The Family Heritage Series

A weekly discussion of Americanist truths and traditions for those "heirs of all the ages" who will have to preserve that most important inheritance of all – freedom. Produced by the Movement To Restore Decency.

Volume II

Lesson Fifty-Four

Completing The Canal

LESSON IDEA

To describe the gigantic engineering tasks that were required to finish building the Panama Canal; and to show why it is vital for the United States to retain control of this waterway.

PREPARATION

Collect some newspaper stories and magazine articles about current efforts to surrender control of the Canal, and plan to conclude this lesson with a discussion of the need to retain U.S. sovereignty over the Panama Canal.

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AT THE BEGINNING of his third year in Panama, John Stevens could boast that yellow fever and malaria were on the way to being totally eliminated. But the Chief of Engineers was still having his problems with the Isthmian Canal Commission. And although almost two years had passed since the first American steam shovel bit into Panamanian soil, a decision had not even been made on whether to build a sea-level canal or a lock canal. Can any of you explain how locks on a canal work?

Before arriving in Panama, Stevens favored a sea-level canal. But once he had surveyed the proposed canal route, he realized that a lock canal would be cheaper to build and take less time to complete. Unfortunately, Stevens had no say in the type of canal to be built. That decision would be made in Washington.

In the summer of 1905, President Theodore Roosevelt appointed a Board of Consulting Engineers to study the various proposals. The Board met nearly forty times through the fall and winter, and finally in January of 1906 it issued a report in favor of a sea-level canal. But the decision was far from being unanimous, and the board members who favored a lock canal invited Stevens to Washington to testify. Stevens told the board members that a lock canal "will provide a safe and a quicker passage for ships, and therefore be of greater capacity. It will provide, beyond question, the best solution of the vital problem of how safely to care for the flood waters of the Chagres and other streams . . . . Its cost of operation, maintenance, and fixed charges will be very much less than any sea-level canal." To almost everyone's surprise, Stevens' presentation won the approval of the Isthmian Canal Commission, which rejected the decision by the Board of Consulting Engineers favoring a sea-level canal.

Stevens had the support of the Isthmian Canal Commission, the Secretary of War, and the President. But there was one more hurdle to pass – the U.S. Congress. Days became weeks as a Senate subcommittee debated the canal question. Stevens didn't wait in Washington for a decision, however, but returned to Panama to get ready to start construction. Then the subcommittee voted in favor of a sea-level canal, and Stevens hurriedly returned to Washington and spent the next two months pleading for approval of a lock canal.

One point of debate was the proposed Gatun Dam, which would be needed for a lock canal. When one Senator told Stevens, "I suggest to you that this dam ought to be made stronger," Stevens retorted, "The dam is strong enough. This is like killing a duck; when you kill him he is dead;

there is no use trying to kill him deader."

Stevens' efforts paid off, and the Senate voted 36 to 31 in favor of a lock canal. A few days later, the House of Representatives approved the legislation, and the President signed it into law on June 29, 1906.

John Stevens should have been elated, but mysteriously, three weeks after he returned to Panama, he resigned as Chief Engineer. He never explained why he quit, except to say it was for personal reasons. Stevens was certainly fed up with politics and politicians; at one point he wrote, "If I have to mix and mingle with every politician in the United States, the sooner I drop [this project] the better I will be satisfied." So perhaps he had had enough of the bureaucrats.

COLONEL GEORGE Washington Goethals was President Roosevelt's next choice as Chief Engineer. An efficient engineer, Goethals was practically unknown except to others in the Army. Unfortunately, he lacked the sense of humor Stevens possessed. At first the workers in Panama distrusted him, and there were mutterings that he would turn the Canal Zone into a gigantic Army base, with himself as supreme ruler. But these fears were unfounded, and Goethals' men soon learned to respect him.

Colonel Goethals recognized the immensity of his job, and the wonders Stevens had already performed. In a letter to his son a week after arriving he said:

> *The magnitude of the work grows on me. It seems to get bigger all the time, but Mr. Stevens has perfected such an organization . . . . that there is nothing left for us to do but just have the organization continue in the good work it has done and is doing. . . . Mr. Stevens has done an amount of work for which he will never get any credit, or, if he gets any, will not get enough.*

Colonel Goethals had good reason to be awed at the size of the job ahead of him. He was responsible for coordinating the activities of some 40,000 men, from forty-five different countries; their task was to dig a huge trench that would average 45 feet deep and 500 feet wide for a distance of almost 50 miles. It would cut through mucky swamps, winding rivers and rugged mountain ranges.

The three major construction projects were to dam the rivers on both sides of the Isthmus, to blast through the mountainous continental divide at the Culebra Cut, and finally to build the intricate system of locks. Once these three were accomplished, everything else would be easy!

Goethals decided to divide the labor into three sections. The Atlantic Division would handle the construction of the Gatun Dam and locks; the Central Division would tackle the Culebra Cut; and the Pacific Division would build the dams and locks for that side of the Isthmus.

THE BIGGEST CHALLENGE facing Goethals and his men was the Culebra Cut. This was a mountainous region nine miles long, and some of the mountains in it were as high as a twenty-story building. But the canal could not go around the range; it had to go through. Working in the Cut was especially dangerous because so much of it was composed of gooey clay. Every time men set off a dynamite charge they feared a landslide would bury them. More than once slides did bury men and machines under tons of earth, and it often took weeks to uncover the bodies.

While men and machines were gnawing their way through the Culebra Cut, others were working on the Gatun Dam. Hundreds of acres of land had to be cleared, and whole villages moved to higher ground. Some three million cubic yards of clay and