PANAMA CANAL A MARVELOUS FEAT

CLAIMED THAT IT WILL BE COMPLETED BY 1913

READY FOR BUSINESS BY JAN. 1, 1915

The Gatun Dam Is a Wonderful Piece of Work—Vegetation Grows in Rank Profusion

WASHINGTON, D. C., Dec. 3.—The Panama canal as it is today—as President Taft saw it upon the trip to the zone from which he has just returned—presents the most marvelous engineering feat in the world because of its magnitude and its bearing upon the future history of the nations of the earth.

The executive's plan in inspecting the isthmus was to gain a first hand knowledge of working conditions there, to confer with those on the ground as to future legislation, to refute baseless rumors of the contemplated annexation of the Republic of Panama, to stimulate the diggers to renewed efforts, and to bring back his opinions on the work—opinions that are soon to be made public in his annual message to congress.

An Artificial River

Astonishing progress has been made, the canal work in the twenty-two months since President Taft, then president-elect—was last on the zone. The work is on such a gigantic scale that heretofore it has required the trained mind of an engineer to trace the course of the ditch. It should be stated at the outset that the Panama canal will be more of an artificially constructed river than the prim, regularly cut canals, with which the average American is familiar. When completed probably the only feature which will suggest that it is a canal will be the locks and dam spillways of concrete. For the remainder of the distance, the interoceanic canal will appear merely as a river, winding through canyons and valleys.

Completed by 1913

At the present time it is predicted by canal officials that the canal will be completed by December, 1913. This does not mean that it will be actually in use by that time. It will require a rainy season—eight to nine months—to store up water to fill the ditch, and in addition, Colonel George W. Goethals, chief engineer, desires that the force of men who will operate the locks and handle the vessels passing through the canal shall have several months in which to become expertly proficient in their work. The canal will be ready for commercial business by January 1, 1915—the date set a year or more ago.

Ready for Use in 1915

The date of completion of the canal depends upon the continuance of the present speed of excavation in the so-called Culebra cut. Save for this, there is very little real digging to be done. The locks and dams are more nearly completed than the Culebra cut. Upon maintenance of the present rate of progress here, and a minimum of setbacks, caused by caving in of the banks of the cut, depends the realization of the prophecy that the canal will be ready for use on January 1, 1915.

Canal Is of Lock Type

The Panama canal is of the so-called lock type, with six locks to obtain a height of 85 feet. The future Atlantic to Pacific liner will enter a channel with a bottom width of 500 feet, at Port Limon, around Colon. It will steam seven miles through the river like canal to Gatun. Here it will enter a series of three locks, and be lifted 85 feet to the level of Gatun lake. It will sail at full ocean speed over a marked channel of from 1,000 to 500 feet in width in this artificially constructed body of water for about 24 miles to Bas Obispo. Here it will enter the Culebra cut. The cut extends for nine miles, and the channel will have a bottom width of 300 feet. Pedro Miguel stands at the Pacific end of the cut, and here the vessel will enter a lock and be lowered 30½ feet to a small lake, over which there is a sail of 1½ miles to Miraflores. At this point a series of locks will lower the vessel 54 2-3 feet to the level of the Pacific ocean, and it will sail out to sea through a channel 8½ miles in length, and with a bottom width of 500 feet. Great locks, coaling stations, machine shops and supply stations will be located at either end of the canal. From deep water on the Atlantic to deep water on the Pacific the distance will be about 50½ miles.

Severing Two Continents

Canal building suggests digging, and it is for this reason perhaps that the most interesting portion of the Panama work to the layman is that being done in the Culebra cut. The task here is a severing of the backbone of two continents. The same chain of mountains that twists throughout the Far West in "The States," and is known as the Rockies, appears in dwarf on the slender link between the North and South American continents, to break out later in majestic peaks and mountain grandeur, as the Andes in South America. The severing of the backbone of two continents is a Gargantuan surgical operation of nine miles of cutting. The French did a portion of the work, but on a small scale. At present a horde of steamshovels is eating away the ground, dirt trains hustle back and forth carrying the debris, and there is a constant roar of blasting, for much of the cut is through black, volcanic rock.

Culebra Cut 300 Feet Wide

At bottom the Culebra cut will have a width of 300 feet. From the lowest level the side walls slope up gradually to the banks. It is here that the greatest difficulty is encountered in canal digging, from cave-ins of the banks. Much of the volcanic rock disintegrates under the action of the air, and the side walls slide down to the bottom. There is no preventive measure against such accidents. All there is to do is to remove the slide. Eventually the slope at the sides will be so gentle, after hundreds of slides, that there will be no danger. Meanwhile they occur daily, and down on the canal the engineers shrug their shoulders philosophically and get down and sweat in moving the extra dirt. Up in the states citizens who don't know better shake their heads and prophesy dire things.

Gatun Dam Looks Like Mountain

By the time the canal is completed the passenger on a liner utilizing it will probably never notice the famous Gatun dam—notwithstanding it is one of the marvels of a multitude of gigantic engineering feats on the isthmus. The beholder will see the dam as a natural mountain, providentially placed by the Almighty hands to hold the lake in check. As a matter of fact, it is a mountain, but built by human hands with infinite care and patience.

An Immense Artificial Lake

The Gatun dam will impound the waters of Gatun Lake, an irregularly shaped artificial body of water covering about 164 square miles. It is nearly 1¼ miles long, nearly ½ mile thick at its base, and about 115 feet high. Two miniature parallel mountain chains are being heaped up here, and between them, mud and clay is being pumped. The interior case of mud and clay hardens, and when the water is let in against the dam, the earth, being of a kind which becomes impervious under the action of water, likewise hardens. The mound of earth becomes a rocky mountain.

Vegetation Grows Rapidly

Vegetation grows with such astonishing speed and rankness in the climate on the zone that within a few months after the Gatun dam is completed all the earth above the water will be covered by an impervious tropical growth of bush and trees. To the man from the states the luxuriousness of tropical growth is amazing. C. S. Blackburn, who was formerly governor of the canal zone, used to declare that he was afraid to let his cane stand upright out of doors overnight, lest in the morning he would awake to find it rooted in the earth and sprouting branches. The banana, orange, cocoanut and sugar cane grow wild over the Isthmus. If American energy could discover some method of revitalizing the shiftless natives and inspiring them to steady work, millions may be made in the cultivation of these crops. As it is, the natives pick their crops wild, or at the most, can only be induced to give half-hearted attention to a small section of land.

Sun Terribly Hot

The sun beats down mercilessly. Until a few years ago the native children, unembarrassed, flaunted their chubby dark charms, sans garments. Even at the present time one may occasionally see swarthy youngsters at the bath in front of a hack, in nature's garb. Strangest to all American ears, is the Spanish, French or English accent of the negroes. They are alike in feature with the American negroes, but their environment in Trinidad or Martinique, Guadeloupe or Barbadoes, Jamaica or St. Kitts, has left the accent of the language spoken there. It is infinitely amusing to the Americans to encounter a coal black negro who talks with a cockney accent.

A Cosmopolitan Place

The Isthmus is a cosmopolitan place. The republic of Panama, through which the United States owns a ribbon of land ten miles in width from ocean to ocean—the canal zone—is, of course, South American, its people speak Spanish mostly. They are descendants of the Spanish pioneers. Some of them perhaps a mixture of Indian blood. When the United States began work on the canal Americans brought the English tongue, and laborers from Greece, Italy and the various West Indian islands. Today, in Panama City, capital of the republic, one can manage to get along on English.

Dr. Pable Arosemna, president of the republic, speaks English fluently, as, indeed, do the majority of the upper classes of Panamanians. The daughters of nearly all prominent citizens are educated either in the United States or abroad, and many of their sons likewise.

Panama Independent Republic

While Panama is an independent republic, gaining freedom with the tacit knowledge, if not actual co-operation of the United States, she is bound very close to America. Merchants and business men in the republic have grown rich by the $20,000,000 which Uncle Sam spends there yearly. Moreover, America exercises what is very like a protectorate over the country. The treaty by which the United States acquired the canal zone guarantees its independence. More than that, Uncle Sam undertook the task of making the principal cities of Colon and Panama sanitary—laid pavements and forced the destruction of pestilential danger spots. There have been no cases of yellow fever on the Isthmus near or in the canal zone since 1905. The herculean task of transforming a belt of land racked with tropic fevers and alive with pestilence—a job comparable to the engineering work on the canal—has been accomplished by a corps of military physicians under Colonel Georgas, with wonderful efficiency.

No More Yellow Fever

Today the deadly yellow fever mosquito is practically eradicated. There is no diminution in preventive work, however, and swamps and stagnant water pools all over the zone are regularly oiled. Panama and Colon have been made clean and healthy cities—the latter being transformed from a veritable swamp alive with deadly fever.

Sanitation Complete

The department of sanitation even sees to it that the citizens of the free and independent republic of Panama keep their streets clean, and it requires a sanitary and modern collection of garbage as well as the extermination of rats and mosquitoes. An American need not fear to live and work on the Isthmus nowadays. Despite the heat, there has never been a sunstroke in the history of the medical corps there. In 1904 three-quarters of those on the zone were infected with malaria and hospitals were kept busy treating about 80 per cent of the canal force. Nowadays scarcely one-third of this number are affected. The eight-hour working day prevails, and the work is from 7 to 11 a. m., and 1 to 5 p. m., with two hours for luncheon and siesta. There are Y. M. C. A. stations, churches and clubs for the employes. The government furnishes quarters, light, fuel, and, if desired, food. This latter at prices which appear ridiculously low compared with the states, free schools, free medical and hospital attendance and pay salaries to 35 to 55 per cent above those paid for similar work in the United States. A laundry owned and operated by the government, does work for all employes and charges 25 to 40 per cent less than those in the United States. Employes receive distilled water free. They get ice from the government "hotels" and pay just 30 cents for a meal which cannot be obtained in the United States for 75 cents or $1. This is only open for government employes. The worker on the canal can smoke cigars which would cost 15 cents straight in the states, but which an obliging commissary sells for 6 cents each. His wife may purchase real Irish linen at half the price to her sister in the states. The reason is that there is no duty on imports to the zone when they are brought in by the government.

Men Save Money

The United Press correspondent with President Taft asked an engineer on one of the big locomotives to tell him what he thought of the work on the zone. "Well," he said, "I'm not a 'main line' engineer, and I only get $180, gold, a month, as against their $210. But I save $100 every month of the year and live better than I'd even hope to live when I was in the States."

"How long have you been here?" he was asked.

"I've only been back seven months this last time," he replied. "Prior to that time I worked here four years; then I went home and bought a farm. Now I want another farm, so I came back where the money was easy."

Living Not Hight

There is no "high cost of living" n the Isthmus. The government employe there can purchase the best porterhouse steaks (kept in a cold storage plant operated by the subsistence department) for from 10 to 15 cents less than in the United States. The two lone staples upon which the price has increased in the last four years are ham and bacon.

The monetary system in the zone is based on the gold standard, of American and the silver money of South America. American money is worth twice as much as "Mexican." It is rather perplexing for the citizens of the states to go into an "American bar" in Panama city run by, say, a citizen of New York, to buy a glass of imported beer and to receive $9.80 in queer tinkly Panama money as the change for a $5 bill.

Everybody Rides

Everybody in Panama City takes a carriage, even if going only a few steps. The heat is so oppressive that one learns quickly to husband his energy. The visitor used to Yankee cabbies will be astonished at the conclusion of an hour's ride through Panama City behind a diminutive pony, to learn that it costs him just 80 cents gold. The only way in which the cabby (he is generally a negro who talks English haltingly with a queer Spanish accent) gets even is by charging you enormous prices (in Mexican money) for all stops and waits.

No Earthquakes

In the states one hears a great deal about earthquakes in Central and South America, and the fear has been expressed by some that such a convulsion would destroy the locks and dams of the canal. Down at Panama the visitor who thus expresses himself is given visual and documentary refutation. He is first taken to the cathedral ruins in Panama City, and there may see two magnificent brick arches which have been standing since early in the seventeenth century. They used to have real earthquakes in those days, but the arches are still strong. Nowadays the only earthquakes they have are slight movements, hardly noticeable, and very rare.

The documentary evidence is in the fact that scientists have classified Panama as without the "earthquake belt." A few hundred miles northwest in Central America lies Costa Rica, a shaken and often convulsed nation. To the southeast lies South America well within another earthquake zone. Panama's history shows no earthquake of any size for a dozen of decades.

The Seismographs installed by the government to record earth shocks have made some peculiar records. For instance, the "record" of the big earthquake at Costa Rica a few years ago was smaller, of less duration, and indicated feebler impulses than the seismograph records at Washington of the same shock.

Concrete Resists Shocks

It is a well known fact that concrete resists earthquake shocks more successfully than any other constructive material. It is used to the exclusion of everything else on the canal. A shock of the same magnitude as that which started the San Francisco fire would have little effect upon the massive locks and spillways.

No mere recital of specifications of the canal conveys the magnitude or difficulty of the work. They are making islands of two continents down there, and new geography—they are building mountains and creating rivers.

In the words of President Taft: "It makes one feel prouder than ever to think he is an American when he sees this work."

Indians Are Married

Stanley Pedro and Martha Aggsmen, two of the bright young Indians of the Klamath reservation, were married in the Orndorf hotel parlors Friday night at 8 o'clock by Rev. J. B. Griffith. The young couple left next morning for the reservation. Mr. Pedro has been a student at the Indian school at Chemauwa, near Salem.

Remains Another Month

Mrs. Hill-Booker will continue to fill the pulpit at the Baptist church during December. At the 630 p. m. service she will recite her famous compilation, "Bible Women."

Closing Out Entire Stock

at the

Goodrich Cash Store

Crackers (carton), regular 85c	75c
Flake Oats and Wheat, regular 45c	35c
Table Fruit, regular 25c	20c
Table Fruit, per dozen, assorted	$2.25
Cream, nine cans	95c
Spices, regular 15c cans	10c
Rolled Oats, 16 pounds for	$1.00
Pearls of Wheat, per package	15c
Regular 60c Tea, per pound	40c

Men's and Boys' Clothing

Regular $20 and $22.50 Suits	$14.00
Regular $17 Suits	$11.00
Regular $3.50 Pants	$2.25

Other Prices in Proportion

CROCKERY

Agateware Glassware

A Large Line to Select From at Your Own Price

Produce and Eggs Taken at Market Prices Same as Cash. No Goods Delivered

ASK YOUR NEIGHBOR

If he takes the Republican. If he does not urge him to do it, so as to lend a hand in the fight for his rights