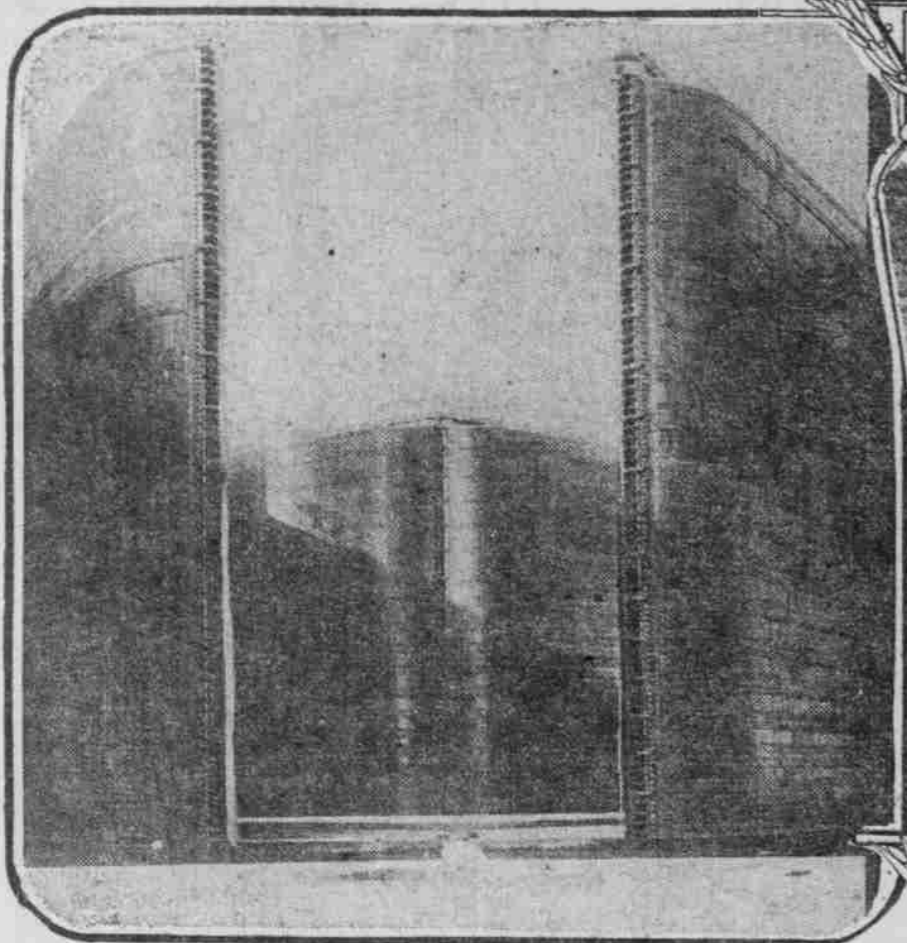


The BUILDING of the PANAMA CANAL

By MAJOR-GENERAL GEORGE W. GOETHALS

Governor of the Panama Canal.

V—THE ORGANIZATION OF THE FORCE



First and Second Lock-gates at Gatun.



Tore Point, or West Break-water in Colon Harbor, About Two Miles in Length, Fifteen Feet Wide at Top, Surface Ten Feet Above Mean Sea Level.

THE organization through which the canal was constructed was the result of a process of development, and a clear understanding of it can best be conveyed by outlining, as briefly as possible, the steps which led to its adoption. This outline will include, necessarily, an account of the conditions which existed at the time the work was transferred, in 1907, and the impediments to progress which developed subsequently.

As noted in a previous article, Major Gaillard and I arrived on the Isthmus in March of that year in company with a party of Congressmen. During their visit we accompanied them on the sight-seeing trains supplied by the officials for inspection of the work, thereby getting a general idea of what was being done, what was contemplated, and the methods employed.

There were in operation at the time departments and divisions covering all phases of the work, the chief of which were engineering and construction, directly under the chief engineer in charge of the construction of the canal; sanitation, in charge of the sanitation and quarantine; law and government, in charge of courts, schools, police, fire, postal affairs, and other public works; labor, quarters and subsistence, in charge of recruiting skilled and unskilled labor, and kitchens, building construction, engaged in the erection of quarters; mechanical, in charge of shops; municipal engineering, in charge of streets, sewers and water supply; material and supplies, in charge of equipment and construction materials of all kinds; meteorology and river hydraulics, and others, in charge of map-making and lithography.

Ineffectiveness of Commission System.
With the settlement in June, 1906, of the question that had been pending for some time as to the type of canal, a designing force had been organized, and prepared the plans for the locks, lock-gates and their appurtenances, and the spillways with their operating mechanisms. This force was located in Washington and was under the direction and supervision of a committee composed of the engineer members of the Commission who were stationed in the United States.

The chief element in the consideration was, of course, the Isthmian Canal Commission of seven members, which constituted the executive control. There had been considerable friction and trouble in previous commissions because of this seven-headed authority. Mr. Stevens maintained that the commission system had never been given a fair trial, and that its ineffectiveness was due, not to the system itself, but to the way in which it had been handled. He claimed, in the case of the one with which he had been practically connected, that its members had been practically ignored, since their services were called for only when a quorum was necessary for a vote on a proposition. He believed that, with a proper personnel, under intelligent leadership, the work could be subdivided among the members in such a way as to secure better results than had been obtained, but this could be hoped for only in case the chairman was vested with the direction of the various subdivisions and with final approval or veto power.

I had not given the matter any thought, for this form of executive control had been provided by law, and that settled the matter. Still, there could be no question that in any undertaking there must be a directing and controlling head, and this would be accomplished were the veto power vested in the chairman of the Commission.

In common with other visitors to the canal, I was strongly impressed by the magnitude of the work, which seemed to grow greater the more closely examination was made. Whether the new regime would be able to carry the burden remained to be seen; there were times when I had a feeling of doubt, but certain it is that we were fortunate in falling heir to the organization that had been perfected for excavating Culebra cut, for no one not thoroughly familiar with railroad transportation

and not possessed of organizing ability could have succeeded in this part of the work—the one part for which our previous training had not fitted any of us.

Continuing the Existing Organization.
The lock type of canal had been adopted only the previous June, so that the organization for other portions of the construction work was in a more or less tentative stage. The period of preparation was practically completed, however, and the success subsequently attained is indicative of the thoroughness and clear-sightedness displayed in the preparatory work. Recalling the President's desire to continue intact the existing organization, I could not but feel that it would be madness to attempt any change; such a course, had it been taken, would have resulted in nothing short of chaos.

Because of his familiarity with the work in all its ramifications, I took counsel with Mr. Stevens as to the manner in which he would so subdivide it as to utilize to the fullest extent the services of the other members of the Commission and at the same time carry out the views of the President by placing each in charge of a department.

Three of them fell into place naturally—Colonel Gorgas at the head of the department of sanitation, Jackson Smith at the head of the department of labor, quarters and subsistence and ex-Senator Blackburn as Governor. For the other three, who were engineers, there must be found departments, and necessarily they must form part of the department of construction and engineering, which remained with the chief engineer.

Following the suggestions of Mr. Stevens, I decided to organize the department of excavation and assign to it Major Gaillard, with supervisory charge of all excavation, both dry and wet, and Major Sibert to the department of lock-and-dam construction. Instead of placing Mr. Rousseau at the head of the division of material and supplies, as had been suggested, I combined the divisions of municipal engineering, building construction and motive power and machinery into one department and assigned him to the head of it. In this way each of the engineers was given charge of engineering work.

Mr. Stevens retired from the service at the end of March, 1907, and on April 1 the management of canal affairs passed into the hands of the third commission that had been created since construction was undertaken. The Secretary of War (Mr. Taft) was on the Isthmus at the time, and various questions concerning the organization were taken up with him.

First Move to Concentrate Authority.
The Canal Commission maintained its headquarters in Washington, which for a time were in charge of the Bureau of Insular Affairs of the War Department. Soon after the creation of the second Canal Commission, Mr. Shonts, chairman of that Commission, took charge of the office. He, as well as the other members of the Commission, spent most of his time in Washington, making only occasional visits to the Isthmus.

For me to attend personally to matters of this kind; if this should prove to be the case, then there was great need for some one to look after them, and it seemed to me that Mr. Bishop, by reason of his position, would not only be useful but the proper person in this field.

How pending labor questions would be settled was unknown at the time, for the formal hearing by the Secretary of War had not been held, but there had been instances of complaints and grievances being taken direct to the President, so that more were likely to be, and if the Commission side could be presented as such cases occurred our authority would be strengthened materially. If Mr. Bishop lived on the Isthmus he would be familiar with local conditions and would be of much assistance in making such presentations.

I had a further reason for desiring his presence with the Commission. In my interview with the President on February 18, as mentioned in a previous article, I suggested that the canal work be placed under the Chief of Engineers of the Army, in order that I might have a "friend at court." Having failed in this, I realized that Mr. Bishop would be much more valuable on the Isthmus than in Washington, for that the President had confidence in him was indicated clearly in what he said about him at that time. Mr. Taft expressed doubt about the President sending Mr. Bishop down, but suggested that I write to him after his return to Washington and make the necessary application. In regard to the Washington office, while it served many useful purposes, there was no doubt that its most important duty was to contract for supplies and purchase and inspect them. Officers of the Corps of Engineers had experience in such matters, and, furthermore, if through the Chief of Engineers inspections could be made by his local Engineers distributed over the country, usually in commercial and manufacturing centers, in connection with river and harbor work, some economy would result. I, therefore, advocated that an Army engineer be placed in charge of the Washington office, acting under the Chief of Engineers.

"A Case of the Tail Wagging the Dog."
Previous to the advent of the new Commission there had arisen some friction between the head of the department of law and government and the chief engineer, due to lack of proper co-operation, for there was the seeming impression on the part of the former that the *raison d'être* of the

presence of the Americans on the Isthmus was not primarily to construct a canal, but to set an example in government to the republics of Central and South America. Referring to this subject, Mr. Stevens was said to have remarked: "It is a case of the tail wagging the dog."

Mr. Taft concluded, after examining the situation, that in order to subordinate everything to the construction work the chairman of the commission should have direction over the civil functions, and on April 2, 1907, he issued an Executive order, by direction of the President, decreeing that the "authority of the Governor or chief executive of the Canal Zone, under existing laws, regulations and Executive orders, shall be vested in and exercised by the chairman of the Isthmian Canal Commission." This put an end to that source of friction and also to the idea which had been the cause of it.

In view of this order I was instructed that when Senator Blackburn arrived on the Isthmus he should be assigned to duty as "Governor" but designated as head of the department of civil administration. The official designation of "Governor" thus passed out of existence until revived by the Panama Canal act of August 24, 1912.

I brought up with Mr. Taft the question of giving me the veto power over any action of the commission, and in discussing the matter he expressed the hope that as all the members of the commission were on the Isthmus things would work more smoothly under the seven-headed system. I explained to him the views of the President, who had said he would give me such power, and suggested that, while occasion for use of the power might not arise, it might be advisable to issue an order conferring it.

This he did not think it advisable to do, for the law contained no such provision but apparently contemplated the settlement of all questions by majority rule; he preferred not to reduce the bestowal of the power to writing, and suggested that should it prove to be desirable or necessary to exercise it I take such action and report the facts to him. In this connection I learned from him that a man's usefulness in the public service is determined by the abuse and criticism he can take without complaining.

As Secretary of War, Mr. Taft was the principal stockholder of the Panama Railroad Company, which was operating under its corporate charter from the State of New York; consequently, he directed its policy. The board of directors was composed of 13 stockholders, and he proposed to divide the board into two parts—seven members on the Isthmus and six in the United States. He had instructed the members of the Isthmian Canal Commission should be elected directors, and that I should be selected as the president of the company, so that the interests of the rail-

road on the Isthmus and those of the Commission could be adjusted on the ground.

The Canal Newspaper.
Subsequent to Mr. Taft's return to Washington I made application for the transfer of Mr. Bishop to the Isthmus, and recommended that the policy outlined above relative to the Washington office be made effective. The outcome was that Major H. F. Hodges, of the Corps of Engineers, was placed in charge of the Washington office, for which duty he could be spared, apparently, though a few months earlier this was not possible, and Mr. Bishop was transferred to the Isthmus, arriving there on August 7.

In the interval that had elapsed since assuming charge I had become convinced that some kind of newspaper was greatly needed in order that information about the various phases of the work might be disseminated among the members of the force, and I discussed the matter with Mr. Bishop as a part of his duties. He proposed the publication of a weekly official paper, under the title of "The Panama Record," of the Isthmian Canal Commission, which should set forth the progress of the work, together with incidents and general developments of interest to the men, with the view, primarily, of keeping them informed, and, secondarily, of affording to the public a means of obtaining accurate and unquestionable information on the subject.

He drew a plan for such a publication, which was approved by the Commission, and in September, 1907, the first number of *The Panama Record* was issued. Its publication continued throughout the construction period. It served a very useful purpose in many ways. It supplied a medium for communicating all official orders to members of the force, furnished a complete file of progress in all sections, and brought a spirit of wholesome rivalry among the men by the means of publishing accurate and unquestionable information on the subject.

Italian, Greek and other laborers from European countries.

Small Matter That Caused Annoyance.
With the commission residing permanently on the Isthmus, it was deemed advisable to move the force of designing engineers to the Isthmus also; this was not regarded favorably by certain members of the force, resulting in separations from the service, and was modified to the extent of permitting those in charge of designing the lock-gates to remain in Washington, on the ground that they should have the advantage of and access to machine-shops and rolling-mills so that the design of the gates might be made to conform to commercial practices and shapes.

Following the example of the previous commission, an engineering committee was established for the consideration of such engineering matters as might be referred to it, and Majors Gaillard and Sibert and Mr. Rousseau were designated as constituting the committee. By naming them in this order, I expected that Major Gaillard, as the senior or ranking member, following the usual custom in the army, would become its chairman.

An incident which occurred soon after the announcement of this committee will serve to illustrate how small a matter may create friction or annoyance.

In the executive order announcing the appointment of the engineer members of the commission the name of Major Sibert was placed ahead of Major Gaillard. While I noted this reversal of their rank in the Army, I paid no attention to it. They were classmates at West Point and had roomed together there; Major Gaillard had been graduated No. 5 and Major Sibert No. 7.

This was a situation of affairs which might become intolerable, since four members of the Commission could, by combining, defeat any proposed action that was objectionable to them for personal or other reasons, and thus make impossible the execution of a uniform and effective policy designed for the sole purpose of expediting the building of the Canal. However, this condition of affairs never arose due to a change which was effected shortly after.

Ex-Senator Blackburn spoke to me of the commission form of control on several occasions and expressed the opinion that, notwithstanding the general feeling of good will which existed there should be in his mind that there should be a head rather than a head of seven executives. Whether or not he expressed such views to President Roosevelt, I do not know, but undoubtedly some one did.

All Authority Placed in Colonel Goethals' Hands.
When I reached Washington in December, 1907, and called at the White House to pay my respects, Mr. Blackburn had preceded me. The President began his conversation by expressing gratification at the progress which was being made, and after this expressed his conviction that from what he had heard and from the experience already gained the commission form of organization could not secure the best results; he then announced his intention to concentrate authority in my hands and to hold me responsible for the work. With this in view he desired me to draw up an executive order which should accomplish the purpose.

I discussed the matter with Richard Reid Rogers, the general counsel of the commission, who prepared such an order. As the Secretary of War was my immediate superior, I submitted it to him. The general counsel accompanied me and remarked that it was the best he could do without questioning the law too much.

Mr. Taft read the order, laughed and said that it was not entirely in accordance with law, but, as it had been prepared under the President's direction, he drew up a note of transmittal, suggesting that I take it with the order of the President and see what he thought of it.

Pay Day at Culebra, Jan. 1908. Pay Car Was Taken to Centers of Greatest Activity Along Canal, Men Paid Twice a Month.

Section of Ancon Hospital Grounds, Where Employees of Canal Were Taken Care of in Case of Serious Accident or Illness.