Fresh fish can be had although the supply is not equal to the demand. The Caribbean sea and Panama bay abound in fine fish, but the prices have gone up so the fisherman will not work steadily. They care only for enough money to supply the wants of the day and have no ambition to accumulate. Turtles weighing from 400 to 600 pounds can be taken near Colon and turtle soup is served in the restaurants daily.

Canal a Godsend to Natives.
The digging of the canal has proven a godsend to the inhabitants of the overpopulated islands of the West Indies. This is especially the case with the Barbadoes, where the population is nearly 1,100 to the square mile or over twice that of any country in Europe or of any state in our Union.
The English steamer Solent, Royal Mail line, makes three trips every month between Bridgetown and Colon and each time brings 1,500 Barbadonians as contract laborers to work on the canal. Thus the most densely inhahitated island in the world is afforded relief by the enterprise of our country in resolving to connect the waters of the two great oceans.

Old Mother Isthmus does not worry so much about this influx as many good people in the United States do about the character of the European immigration which is vastly superior. The Barhadonians speak English and are accustomed to observe the law but are indolent and not fond of steady work.

Many of these laborers want to work only with new tools. Some of the gangs rehelled against using the old French picks, so the foreman hit on a happy expedient and dipped all the picks in tar so all have the same appearance.

It is not lahorers only who kick at times against what they believe is unfair treatment. It is related that a supply of fine grape-fruit intended for the Hotel Tivoli was by mistake delivered at one of the hoarding houses on the Canal zone instead of oranges, which had been ordered. The first American boarder who came in to breakfast was not familiar with the delicious fruit and threw it at the waiter's head for serving him a sour orange. Other hoarders followed with complaints until assured how the grape-fruit was esteemed as an appetizer for hreakfast. Which recalls the
old saying about casting pearls before swine.
Few cases of malaria are reported now, hut the hunt for the hiding place of the malaria carrying mosquito goes on so steadily as to make life a bur den for that industrious little insect. Every patient with malaria is closely confined hehind screens for a fatal case may result from the contagion carried by a mosquito from a patient who has suffered from a very light attack. For this reason the persons with malaria are sent to the hospital and isolated.

## Naturalized Americans Troublesome.

The only persons on the zone who make any trouble are the naturalized American citizens. Some of these came here to exploit the people and do not relish the restrictions imposed by the commission. They talk about their rights as American citizens heing infringed. They do not distinguish between liberty and license. They purchased citizenship and did not inherit it, so would have a government of which they can simply make use, and which will permit them to proceed in any way they choose to make money.

The Canal zone, a strip ten miles wide from sea to sea, has an area of nearly 300,000 acres. The Gatun and Sosa lakes will cover about 75,000 acres, and the canal, locks and railroad which is to be rebuilt on a new line, will occupy about 50,000 acres. This will leave 175,000 acres which helong to the United States and which are exceedingly fertile. Nearly all this land could be cultivated and after the completion of the canal, douhtless will be. Gatun lake will he a beautiful sheet of water with attractive islands. Already it is predicted that when the canal is completed these will be sites for winter hotels.

The land in the zone is susceptible to high cultivation if given as much attention as the Chinese gardeners now give it. It will grow tropical fruits the year round, and when questioned, the Chinese gardener at the Tivoli said he had good success with all the vegetahles of the temperate zone except celery. Two crops of rice can he raised every year. Those who raise fruits and vegetables in the zone should find a ready market even after the canal is finished, by supplying the ships which will pass through.



Congressional Party on the Ancient Bridge on the Road to Old Panama.

## Old Panama and the Pirate Morgan

Colon, Panama, March 18.-A visit to the ruins of Old Panama was one of the delightful features of this memorable trip. The old city was located about seven miles north-east of the present Panama and its ruins well repay the traveler for the toilsome trip. The route for four miles is over a magnificent macadamized highway built by the Canal Commissioners through Zone territory; thence over a wagon road, rough and seldom used, for a mile and a half to a point where vehicles must be left and the remaining distance traversed on foot or on horseback. About a mile of the last stretch is along the beach of Panama bay. Altogether it is a charming and romantic route.
The city of Old Panama was founded by the Spaniards in 1521, only eight years after Balboa discovered the Pacific ocean. A road was constructed across the isthmus wide enough to accommodate two carts abreast. The building of this road was a difficult task as much of the route was through swamps and over mountains. When it was completed Old Panama became a place of great importance and for one hundred and fifty years was famous throughout Europe. It was called the Key to the Pacific and the Gate of the Universe. Fahulous treasure came to

Panama en route to Porto Bello where it was shipped to Spain. It is said to have been a beautiful city and the picturesque situation, with tree lined coast, with wide Savanna back of it and the mountain peaks ln the distance make it easy for the imagination to picture "Panama the Golden," whose wealth and voluptuous luxury attracted the fierce buccaneers of the Seventeenth century.

When at the heighth of its glory Old Panama is said to have had a population of over 20,000 , with 12,000 build ings, palatial public structures, eight monasteries, a splendid hospital, and many magnificent private manslons built of stone or aromatic cedar. It was the wealth of this beautiful city which excited the cupidity of the reckless freebooters of the West Indies. Henry Morgan, an adventurous privateer, a native of Wales, planned the expedition against Panama. This daring ruffian was one of the most depraved and brutal buccaneers of that period made infamous by the crimes of desperate cutthroats ready to face any danger for plunder and rapine.
It was in 1671 that Morgan and his band of 2,000 buccaneers left the West Indies in 37 ships, captured Porto Bello, reduced the castle at the mouth of the Chagres river murdering nearly

300 of the garrison, and marched across the Isthmus against Panama. The pillage of that beautiful city is one of the darkest pictures in the history of our western world. Men and children were murdered, women outraged, houses and churches plundered. It was a revolting carnival of crime. For days the buccaneers reveled in the license of lust and loot which characterized their conduct on such occasions. After their demonlac debauch the pirates put the torch to the town and entirely destroyed most of its buildings. The reign of horror during the sack of Panama was indescribable. Some of the inhabitants escaped by fleeing to the mountains, while others put to sea in vessels ladened with valuables.
In approaching Old Panama we crossed an arched stone bridge, built without mortar, which has been standing nearly 400 years. Mr. Hallan, the enterprising photographer, took a picture of our party when gathered upon the bridge and again when we assembled in the ruins of the old church with its tree covered walls as a background. These walls are fully 30 feet in height and four feet thick. Great trees are growing upon their tops, the roots extending down into the ground. It is one of the most unique and pic-
turesque scenes to be found anywhere. Albeit the glimpse it gave of the olden time and the vivid recollection of a revolting incident in human history which it recalled left a feeling of sadness. The ruins of Old Panama are covered by a rank growth of tropical vegetation for after its tragic fall the Spaniards abandoned it and since its destruction only the curious, the treas ure seeker, or the tourist cares to visit it. The Indians still bury their dead among the ruins and we saw many new graves within the old walls of the church.

## Panama Saving Money.

The $\$ 10,000,000$ which Panama received from Uncle Sam have not been squandered. About $\$ 1,000,000$ were used in paying the debts of the State of Panama, $\$ 6,000,000$ invested in securities in the United States, and $\$ 300,000$ deposited as guarantee of parity of currency. The remainder is on deposit in New York and London and is to be used to pay for public improvements or to protect additional lssues of currency. Panama's finances appear to be in good shape.

The total amount of excavation on the Canal is estimated at $110,000,000$ cubic yards according to the latest revised figures. The amount of dredging to be done $\ln$ the sea level channel on the Atlantic slde is $12,000,000$ cubic yards and on the Pacific 8,000 ,-
000. Everyoue here believes this material can be moved within the time limit, eight years.

## Panama's Customs Receipts.

The customs dues (impuesto commercial, on general merchandise which is taxed 10 per cent ad valorem amounted last year to $\$ 935,325$ Panama silver. On liquors which are heavily taxed in comparison with other merchandise, the dues were $\$ 409,000$; on tobacco $\$ 100,000$; cigarettes $\$ 58$, 000 ; matches, coffee, opium and salt $\$ 47,000$. Coffee and salt are protect ed by the Panama tariff on account of being produced in abundance here.
Mr. Ehrman, the successful banker of Panama, has a wonderful collection of curios and rare Indian relics, which many members of our party by his courtesy examined with interest. Nearly all of them are of solid gold and of great value. Mr. Ehrman's father came here over forty years ago from Louisiana and the firm is well established and prosperous. He has enjoyed exceptional opportunities of gathering the golden relics of a bygone race. The ornaments are found in old graves which are located by tapping the earth. Most of them are shaped like frogs, tigers, pigs, bats, birds, and other living creatures. Others represent men and women. The figures are usually rudely hammered out, though some display considerable
skill. Agazzi examined this collection twice but was unable to decide as to the age when the ornaments were made.

## Beautiful Island of Taboga.

A trip by boat to Taboga Island was one of the enjoyable incidents of our sojourn on the Isthmus. Taboga is ten miles from Panama city in a part of the bay where the gentle breezes always blow. The island is about seven miles long by three miles wide and has a population estimated at 3 ,000 . How so many people can live there would be a mystery were it not for the prodigality with which nature produces her fruits and the abundance of fish in the bay near by. Any one can go out and with little effort gather enough fruit to sustain life.
ln Taboga village the streets are so narrow and with so many offsets and turns as to make the passage of a vehicle impossible if there were such a conveyance on the island. The houses are miserably cheap and poor structures, built without regard to lines or lots, apparently erected anywhere the occupant took a notion to set up a home. They are jammed in close together and full of people and pigs, for in many houses we could see women, children, and pigs on friendly terms. Five hundred people are thus packed on a piece of ground no larger than
the College campus, on a rough, stony hillside.
The French built a sanitarium on Taboga island which now belongs to our Canal commission. It is in charge of Dr. and Mrs. Randall, who manage it successfully. Many patients from the hospitals at Ancon and Colon are sent to Taboga to recuperate after a siege of sickness. Many of those who are barely able to stand when they reach Taboga are soon invigorated by the life giving breezes and in a few weeks are able to go back to work. We visited the odd old church built over 200 years ago and left Taboga glad that we had been so fortunate as to get this brief glimpse of such a strange mode of life.

## The Great Gatun Dam.

The site of the mighty Gatun Dam was carefully examined by our party. Interest has entered in this dam because it is the part of the project which has been most severely criticized. Mr. Stevens, Mr. Ripley, and every engineer with whom I talked expressed the utmost confidence in the character of the foundation and no one has the slightest doubt that it will hold. Indeed some assert that 1,000 ,000 cubic yards of material would be sufficient to hold the waters of Chagres river and the waters of Gatun
lake which is created by this great dam. $22,000,000$ cubic yards are to be used in making it. The area of the lake will be 110 square miles. The dam will be 8,000 feet long and 135 feet high. It will be 100 feet wide at the top and 2,625 feet, or a half mile, wide at the bottom. The water will be 85 feet deep, so the top of the dam will be 50 feet above the level of the lake. This and a spillway 150 feet wide should be sufficient to take care of the great floods in the Chagres river. The material for the Gatun dam will be conveyed an average distance of 10 miles.

It costs $\$ 1$ per mile to move a trainload of earth and rock. Each train is composed of seventeen cars which hold an average of 18 yards each. They are loaded and unloaded by machinery. The material is chiefly the indurated clay of which the public has heard so much from canal critics. It is a volcanic rock which crumbles just as much as our Wasbington county limestone does when exposed to the air, but underground is quite hard. It is blasted out of the hills by dynamite. The holes are drilled seven feet apart and 20 feet deep. The charge is from 30 to 60 pounds. The drilling machines were formerly run hy steam but now compressed air is used. The increase in efficiency is said to be ful-
ly 20 per cent. As all the material from the great cuts has to be handled on the cars it was thought best to use much of it in increasing the thickness of the Gatun dam so as to make it safe beyond all peradventure.
The lottery which is in operation at Panama City has a branch at Colon. The drawing takes place on Sunday. This morning scores of men and women, mostly colored, were gathered in front of the lottery office to see the lucky number posted. The highest prize, $\$ 3,000$, was won by number 744. Others drew smaller sums but of course thousands were disappointed. Gambling in this form is general. Even the reputable stores sell lottery tickets. The result is very demoralizing. In some way our government should put a stop to this.

## Bull Fights are Revolting.

The hull fight yesterday was a revolting exhibition. Such a show is given now every Sunday. The animals have little spirit and are terribly goaded to madden them. The valiant bull fighters take no chancea themselves, having safe retreats built close to the walls of the arena. The so-called fight was merely a cruel way of slaughtering the animal but the spectators cheered with delight as the frenzied bull, bleeding from many cruel wounds occasionally charged bis tormentors


Congressional Party at the Ruins of the Church at Old Panama.
who waved their red capes. The spectacle was disgusting in the extreme and it is marvellous how any one can enjoy it.
This town has many husky, enterprising Americans who are cram full of energy and are bound to succeed. Their modern and progressive methods cause the native Panaman to open his eyes in wonder and also arouse his jealousy. The native is too indolent to hustle himself, yet is envious of the go-ahead American who has infused new life into the Isthmus. The native is mostly incapable of appreciating American generosity, the opportunities open to him, and the debt he owes to the United States for its liberal treatment. He seems to think these concessions were made by us through fear of complications. For these reasons American residents speak with some contempt of the natives.

Enthusiasm of Canal Workers.
The splendid enthusiasm of those who have charge of all departments of Canal work is inspiring. The spirit of confidence and devotion to the cause is all pervasive, and permeates the very atmosphere of the zone. The esprit de corps of those directing all branches of the work is magnlficent. The great enterprise has attracted to the Isthmus many of the most actlve
and patriotic young men of the states who are anxious to have their names linked with this master achievement of all the ages. In their lexicon there is no such word as fail. Whoever insplred this enthusiasm performed a great work. If it was the personality of Mr. Stevens as many claim, he is certainly entitled to the thanks of the country. One thing is sure. Every one speaks with admiring enthusiasm of Mr. Stevens and regrets his departure. The points of general agreement on other matters are that the sanitary work of Col. Gorgas is remarkable, that Capt. Shanton handles the police department admirably, and that U. S. Consul Shankin is an energetic, efficient, and popular officer whose devotion to the interests of his country makes his services invaluable. On all other matters there is more or less disagreement.
The Canal when completed will probably have cost $\$ 250,000,000$. While this is a vast sum it is not so much in proportion to the wealth of the United States as the cost at the time of its construction of the old National road. That was the first great work of internal improvement undertaken by the government. It was hegun 100 years ago under President Jefferson's administration when the country was so poor that is was not thought worth while to compile statistics of wealth.

The United States expended about \$7,000,000 in constructing that famous old highway. It was for many years the main artery of commerce between the East and the West. Its cost was a mere bagatelle compared to its benefits in binding together remote sections of our country. so the cost of the Isthmian Canal will be counted as a small expenditure a century hence when the American people come to estimate what has been accomplished by uniting the Atlantic and Pacific at Panama.

## Canal Work an Object Lesson.

The work on the Canal Zone is an object lesson to the whole of Latin America. The Anglo Saxon has conquered the tropics. He has shown that the race can live and thrive in a hot climate. By strictly observing the laws of health and enforcing sanltation he has eradicated deadly disease and banished such afflictions as malaria which paralyze effort. The inhabitants of Latin America can learn how they must live by observing what has been done on the Isthmus. When the Canal is completed thousands of competent young Americans, famlliar with their customs and language by years of residence on the Zone, will be equipped to aid them In the march of progress and civilization. The Pana-
ma Canal will improve the social, moral, material, and political conditions in every country between the Rio Grande and the Straits of Magellen. President

Roosevelt's administration will be noted in history for many wise and beneficent measures but the supreme achievement of his two terms will he
recorded $a_{s}$ the inauguration of work on the Isthmian Canal through his insistent leadershlp and sagacious statesmanship.

## Costa Rica the Best of the Central American Countries

San Jose, Costa Rica, March 20,Sailing from Colon at 1 o'clock on Monday our section of the congress ional party reached Port Limon, Costa Rica, early yesterday morning. The distance is 192 miles. Our ride through the golden Caribbean was on the beautiful steamer Ellis of the United Fruit company's line, a staunch vessel of 3,000 tons, manned by as polite and capable a set of officers and crew as ever trod a ship's deck. Everything possible was done to promote the comfort and happiness of the passengers.

Port Limon was named by Columbus who sailed along this coast on his last voyage vainly searching for a passage to the western sea. The old ravigator explored the shere lines of each gulf and bay and sailed into each river between Yucatan and Trinidad. This portion of the land was well named Costa Rica, or rich coast, and the harbor in which our good ship anchored was called "Puerto de Limen," because the islands near by were cov-
ered with lime trees. Limon, pronounced as though spelled Lemone, has a population of 8,000 , a large proportion being negroes from Jamaica, whe are employed in loading and unloading ships and upon the immense banana plantations near by. English is the exclusive language as it is in all the coast country of Costa Rica. Indeed English is taught now in all the schools throughout the country and its study is compulsory. It must also be used in all the stores. Costa Rica prides itself on being the only country of Central America which has more school teachers than soldiers and this is saying a great deal in Latln America, where revolutions follow one another in rapid succession and civil authority is generally only maintained by force of arms.

## Great Banana Country.

The railroad connecting Port Limon with San Jose, the capital, has a guage of three feet, six inches. The distance is 102 miles. For slx miles
after leaving Limon the read skirts the coast most of the way within sight of the breaking billows and then turns up the valley of the Reventizan river. For many miles it passes through the wonderful banana farms which have made Costa Rica famous. Here the banana grows all the year around. A banana shoot or branch, as it is called, starts to produce at the age of nine months. The branches are cut down each season. Then the laborer cuts the shoots with his machette or corn cutter, sticks the machette into the ground, twists it, puts in a shoot, stamps it, and that is all the cultivation the banana branch gets. The underbiush which grows in tropical luxurianco is cut three times each year, however. The banana bunches are measured by hands. Each perfect hand has 22 bananas. The number of hands on a bunch ranges from 7 to 22 . The average number of bananas on a bunch is 144 , though a few bunches have been found with upward of 500 .

The land along this coast is pe-
culiarly adapted to banana raising. While the banana trees thrived for awhile in other countries of Central America no soil seemed rich enough to stand the continuous cultivation of bananas save that of Costa Rica and upper Panama. Land can be bought here at $\$ 12$ per acre. It costs $\$ 40$ per acre to clear it, and put it in condition to raise bananas. It will yield 15 bunches of bananas per acre every month. Taking the average of 144 bananas to the bunch it will be seen that each acre will produce 25,920 bananas anually. The vegetation is so rank and its growth so rapid that it takes one man to every three acres to clear the brush and grass every four months, pick the fruit, dig the ditches, build the bridges, and do all the necessary work. Farm laborers are paid from 85 cents to $\$ 1.50$ per day, American money. As $\$ 1$ of our money is equivalent to 215 centavos or $\$ 2.15$ Costa Rican money, the laborers can live luxuriously on these wages if they choose. Here as in Panama the Jamaicans are indolent and will not work regularly. If engaged to go to work at 7 a . m . they may not appear until 8 or 9 o'clock, and after three or four days' work will lay off for two or three days. Frequently they go off into the bush or jungle as it ls called, build a shack and clear a piece of ground. Under the law these squatters must
be paid for their improvements if the owner of the land wishes to take possession. The land is divided into nectares or 2.47 acres and all calculations as to production are based on this measurement.

## The Banana Industry.

The United Fruit company owns 150,000 acres of land susceptible of banana culture. The greater portion of this, remote from the railroad, is not yet used for the production of bananas. Last year the company purchased about half of the bananas it shipped. Many banana growers (wn their own farms. During 1906, no less than $8,500,000$ bunches were shipped from Port Limon, of which $5,000,000$ went to the United States. There is no export duty on bananas. About 400 ships or an average of more then one ship per day loaded with bananas left Port Limon last year. This year it is confidently believed $10,000,000$ bunches will be exported. A ship of 3,000 tons sometimes takes from 40,000 to 50,000 bunches. While the Jamaica bananas are pronounced better by epicures the Costa Rican or Limon bananas sell better in the market because they look better. They have a fine appearance and four customers out of five will choose them. A good many settlers have come here from the United States and have been very successful in banana raising. I
have therefore sought information on the subject for the Observer, thinking that some of our Washington county farmers who are selling coal lands may wish to come here to try banana growing. The business is said to be very profitable and the consumption increases steadily. I can well remember when a banana was unknown in Washington.

## Mountain Climbing By Rail.

Passing through vast banana farms, one of which belonging to one company is nine miles in length, our train reaches the foot hills of the Cordilleras and begins its winding climb to the summit, a mile above us in the clouds. The road follows the valley of the Reventizan, which soon becomes a dashing torrent. For forty or fifty miles there is a succession of horseshoe bends equal to any of the curves on the W. \& W. railroad, between Washington and Waynesburg. The route is more tortuous and the grade at many points heavier than on the only railroad which reaches Greene county's capital. Like our "Narrow gauge" this line is a great revenue producer. Last year it earned over $\$ 1,700,000$. It was built by an English syndicate, but has keen taken over by the United Fruit company. The Reventizan is a considerable stream and as it falls again and again over the rocks for mile after
mile, the thought comes that some day this power now wasted will be utilized. It would undoubtedly be sufficient to generate electricity which would operate the railroad, light many towns and run thousands of machines.

Our train winds through picturesque mountain passes and deep gorges where mighty walls of solid rock rise for hundreds of feet. The mountains are fertile to their very tips. Gardens are planted on slopes as steep as the roof of a house. Clouds hover over us obscuring the mountains across the valley. As we approach the summit we get a good view of Irazu, a volcano on a peak said to he 14,000 feet above the sea, but which does not look the part. It is one of a group in this neighborhood which are row quiescent, but sometimes get gay and vomit sulphur, lava and ashes. Two miles from the summit we stop at Cartago, a town of 10,000 people, which was destroyed by an eruption nearly 60 years ago. It is 90 miles from the coast and about 5,000 feet above sea level. The air is cool and bracing and one can scarcely believe that it is only a few hours since we were sweltering in tropical heat at port Limon. Many persons from the Canal zone come to Cartago to recuperate when worn out hy continuous hot weather. It takes only a day from Colon to reach this mountain top. We are told that accommodations for
boarders are at a premium and it has been suggested that the Canal commission build a Sanitarium at Cartago. A few weeks here would do as much to revitalize a man as his six weeks annual vacation spent in the States and the trip would be much less expensive. A peculiarity of this region is that it will rain for weeks on the Atlantic side of the mountains and never a drop fall on the Pacific side. Going down to San Jose the descent is about 150 feet to the mile. Switches and sidings for runaway trains are provided, the tracks of the sidings running at a stiff upward grade for some distance to allow a runaway train which is switched to it to expend its force and enable the crew to get control of it.

## San Jose, the Capital City.

After a delightful seven hours ride we reached San Jose, the capital of Costa Rica. It happened to be the feast day of St. Joseph, in whose honor the city is named, and the stores and business places were closed while people thronged the beautiful parks and listened to good music by the National band. San Jose has a population of 25,000 and is a solidly built town of clean and attractive appearance. The streets are narrow as in all Spanish towns, hut are well paved. The bulk of the population of Costa Rica is in the country around San Jose. It was
settled by immigrants from provinces in Spain where the people were Caucasians and had never mingled with the Moors. When they came to Costa Rica they kept their blood pure and refused to intermarry with the Indians as most of the Spanish settlers did. Thus it happens that while at Panama city, a place about the same size as San Jose, it is said that there are only 16 families without any trace of the tar-brush, as the mixing of races is called, in the capital of this Republic and the country round about, thousands of families of European descent and pure Caucasian blood can be found. Few negroes are seen here. They keep to the coast country.

The population of Costa Rica is estimated at 350,000 . The area is 18 ,400 square miles or equal to that of New Hampshire and Vermont combined. The foreign population is about 7,000 and this is increasing slightly by immigration. The government has begun to encourage immigration by the sale of land on easy terms. Costa Rica maintains an army of only 1,000 men while Nicaragua has 5,000. Just now some apprehension is felt as to the effect which the military success of President Jose Santos Zelaya, of Nicaragua will have on Central American politics. Zelaya is carrying on war with Honduras and Salvador. He is said to be ambitious


Specimens of Bananas, Port Limon, Costa Rica.
to unite all the Central American states in a union of which he would be president. He is represented as a military dictator and if successful in his present operations it is feared will turn upon Costa Rica. Unlon with Nicaragua and other Central American states would not be agreeable to Costa Rica. It would prefer annexation to the United States. Indeed, as long ago as 1822 it was ready to follow San Salvador in asking the United States for annexation. It is the most advanced country in Central America, with a more desirable population and with more stable government. No revolution has occurred here for 35 years. The gold standard has been adopted and business is on a solid basis. The people are peaceful and do not want to go to war. They have the reputation of being more industrious and-honest than their neighbors in other states. Most of them take little interest in politics, do not vote and care little who governs them so that peace is maintained. While they probably work more than the inhabitants of other countries in the tropics they are not hustlers. Here as in other Spanish countries the viord most often used is "Manana," meaning "some other time." The country has immense resources, agricultural, mineral and timber, but the greater part of its territory is unoccupied. Here as in all Spanish countries, there
is no land tax. That is the reason the country has not made progress. Immense tracts of land are held under ancient grants and as there is no tax to pay it is held in rich families who do not use it and will not subdivide and sell it. Import duties are levied on tobacco, liquors and various kinds of goods.

Great Fertility of the Soil.
It is said broadly that everytbing will grow in Costa Rica. By far the larger part of the population and production is on the Pacific side of the mountains, yet nine-tenths of all its exports are from Port Limon. Sixtyfive per cent. of these exports go to the United States. While bananas are the principal export, still last year the value of coffee exported was $\$ 3$,350,000 . At Limon we saw 450 men employed loading our ship with bananas. All told 32,000 bunches or over $4,600,000$ bananas are to be put on board. This is about an average load. Then if one considers that the United Fruit company has 102 ships carrying fruit to the United States and Europe he gets a faint idea of the tremendous growth of the business. Of course many of the ships ply between Cuba, Jamaica and other fruit producing countries to ports of the United States and England. This company gives work to 7,000 persons including railroad employes.

San Jose boasts of one of the most magnificent theatres in the world. Only Paris and Milan have structures which exceed it in grandeur. It was built by the government and cost over $\$ 1,500,000$. The money was raised by a coffee tax. The best mechanics and decorators in Italy were brought here to do the work. Although only ten degrees from the Equator the mercury never rises above 84, while in Canada it reaches 104. Perpetual spring reigns and the flowers are perennial. The days are warm and the nights cool enough to sleep under a blanket. No one has an overcoat, and the houses have no chimneys. Shoes are not worn by the women of the lower classes. Education is free and compulsory between the ages of eight and fourteen. On account of earthquakes the houses are one and two story structures with thick adobe walls. Through the courtesy of Mrs. Fernandez we were permitted to see the interior of one of the houses of the better class. She invited us to her residence which is on an elevation overlooking the town. Mrs. Fernandez's husband was at one time Minister of Education and at the time of his death was president of congress. We were charmingly entertained at this beautiful Costa Rican home and if its inmates are representative of the people we must admit that they surpass us in social graces. The children were edu-
cated abroad, speak several languages fluently and have accomplishments which fit them to adorn the best society anywhere in the world.

## Strict Sanitary Regulations.

The sanitary and quarantine regulations are better enforced in Costa Rlca than in any state in Central America. The health officer who came aboard the Ellis at Port Limon did not perform his dutles in the usual perfunctory manner. He felt the pulse and examined the vaccination mark of every passenger. The buzzards help to protect the public health and great flocks of these scavengers of the air can be seen from the car wlndows. We also see many teams of oxen yoked together by the horns as in Cuba. San Jose is over 4,000 feet above the sea, on the Pacific slope of
the mountains and its surroundings are picturesque and beautiful. The valleys between the mountain ranges near by are exceedingly rich and fertile. And to speak again of the banana it is reported that a grower has just produced a bunch fiavored like an apple and which smells and tastes like an apple. This has caused sime excitement in the banana world and the success of the experiment will open a wider market and lead to a largely increased demand for the banana.

What has been accomplished by the United Fruit company shows what American energy and enterprise can do in a tropical country. It is over four hundred years since Europeans first set foot in Costa Rica. It was the first country on the mainland of the continent to be discovered, but
as yet its marvellous resources are scarcely touched. Extensive prairles affording fine pasturage are found In the northern part of the country and vast forests of valuable timber in the northeastern section. Sugar, corn, cocoa and tropical fruits flourish. The coffee is of superior quality. The land held by the government is sold at a nominal figure with a long time allowed for payment. Costa Rica only needs more enterprising Americans with capital, such men as manage the United Fruit company, to bring it into the first rank of prosperous communitles of this continent. One bids adieu to this wonderful little country of Central America, thankful that he has had an opportunity to visit it and wishing for it the development and advancement which its rich resources and varied attractions merit.

## New Orleans and the Lower Mississippi

The return trip from Panama was made by way of New Orleans. Eight days were spent with other members of the committee on rivers and harbors of the House of Representatives in an inspection of Louisiana waterways. This committee visited Louisiana at the request of the state delegation and was entertained by the commercial organizations of the principal cities of the state. The following interview appeared in the Observer of Saturday, April 6:
"Our ship entered the south pass of the Mississippi a little after noon on Sunday, March 24. I had seen the mouths of the Mississippi before, but what can be learned there is a never ceasing wonder. The Father of Waters has three great outlets, the South Pass, the Southwest Pass and the Southeast Pass. All told, $1,300,000$ cubic feet of water, or seven times that amount in gallons, passes out into the gulf each minute. The amount of matter carried in suspension and deposited as sediment each year would cover one square mile of territory to a height of 360 feet. As the average depth of water is between 30 and 40 feet, this soil washed from 27 states, makes from 10 to 12 square miles of land annually. Pennsylvania and Louisiana have the same area,

45,000 square miles. While the area of Pennsylvania is fixed, Loulsiana adds to its total each year a strip of land as.large as South Franklin township.

## New Orleans.

"It was my third visit to New Orleans, and yet there is so much to see there that I enjoyed every minute of the stay. Its history is intensely interesting. It has a location which insures its pre-eminence as one of the great cities of America. If New Orleans had the push and enterprise of many of the small northern towns it would soon have a population of 1 ,000,000 . Its people do not seem to be imbued with the mad rush for wealth which characterizes our northern communities. • If a merchant makes $\$ 5,000$ or $\$ 10,000$ per year he spends it; and if a clerk receives $\$ 1,500$, he has no ambition to save it. As a whole the people do not care to accumulate. The Mardi Gras is an annual extravagance in which the city indulges. It costs $\$ 1,000,000$ for the display. I was told that men gave $\$ 25$ or $\$ 50$ to make this a success who could not afford it Then everyhody loses a week of work and the waste in wages is estimated at $\$ 2,000,000$. On the other hand the city takes credit for $\$ 1,000,000$ spent
by 100,000 visitors, but is still short about $\$ 2,000,000$ on account of this festival. During its continuance everybody keeps open honse and entertains friends. New Orleans has been satlsfied to have dirty streets with foul water covered with green scum in the gutters, but a better day is dawning. The city is growing by force of circumstances. Its commanding location and splendid harbor, with water 100 feet deep for miles above and below, compel it to forge ahead and assure its future supremacy.
"Our party went up the Mississippi by boat to the mouth of the Red river. The banks are lined with beautiful sugar plantations many of which contain from 2,000 to 3,000 acres. A good surgar house with modern equipment costs about $\$ 100,000$. Some of these plantations sell at $\$ 250$ an acre. The current in the river is very shifty and uncertain. Sometimes it eats remorselessly into one of its banks until half a plantation will be washed away. This is a dead loss to the owner, although a little lower down the accretions on the other shore may add an equal area to the plantation of a neighbor. The land thus made belongs to the owner of the plantation so enlarged. Many fine homes have gone into the river and disappeared.

The channel is seven-eighths of a mile wide at New Orleans and three-fourths of a mile wide for a long distance above the city. If a cut is made across a bend to straighten the channel, the rover eventually makes a reverse curve somewhere below and stretches out to its usual length. This was true of it in its natural state. Now it is confined by levees about 20 feet high on each side. These revetments cost from $\$ 20$ to $\$ 45$ per running foot.
"About ten miles ahove New Orleans on the east side is the beautiful 1,000 ,acre plantation of Gibbs Morgan, Esq., one of the leading lawyers of that city. He is a great-grandson of Col. George Morgan, of Morganza, and has relatives living in this community. His home is known as the "Danish Consul plantation," as it formerly belonged to Mr. Frellsen, who was consul from Denmark to New Orleans for many years.

## Plaquemine Bayou.

"Plaquemine is on the west bank of the Mississippi about 100 miles above New Orleans. Here came Nicholas Wilson from Washington a hundred years ago and settled on a splendid plantation a mile below the town. He was an uncle of Alexander Wilson, Esq.; of Misses Jennie and Eleanor Baird, of East Wheeling street
and connected with many other families in this community. The old plantation contained several thousand. acres and has been divided into three parts. Some of Mr. Wilson's descendants live on these plantations yet. Others are scattered over the state, at New Orleans, Lake Charles and Shreveport. All are worthy descendants of a good man. The lock which has just been completed at Plaquemine to connect the Mississippi with the Bayou is the largest in the world. It will have a lift of 36 feet, twice that of the lock at the Soo, and the gates are 52 feet in order to accommodate the rise of water during floods in the Mississippi. Many beautiful sugar plantations are located on the Plaquemine Bayou. I was interested to know that some of them used Washington county coal which comes from the Monongahela river. They pay $\$ 5.30$ per ton. Last year 500,000 tons of this coal were sold at Plaquemine. Most of the planters, however, are using oil brought from Texas as fuel. The price of oil has been going up and is now $\$ 1.40$ a barrel. One planter told me that he considered a ton of Pittsburg coal equal to five barrels of oil, but another put the proportion at one ton to two and a half barrels. If the improvement of the Ohio river were completed and a uniform depth of nine feet from Pittsburg to Cairo
the year around assured our coal could be sold at $\$ 2.50$ to $\$ 3.00$ per ton. These big plantations use from 4,000 to 6,000 tons each annually.

## Big Real Estate Deal.

"Baton Rouge, the state capital, is an interesting little city, not so large as Washington. The portion of Louisiana east of it to the Pearl river was not included in the purchase made by Livingston from the French in 1803. It was claimed by the Spaniards for years afterward and called West Florida. $\ln 1810$ it was taken by Americans and the Spanish claim has never been settled. It is not clear how Livington overlooked this piece of territory. He made the greatest real estate deal in history when he bought Louisiana. Next to the treaty of 1783 , this purchase represents our greatest and most valuable acquisition of territory. Jefferson only wanted New Orleans, but Livingston acquired a vast territory besides at a low price. He was a shrewd dealer, saying to the French that it would be a hundred years before the white man set foot west of the Mississippi. In less than 50 years the Stars and Stripes were afloat over everything clear to the Pa cific. West Florida has been under seven flags, English, Spanish, French, West Florida, United States, Confederate and United States. No other
piece of territory in our country has witnessed such a change of sovereignty.
"Our boat turned up the Red river and then down the Atchafalaya. A plantation on the Red river was the scene of 'Uncle Tom's Cabin.' Mrs. Stowe never visited Louisiana and her information came from a school teacher who had spent some time there. All those here who speak of the book say that it is an extreme picture. Usually the relations between master and slave were kindly and instances of such cruelty as is depicted in 'Uncle Tom's Cabin' were rare. Atchafalaya' is an Indian word, meaning 'very long river.' As a matter of fact it is a very short river. It is supposed that at one time it was the outlet of the Red river. At one point the Red and the Mississippi came within six miles of each other. The Red worked its way east and the Mississippi west until the two were united and the waters of the Red went to the gulf by the Mississippi channel. Recently the mats of drift in the Atchafalaya were cut away and now about one-fourth of the flow of the Red goes to the gulf by way of the Atchafalaya.
"We went by boat from Morgan City to Franklin up the Teche, pronounced 'Tesh.' This is through Acadia, made famous by Longfellow in his poem, 'Evangeline.' Part of our trip was by
the light of the full moon. Fine sugar plantations are on either bank. We passed the tree under which Evangeline is said to have slept as her lover went by. It has been cut up and most of it carried away by relic hunters. The old love story was told as we glided gently by with music on the upper deck, which made the trip seem like one in Fairyland.

## Avery Island Salt Mine.

"We visited the great salt mine at Avery island. It is the largest mine in the world. The area of the island is four square miles and two square miles of this is a solid block of salt. Drills have been put down through it to a depth of 2,299 feet, when cedar wood 25 and 30 feet in thickness was encountered. Operations are carried on now 532 feet below the surface so as to give a roof and keep the water out. Entries are driven very much in the same way as in our coal mines except that they are about 25 feet in height. Eighty thousand tons of salt were taken from this mine last year. We saw 10,000 tons at the mouth of the mine waiting shipment, but no cárs available. The cars on hand only held 20 tons and seemed very small along side of our 50 ton coal cars. General Avery's grandfather came from New Jersey in 1815 and settled on this island. Lump salt was discovered in

1862, the first in America. It is 98.6 per cent pure. Tobasco pepper also grows in profusion on this island and a thousand barrels of oysters are shipped every day. Five hundred men are given employment. The highest part of the island is 350 feet above the sea. Here General Avery, his sons and Civil Service Commissioner Mcllhenney, his son-in-law, have fine homes, where we were beautifully entertained.
"We passed the island owned by the late Joseph Jefferson, the actor, which he called Bob Acres. In this neighborhood are lands said to yield 300 to 400 barrels of onions per acre. The seed is brought from Bermuda. The oyster beds nearby yield 1,000 barrels per acre. Last year $3,000,000$ bushels of oysters were taken from the Louisiana beds and on each bushel the state imposes a tax of one cent.

## Wide Rice Lands.

"We passed through miles and miles of rice land. Much of this land can be purchased for $\$ 20$ to $\$ 25$ per acre. The average production of rice is about ten sacks per acre. Each sack contains 180 pounds and sells at \$3. Many instances are given of persons who have cleared the price of the land in one crop. It is said to be a common thing. It is only 20 years since rice growing was be-


Palm Avenue. Cristobal Colon, Canal Zone.
gun in this neighborhood. One man can cultivate 100 acres. Wages are pretty good and the demand for labor is great. The usual rate is $\$ 1.50$ per day for common labor. Many farmers are moving from Illinois and Iowa to these rice lands. They say one must pay $\$ 125$ per acre now for good land in those states. Such land when planted in corn wili produce about $\$ 20$ gross. They can produce $\$ 30$ worth of rice on land which they can buy for one-fifth as much as in Illinois or lowa.
"Lake Charles is one of the growing towns of the state and the metropolis of Southwestern Louisiana. It has numerous saw mills which turn out about 750,000 feet of lumber per day. The yellow pine timber belt is about 15 miles north of the town.

## Wonderful Sulphur MIne.

"Ten miles northwest of Lake Charles is the wonderful sulphur mine, said to be the greatest in the world. Sulphur was discovered here during the Civil war while boring for salt. Over $\$ 2,000,000$ were expended by different companies in attempting to mine it. The property finally passed into the hands of the Standard Oil company and Professor Herman Frasche, the engineer for that great company, invented a method of getting it out. Wells are drilled to a
depth of 500 to 600 feet. A 13 -inch iron pipe is inserted with a six-inch pipe inside. Superheated steam is forced down the larger pipe. It melts the sulphur and the air pressure brings it up the six-inch pipe. It pours out like molasses. It is confined in large square pens made by setting heavy planks on edge. Some of these pens are 200 by 1,400 feet, with an area of about seven acres. The sulphur cools when it comes in contact with the air. The planks are then raised and this is continued until the blocks of sulphur are 30 feet high. We saw several of these chunks. The mine produced last year 300,000 tons. The market price was $\$ 22$ per ton. During the Russo-Jap war it rose to $\$ 40$ per ton. The deposit of sulphur is 500 feet below the surface and is 125 feet in thickness. The limits of the deposit have been defined and the bed is known to contain $45,000,000$ tons. In the ground the sulphur is absolutely pure. After handiing it, walking over it, and so forth, it is 99.8 per cent pure. Some years ago the property was assessed at $\$ 50,000$. It was raised to $\$ 85,000$ and the company appealed. The assessment stood and was then raised to $\$ 500,000$. The company again appeaied, but the valuation was not changed. This year it has been assessed at $\$ 5,000,000$ and the usuai appeal is pending.
"The Jennings oii field is interesting from the fact that 250 wells were drilled on 75 acres. They are about 1,600 feet deep. The best well produced $3,500,000$ barrels. It made a thousand harrels an hour for 60 days. The field now produces 18,000 barrels per day.
"Shreveport is the largest city in Louislana outside of New Orleans. Its population is about 25,000 . Some large gas weils were brought in in that neighborhood last year and the town has been piped. It is belng widely advertised as a city which has "natural gas to burn," and the population is increasing rapidly.

## Municipal Ownership.

"Our trip wound up at Monroe, a town of 16,000 inhabitants, in Northeastern Louisiana, which has been making interesting experiments in municipal ownership. It is the only town in the United States which owns its own street railway. Seven miles of first ciass track were laid at a cost of $\$ 130,000$ for construction and equipment. Three lines etxend from the center of the town to the suburbs. The service is good and the fare five cents. I was assured that the venture was successful from the start and at the present rate the net receipts would pay for the road in five years. The city has also taken over the water
plant and electric light works and claims to have cheaper water and light than other towns. Last year Monroe purchased 300 acres of land two miles from the center of the town. The street railway has been extended out to $i t$, a summer theatre erected, a race track built, a ball ground lald out, a grandstand erected, and trees, shrubs and flowers planted. The land cost the city $\$ 40,000$. The municipality also owns the wharf, which cost $\$ 10,000$ and a bridge which cost $\$ 88,-$ 000 . It has expended over $\$ 400,000$ for public utilities, yet its bonded debt is now only $\$ 250,000$. Monroe is trying an interesting experiment which will be watched closely by other progressive towns in the country.

## Fine Waterways.

"Louisiana has a matchless system of waterways. Its rivers and bayous whlch are navigable have a length of over 5,000 miles and reach all save three of its 58 parishes, which corre spond to our counties. By the cutting of canals, which can be done at a small cost on account of the alluvial soil, a vast network of interlacing waterways can be created. The rivers and bayous are quite deep, 50 to 100 feet in depth being common. The soil is of wonderful fertility. The whole state is alluvial and made of the richest portlon of the 27 states washed by the Mississippi and its branches. All the low land will eventually be reclaimed and will blossom like the rose. The state could sustain a population equal
to that of Holland, which has over 500 to the square mile. Western Pennsylvania should have a deep interest in Louisiana, for its development wlll open a wide field for our coal, iron, steel, pottery, glass, and other products. With a nlne-foot stage in the Ohlo river these products can be conveyed to Louisiana at one-eighth of the present freight charge by rail. On the other hand, their sugar, molasses, rice, salt and lumber can be brought up the river at less than one-fourth the cost of shipment by rail. Most of the sugar goes now by water to New York. It costs us $\$ 3.80$ per ton to bring it by rail from New York to Pittsburg. With a uniform stage of water in the Ohio it could be brought from New Orleans to Pittsburg at $\$ 2.30$ per ton."



[^0]:    Washington, Pa., April 20, 1907.
    ERNEST F. ACHESON.

