

Personality of Engineer to Whose Constructive Genius Panama Canal is a Monument

Goethals—the Builder

BY JOSEPH BUCKLIN BISHOP.
(For nine years secretary of the Isthmian Canal Commission and for seven years of that period in intimate association with General Goethals.)

Editorial Note.—This article by Mr. Bishop, which reveals in a striking manner the remarkable personality of the modest United States military engineer who built Uncle Sam's great waterway, will be followed next week by the first installment of "General Goethals' Own Story of the Building of the Panama Canal." General Goethals' account of this stupendous work will appear exclusively in this paper. This is the first time that no reader who takes pride in Uncle Sam's achievement on the Isthmus can afford to miss.

ISAAC DISRAELI, in that most delightful of books, "Curiosities of Literature," makes this observation, which is as true today as it was when written a century ago: "How superficial is that cry of some impertinent pretended geniuses of these times who affect to exclaim: 'Give me no anecdotes of an author, but give me his works.' I have often found the anecdotes more interesting than his works."

In conversation a few years ago with John Hay I cited this utterance in support of something that he was saying to the same effect, whereupon he added (I quote from memory): "Real history is not to be found in books, but in the personal anecdotes and private letters of those who make history. These reveal the men themselves and the motives that actuate them and give us also their estimate of those who are associated with them. No one should ever desire a private letter that contains a fight, a quarrel, or a willfully lied and illuminating anecdote disclosing their individuality."

When I am about to write concerning the personality of General Goethals I shall follow mainly the idea thus outlined. I shall endeavor to portray him as he revealed himself to me during seven years of intimate association, in which he honored me with his confidence and admitted me to the inestimable privilege of his personal friendship.

Throughout that period I was a constant observer of his official acts, of the methods by which he met and solved the problems which pressed upon him incessantly for consideration, thus becoming familiar with the intellectual and moral qualities which form the basis of what is called character and which constitute the personality of a man. That General Goethals has a distinct personality no one who knows him or has followed his career will deny. That it is a strong personality, as well, every one who has been in the Canal service will testify without hesitation or qualification.

It is customary to regard the construction of the Panama Canal as an engineering achievement, but it is in equal, if not in larger, degree an achievement in administration. The engineering problems were comparatively simple, being those of magnitude, the solution of which followed clearly defined and well-established scientific lines. The problems in administration were new and there were no precedents in American experience from which to obtain light for guidance.

ful or incompetent learned soon that his uniform was no protection from censure or transfer to other duty.

Foreman Who Became Right-Hand Man
One of the most conspicuous examples of the Colonel's unmitigated policy was the selection of a civilian, Sydney B. Williamson, as head of one of the three great divisions of canal work. At the head of the Atlantic and Culebra divisions he placed two Army members of the Canal Commission—Colonel Sibert and Colonel Gaillard—but in selecting a head for the Pacific division he passed by all Army officers in the force and appointed Mr. Williamson.

Here, again, he followed a course which it is doubtful if any other Army officer in his position would have had either the courage or the foresight to take. I use the words courage and foresight advisedly, for the act displayed both. It was fully justified by results. Mr. Williamson, by his energy and ability, set a pace for work which compelled the Army officers in charge of similar operations in the Atlantic division to do their utmost to keep up with him, both in quality and quantity and also in economy. There was thus created a spirit of rivalry between the two divisions which was of almost incalculable advantage to the progress of the work.

I once asked Colonel Goethals why he selected Mr. Williamson for a position of such importance—what his reasons were for thinking him equal to the task. His reasons, as given to me in reply, throw a clear light upon the methods of judging men and selecting agents that they are worth citing here.

While he was in charge of work on the Musael Shoals Canal, in 1889, Major Goethals, as his rank was then, had directed a foreman to sink a test pit in order to find rock foundation for a lock. He had told the foreman that he would have to pass through a layer of quick sand, and had warned him to take precautions against a cave-in. The foreman failed to follow directions and a cave-in was the result. The Major discharged him, and Williamson, who was employed at some distance on another job, was recommended for the place.

The Major sent for him and put him in charge. Going to the spot on the following day, he found Williamson down in the pit with a gang of negroes shoveling sand into buckets to be hauled up. Later he had Williamson dine with him, and said to him that he did not think he should have gone down into the pit to work side by side with his men; that the place for a foreman was outside and in command of his gang. Williamson said: "You want to get down to rock, don't you?" "Yes," "Well, those negroes were so scared by the cave-in that they ran up into the pit unless I went with them."

When the job was finished satisfactorily, Major Goethals told Williamson, in reply to his request for employment, that he would like to retain him in his employ, but he had nothing to offer him except the position of assistant lockmaster, which paid only \$40 a month, and he supposed that was not worth his while. "I wasn't asking for money but for a position," said Williamson. "When a man has a wife and child to support he takes whatever is offered him and holds it till he can get something better."

When Colonel Goethals was placed in charge of canal construction, Williamson applied for service under him, and the Colonel, mindful of his capacity and character, assigned him to the important position which he filled with great credit to himself and with signal benefit to the entire work.



Sidney B. Williamson
Who had Charge of
Construction Pacific
Division of Canal
Under Goethals.

It was a two-story structure, containing a dozen or more rooms, and it had been built in 35 working days. The regular period of construction for houses of similar type, previous to that time, had varied from four to six months.

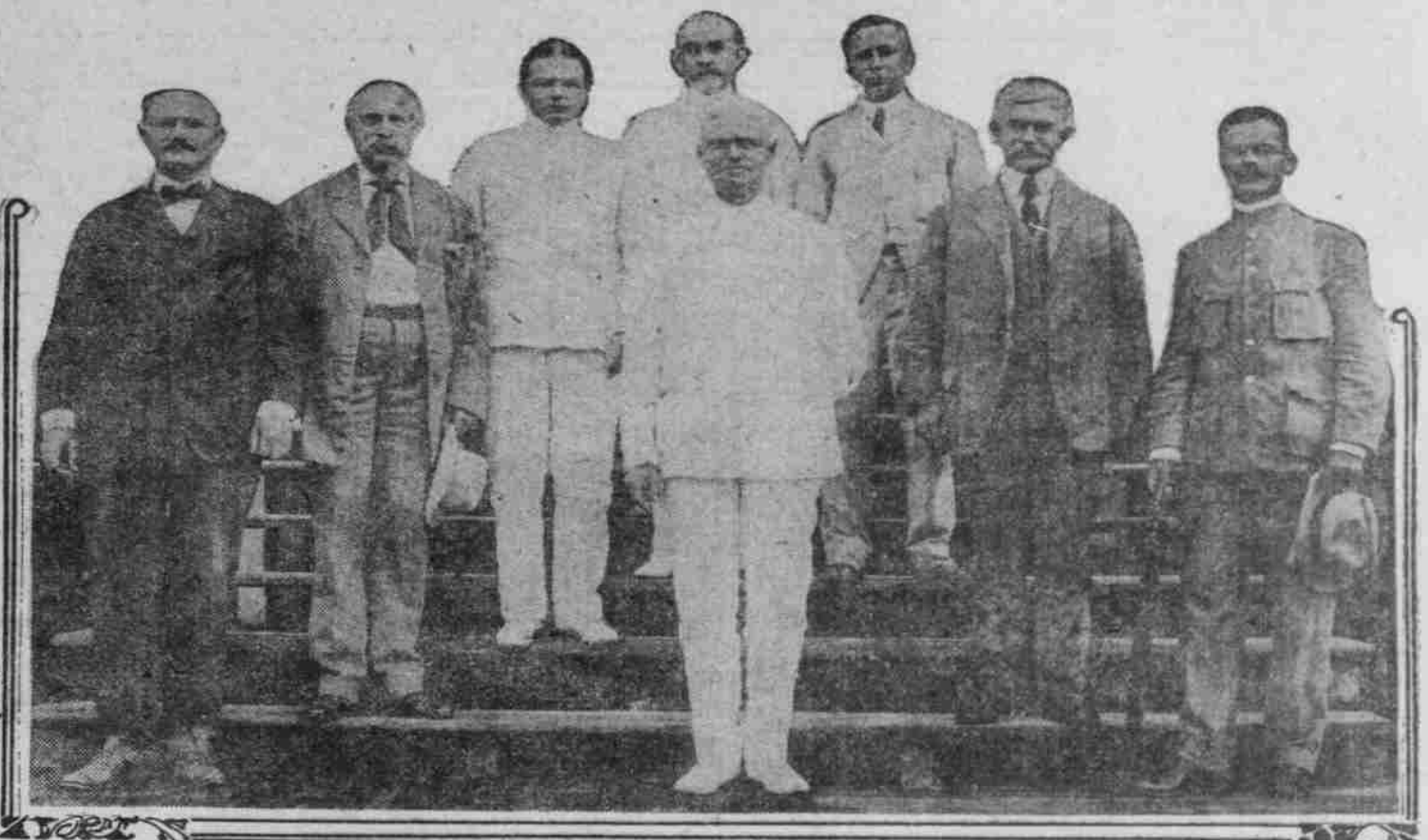
"He's a Pastmaster of His Business."
The effect of this quiet but inflexible control upon the progress of the work, was little short of marvelous. It was soon realized that if the Colonel insisted upon exercising absolute power, he assumed also full responsibility. It was also realized that he was master of his business, and that all his orders were based upon full and accurate knowledge. This it came about that the wisdom of his acts was universally admitted, and discussion about them practically ceased. With discussion and faultfinding there vanished from the force the chief sources of discontent.

Then, too, the Colonel was "on the job" every minute. He showed on every occasion exact and intimate knowledge of every phase of the work, for there was no part of it that escaped his personal attention. He spent part, often the whole, of the day in the field and his evenings in his office. No man in the force stood and the work than he, and no one of them had the minute and comprehensive knowledge which he not only possessed but had at his command at all times. His ability to master and retain detailed information was at once the marvel and the despair of every one associated with him.

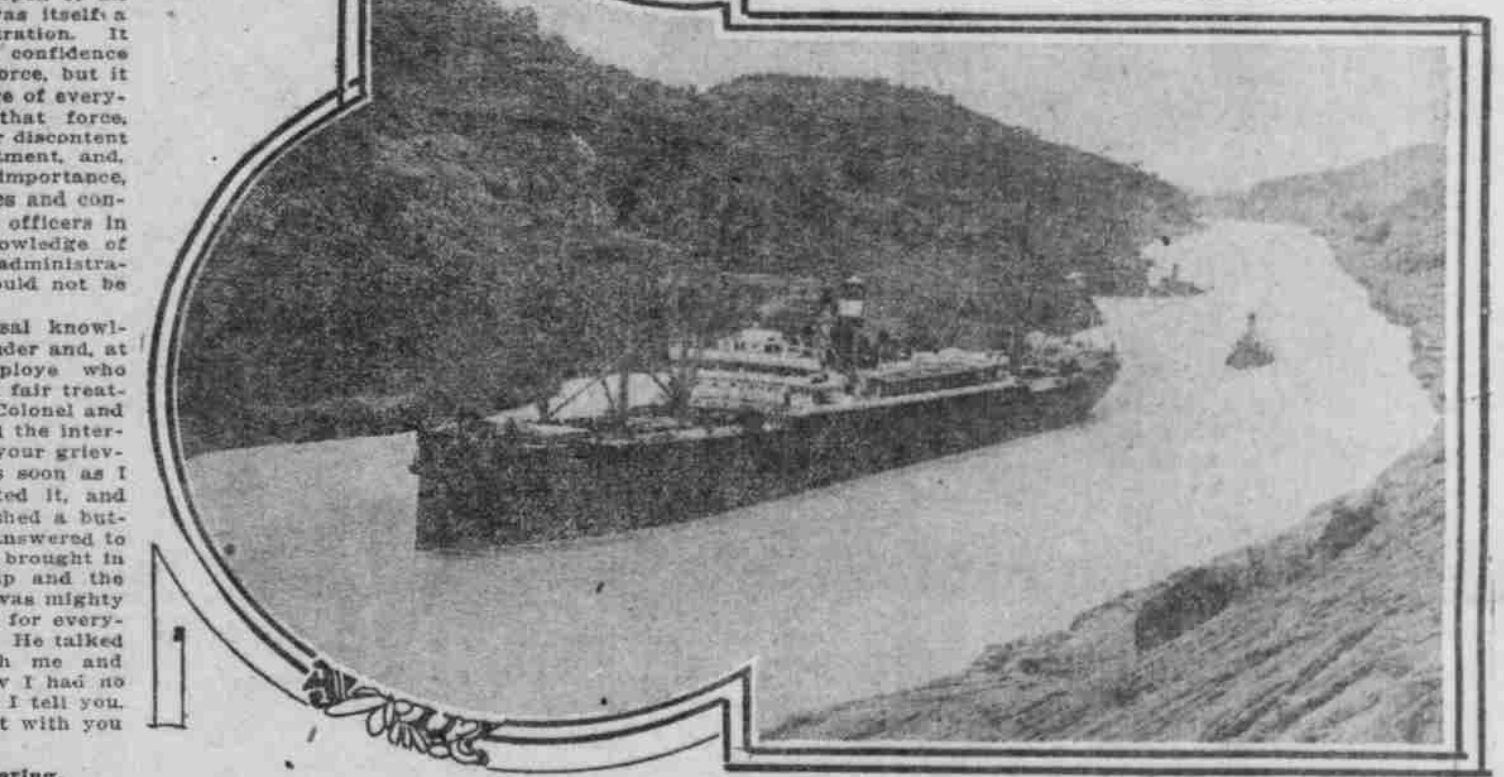
I remember distinctly the exhibition which he made of this faculty before the committee on appropriations of the House of Representatives on their first visit to the Isthmus in 1908. At its first session he took the stand and the members of the committee, each equipped with pad and pencil, began a cross-fire of questions at him, most of them betraying a simple ignorance that was quite impressive.

The Colonel endured it for a few minutes and then he suggested informally to the chairman that perhaps they could get on more rapidly if he were to outline the condition of the work as it existed. The suggestion was adopted and the Colonel, in a quiet, deliberate manner, began a narrative of what was proposed and what had been done. As he proceeded one by one the pencils were laid down, the pads were pushed aside, and the members leaned forward in absorbed attention. When he finished, after about 30 minutes of speaking, the chairman moved over to where I was sitting and said in a low tone:

"Good Lord, we've got to give that man what he asks for—he's past master of his business!"
Like demonstration was made at every subsequent visit of a Congressional committee. It was the custom of the Colonel to sit by the division engineer or department official who was testifying. Invariably, when a question was asked concerning some detail that the witness was unable to answer, the Colonel answered it for him, showing that he was more familiar with the details of the division or department than the head of it himself.



The Third or Goethals Canal Commission, in Front Center General Goethals, Others Left to Right, Major William L. Sibert, J.C.S. Blackburn, Civil Engineer, H. H. Rousseau, Joseph Bucklin Bishop, Secretary, Lt. Col. H. F. Hodges, Col. W. C. Gorgas, Lt. Col. D. D. Gaillard.



Opening of Panama Canal, Steamer Ancon Passing Through Culebra Cut.

United States. A mass meeting of transportation men was held on Sunday, February 25, at which, under the lead of some hot-heads, resolutions were adopted denouncing the verdict as unjust, demanding the liberation of the engineer, and declaring that if the canal authorities did not free him by 7 o'clock on Thursday evening following the transportation men would leave the service.

A delegation from the meeting went in a body to the office of the chief engineer and stated the result of the meeting to the acting chairman and chief engineer, who persuaded them to await the arrival of Colonel Goethals before taking action. On Thursday following Colonel Goethals arrived and went at once to his office. A leader of the protesting employees called him up by telephone at 7:10 and asked him if he had received the petition, when the following conversation took place:

Colonel Goethals—No, I have received no petition.
Leader—You haven't? Has not Colonel Hodges advised you of the action of our meeting?
Colonel Goethals—Yes, I have been advised of a demand from a mob.
Leader—When will we get our answer?
Colonel Goethals—You have it now.
Leader—We have it! I have not received it.
Colonel Goethals—Yes. You said if the man was not out of the penitentiary by 7 o'clock this evening you would all quit. By calling up the penitentiary, you will learn that he is still there. That's your answer. It is now 10 minutes past 7.
Leader—But, Colonel, you don't want to tie up this whole work?
Colonel Goethals—I am not proposing to tie up the work—you are doing that.
Leader—But, Colonel, why can't you pardon the man?
Colonel Goethals—I will take no action in response to the demand of a mob. Furthermore, I cannot act in this case at all because you yourselves placed it in the hands of President Taft, who, when he was on the Isthmus a few weeks ago, he told you then that if the Supreme Court confirmed the verdict he would consent to consider the case. It is in his hands now.
Leader—Must the man stay in the penitentiary until he is set?
Colonel Goethals—So far as I am concerned he must. As for your threat to leave the service, I wish to say to you and to your associates, that every man of you who is not at his post tomorrow morning will be given his transportation to the United States and there will be no string to it. He will go out as the first steamer and he will never come back.
Leader—Suppose one of us should be sick?
Colonel Goethals—It is an unfortunate time to be sick.
Only one man failed to be at his post the next morning, and he sent a doctor's certificate saying he was too sick to be there. The mail of the chairman and chief engineer's office was stuffed

with letters from signers of the resolutions asking to have their names taken off, and there was not a shadow of a strike then and there has been none since.

The "Yellow Peril."
The Colonel's custom of spending a part of each day, usually the forenoon, in visiting the work, gave him a knowledge of every part of it that often caused a rude shock to some subordinate official whose performance was not quite up to the mark. No such official could foresee when the Colonel, in his personal railway motorcar, known because of its color as the "Yellow Peril," might appear on the scene; neither could he foresee what defect or shortcoming the keen eyes of the chief engineer might detect.

Toward the end of the task, when completion ahead of time was assured, a tendency to relax effort became visible in several quarters, due partly to lessened tension and partly to a desire to make the job hold out as long as possible. In one such instance the Colonel appeared suddenly on the spot and called the foreman in charge to account for slow progress. The foreman said: "Oh, that's all right. I have 100 days in which to complete the job." "That's not the way I work," replied the Colonel.

Returning to his office he sent for the foreman's superior officer and told him the work must be pushed forward rapidly. A few days later he visited the work and saw that his order had not been obeyed. He then issued an order transferring the work from the official who had charge of it to his personal direction, and directing that the plant be removed to a different location on the canal line and consolidated with another.

"that is a matter for your personal decision, but the order will neither be revoked nor modified."
The official resigned, and the general comment on the incident was one of astonishment that a man who had served seven years under the Colonel knew him so slightly as to think he would revoke or modify an order he had once issued.

The faculty of going surely and directly to the vital point of a matter is possessed in a remarkable degree by Colonel Goethals. So also is the gift of plain speech. While inspecting the work in progress under an associate official he rebuked him sharply for disobedience of orders, saying his conduct amounted to disloyalty. The official unconsciously confessed judgment by saying: "I can be loyal to you." "You can be loyal," retorted the Colonel, "then you have not been!" "I am loyal," continued the official, "that you have accused me of disloyalty and have said that a man who is disloyal will lie and steal!" "So he would," said the Colonel, "given provocation."

Goethals' Habitual Answer to Criticism.
A Washington visitor met Colonel Goethals one day in my office at Ancon. The Canal was at that time nearing completion. "How soon are you going to be able to pass ships through the canal?" he asked. The Colonel replied that he had no doubt that he would be able to pass them in 1914. The visitor, paying little heed to the statement, continued:

"Colonel, I come in contact in Washington with many of the diplomatic representatives of foreign governments with whom I am on quite intimate terms. They say such things as this to me: 'You know that the canal will never be open to navigation. You know that the Gatun dam will not hold water. You know that the slides in Culebra Cut can never be stopped. You know that the locks can never be operated.' Now, Colonel, what shall I say in reply to these people?"
The Colonel, with an amused gleam in his eye, said quietly: "I wouldn't say anything."
That was his habitual answer to ignorant or malicious criticism. Whenever an instance of it was brought to his attention and a suggestion was made to publish a refutation of it, he would say: "Oh, let it go. We will answer them all later—with the canal." He is as indifferent to fulsome praise as he is to ignorant and unjust blame, and cares so little for both that he rarely or never reads anything that is written about himself.

His sense of humor is acute and unusual, and he has the quite unusual ability to enjoy a joke at his own expense. He was hugely amused by a conversation which he overheard concerning himself on a Panama Railway train. Two men were talking in a seat directly behind him, neither of them having recognized him. One, a foreman, was telling the other, who was a visitor, of the great things he and

(Continued on Page 5.)