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Constructing the Panama Canal: A Brief History

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Introduction

Seeking to commemorate the construction of the Panama Canal, an engineering marvel widely considered a contender for the eighth wonder of the world, this article attempts to retell the story of the Canal's construction by synthesizing a narrative centered on the Canal under French and American leadership, worker segregation, and labor conditions at the Isthmus.

Background

Operating at over 50 miles in length, the Panama Canal serves as an artificially man-made gateway between the Atlantic and Pacific oceans, opening up a previously non-existent maritime trade route between the Panamanian isthmus. For years, explorers attempted to discover a waterway from one side of the Isthmus to the other all without success, and so it was eventually decided that if humanity wanted such a trade route, they would have to build it themselves. Building the canal, however, would prove to be no easy feat as the conditions at the Isthmus were among the worst the world had to offer. Workers at the Isthmus had no choice but to work in brutal heat, rain, loud, unsanitary, and unsafe conditions often for little pay, being even lower if they were a minority. The horrible labor conditions made construction a logistical nightmare, and those troubles were only compounded by political issues riddled with strife from those who felt the mission was either impossible or too costly. Countless people died constructing the Canal, and this article serves as a brief memorial to their anguish.

Construction Under the French

Construction of the canal first began under the leadership of the French government, only for the project to be transferred to the United States after their failure.¹

To examine the failure of the French, it is best to start off a few decades prior to when France would first start the project. In the spring of 1879, the economy in France was booming and “the reach of those seeking to raise capital had widened considerably” with advances in technology such as the telegraph and the expansion of railroads.² France had just been humiliated in the Prussian War a decade earlier, and wanted to showcase their regain in prestige by “astonishing the world by the great deeds that can be won without a war.”³ Around the same time, an engineer by the name of Ferdinand de Lesseps had just completed the construction of the Suez Canal, making him one of the most famous men in France.⁴ His fame was not only because of his leadership in the canal's construction, but also because de Lesseps went to 25,000 small investors as opposed to big banks in order to fund the project.⁵ “Bathing in public adulation, de Lesseps, although by any reckoning now an old man, was not going to content himself with just the Suez Canal,” de

Lesseps wanted more and would end up taking his talents to Panama throughout the 1880s.⁶

After traveling around the world for investors and making his case for the canal, de Lesseps would eventually start construction in 1881 immediately facing problems. A major problem just two months after he began construction was that his labor force was quickly dwindling, and he needed to import labor from another source.⁷ News would break that de Lesseps would contemplate bringing in laborers from the Isthmus itself, the neighboring coast states of Columbia, as well as laborers from the West Indies, primarily from Barbados and Jamaica.⁸ Many former slaves would jump at the opportunity to leave their home countries in the West Indies post-emancipation, as they were still not considered full-citizens, and would opt to immigrate to the Isthmus in hope of better lives.⁹

The Panama Canal Company took advantage of the aspirations of the formerly enslaved by utilizing propaganda via uninsured promises. An example of an advertisement written by Charles Gadpaille can be seen below:

A trip to Colón?
Wanted immediately!
10000 labourers
for the
Panama Canal Company.
No Indenture. Passengers returning when they like.
Both passage and food given.
\$1.50 to \$3.00 a day. [In Columbian silver dollars]
Medical care when sick.
Apply to Charles Gadpaille
Hincks Street,
Agent, Panama Canal Company.¹⁰

The first people to travel to the Isthmus tended to be skilled laborers, as they did not come from operating small land-holdings back in their home countries.¹¹ They did not speak French, but were able to get the work they needed done, finished.¹² Unfortunately, however, many of those hard-working individuals seeking a better life would never get it, as the conditions at the Isthmus would leave many dead from the brutal conditions mixed with the contraction of Chagres Fever, otherwise known as malaria.¹³ As author Matthew Parker puts it, “For every laborer returning with his pockets rattling with coins, there was another who came back in a different state, or didn't make it back at all.”¹⁴

Pairing with the diseases like Yellow Fever or malaria which left thousands dead, the funds to continue operations at the Isthmus were dwindling, widespread political instability in 1884 was resulting in “high inflation, food shortages, and the general social unrest” in the region, there was an increase in deviant workers just

looking to make money, a police force was not able to be established, and members of the leadership were dying along with the workers.¹⁵ Eventually things would get so bad in October of 1884, that two rival state presidents in Panama City would take up arms and fight one another for the next year.¹⁶ Any hope of continuing work was essentially gone, and many of the West Indian workers were being extorted for money by a corrupt police force.¹⁷ Many had to look for protection from foreign warships during this time that were anchored at bay, but for most others their faith was sealed in death and suffering.¹⁸ On top of all the chaos, by the end of 1884 the wife and children of Jules Dingler, Director General of the Company, would be dead as a result of disease. He would then leave after only six more months in 1885, dying later that year in France.¹⁹

Eventually, unable to recover from the previous years, the French Panama Canal Company would go bankrupt with little progress made, causing investors to lose millions of francs.²⁰ The results were so bad that an investigation by the examining magistrate in France began on de Lesseps, his sons, as well as other officers of the project.²¹ In May 1892, the magistrate's report charged the Panama Canal Company of squandering funds "in a manner... more consistent with the personal views of and interests of the administrators and directors... than with the true interests of the company."²² Ferdinand de Lesseps and his son Charles would both be sentenced to five years in prison for fraud and maladministration, but would get off after only serving a few months due to a technicality.²³ When they got out, Charles was also sentenced to one year in prison on bribery, and he would be forced to pay a fine with money he did not have when he got out, eventually being forced to flee to London in September of 1893.²⁴ As for Ferdinand de Lesseps, he would die a few days after his 89th birthday, so poor that "the funeral expenses had to be met by the board of directors of the Suez Canal."²⁵

By 1889, the Canal was a total failure and the project would not be undertaken again until 1904 under the leadership of the American government.

The Panama Revolution

Following the failure of the French in constructing the Canal, the United States was looking to take over the project and attempted to reach an agreement with Columbia whereby they would have a large amount of control over where the canal was to be built.²⁶ Unfortunately for president Theodore Roosevelt and the Americans, the Columbian constitution forbade any sovereignty to be given away to another state without the approval of a treaty by Congress.²⁷ The Columbian legislature rejected the treaty from the United States to seize control over Panama, striking down the treaty unanimously.²⁸

As a result of the rejection, the United States' only two options would be to declare war on Columbia, or for Panama to declare independence from Columbia. Given the ultimatum, Theodore Roosevelt decided to back a popular separatist

movement in Panama, and on November 3rd, 1903 the Panama Revolution lasted from sunrise to sunset, with the new country allowing the United States to occupy and use the territory surrounding the canal zone.²⁹ As a result of U.S occupation, the “Panamanians found themselves in the unlikely situation of being at the center of political innovations in a world that increasingly considered them incapable of civilization.”³⁰ In the following years, thousands native to the city of Panama would be displaced and an entire government would be altered.³¹

With the United States now having the authority they needed over the canal zone of Panama, they decided start its construction in 1904.

Construction Under the United States

As a result of the Panama Revolution, the United States would seize control over the area needed to construct the Panama Canal with no opposition from a foreign government, beginning work in 1904. Originally, the United States set up the *Isthmian Canal Commission* to supervise the construction effort from Washington D.C, but it was an utter disaster.³² On track to spend over \$66 million the first year, president Theodore Roosevelt replaced the commissioners and then appointed John Stevens, a prominent civilian railroad engineer to take over the project.³³ Stevens only accepted the position after declining it twice, and finally being convinced by William Cromwell to take it under the condition that Stevens “was not to be hampered or handicapped by anyone, high or low.”^{34, 35}

When Stevens arrived in Panama in early 1905, “he approached the construction of the canal more systematically than the early, almost random efforts” by both the French and the Isthmian Canal Commission.³⁶ Steven’s first plan of action was to rebuild the railroad lines around the canal zone, essentially building everything from scratch.³⁷ He would also see that the problems surrounding disease were taken care of by fostering the success of an appointment made by Roosevelt, which was bringing in the world’s leading expert on Yellow Fever, Dr. William Gorgas, to eliminate the diseases transmitted by mosquitos at the Isthmus.³⁸ Lastly, Stevens would oversee the adoption of a lock-canal plan approved by Congress on June 29th, 1906.³⁹ It would not be long, however, until Stevens would resign from his post, citing a general disdain for all the attention and type of work in his resignation letter to Roosevelt, who had just been at the Isthmus a few months prior to meet him at the construction site.⁴⁰ Officially, on April 1st, 1907 Stevens would resign to go back to work in the railroad industry, thanking Roosevelt for allowing him his tenure.⁴¹

With Stevens now gone, Roosevelt appointed a new person to head construction at the canal, a military man by the name of Colonel George Washington Goethals, who could not abandon his project whenever they were tired of the work.⁴² It appears as if Goethals had much respect for Stevens, as he was recorded saying that he will not get the respect he deserves.⁴³ Stevens was so dearly

missed that there were actually petitions full of thousands of signatures trying to convince him to stay, all to no avail.⁴⁴ Early on, though, Goethals structured the project as a military operation with himself in full command due to an executive order he persuaded Roosevelt to sign to avoid any potential hold ups from the Isthmian Canal Commission, a decision riddled with controversy as the commission “had been created by an act of Congress.”⁴⁵ The commission had lost most of its power by the executive order, and when Roosevelt was questioned on the matter he stated, “damn the law, I want the canal.”^{46, 47}

Up until the Canal’s completion, the Americans would face most of the problems that the French would face, such as cost, disease, landslides, implementing the lock mechanism, building walls, creating lakes, getting proper equipment, labor-relations issues, and leadership changes. Eventually, “the first ship sailed through the canal in 1914, ten years later and \$326 million later -- a considerable increase over the \$144 million originally planned.”⁴⁸ Colonel Goethals would finish his work early in 1914, assuming the responsibility for overseeing the completion of one of the United States’ biggest assets.

Teddy’s Visit to the Canal

A brief but important note in history, is that Theodore Roosevelt was the first ever president to leave the mainland of United States while in office.⁴⁹ Most likely traveling for a publicity stunt before his second election, he decided to travel to the Isthmus and see first-hand the construction that was being done under the leadership of John Stevens in November of 1906.⁵⁰ The trip would serve as a means to bolster support for the Canal’s continuation, as well as Roosevelt’s presidential image showing he was someone who cared about his work and American innovation.⁵¹

A famous picture of Roosevelt operating a steam shovel can be seen below.⁵²



Worker Segregation: Gold & Silver Roll

Worker segregation and discrimination at the Canal was essentially how it was in the United States through the late 19th to early 20th century, the only difference being that it was happening outside of the mainland United States and operating under a different name. Workers were placed into either two categories inexplicitly as a result of the color of their skin or origins, mainly targeting what those of whom in the United States would be considered minorities. The two categories one could be placed in were either the Gold Roll or the Silver Roll, and your pay and living conditions were contingent upon which roll you were assigned upon your arrival to Panama.

The United States was not the only one using a segregated and discriminatory system either, as the French would utilize a very similar system.

Workforce Recruiting & Roll Distinctions

Seeking to get cheap labor for the Canal's construction, the United States quickly realized that the Panamanians themselves were not a viable option, as those who wanted to work on the canal were few and the population of Panama was too small in order to source the majority of labor from that location alone.⁵³ The United States then turned to Jamaica, but "Jamaican officials remembered the disaster that was the repatriation of Jamaican workers after the French canal efforts collapsed in 1889," and wanted a guarantee that workers would be taken care of, so Jamaica was

not a viable option.⁵⁴ Since Jamaican labor did not work out, the United States then turned to labor from Barbados, but the laborers “proved to be too malnourished to accomplish their assigned tasks.”⁵⁵ John Stevens can be quoted saying that “Not only do they seem to be disqualified by lack of actual vitality, but their disposition to labor seems to be as frail as their bodily strength,” and “I have no hesitancy in saying that the West Indian Negro is about the poorest excuse for a laborer I have ever been up against in thirty-five years of experience.”⁵⁶ Moving away from the Barbadians, the United States attempted to hire Chinese workers, but a number of problems arose from that as well. One problem being that the Chinese government refused to comply with the request.⁵⁷ Another problem being that American unions condemned the idea of hiring Chinese people.⁵⁸ And a final problem in hiring Chinese workers being that “the Panamanian press denounced the commission for attempting to break Panama's anti-Chinese exclusionary laws.”⁵⁹ As result of being turned down from multiple countries, the United States decided to just “supplement West Indian labor with contract labor from Spain,” and eventually entirely from Spain as opposed to Spain and Cuba, because Cuban planters strongly opposed America taking part of their workforce.⁶⁰

Once the workforce was established, each person was distinguished as either a member of the Gold Roll or the Silver Roll. The Rolls got their names because “Americans were paid in gold dollars” and everyone else was paid in Columbian silver pesos or another form of silver such as fractional currency from the United States.⁶¹ Originally when the system began, both American, or white people, along with skilled blacks were allowed on the Gold Roll, but as time progressed the Gold Roll was essentially limited exclusively for American whites, or those who were American blacks and grandfathered into the Gold Roll.⁶² By “1905, transfers between the rolls were prohibited, and by the end of 1906, all Gold Roll blacks who were not United States citizens were demoted to the Silver Roll, with the exception of some civil servants in positions of authority over other West Indians and a few exceptional workers,” and by 1908 “President Roosevelt closed the Gold Roll to non-Americans.”⁶³ It is clear that such a system was targeting minorities, and one of the facades used to get around outright discrimination was calling workers skilled or unskilled at certain points, which may or may not have been true depending on each individual case.

Those working on the Silver Roll would be given more menial tasks, and would often be enticed to quit by being offered extremely low wages as a result of wage caps.⁶⁴ The Spanish on the Silver Roll earned twice as much as the West Indians, who were often treated the worst though by no means were the Spanish treated much better, and the West Indians would see their skilled jobs replaced by those workers who were white doing the exact same job they were doing except on the Gold Roll for a higher wage.⁶⁵ The only reason the Spanish got slightly better treatment was because the Spanish militia could be a threat to the United States and

a previously organized labor movement, prompting many to strike in 1907, was Spanish in origin.⁶⁶

Eventually the United States would solve part of their workforce problem by mandating that the workers buy three meal tickets every day, since most subsisted from food in exchange for sending more money home to their families.⁶⁷ The other part of their workforce problem they found could be fixed if they just pinned the West Indians and Spanish against each other to keep the two on the edge of fighting, until one day a riot would break out in 1909.⁶⁸ The Americans would seize hiring Spanish workers from the riot onwards, and the laborers would come primarily from Barbados and other states in the West Indies with the complete replacement of Spanish labor after strikes that occurred between 1911 and 1912.⁶⁹

Labor at the Canal

Proclaiming that the labor conditions were horrendous at the canal will always fail to do the conditions justice. The conditions at the canal are almost unimaginable to us modern people, but aspects of the work can be broken down to paint a picture of what forces were driving the thousands of deaths and sufferers who had to work at the Isthmus. Excluding reference to the Gold and Silver Roll, I will be breaking down various aspects of the labor conditions one would face if they were a worker at the Canal site, but bear in mind that Silver Roll workers undoubtedly had it worse than Gold Roll workers, even if they were in a position of 'privilege' because of their pay being much lower than their white American peers. Worker turnover rates were very bad considering the conditions, and those who survived often did not stay for too long.

Disease

Perhaps the worst labor problem was one that did not even come as a result of the job itself, rather just living in Panama, and that was disease. The two main diseases that one could catch were the Yellow Fever and malaria, two deadly diseases that killed thousands of workers before the eradication of mosquitos carrying Yellow Fever at the Isthmus, and a majority of those carrying malaria at the Isthmus by William Gorgas in 1906.⁷⁰ Dr. Gorgas describes in his book how "in 1906, when our malaria rate was highest, we had eight hundred out of every thousand of our employees admitted to hospitals on account of malaria," and by "1913, we had only seventy out of every one thousand laborers admitted for this disease."⁷¹ In regards to Yellow Fever, the disease was entirely eradicated by Gorgas's efforts at the Isthmus, accounting for zero deaths after 1906.⁷² Gorgas estimates that he saved over 71,370 lives during his tenure, because if the rate of disease was that under French leadership, then that many more people would have died.⁷³

The ways in which Gorgas and his men tackled the problem of disease was through a few ways. One way was to rat-proof homes via a cement foundation and walls, carefully managing garbage that could attract the rodent.⁷⁴ As a result of such efforts, Gorgas was able to reduce the rat population, resulting in less common diseases such as the plague from spreading.⁷⁵ Another way Gorgas went about eradicating disease was by killing the larvae of mosquitos with what he called “larvacide,” a mixture of carbolic acid, rosin, and caustic soda, all boiled together to be dropped on any larvae that they found.⁷⁶ Going around and dropping oil on larvae was no easy task as it involved systematically going through shrubbery and around sources of water all by hand, usually in the pouring rain, muddy ground, and heat, in hopes of finding some. A final way Gorgas and his men would kill mosquitos and other insects was by fumigating buildings with Sulphur for a few hours to kill everything in the building, and if they did not want to use Sulphur because of potential damage, then they would use pyrethrum which would not kill the mosquitos, but weaken them enough to be collected and burned.⁷⁷

Landslides

Perhaps the second deadliest threat at the Isthmus were the landslides that occurred as a result of moving literal mountains by setting off constant explosions next to unstable terrain. The atmosphere would have been extremely loud, with excavation equipment being used constantly and dynamite going off to get through any bedrock that might be in the way. There were “one hundred and two Milwaukee-built steam shovels” that “moved four to six hundred cubic yards of dirt per hour, working sixty machine-hours per week.”⁷⁸ Landslides would make it so that their accomplishments were constantly being thwarted. It is said that “for every 5 cubic yards of dirt that the Americans extracted, another yard slid back in from the hills lining the route.”⁷⁹ The problem of landslides was so bad that even after the Canal was officially completed in 1914, the Canal would not be opened up for public use until 1920 because of landslides, after “Americans spent an additional \$52.6 million on construction.”⁸⁰ Sadly, many workers would die as a result of working in a spot in the Canal zone subjected to a landslide, and unfortunately there was almost no way to prevent it.

Unions

It is almost a certainty that workers being subjected to muddy, hot, rainy, and deadly conditions will attempt to garner a better income for themselves, and the workers at Panama were no different. Strikes were not uncommon at the Isthmus with many people seeking more equitable treatment, but outside of small demands such as the Spanish gaining a slight raise in pay over West Indians, unions largely gained little of what they lobbied for.⁸¹ John Stevens, for instance, passionately hated labor unions and his demeanor on issues such as unions would

serve as one of the few reservations for Roosevelt.⁸² One time, “when a delegation of steam-shovel engineers came to his office threatening to strike unless paid more, Stevens reportedly told them: ‘You all know damn well that strikes do not get you anywhere. Now get the hell out of this office and back to work.’”⁸³ When the Americans heard of Stevens’ stance towards the potential strike it raised his status among them, but when the Silver Roll workers wrote back to their union leaders, Roosevelt would be the first to hear about it.⁸⁴ Even Goethals’s stance on unions was off-putting to laborers, according to a reformer from the National Civic Federation, Gertrude Beeks, who commented that “there is a strong anti-union sentiment among officials and an unwillingness to deal with union committees.”⁸⁵ “Goethals's policy of hearing grievances every Sunday and making investigations had generated more hope and confidence in the administration,” but according to Beeks, Goethals would not even meet with people who were part of a union.⁸⁶ Roosevelt, however, appeared to listen to what unions had to say, but the bureaucrats underneath him wanted no part in it.⁸⁷

Overall, unions were not too effective, as it was just the sentiment of the day not to deal with them. Some made tremendous strides, but many simply did not have the proper backing or means of supporting themselves to bring about better wages or working conditions.

The Panama-Pacific International Exposition

Once the canal was finally opened on August 14th, 1914, the United States sought to celebrate the achievement by hosting the Panama-Pacific International Exposition from February 20th, 1915 to December 4th, 1915, a world fair hosted by the city of San Francisco. The fair served as a showcase to modern technology and innovation, a task coinciding with the completion of what was considered the greatest engineering feat at that point in history.⁸⁸ The fair had a wide range of attractions including those found in your traditional fairs, as well as attractions rooted in highlighting the technology of the coming age. The reason it was held in San Francisco was not only because it was a big city able to host the event, but because San Francisco likely wanted the chance to show how they rebuilt their city after a terrible earthquake and fire that took place in 1906.⁸⁹ So, to foster a chance to host the fair, “the city conducted a two year public-relations and lobbying campaign that ended with it being awarded the fair” in 1913.⁹⁰ Within only two years, the fairgrounds would transform from “625 acres of landfill into a beautifully landscaped wonderland with 11 enormous exhibition palaces, dozens of state and foreign pavilions, and an amusement zone almost a mile in length.”⁹¹ Attractions at the exposition were designed to provide people with the opportunity to see firsthand the new technologies and innovations of the coming age. A few of the attractions that were present at the exposition included the first transcontinental telephone call, the Tower of Jewels, as well as airplane and submarine rides. Ultimately, the fair

would serve as the time's pinnacle of human achievement, where the "exposition began to chart the coordinates of American progress" and imperialism to come.⁹²

Conclusion

In conclusion, the construction of the canal was a long and grueling process that helped solidify the United States as the dominant global power. By completing the greatest engineering marvel in human history, a feat that the French could not come close to completing a couple decades earlier, the United States was now on top of world economically, only to separate itself from the rest of the world even further after World War One which decimated much of Europe. The Canal did not come without its costs, however, and the thousands of lives lost during the Canal's construction serve as a reminder of the brutality of labor conditions throughout the 20th century.

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