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The Americans In Panama

Story of the Panama Canal From Start to Finish

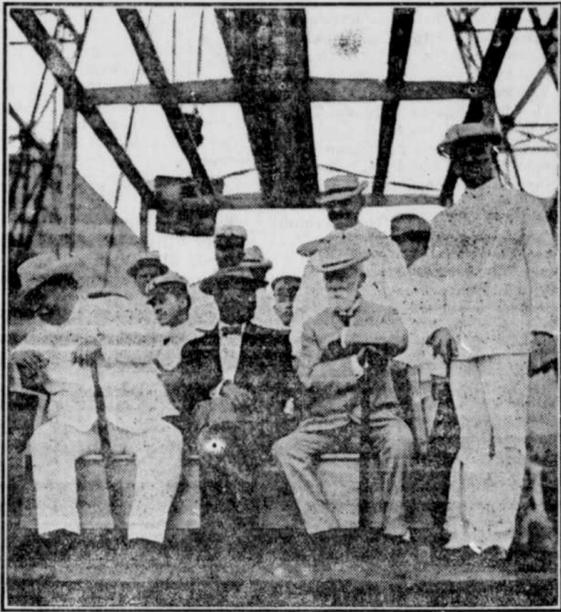


Photo copyright by American Press Association. PRESIDENT TAFT AND COLONEL GOETHALS IN ONE OF THE BIG LOCKS.

By Wm. R. Scott

(Continued from last week)

From then on to December the rains become more frequent and heavier and have a way of coming up about the same time every day, sometimes in the afternoons, sometimes in the mornings. Construction operations have to be suspended during the violent rains.

On the Atlantic side the rainfall averages between 130 and 140 inches annually, on the Pacific side from 60 to 70 inches. At times it rains so furiously that it appears to be one continuous sheet of water falling. For one hour the record fall is 5.86 inches; for one day, at Porto Bello, 10.06 inches; in three minutes 2.46 inches fell at the same place, and at Panama on May 12, 1912, 6 inches fell in two hours. The years 1906 and 1909 were the wettest since the American occupation and 1912 the driest.

The heavy precipitation makes the rivers of Panama torrential streams. The Chagres river has risen twenty-five feet in twenty-four hours. During every season the records left by the French and kept by the Americans since their occupation show that this river discharges enough water to fill the proposed Gatun lake one and one-half times. It is not expected that any lack of water for the lock type canal ever will be experienced.

Except for the beaten paths and cleared spaces constantly maintained the jungle is king in Panama. One season's growth will cover an abandoned clearing with the luxuriant tropical vegetation. When the Americans entered the canal zone most of the French machinery and even whole towns were covered by the jungle.

There are the usual tropical fruits, bananas, coconuts, alligator pears, papayas, mangoes and other less well known varieties. The vegetation includes the royal poinciana, palm and other stately trees. The rare orchid is at home on the isthmus, about seventy-five varieties being found, a dozen of which are of the most beautiful kinds. A dry season of four months does not parch the growth, but the rainy season gives it the most brilliant green coloring.

None of the big animal life of Africa is found anywhere in South America, and Panama has even less dangerous species than the mainland. The tarantula, coral snake, tiger cats, deer and other larger though not so dangerous animals are found, and alligators abound in the rivers and bays as well as sharks. The insect life is wonderfully varied, the birds are in infinite variety and most beautiful, while wild flowers of dazzling colors are in profusion. The canal zone, where occupied in the canal operations, long since was freed of dangerous animal life.

Distinct but inconsequential earthquake shocks have been felt in Panama for centuries. The San Francisco earthquake in 1906 was not recorded on the canal zone seismograph. In the seventeenth century a violent shock occurred, but none in the eighteenth and nineteenth centuries, nor has any been recorded in the twentieth century, although in Costa Rica, the republic adjoining Panama, a severe shock in 1910 caused a considerable loss of life and property. So far as past performances can indicate, the canal should not suffer from earthquakes.

The Atlantic and Pacific oceans are on the same level, but the tide on the

Pacific side has a maximum lift of twenty-one feet, while on the Atlantic side the maximum lift is only two and one-half feet. Allowance for this variation was made by providing a deepening channel for the canal on the Pacific side, so that the passage of ships will not be affected by the tides. The shape of the bay of Panama causes the high tide on the Pacific side.

As there is not a favorable geographical arrangement at either end of the canal in the way of harbors the defects have been supplied by breakwaters. At the Atlantic entrance a breakwater more than two miles long runs from Toro point to shield ships lying in the entrance from the violent northers that occasionally sweep the coast. Another breakwater a half mile long running out from the Colon water front will protect shipping in that harbor from storms on the east. At the Pacific entrance storms are not dangerous, but the currents deposited silt in the channel in such quantities as to make a breakwater advisable, and this one runs from the mainland to Naos island, three miles out in the bay, and connects with the fortifications. It was built from material excavated in the Culebra cut, whereas the Atlantic breakwaters were built largely of rock quarried at Porto Bello.

Panama and Colon are cities of great interest to the tourist. The former has about 50,000 population and the latter 20,000. Panama is the capital of the republic and has a handsome national theater and institute, a street car system, and a number of old cathedrals are interesting sights. The canal employees travel for half fare on the railroad and are often in evidence in the quaint little victoria carriages that handle the street traffic at 10 cents a ride in the two cities.

"What this nation will insist upon is that results be achieved," wrote President Roosevelt in his order creating the first isthmian canal commission that he appointed, on March 8, 1904, and that remained the keynote of his attitude toward the canal. He announced its full personnel as follows: Admiral John G. Walker, U. S. N., chairman; Major General George W. Davis, U. S. A.; William Barclay Parsons, William H. Burr, Benjamin M. Harrod, Carl Ewald Grunsky, Frank J. Hecker.

This commission held its first meeting in Washington on March 22, when preparations were made for a visit to the isthmus, which it reached on April 5. After three weeks of investigations it decided that such engineering records as the French left must be supplemented by fresh explorations and surveys, that the sanitation of the canal zone and the cities of Colon and Panama was of the first importance and that a period of preparation generally must precede effective construction operations. Surgeon Colonel W. C. Gorgas accompanied the commission on this trip and made the preliminary plans for cleaning up the isthmus which, when worked out were to make him famous. The commission returned to the United States on April 29.

At a meeting between representatives of the United States and the French Canal company in Paris on April 16 the sale of the company's property for \$40,000,000 was signed and was ratified by the shareholders in the company on April 23.

President Roosevelt was subjected to wide criticism for this deal, but of all his actions in connection with the

canal it was one of the wisest. Without regard to who got the money, it indisputably is true to any one who has visited the canal that the United States got a dollar in value for every dollar it paid the French company. As late as 1911 Colonel Goethals appointed a committee, headed by J. B. Bishop, secretary of the commission, to invoice the French purchase, and it reported the value of French excavation useful to the American plan of canal, the mechanical equipment, buildings and engineering records to be \$42,790,826, or nearly \$3,000,000 more than was paid. At the same time it was a good sale for the French company, because the United States was the only prospective buyer.

The item of largest value to the United States as estimated in the report was the excavation of 29,908,000 cubic yards, valued at \$25,389,240. This mainly was in the Culebra cut. Next in importance was the Panama railroad and subsidiary trackage in the canal zone, and the remainder was for quarters, hospitals, storehouses, machine shops, canal equipment, steamships, land, etc.

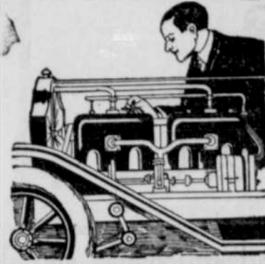
Much of the mechanical equipment and whole villages of houses used by the French employees were covered with a dense growth of jungle after years of idleness, but the machinery had been oiled and painted carefully before abandonment and so was preserved in good condition when the Americans came. Had not the French buildings been available and capable of being speedily repaired for use the early American employees would have suffered more hardships than they did. Of these buildings the Americans repaired and used 1,536, their value being estimated at \$1,879,203.50.

Construction work was carried on the first year of American occupation largely with old French equipment, a part of the equipment which could not be utilized was used as ballast on the Panama Steamship lines to the extent of 27,000 tons and sold as scrap on the New York market, and in 1911 the Chicago House Wrecking company bid in the remainder for the lump sum of \$215,000.

In the sale the United States received 68,888 shares of the capital stock of the Panama Railroad company and later bought from individuals 1,112 shares for \$157,118.24, giving the government complete control. (Continued next week)

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