From a portrait copyrighted by Malvina Hoffman *Photo by P. Juley*

COLONEL PHILIPPE BUNAU-VARILLA

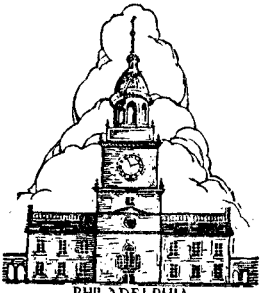
FROM PANAMA TO VERDUN

My Fight for France

By

PHILIPPE BUNAU-VARILLA

ILLUSTRATED



PHILADELPHIA
DORRANCE AND COMPANY
Publishers

MANUFACTURED IN THE UNITED STATES OF AMERICA

Postal Stamp of the Republic of

Nicaragua.

An official witness of the volcanic

activity of the isthmus of Nicaragua.

On account of the earthquake consecutive to the eruption of the volcanoe (to be seen smoking in the background) the greater part of the wharf (tobe seen in the foreground) went to the bottom of the lake with a large quantity of bags of coffee on March 24, 1902, at 1:55 P.M. (Democracia de Managua). (See also New York Sun of June 12, 1902).

AN OFFICIAL WITNESS

This document, sent by Bunau-Varilla to every member of Congress, determined the vote for Panama a few days later in both Houses.

Dedicated

to

THE "ÉCOLE POLYTECHNIQUE," MY INSPIRATION

Napoleon said that the *"École Polytechnique"* was his "hen with the golden eggs."

In fact it furnished him liberally with what the head of a State desires most: officers especially instructed for the scientific branches of the army, or functionaries of the civil service requiring highly specialized technical knowledge, always endowed with a scrupulous integrity and a passionate devotion to France.

The duty of the *Polytechniciens* to their country does not end with their official duties, be they military or civil.

Though the accidents of life may have relieved them of public office, they yet must always hold themselves ready to work or fight should the interest of the State demand it.

They resemble these inhabitants of the military frontiers of old Austria who carried their guns over their shoulders while tilling the ground, or those knights-errant of the Middle Ages who rode through the world to protect and defend the oppressed people.

The *Polytechnicien* must hold himself permanently and disinterestedly ready to serve his country.

Whatever his situation, whether official or not, he is obliged by the honour of his school to devote himself to the solution of problems which bear on public safety and to the study of that mysterious unknown quantity which safeguards national interest.

At the beginning of the great war, did we not see Joffre transforming a general retreat into the Marne Victory?

At the end of the war, did we not see Foch transform an apparently desperate situation into the final victory!

These two illustrious contemporaries are true representatives of the *Inspiration Polytechnicienne.*

It has been my life's guide and for this reason do I dedicate to the great School of France this history of my fights for my country, its science, and its glory.

PHILIPPE BUNAU-VARILLA
(*École Polytechnique,* Class of 1878)

Paris, July 26, 1939, the beginning of my eighty-first year.

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ILLUSTRATIONS *

** Copies of the original illustration plates, used in the French edition, were shipped the Publishers but evidently were seized by the Nazis during their occupation of Paris. The plates in this edition were made, as well as possible, from proofs.*

It is a patriotic duty to tell the truth to one's country.

CHAPTER I

THE CREATION OF THE CANAL BY THE OLD PANAMA COMPANY

SAILING FOR PANAMA

THE BEGINNING OF MY PARTICIPATION IN THE GLORIOUS UNDERTAKING

On the 6th of October 1884, I sailed from Saint Nazaire for Colon Aspinwall in order to collaborate in the construction of the Panama Canal.

"You want indeed to commit suicide," said the esteemed Mr. Schwoebelé, the librarian of the "École des Ponts & Chaussées," to me when I told him what I had decided.

"Not all," said I, "I have no such intention. I made that resolve fifteen years ago, when the Suez Canal was inaugurated, on the 18th of November 1869. For this reason I entered the 'École Polytechnique' in 1878.

"I am now equal to the task and ready to go. But here is the difficulty. I have been a whole year *ingénieur des Ponts & Chaussées* at Bayeux. You know that I must complete five years' service before the Minister can grant me leave to serve the Panama Company. A standing regulation requires it. As I have decided to work for the Panama Canal, I am thinking of resigning because the leave I am going to ask for will doubtless be refused as it was last year."

"Think that over again," said Mr. Schwoebelé paternally, "to go to Panama is to run toward death. See the general director of the works, Mr. Dingler, chief

engineer of your engineering corps. He lost his son, his daughter and her fiancé."

"Victory without peril, dear Mr. Schwoebelé, leads to triumph without glory."

"When extreme sanitary dangers are added to the enormous technical difficulty, the undertaking may appear impossible to most people. For those who wish French genius to win the battle, it is one more reason to go. I am decided and, whatever may be the cost, I am going."

"Oh," replied Mr. Schwoebelé, "if you are as determined as that, you probably will be able to obtain your leave, if Mr. de Lesseps asks for it from the government. It is of public interest that the Panama Canal undertaking should be served by the best engineers of France. It will be the more easy as there is now an excess of Engineers in the corps of the 'Ponts & Chaussées.' The program of great public works drawn up by Mr. de Freysinet had led to the recruiting of many auxiliary engineers. Now that conventions have been signed with the great railroad companies, many of these auxillaries have become unnecessary. They don't know where to utilize them. Consequently your request has every chance of being accepted and the regulations adapted to what the public interest demands."

Thus spoke Mr. Schwoebelé, whose experience made him a veritable oracle.

As a matter of fact the minister did accede to Mr. de Lesseps' request and I was given temporary leave for six months, which was to be renewed every half year, until the end of a five year period, at which time I could obtain official leave to serve the Panama Company.

The director general of the works, Mr. Dingler, was returning to the Isthmus with his wife by the steamer *Washington*. Twenty years previously, this ship, then

provided with a wheel on each side, had opened the regular service between France and the United States.

On this voyage the *Washington* was carrying to the Isthmus many employees of the Canal Company, who were full of gaiety and enthusiasm for the great work undertaken there.

When we arrived before the low lands of the island of Manzanillo, the smile vanished from the lips of several of them, at the approach to the invisible but ever present danger, behind the warm fog concealing the horizon.

I noted the names of those on whom this impression of fear was particularly noticeable.

They were predestined to an early death. My deduction therefrom was that in the struggle for life, be it in battle or in a fight within the organism, the same rule applies: the most important factors of success are moral force and a stable equilibrium of the mind.

As soon as I arrived on the Isthmus I was appointed Chief Engineer of the 3rd Division, which extended from the Pacific shores to the Culebra Cut, inclusive.

On these twenty-five kilometers covering approximately one-third of the total length of the Canal, no deep excavation had as yet been carried out. An important contracting firm, the so-called Anglo-Dutch, was going to attack the Culebra Cut with powerful machinery.

Simultaneously a marine dredge was coming by its own power from Scotland to attack the sands of the Pacific shores with its large buckets. It was to open a long channel at the mouth of the Rio Grande into the Pacific, a channel which was also to be the mouth of the Canal.

Everywhere the struggle against nature was prepared conscientiously but nature, at the same time, was striking fast and unmercifully at its aggressors.

During the night between the 31st of December, 1884 and the 1st of January, 1885, as the whistles of the ships and the songs of merry makers were saluting the New Year, Mrs. Dingler was breathing her last.

She was departing to join her son and daughter fallen the year before under the scourge of yellow fever.

Soon after, to the difficulties presented by nature, were added those made by man. A revolution, under the leadership of General Aizpuru, conquered Panama, after a bloody struggle, on the 1st of April, 1885.

The American authorities disembarked troops when they saw a conflict imminent in the town of Panama. They entered the Isthmian capital and fired several volleys of blank cartridges with their machine guns. At the same time, the Colombian troops, which had arrived on lighters stolen from the Canal Company, were requested to abstain from performing any act of war against the revolutionary government of Aizpuru.

On the other side Aizpuru was convinced by the Americans that he had to lay down his arms.

Thus there developed before my eyes the paradoxical situation of a revolutionary government protected by American intervention against the attack of an army under the orders of the legal government of Colombia.

It was, in fact, only the rigorous application of the treaty of 1846 between the United States and New Granada (the former name of Colombia), which gave to the great Northern Republic the right of free transit through the Isthmus, but required her to maintain order there.

I was witnessing the application of the diplomatic theory which, almost twenty years later, was to permit me to establish the Republic of Panama and to rescue the canal undertaking from annihilation.

The submission of Aizpuru settled the situation at Panama, on the Pacific side, but another political storm had already burst on the Atlantic coast.

A revolutionary government had been established at Colon, a few weeks before, under the leadership of a Haytian mulatto called Prestan.

It was attacked, on the 1st of April, 1885, by regular troops of the Colombian government coming from Panama.

Precisely this departure of the main force of the Panama garrison had permitted General Aizpuru to seize Panama.

The United States had three men of war in the harbour of Colon, one of which, the *Galena,* was commanded by Captain Kean, chief of the squadron. He was entrusted with the duty of maintaining order at Colon.

His vigilance was overcome on the 1st of April, 1885, The Colombian troops arrived during the night surreptitiously and attacked Prestan's men in the early morning. A violent battle ensued with the almost inevitable result, in a town where the houses were of wood, that Colon was completely burned.

Happily, the town belonging to the Canal Company, Christophe Colomb, though contiguous to Colon Aspinwall, was saved.

This disaster without parallel happened just when a great number of ships chartered by the Canal Company to transport the machinery ordered by Mr. Dingler were due to arrive. These ships had been expected to unload at the wharves of Colon Aspinwall, which however had been burned to the water level.

To these exterior commotions were added others inside the Canal Company administration and the moral sufferings of Mr. Dingler were increased by cruel disillusion as to the progress of the works. He became extremely irritable and, during the course of a dinner, was so exasperated by an unhappy remark of Mr. Clavenad, Chief Engineer of the First Division, residing

at Christophe Colomb (who has since been Chief Engineer of the town of Lyons), that he spoke in a way that gave Mr. Clavenad no alternative but to resign, which he did.

Mr. Dingler, then, entrusted me with the First Division, that on the Atlantic side, in addition to the third one, that on the Pacific.

I arrived to take charge when the turmoil resulting from the complete destruction of Colon Aspinwall was at its height. Before me were fourteen big ocean steamers loaded with machinery belonging to the Canal Company and I had no means of unloading them.

I returned immediately to Panama to inform the Director General that unity of command was indispensable to the re-establishment of order.

I requested Mr. Dingler to entrust me with the two administrative divisions, that of Transportation and Maritime Operation, together with that of the Repair Shops.

Mr. Dingler accepted my request for the general direction at Colon.

I thus became responsible for two of the three divisions of work and also for two important and active administrative divisions.

Only two hours a night could be available for sleep, the remaining hours being devoted to calculating and devising practicable solutions for the problems which were every day renewed.

During this period the yellow fever was constantly thinning the ranks of my collaborators.

Soon after, Mr. Dingler had to leave for France and his place at the head of the Canal Company was taken by a comrade of mine in the corps of the "Ponts et Chaussées." He had the title of Chief Engineer of the Work and had been in fact Mr. Dingler's assistant.

He also was overcome by disease and forced to leave the Isthmus.

The general direction of the gigantic undertaking thereupon fell automatically on the shoulders of a man who had only recently celebrated the 26th anniversary of his birth.

It seemed to me rather a relief than, as might have been supposed, an overwhelming burden.

I had carefully provided the services with active and experienced men. I had taught each one, then and there, during my daily visits to the works, what methods to follow.

I had only to issue the necessary orders without having to discuss their propriety beforehand with the director.

One thing only had to be rectified: that was the general administration of Panama, where reigned a spirit of criticism, a sense of defeatism.

I decided, as soon as I assumed office, to make two dismissals.

One was a chief of section, who in the public houses never hesitated to express his lack of confidence in the prospect of ever opening the canal to navigation.

I ordered him to come to my office and informed him that I had decided to dismiss him. As he protested, I said:

"The heroic undertaking of the Canal is to be served only by men determined to sacrifice even their lives to victory. The act of cashing its generous salaries without believing in the possibility of success is veritable treason. Your doubt justifies your dismissal."

The second one was an elegant British gentleman who had rendered services to the Suez Canal and to Mr. de Lesseps.

He had a numerous family and had a yearly salary of $8,000.

Actually, he did not serve usefully and his sinecure was the reward for acts anterior to the Panama Canal enterprise.

In justice to him, I must say that I had nothing to reproach him with but his uselessness.

When I informed him of his dismissal, he assumed a haughty attitude, invoking Mr. de Lesseps' protection.

I answered, "If Mr. de Lesseps has a debt to you for services rendered to the Suez Canal Company, it is for that company to pay it."

"I shall not consult anybody, not even Mr. de Lesseps, to learn what is my duty where my duty is concerned."

These two discharges were sufficient. The personnel of the Central offices understood that there was nothing to do except to work wholeheartedly for the success of the great enterprise!

These measures systematically and energetically enforced in all the services resulted in a heretofore unexampled activity.

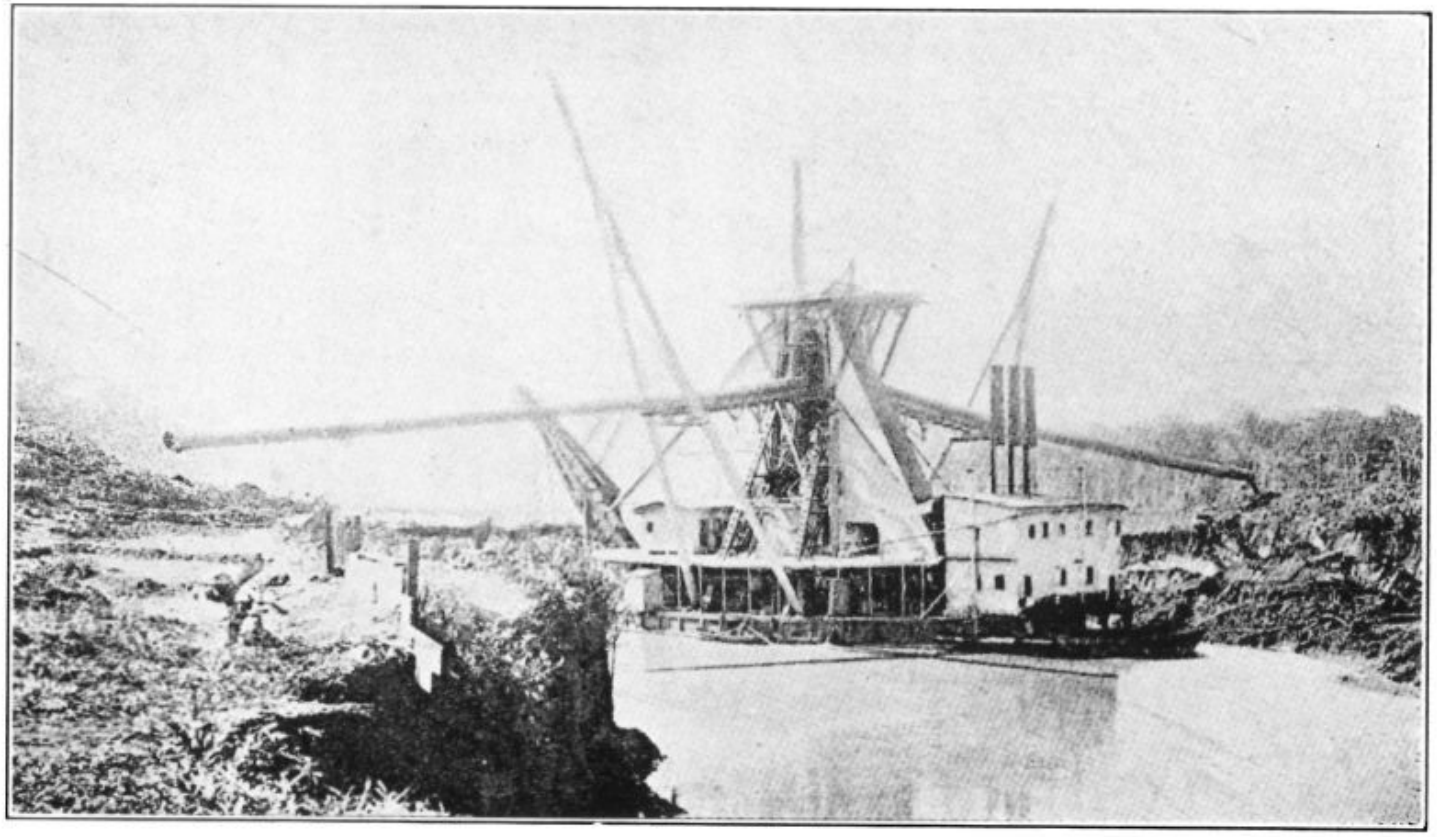
My supreme ambition was to reach the goal, so often promised but never even remotely approached, of a monthly excavation of 1,500,000 cubic yards.

I calculated that I would attain this result in January 1886, and in fact the yield for that month was 1,503,000 cubic yards. The great enterprise was henceforth on the safe side of the abyss, provided a new principle might be introduced into the general plan and that the problem of the Culebra excavation could be solved.

While this interior reorganization was being carried out various incidents were constantly throwing new difficulties in the way.

I have already mentioned the Aizpuru revolution at Panama on the first of April, 1885 and the attack against Prestan at Colon, on the same day, and referred to the American intervention which prevented fighting at Panama.

As I stated, the American squadron at Colon failed to intervene in time to prevent the struggle between the



LONG PIPE DREDGE OPENING PANAMA CANAL IN THE VALLEY OF THE CHAGRES

This type dredge, invented by Borel and Lavalley, made possible the excavation of the Suez Canal.

Colombian troops and Prestans men, the consequence of which was the burning of Colon in its entirety.

As soon as the town was taken again by the regular army of Colombia, a negro named Cocobolo was hanged for having started the fire.

To execute him a portico was erected across one of the Panama Railroad lines in the town of Colon. A flat car was pushed under the portico, the condemned man was led up on to the platform and behind him went the captain of the port.

This captain had been captain of one of those corps of volunteers who, in the American Wild West, assumed the triple duty of policemen, judges and executioners. They were called "Vigilantes," and their code was limited to the enforcement of Lynch law, which carried out the immediate execution of the convicted criminals.

This is how he dealt with Cocobolo. Carrying under his arm a long rope at the end of which was a noose well smeared, he came up to the condemned man and adjusted the noose to the negro's neck. The other end he attached to the frame of the portico and ordered a dozen negroes to push the flat car ahead.

The newly erected portico in the ruined town was carefully preserved for the use of Prestan, the chief of the insurrection, who was held responsible for the disaster.

But Prestan had fled far from the Isthmus, perfectly disguised. He finally was arrested and brought to Colon several months later, where he was tried by a Colombian Military Court.

Unfortunately this Court was obliged to enforce the Colombian law and this law was impregnated with the humanitarianism which during the whole of the nineteenth century had protected criminals. Colombian law

had provided as a supreme sanction for the most horrible crime only a penalty of ten years' imprisonment.

Great was the embarrassment of that Military Court when faced by this legal barrier and, in order to send Prestan to the portico, it resorted to a very curious reasoning.

The Court maintained that the legislative imagination could not have conceived of a crime as horrible as that of the destruction of a whole city by fire, and it further stated that such a crime as Prestan had committed, not having been foreseen by the Colombian law, created the necessity of appealing to natural law. A condemnation to death by hanging resulted from the delicate casuistry of the Military Court of Justice.

I came on a tug boat, to witness this execution which was to take place near the shore of the ocean.

On the day before, at Colon, I had several times met the captain of the port. He carried under his arm a big bundle wrapped in yellow paper.

Meeting him face to face, on one of the foot paths made of boards which were the only means of communication in the vanished town, I asked him what he was carrying.

"Oh," said he, "it is a rope. They are trying Prestan and I expect every moment to be called upon to hang him. Therefore I have prepared the rope and in order to be ready at any moment I am taking it along with me, while the arrival of ships forces me to go to various places." The good man, wishing me to appreciate his art, opened the bundle, and showed me the rope, about as thick as my little finger, and the noose, admirably prepared and greased, which ended it.

With the execution of Prestan the last episode of the revolution which had shaken the Isthmus, during part of 1885, was terminated.

The yellow fever, during that time, was continuing its deadly work.

I still remember two ships loaded with wood from New Orleans, riding at anchor in the harbor of Christopher Columbus. Nobody remained on board; everyone was dead of yellow fever, from the captain to the last cabin boy.

I was certainly stung often by the "stegomyia" mosquito, the transmitter of yellow fever, but I had within myself a power of resistance which was made more active by the notion that I was indispensable to the life of the great undertaking.

A dramatic and double yellow fever incident marked the autumn of 1885.

The Canal Company viewed with concern the reduction in the number of engineers and sent me two.

One, Mr. Petit, engineer of the "Ecole Centrale" had passed the meridian of life. The other, who graduated from the "École Polytechnique" seven years before me, was a young and active man. He was a brother of Mr. Sordoiliet, Director of the *"Éclair de l'Est,"* the great newspaper of Nancy.

I sent the latter to Matachin, as chief engineer of the Second Division, where the work required great physical activity.

A few days later Sordoiliet telegraphed me that he felt very ill. I left by special train to bring him back to Panama, should his case be serious.

He was suffering from a very high fever, but the characteristic symptom of yellow fever, the albumin in the kidney excretion, had not appeared.

"I am going," said I, "to bring you to the hospital at Panama. A car shall wait for you at the station and, within two hours and a half, you will receive the most scientific treatment."

"Oh, Mr. Director," said he, "please let me be brought

back to your house in the room where you have given me hospitality. It seems to me that if I go to the hospital it will be the end."

"You are wrong," I answered. "Our hospital is admirably organized. Were I sick, I would desire to be taken there. But if you are frightened by the hospital, I am going to take you back into the room which I gave you, during the first three days of your presence on the Isthmus."

He thanked me cordially and we went back to Panama, a few moments later.

The fourth night after my return the fatal symptoms appeared.

I had, as was the case almost every day, several guests at dinner, among whom was Mr. Petit, the older engineer who had arrived with Sordoiliet.

Everybody hastened to ask for news of the sick man.

"Alas," I answered, "there is unfortunately no doubt any more about the gravity of the disease of our unfortunate comrade. He is lost!"

Then I added, after a quick mental calculation based on the usual duration of the disease and the date of its beginning:

"We shall bury him within three days!"

As this sad news was grieving the hearts of all present, several of whom were high employees of the Canal, I said further:

"It is the exorbitant price that we, soldiers of progress, have to pay for the glory of realizing the union of the Pacific with the Atlantic. Let us salute him who falls and let us carry on the struggle. Gentlemen, let us speak of the work and of the incidents of the day."

During the dinner, one of the guests failed to take part in the conversation. It was Mr. Petit. He did not open his mouth, except to answer the questions I asked him.

On the following day he sent a messenger to inform me that he was obliged to absent himself from the office, because of a sudden indisposition.

Forty-eight hours later he died, half an hour before Sordoillet.

The same evening we took them together to the Cathedral and afterwards to the cemetery.

Never have I seen such a rapid development of the disease as in Mr. Petit. Within two days and a half the fever had accomplished its work.

It is a proof of the cohesion between the physical and the psychical in the great trials of life.

When Mr. Petit heard me prophesy the death, within three days, of his colleague and travelling companion, Sordoillet, he assuredly took this prevision for himself:

"We arrived together," he must have thought, "we shall die together."

And thus it happened!

I was able to note several incidents of the same kind.

It was thus that the death of my eminent comrade and friend, Léon Boyer, who succeeded me as the head of the direction of the Canal works, occurred. It was obviously due to a moral blow of the same kind.

At the end of 1885, Léon Boyer, engineer of the "Ponts et Chaussées" had just covered himself with glory by building the admirable and world-known viaduct of *Garabit* in the Canal.

He had a charming and brilliant mind. He had tried to enter political life and in 1885 presented himself for election, which was held with the panel ballot.

His panel had been beaten, but triumphed several months later, after the invalidation of the opposing panel; but then Boyer was dead.

He arrived at the beginning of February, 1886, bringing forty technicians known to him with whose

help he expected a rapid increase in the rate of production.

But the necessary reorganization had already been accomplished and an impulse given which was never equalled later even during the American period, if the calculation is based on the unitary yield of black labor.

One month later Boyer said to me: "What a strange country. I arrived here with tried technical assistants and I relied upon them to accomplish marvels. I see now that the only ones upon whom I can rely are those whom I find here: they are yours. I thought I should have to reform half of what you had done and I see that not one of the lines that you have traced can be modified!"

This failure obviously affected Boyer, whose nervous and impressionable temperament suffered.

Some weeks later I myself fell ill of yellow fever, which depressed him still more. However, I could resist the disease and he came on board the boat for New York to bid me an affectionate good-bye, which proved an eternal farewell.

Twenty days later, when, after reaching Paris, I opened for the first time a French newspaper which was not three weeks old, I felt a violent shock. The first lines of the *Temps* which fell under my eyes announced the death of my friend Boyer.

It was a cruel sorrow. I learned later the dramatic conditions of that death. They matched those of the death of Engineer Petit.

Boyer had inaugurated, before his departure from Paris, the so-called period of the great contractors.

All the excavations extending from the extremity of the Culebra Cut to the Pacific Ocean were entrusted to an association of important contractors, Letellier, Baratoux & Liliaz.

The two first made only short appearances on the Isthmus. Mr. Liliaz, on the contrary, whose experience and capacity for action were great, had resolved to direct his work himself.

He was hampered everywhere on land by that mass of difficulties which the Isthmus presented everywhere.

His personnel was melting in his hands.

One section only gave him satisfaction and profit.

He had found, already in fruitful activity, a dredge, in the Bay of Panama, which I had installed about a year before.

Boyer had agreed with the new contractors on very generous unit prices for the dredging. This was in order to compensate them for their sterile expenditures at the beginning and during the organization of the work in the dry.

Suddenly, fate upset everything.

The dredge caught an anchor buried in the silt of the bay. The rising of the chain brought the anchor into contact with the hull which was broken open.

As a normal contractor should do, Liliaz requested from the Canal Company an indemnity for the expenditure caused by the enforced idleness of his personnel on the dredge, as well as on the boats that carried the spoils out to the deep sea.

His demand was based on the fact that his contract was for dredging ground and not anchors.

To this, Boyer answered with perfect propriety that, according to the contract, the cost of any accidents during dredging were to be paid by the contractor. I was told that he added, under the pressure of irritation: "When people have obtained prices as high as yours, they cannot claim anything more."

The expression was unhappy because it gave the impression that Liliaz had obtained abnormal prices.

They were indeed much higher than the cost resulting from dredging by administration as I had organized it, but I have explained why Boyer had adopted them.

Naturally this difference had been observed and Liliaz had become the object of pleasantries and hurtful insinuations in the gossip of the cafes.

He had grown excessively sensitive in the matter and the letter of Boyer brought his irritation to its culminating point.

It was this moral wound which obliged him soon after to lie down on a bed of suffering. Yellow fever had taken hold of him and eight days later he died.

At the moment Liliaz was to breathe his last he said:

"Boyer, you have launched against me the abominable accusation of having obtained prices which could not be justified, when it was yourself who had determined them. I give you an appointment within fifteen days before our Supreme Judge."

The wound made by this sentence on the delicate soul of Boyer was mortal.

He succumbed a few days later to yellow fever and before expiring said to those who were around his bed: *"I die for a great cause. You who stay must remain faithful to it!* NEVER ABANDON PANAMA!"

Panama is open today and has been for more than twenty years at the service of the universe because I did not abandon it and thus realized the wish expressed by my dear successor and friend on his death bed. Our hearts were united by the same love for the greatest work of the French genius. Happier than he, I was able to preserve it from the destruction to which it had been condemned by the timidity of our Governments in defending France and its great interests.

During the second half of 1885 the vigorous organization of the various works was obtaining good results, when suddenly with the arrival of big dredges

brought to Colon by an American company to open the Canal in the lower valley of the Chagres, a great difficulty presented itself there. These dredges belonged to the type called *à long couloir,* used by Borel and Lavalley for the excavation of the Suez Canal which, without this invention, would have resulted in failure.

The dredges, instead of unloading the excavated material into lighters, unload it into long inclined pipes through which it is poured on the banks.

In all problems of excavation, the costs accumulate principally in transportation and unloading charges. Excavation properly speaking entails the smaller part of the expenditure.

With the remarkable conception of Borel and Lavalley the transportation and unloading do not cost anything at all. The difficulty of excavating and transporting the spoils over the immense length of the Suez Canal was such that its solution would have been impossible with the old methods.

Fortunately for the undertaking of Mr. de Lesseps, Lord Palmerston, who intensely desired its failure, acted with the intention of stopping the work suddenly. It was exactly the contrary that took place.

The celebrated head of the British Government had twice, from the tribune in Parliament, characterized Mr. de Lesseps' undertaking as a vulgar swindle. *"It was conceived,"* said he, *"simply to attract stupid subscribers."*

The reason for that violent animosity was the same which drew down British thunder on Italy in the Ethiopian question. The protection of British transports to India, China and Australia was, in 1860 as it was in 1835, the concealed motive of English policy.

Seventy-five years ago transportation passed around the Cape and was assured by sailing ships. The com-

mercial fleet of Great Britain was supreme as to the number and value of both ships and personnel.

With the opening of the Suez Canal the exclusive use of steam navigation became necessary. This was to put all nations on a footing of absolute equality (as to Asiatic transport by the new highway) and was to suppress English supremacy.

If Lord Palmerston had been wise and patient, he would have let the Suez Canal undertaking be submerged by the technical difficulties of excavating the channel by man power. Instead, he notified the Khedive to stop recruiting the necessary workmen by the "Corvée" (forced labor) system. Because, he said, this system was nothing but disguised slavery.

It was the noble war against slavery, or anything that resembled it, which for Lord Palmerston justified the stoppage of the work. This seemed likely to happen because Mr. de Lesseps could not obtain laborers outside of those provided by the obligatory regime of the "Corvée."

It is worthy of remark that seventy-five years later the independence of Ethiopia, where slavery reigned, was defended by England. The horror of slavery, which caused her to try to stop the work on the Suez Canal about 1860, had ceased to exist in 1935. Sir John Simon, a member of the Cabinet, had indeed truthfully stated that slavery reigned then in Ethiopia.[1]

Nothing could better expose the vanity of the pretexts of war than the juxtaposition of the two attitudes of England at a distance of seventy-five years in that question of slavery.

The suppression of the "Corvée" under the pretext

[1] In his speech Sir John Simon said at Oldham, Lancashire, on Tuesday, the first of October, 1935, about Ethiopia: "It is the only Christian country where this abominable thing which is slavery exists still certainly today." (*N. Y. Herald,* Continental edition—October 17, 1935.)

of slavery, which, in the thought of Lord Palmerston, was to kill the Suez Canal, resulted in the reverse. The lack of workmen placed the problem on an entirely new ground which would never have been considered otherwise: "Is it possible to open the Suez Canal without labor?"

To this question two French engineers Borel and Lavalley, both former cadets of the "École Polytechnique," answered "Yes!" They presented to Mr. de Lesseps an instrument excavating, transporting and depositing the soil at a rate of 3,000 cubic yards a day with two gangs of twenty to thirty men per day.

They went farther and offered to take charge of the work for a price fixed in advance.

Important financial groups supported the courageous and brilliant contractors.

But the technical administration of the Suez Canal did not open their arms to these carriers of new ideas.

Mr. Charles de Lesseps, later, told me that his father, when the proposition of Borel and Lavalley was rejected by his technical advisers, asked them the following question:

"If you reject the proposition of dredging, what do you propose for me to do?" They answered:

"Obtain the withdrawal of the interdiction by the Khedive of recruiting work people by 'Corvée.' Otherwise it is absolutely impossible."

Mr. de Lesseps replied:

"If, on your side, all the outlets are closed, you will not be astonished if I go out by the door that is opened by Messrs Borel and Lavalley."

Eight years later, the Canal was opened by *l'Aigle,* the yacht of the Empress Eugénie. The dredge with long pipes had accomplished the miracle. However on the twenty-five kilometers separating the Bitter Lakes from the Red Sea, where the rocky nature of the ground

did not allow the dredges to work, it was necessary to excavate in the dry, while pumping out the water due to infiltration.

It was the same difficulty which proved so embarrassing, in March, 1885 when it presented itself at Christopher Columbus, to the technical administration of the Panama Canal. It was not possible to use the dredge with long pipes in any given work near Christopher Columbus, where it had come by sea. The reason was that previous dredging by a small dredge had revealed the existence of a rock layer eight feet below the water. The small dredge floating with six feet of water had opened the Canal to the level of the rock, but the dredge with long pipes required nine feet of water to float. As it could not excavate the rock, it could neither complete the excavation, where it was begun, nor pass over the ledge and work further on.

My predecessor Clavenad tried to blast the ledge but without any result.

When I arrived the problem required an immediate solution.

I thought then of a method which not only succeeded perfectly, but also provided the key to problems which had hitherto been considered insoluble: *I tried to make the dredge excavate the rock after rendering it dredgeable.*

I thought that if mine holes were made in a rocky ground two and a half feet apart and filled with three lines of dynamite cartridges, a general fissuration of the mass would be obtained, leaving blocks of no more than one foot in their greatest dimension.

I estimated that, if it were possible to break the rock in that way, the dredge would not find much difference between gravel and a mass of rocky fragments of that size.

Rafts were used permitting the driving of a series of

holes two and a half feet apart in rows also two and a half feet apart. The ground under water having been thus prepared along several hundreds of yards and each of the holes having received its triple line of dynamite cartridges, a case of fifty pounds of dynamite was placed on the center and strings of cartridges of dynamite were laid on the soil at the bottom of the Canal, to start the explosion.

In the evening, everything being prepared, I touched off the central box of dynamite and a noise of broken rocks was heard.

The following day one of our dredges bit into the rock which on the day before would have resisted everything. The dredge excavated it as easily as if it had been sand.

The cost price was about equal to that of the rock excavated in the dry in a trench unwatered by pumps.

From that moment on a great obstacle had been surmounted. The enormous expense which had hitherto differentiated the excavation of rock in the dry from the excavation of rock under water had disappeared.

This progress was of incalculable importance because, henceforth, the lock canal became admissible without condemning the final form, that of a veritable strait uniting the Atlantic with the Pacific. The question of money had, hitherto, necessarily excluded the idea of a lock canal, which was easy to make, because it was impossible to couple that idea with that of an ultimate transformation into a free strait. We were therefore liberated from the obligation of building a lock canal in the dry, which was impossible, and we could build it in two phases: first locks, then level.

At beginning of December a grave atmospheric disturbance menaced Christopher Columbus, our town on the Atlantic, which was the center of disembarkation of stores and workshops for the Canal Company.

A storm of unusual violence endangered the platform which we had conquered from the sea on which to build Christopher Columbus. It drove onto the coast twenty-two ships which were bringing wood from ports on the Gulf of Mexico and were in course of unloading in the Bay.

I immediately left for Colon to take charge.

As the level of the Chagres was bound to rise, I had three canoes on the train with me. They were to enable myself and the personnel who accompanied me to pass the places where the waters had covered the track. Thanks to them, we were to reach the dry part of the railroad line, where a train sent from Panama was awaiting me. In passing from one inundated area to another, the canoes were laid across the rails and pushed along the track by hand. One of them was broken in the process, and the consequence was that the two remaining canoes had to carry all the passengers. It was necessary to preserve the immobility of a wax statue in order not to ship water.

Of course I had to see what measures could be taken in case a canoe should sink. While examining the nearby trees and deciding which branch could be seized, I was surprised by an extraordinary sight. Up to a height of three feet above the water, all the leaves on all the branches were covered with a black layer. It was formed by innumerable tarantulas, spiders as big as a pigeon's egg and very venomous.

Suddenly the negro rowing at the end of the canoe uttered cries of terror: "Knock it down! Knock it down!"

I turned my head and perceived a coral snake boarding our canoe at my left hand side. Its head was already aboard and had penetrated the lateral pocket of my jacket. The anterior part of the body was across the canoe and my pocket, the rest was still in the water.

Very fortunately an umbrella was lying in the canoe on my side. Very happily also an engineer, Mr. Philippe, was sitting, facing me, with his right hand resting on the handle of the umbrella.

"Attention, Philippe," said I, "raise your umbrella very slowly so as to suspend the animal by the middle, as if it were an earthworm; then move your umbrella toward your right hand side and let it drop in the water with the coral snake."

The delicate manoeuver was carried out perfectly and we continued our dangerous navigation without any further incident.

Important events marked this period of my association with the creation of the Canal.

My first official act, when entrusted with the general direction of the Company on the Isthmus, was to pay a visit to the American Maritime Authorities.

Since the insurrection of Aizpuru, in the month of April, one squadron had been in the Bay of Panama under the orders of Admiral MacAuley and another in the Atlantic under the orders of Admiral Jouett.

My initiative, which seemed very natural, in going to pay my respects to the naval commanders, had a considerable moral effect: nothing similar had been done before.

Up to that time, indeed, the Franco-American relations on the Isthmus had been rather frigid.

The difference of languages had dug a trench between the American agents of the Panama Railroad and the French agents of the Panama Canal.

On the other hand, there was an instinctive disapproval among all Americans of the French carrying on a work, which, in their opinion, concerned only the United States.

But there was another cause of discord more serious and more profound.

In 1885, only twenty years had elapsed since the day when war had almost flared up between the United States and France. The subtle and perfidious policy of one Bismarck had drawn France in 1861 into a punitive expedition sent to Mexico by England, France and Spain. The expedition was under the orders of the Spanish General Prim by right of seniority.

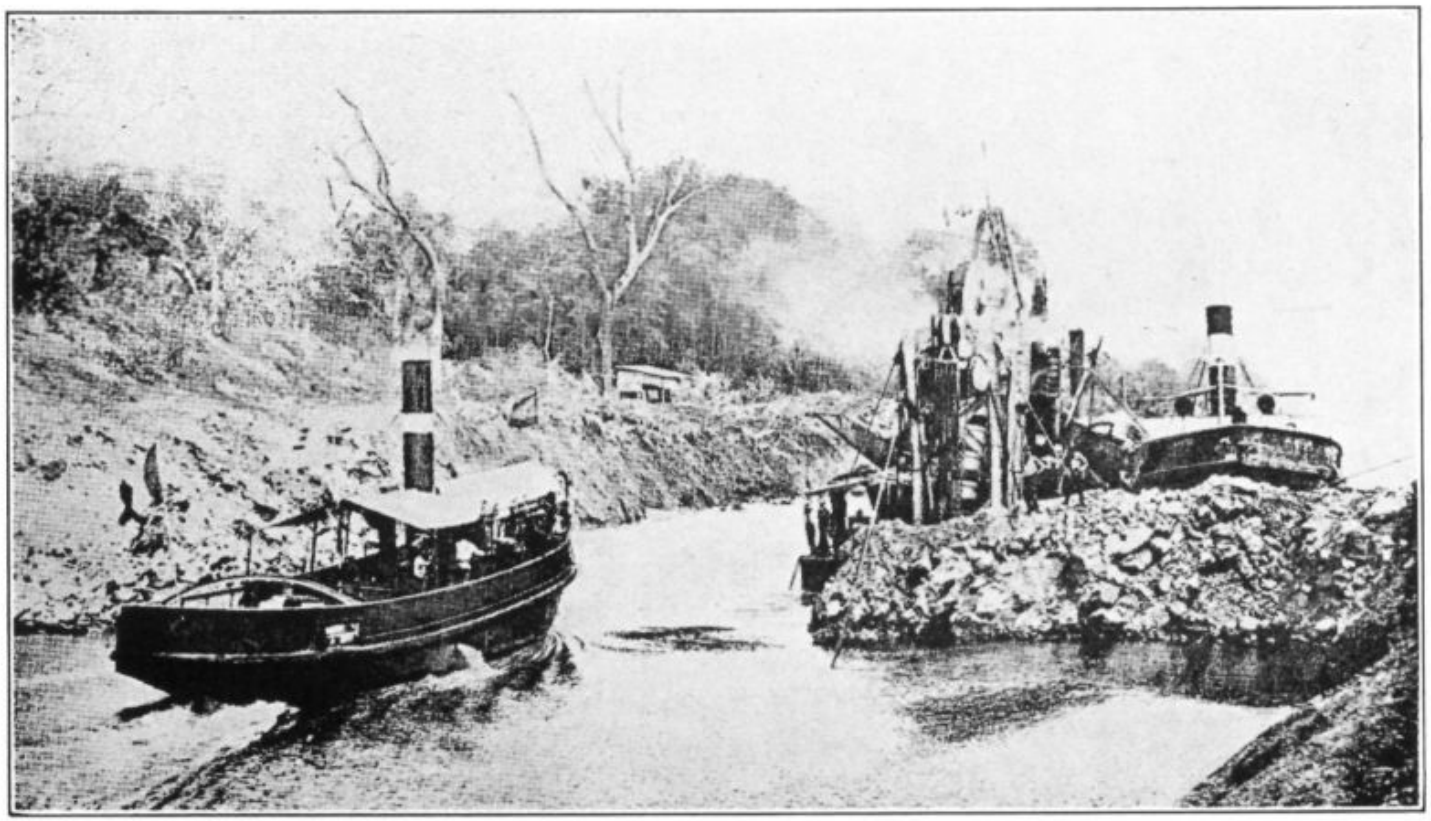
It was the same General Prim who, nine years later, was to light the fire which caused the War of 1870, by proposing a prince of Hohenzollern for the throne of Spain. In Mexico he engaged the French troops so awkwardly that they were defeated at Puebla. The insult received by our flag required the maintenance of a French occupation, while England and Spain withdrew from the dangerous hornet's nest.

This Bismarck was then preparing the wars, first against Austria, then against France, and it is obviously he who suggested that an Austrian prince establish an empire in Mexico with French bayonets for foundation. It is certain that in this way Bismarck brought France to violate the Monroe Doctrine, an act which was a provocation to America.

The violation of the Monroe Doctrine appeared to the United States a traitor's blow, because it took place at a time when she herself was engaged in the repression of a terrible civil war. She was incapable of answering, as she was bound to do, by a declaration of war. She controlled her resentment and promised herself to act, as her honor required, as soon as she could.

When the Civil War was over, John Bigelow, then United States Minister to Paris, was directed to demand of the Emperor the choice of either repatriating the French troops, or ordering them to face the Americans.

Napoleon ceded before the menace.



EXCAVATION (BY DREDGE) OF ROCK ABOVE AND BELOW WATER

After preparation had been made by the Bunau-Varilla process.

John Bigelow, who lived till 1911, was my devoted and warm friend from 1886 on. He spoke to me of this dramatic episode several times.

The moral defeat of France in Mexico was, soon after, still more marked. The shooting of the unfortunate Maximilian, in the ditch of Queretaro, was a sorrowful ending to an undertaking built by stupidity on mined ground.

Napoleon III had not the courage to bring Maximilian back, even against his will, in the baggage of the army.

This double shame prepared the French disaster of 1870-71.

Possibly the influence of Maximilian's wife might have prevailed upon him and persuaded him to leave Mexico.

Unfortunately, the Empress Charlotte, who came to Saint-Cloud to implore Napoleon III and Empress Eugénie not to withdraw the French troops, became mad when leaving the Palace. She had not been able to withstand the shock of an absolute refusal.

The effect upon the American people of Napoleon III's awkward policy continued for a long time after the tension had disappeared. Twenty years later I still perceived numerous traces of it.

My visit to the squadron commander was highly appreciated and after that Franco-American relations on the Isthmus became more cordial.

I took advantage of the visit to Admiral MacAuley (commanding the squadron on the Pacific) to decry the double accusation of impossibility which American engineers had launched against the Panama Canal scheme.

Captain Lull, commanding the Flagship, was one of the officers, who from 1869 to 1875 had studied the various possible canal schemes across the American

Isthmus. This great technical inquiry had been recommended to Congress in 1869 by President Grant in his first Message.

Lull had declared that the Panama difficulties were almost insuperable on two points. He especially doubted the possibility of opening a canal in the semi-liquid silt of the marshes between Colon and the Mindi hills and of maintaining an open channel through the silt bottom of the Bay of Panama.

I took him on a boat to these two points, where he could see the Canal had been built with the required depth of thirty feet.

The speeches delivered at that time warmed the hearts of the Canal Company officers in Paris.

They were reproached for leaving the destiny of so great an undertaking in the hands of an engineer who had left the school of the "Ponts et Chaussées" only two years before.

In consequence two missions were sent successively to Panama by the French Government, in order to be able to make a public statement of the condition of the undertaking which was supposed to be in its last throes.

One of them was entrusted to a former member of the Chambre des Deputés, who had been an officer of the Navy before and who was then appointed Consul General of France to Panama: Mr. Lavieille.

He arrived expecting to find the work stopped.

As soon as he reached the Isthmus he expressed his astonishment to me at seeing such great interests in the hands of so young a man.

I answered, "Allow me to tell you, Mr. Consul General, that I am surprised at hearing such words from a high official of the Republic. I have always thought her choice was based not on the age, but on the actual value of the men to whom great offices were entrusted.

I beg you to observe what has been done before stating whether or not the Company was mistaken in its choice."

Shortly after he repeated the accusations he had heard during the ship's call at Martinique. He had been told that the Company left their sick workmen to die of hunger at the door of its hospital.

"The Company," I replied, "is not a charitable institution. It cannot spend the millions which have been entrusted to it merely to help people in misfortune. It can pay only for work. Work is available everywhere and for any one. When I show you the work, you will see about 15,000 men occupied on the construction of the canal. Speak to them. Ask them questions. I can tell you in advance that you will not find one in a hundred that speaks anything but English. They are Jamaican negroes. Then we will go to the hospital at Panama. There among the five hundred patients, either sick or wounded, you will not find one hundred that speak English but four hundred who speak French. On comparing these facts you will find what truth there is in the claims that have been made to you."

At the same time as the French Delegate a mission arrived from Bogota presided over by a Mr. Ponce de Leon. They also had come to write out a certificate of failure. But their opinion soon was changed. They became full of enthusiasm for the whole undertaking. Mr. Ponce de Leon, before leaving Panama, made a speech in which he compared the war against nature fought by the French in Panama to the most glorious episodes of our military history.

Mr. Lavieille's mission having produced results contrary to what had been expected, the French Government sent another special mission. It was to determine the answer of the Government to the request of the Panama Canal Company for the authorization to issue bonds which were at the same time lottery tickets. That

mission consisted of two personalities of the highest scientific and moral standing. The chief was Mr. Rousseau, Chief Engineer of the "Ponts et Chaussées," a former member of the House of Representatives and Assistant Secretary of State. Mr. Luuyt, Mining Engineer who had left the "École Polytechnique" in the same year as myself, was his assistant.

These gentlemen arrived with Mr. Charles de Lesseps in the beginning of February 1886. Mr. Léon Boyer, who was to assume the permanent direction of the work after me, was on the same ship with the numerous technical agents he had chosen himself.

I, as vice-president of the Company, could give to Mr. Charles de Lesseps, on his arrival in the Bay of Colon, that splendid news of the excavation of a million and a half cubic yards during the month of January, of which I have already spoken. He had left France fearing to find the Canal Organization wrecked under the weak management of a youngster whose leadership was due to circumstances only. He found it producing results at a rate he had almost despaired of ever reaching.

Already, in the harbors of Venezuela and Colombia, before arriving at the Isthmus, the travelers had received satisfactory impressions. The Government Delegation was agreeably surprised and did not conceal its favorable opinions.

Some days later the President of the Company, Ferdinand de Lesseps, arrived bringing with him delegates of various chambers of commerce, which had been invited to send representatives to inspect the work. What I could show them would have impressed anybody. Only one point, for me at least, remained in doubt: the Culebra cut. Even though the depth of that cut might be reduced for a lock canal by one-half the depth of the cut, which was 400 feet at a given point, success was by no means certain. The insignificant deepening car-

ried out first by the small contractors, and then by the great Anglo-Dutch contracting company, demonstrated the presence of a dangerous factor which would have to be eliminated.

Outside of that particular problem the adoption of a lock canal would have made success certain. Unfortunately, the idea of a perfect Canal had always led to the rejection of that solution. It was thought that the adoption of locks would condemn the canal to remain in a form which was evidently inferior to that which had so brilliantly succeeded at Suez, a sea level canal. It was thought impossible to transform a lock canal to a sea level canal. The two reasons on which this thought was based were: first, the impossibility of excavating rock by dredge—which was demonstrated during the construction of the Suez Canal; and second, the impossibility of removing the locks without stopping navigation for a long time.

I had succeeded in preparing the rock in such a way that a dredge could excavate it as if it were nothing but sand. Now I attacked the second problem—the elimination of locks without stopping navigation. I soon reached a solution which was not costly. Thanks to a slight modification in the construction of the locks, it was possible, by dredging, to lower the level of the canal and to eliminate the locks without stopping navigation for five minutes. These two solutions made me absolute master of the situation, except as regarded the Culebra problem. It was possible to draw up a plan for a canal with temporary locks which would be gradually eliminated with the increase of traffic.

All the difficulties, except Culebra, had been mastered and I could await the Government investigation with peace of mind. First I exposed to Messrs. Ferdinand and Charles de Lesseps the precise and simple ideas which would insure success. Though understanding

and approving them, Ferdinand de Lesseps was not convinced of their absolute necessity. He saw in them only another of those engineer's conceptions which had caused so much annoyance at Suez, and which he had obviated by letting nature and common sense take control. This intellectual resistance of the glorious old man had fatal consequences.

Had he seen the truth and frankly adopted it, Mr. Rousseau, as well as his assistant Mr. Luuyt, would have done so also. These new principles would have formed the bases of his report and the transition might have been planned with the authority of an official mission. The public mind would thus easily have passed from the idea of constructing a sea level canal immediately to the idea of a sea level canal constructed in two phases, the first phase being a lock canal and the sea level passage the second phase. This idea provided the Culebra problem was solved would have assured a quick opening to traffic and the collection of profits. At the same time it ensured an enormous amelioration in the type of the finished sea level canal, since time was no longer a factor to be considered.

Unfortunately, Mr. Rousseau, like all political men born under the star of the miscarried Constitution of 1885, was timid, always trying to avoid peremptory decisions. He did not understand that he could not rightfully leave to others the burden of solving the problem. He did not understand that, in certain situations, the powers of a man are not limited by the definition of these powers.

Several months later, one day in Paris, he said to me:

"I was as embarrassed as if I had been obliged to walk between eggs. My duty was not to draw up a plan, but to tell the truth. I said it without allowing it to appear as a reproach to Mr. de Lesseps, a reproach that he did

not deserve. His plan was very good when nobody knew anything about the Isthmus. Today, when everything is known, the program must be modified according to your conceptions. But it is for Mr. de Lesseps to assume the initiative. I could not have done it without exceeding my powers and I had to limit myself to exposing facts without drawing definite conclusions."

There is no fault to be found with Mr. Rousseau's scientific conscience. But had he not been dominated by political timidity, by its aversion to responsibility, he would have bravely chosen the road to follow and thus saved the canal from ruin. Though Mr. Rousseau lacked the energy to assume responsibility and force the adoption of the solutions he considered necessary, at least he indicated them very clearly and in a manner which does honor to his judgment. Here is an extract from his report:

"The Panama Company, owing to the name and the past of the men directing it; owing to the collaborators by which it is surrounded; owing to the generous and in a certain degree humanitarian object of the undertaking it is prosecuting; owing to the serious efforts which it has already made and which it is still making to carry to success this undertaking, deserves the special goodwill of the public authorities."

A little farther, after speaking of the program for work on the sea level canal, Mr. Rousseau said:

"Can it be hoped seriously that this program will be carried out under the conditions announced, while inviting the public to subscribe to the loans? Would it not be possible from a technical point of view to change and simplify the plans in such a way as to facilitate the completion of the work?"

Mr. Rousseau limited himself to a timid indication, instead of to a vigorous impulse towards truth which was needed and which would have sufficed to ensure

success. My conversations with Mr. Rousseau took place at the beginning of 1886. If in that year instead of in 1887 my solution of a canal with provisional locks had been adopted, everything would have been saved. By the end of 1888, three years of that final period of six years would have been passed. The goal would have been within sight and the Company would not have fallen.

Mr. Rousseau's report was that of an eminent, upright and honorable engineer, but it was also that of a man in politics. He was affected by that debility of character which is a weakness common to all politicians. He did me the high honor of proposing me, in spite of my youth, for the cross of the Legion of Honor. It was not given to me then. Some months later, he wrote the beautiful letter which follows, to inform me of his failure:

"I shall always be happy to avail myself of any opportunity to bear witness anew to the situation you conquered on the Isthmus, as well in the opinion of foreigners as in that of your personnel, and of the credit which thereby accrued to our country and the corps to which we both belong."

With the departure of the Rousseau Mission, at the beginning of 1886, ended the first chapter of my contribution to the great undertaking. I had organized and put it in motion; I had obtained a yield of more than one million and a half cubic yards per month; I had solved the problem, hitherto considered impossible, of cheap excavation of rock under water by dredges. Finally, I had unexpectedly found a solution for the problem of the continuous deepening of a lock canal without interrupting navigation.

Yet by not cutting the Gordian knot, by leaving open the debate between the official but physically impossible plan for a sea level canal and my rational plan. Mr.

Rousseau opened the door to the most detestable of crimes.

Mr. Baïhaut, the Minister of Public Works, at that time, had a quick mind. He read Rousseau's report correctly. As he was, I am ashamed to say, a former cadet of the "École Polytechnique" and a State's Naval architect, he understood that the solution indicated by Rousseau was the only one possible.

But this scoundrel understood also that, with its ambiguous conclusions, he could use it to blackmail the company. He called one of his friends, Blondin; a man attached to a great banking establishment, and told him:

"The Panama Company wants the State to authorize them to issue lottery bonds. The Rousseau report does not force de Lesseps to carry out the conclusion which, in my opinion, is necessary. I want to oblige the company to adopt that conclusion and I want to receive one million francs for the services I shall thus render it. In order to oblige the Company to give me that sum you will go to see Mr. Fontane, Secretary-General of the Suez Company and confidential adviser of Lesseps. You will tell him Mr. Rousseau's report gives me the option to accept or refuse the Company's request for lottery bonds and that I will accept on condition that I receive one million francs. This means also that the Company must relinquish its present plan for a sea level canal and substitute the plan of a sea level canal to be constructed in two phases, the first of which will be a lock canal transformable into a sea-level canal without interrupting navigation.

"If the Company refuses, well, I shall refuse also."

Mr. Charles de Lesseps received this abominable communication. Had his personality and his fortune only been exposed, this infamous proposition would have been immediately repulsed, but it concerned the fate of a gigantic enterprise, into which innumerable subscrib-

ers had already paid more than one hundred million dollars. Charles de Lesseps thought his duty towards his share and bondholders demanded the sacrifice of his own person. He submitted and said to Fontane: "But this Blondin is perhaps only a swindler with whom Baïhaut has nothing to do."

Blondin, who was questioned, answered:

"Let Mr. de Lesseps go and see Mr. Baïhaut at the Department of Public Works. The Minister will be non-commital, but if later he accepts my proposition and he has a further meeting with the Minister he will hear quite a different story: Mr. Baïhaut will spontaneously offer his support against the change in the program of work."

Events happened as predicted and Charles de Lesseps drew under his personal signature the money that was paid into the hands of the two blackmailers, at different times, up to 400,000 francs. A change of Cabinet interrupted this extortion of funds.

Such was the crime of which the Panama Company and its admirable Vice-President Charles de Lesseps were victims. Ferdinand de Lesseps was not informed because his son wished to spare him this cruel trial of conscience.

When, after the Company failed, Charles de Lesseps wished to justify the expenditure of the sums drawn by him he denounced the infamy committed by Baïhaut. Then another crime was committed. This time it was by the Government.

The Public Authorities were desirous of protecting a member of the Government from the revelation of blackmail. Therefore the crime of which Mr. de Lesseps had been the victim was transformed into a "corruption" of which, it was alleged, he had been guilty. Never was there a more abominable confusion and inversion of facts.

In the Court of Assizes, where Mr. de Lesseps demonstrated the purity of his acts, the Jury was nearly unanimous for his acquittal and the condemnation of Baïhaut to the maximum. One juror, an agent of the political party which wanted conviction for corruption, deceived his colleagues by saying there could not be a "corrupted" without a "corruptor."

Instead of submitting that there had been neither "corrupted" nor "corruptor" but a wrong definition of the crime, the Jury accepted this misleading reasoning and convicted the three accused men, with extenuating circumstances for Charles de Lesseps.

The Court pronounced a judgment imposing as just a sentence as possible: Charles de Lesseps was condemned to the minimum, that is one year of prison, while Baïhaut received the maximum penalty, that is five years in prison.

This sentence proved, in fact, the condemnation of the prosecution. It is perfectly obvious that in a case of corruption the chief criminal is the corruptor. By awarding the minimum penalty to the so-called corruptor, Justice declared there had been no corruption.

But let us take up our narrative again, after the visit to the Isthmus by Messrs. Rousseau and Luuyt in February 1886.

I had decided to remain on the Isthmus two months after the departure of Messrs. de Lesseps in order to transfer to Léon Boyer all the numerous and delicate details of the enormous enterprise of which he had become the chief. The unloading of responsibility produced on me the effect of an unloading of resistance. I began to feel that I had borrowed too much from my vital resources, between the months of April 1885 and the end of January 1886. Here is the incident which broke my determination to remain.

One morning, at Colon, my iron bed vibrated as if

shaken by an earthquake. I believed that such it was. But no, the vibrations originated inside, not outside my bed. I was quivering with a real fever convulsion. The yellow fever was beginning. Nobody knows any other active remedy, but physicians fear quinine. In order to deceive me the excellent physician of the Colon Hospital, Dr. Vernial, had ordered the preparation of some pills with a valerianate of some kind. He presented them to me as valerianate of quinine, which their smell seemed to corroborate.

The trick succeeded and I noticed, myself, all the symptoms of yellow fever with which I was familiar without, however, understanding that I was actually struggling against that redoubable disease. One of its characteristics is the constant lowering of the pulse, while the temperature rises. After five days a sudden reduction of temperature took place and Dr. Vernial, enchanted, said to me:

"We have won, Mr. Director, we are on the way to recovery."

"Ah!" said I, "don't go so fast, three days ago my pulse was 60, day before yesterday 50, yesterday 40, today 30. It follows an arithmetical retrogression of which the ratio is ten. On the day following the day after tomorrow, that is within 72 hours, it will be zero, and I shall finish my recovery at Monkey Hill." [1]

This remark, initiated as a pleasantry, probably saved my life. Dr. Vernial, who had been concentrating on the temperature, was shocked when he saw that my pulse had fallen to 30 per minute.

"Do you usually drink brandy?" he asked.

"Never," I answered.

"Then everything is all right. You are to take the best brandy to be found and you will drink a full glass as if it were water and you will repeat an hour later."

[1] Cemetery of Colon which was rebaptized by the Americans and the name of which is now "Mount Hope."

"That will be easy," said I, "as Mr. Charles de Lesseps when leaving, a few days ago, said to me: 'My wife gave me two bottles of very old brandy in case I became ill. I am going to leave them with you for the same eventuality'."

I called my faithful servant and nurse Jean, who, for the past five days had brought me, every quarter of an hour night and day, a coffee-spoonful full of lime juice with a small piece of ice in the middle.

This was a favorite remedy of this old woodsman of Central America, which Dr. Vernial had authorized because he had no other.

The Countess Charles de Lesseps' brandy worked marvels. My pulse rose again and soon afterwards I became a convalescent. In a few days I could take the Pacific Mail steamer and within a week I arrived in New York. It was on my departure from Colon that I saw for the last time my dear friend and successor, Léon Boyer.

My voyage from New York was marked by a strange confusion. While embarking on the *Labrador,* a venerable but seaworthy representative of the original French transatlantic fleet, I was approached by a young and distinguished man. He asked me:

"You are Mr. Bunau-Varilla, I have been told, sir? Are you a relative of Mr. Philippe Bunau-Varilla, who died on the Isthmus and whom I had the opportunity of seeing in Panama before he fell ill?"

I assured him that I was the nearest relative possible of Mr. Bunau-Varilla, but that he was not dead at Panama. The confusion was explained and simultaneously brought back memories which the disease had almost wiped out.

The gentleman was Mr. Patenotre, Secretary of Embassy. He was returning from China where he had been

assistant to his brother, the French Minister Plenipotentiary who signed the treaty with Li Hung Tchang which ended the Sino-Tonkinese War.

On his way back from the Far East he had passed through Panama and had arrived there with Mr. Marcel Monnier, a distinguished writer of the *Temps*. These gentlemen had paid me a visit. I had arranged for them to visit the work, and I made an appointment with them at Colon for the next day but one. I wished to explain to them what they had seen and show them the Atlantic end of the Canal.

When they came to my door, it was closed by a disease which everybody considered mortal, so much so that Mr. de Lesseps had thought it his duty to pay a visit to my mother in Paris to prepare her for the fatal issue.

Four days later Mr. Patenotre took the boat for New York, with Mr. Monnier who had chosen the route through the Antilles to go back to France. The latter gentleman heard the news of my death before he embarked and communicated it by letter to Mr. Patenotre, in New York.

Mr. Patenotre left New York as soon as he reached it, in order to visit Niagara Falls and the Chicago slaughter houses, the two American marvels which, at that time, haunted the brains of Europe. He came back, on the eve of the *Labrador's* departure, and on opening his mail learned the news of my death. It was accompanied by the phrases with which it is customary to announce the final departure of the people who have been known. Thereupon, great was his surprise when he saw the name of Bunau-Varilla on the passenger list. The question naturally followed:

"Are you a relative of Mr. Bunau-Varilla, the director of the Panama Canal Company, who just died on the Isthmus?"

It may be surprising that he did not recognize me after our meeting only three weeks before, but my visit to the Hall of Minos, Eaque and Radamanthe had left marks on my face and made it unrecognizable.

THE ATTACK OF THE REDOUBTABLE UNKNOWN FACTOR IN THE CULEBRA CUT

I was back in Paris in April 1886. All the problems of the Canal had been solved except one. The unknown factor: the excavation of the Culebra was the one remaining. Until now every effort had failed. The work by administration, then by a small contractor, and finally by the great Anglo-Dutch contracting company had been without result.

During the short dry season, from the middle of December to the middle of March, everything was all right. As soon as the rains fell, slides paralyzed the excavations and the dumping. Careful observations had convinced me that the main difficulty was in the slides at the dumps.

In order to unload the spoils, a railroad track was first laid on the side of the hill along a valley near by, that of Rio Obispo. The dirt trains were pushed along that line and their contents dumped down the side of the hill, below the track. When a sufficient quantity had been dumped and the platform had become wider, the track itself was moved nearer the edge. The dumping was no longer on the hillside itself but onto the slopes of the dumps which covered it.

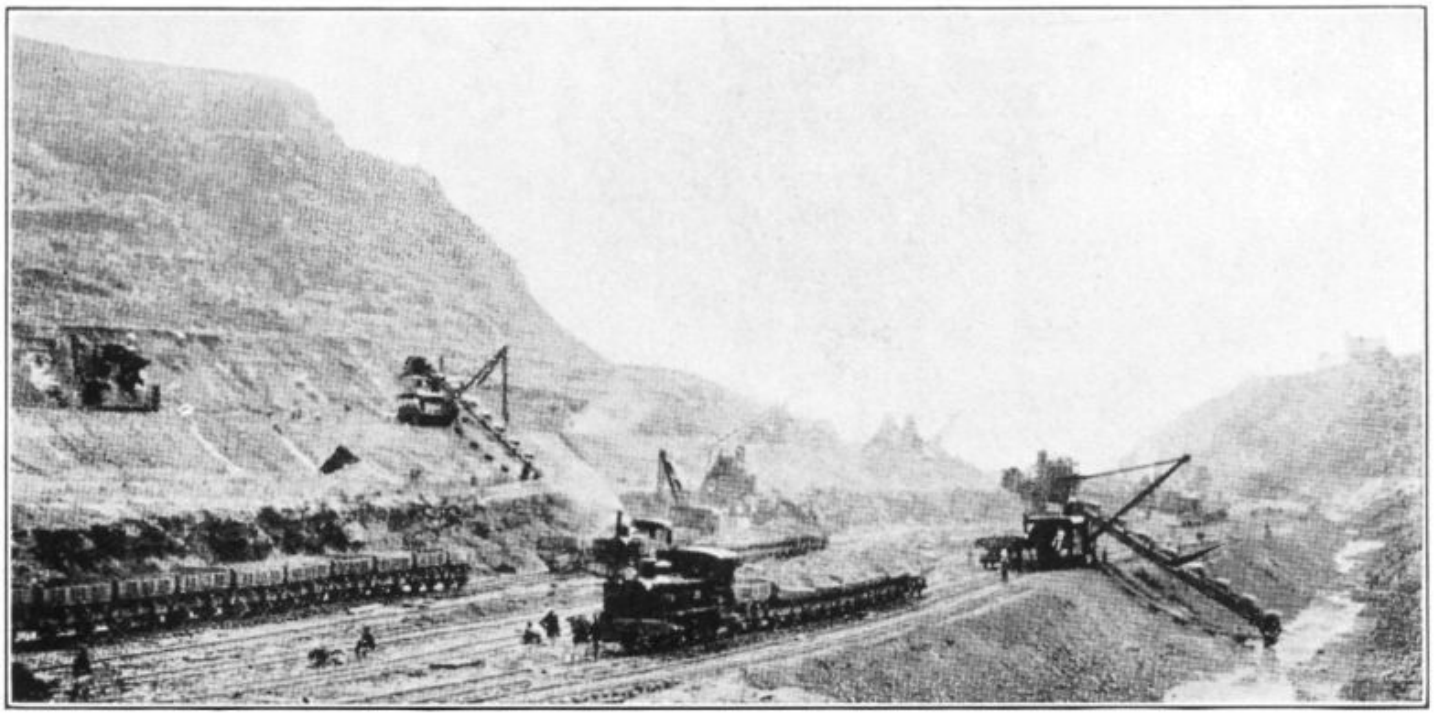
There was no difficulty as long as the dry season continued: the track remained firm and solid on the mass of hard and semi-rocky clay. On the contrary, as soon as the rains started the water flowing down the hillside from above the track, as well as the water falling directly on the dump, moistened this accumulation of

lumps of hard clay and transformed them into so many slippery pieces of soap and at a given moment the entire mass would slide, taking away tracks, rails, sleepers, and often the train itself, even sometimes its locomotive. It meant the suspension of the excavation work as the earth could not be dumped anywhere.

By 1886, the total result of the Culebra work, since the beginning in 1882, corresponded to an average total deepening of about 11 feet along the line of the lowest points of the cut. Such results, after four years of work, of less than three feet a year, would condemn the project, not only of a sea level canal but of a lock canal as well. My conclusions were that, if it were possible to ensure the safe disposition of the spoils, the struggle against the slides in the trench would become a question of energy and that its success would become possible. But how to prevent the slides at the dumps, that was the problem!

The very simple solution I devised was to build a series of wooden trestles in the valley of the Obispo at right angles to the sides of the hills bordering the valley. The trains would run out on these trestles and unload over their sides. The trestle once buried under the spoils, the track could be moved to a parallel position nearer the edge of the great embankment thus created. The trains would then unload on the slopes of the embankment, and so on.

The difference between the first method of disposal and the one I thought of, was that the clayish masses, thus deposited, would no longer be affected by the waters flowing down the hill from above. The reason was that the water was received in proportion to the width of the embankment which was small, instead of being received in proportion to the length of the dump, which was great. In addition, the resistance to sliding down the hillside would be in proportion to the length of the em-



VIEW OF CULEBRA CUT, 1888

On the left side is "Gold Hill," on the right side "Contractor's Hill" where Bunau-Varilla's house, barely visible in the photograph, was erected.

bankment, which was great, instead of to the width of the dump, which was small.

The two factors of instability were inverted and the probability was great that stability would thus be finally acquired. I had tried to persuade the great Anglo-Dutch contracting company to apply these ideas. It ignored my advice and I could not give them orders without relieving the contractors of their responsibilities. Their failure however was seriously endangering the future of the Canal.

When I arrived in Paris in the first days of May, 1886, the Company was engrossed in this situation, the more so as it was impossible to dismiss the contractors and resume control of their work areas. According to Colombian jurisprudence, a contractor was considered as a lease holder. To get rid of him, it was necessary to spend months and years in judicial procedures. Without considering the question of getting rid of the Anglo-Dutch, I advised the Company to carry on the work direct by administration without contractors, which was, in my mind, the only way to overcome this great difficulty of Culebra.

I was willing to take command at Culebra of the works if carried out by administration on account of their vital importance and to give up temporarily the direction of the Company which the death of my successor, Léon Boyer, had left open and which, naturally, I would have been given.

The system of working by administration had a bad reputation in France! For such enterprises as Panama, enormous but concentrated on a narrow surface, it proved, however, the best solution. I recommended it later to President Roosevelt and it succeeded admirably with Colonel Goethals.

It was not so successful with Mr. Charles de Lesseps. Even if he himself was convinced, he did not succeed in

convincing his Board of Directors, who disapproved of any solution outside of a new contracting company. He asked me, as a supreme proof of my devotion to the Panama undertaking, to form the company and inspire it. Experience had demonstrated that in struggling against Isthmian difficulties only men both young and accustomed to fight the battles of the Isthmus were of any use.

The question of Culebra was one of the life or death of the Canal. Any contracting company, formed in France, would have to be composed of large contractors, that is, men of mature age and of limited physical resistance. If it were to start with any chance of success, it would have to be based on men tried by the selective process of the Isthmus. Knowing this, I could not refuse Mr. Charles de Lesseps and accepted the responsibility of forming the company with men whose fidelity and enthusiasm I was as certain of as of their devotion to the work.

Those I chose were Messrs. Artigue and Sonderegger, who had already worked as contractors at Bohio Soldado for several years and had given the highest proofs of their moral and technical value.

As a third associate, I had my brother, Mr. Maurice Bunau-Varilla, a man of superior intellectual activity.

He was to keep in contact with the Panama Company at Paris, as well as to supply the materials, machinery, explosives, coal, etc., required by the Culebra contracting company.

Such was the technical and administrative organization which, in my opinion, alone could insure a victorious struggle against rebellious nature at Culebra.

The Canal Company cancelled the contract with the Anglo-Dutch, without the new society having been involved in the negotiations. The direction of the Canal Company was happy that the Anglo-Dutch should ac-

cept, in compensation of their heavy losses, a payment of 17 cents on each cubic meter excavated by their successors, and to be paid by them. The Company agreed to raise the price per each cubic meter paid to the new society by the same amount.

Thus it was possible to get back the free disposal of ground, which by judicial means would have entailed interminable delays.

Within the month of January 1887 began a struggle against the hitherto considered insuperable difficulties at Culebra. The four months of September to December 1886 had been devoted to the reorganization of the work areas and to the construction of trestles for dumping, etc. The plan I had devised was put into operation with courage and perseverance and rebellious nature was vanquished. Two years later the record of 11 feet in four years was changed to 31 feet in two years, that is, more than five times as great.

From the end of 1887, one could consider as a certainty that for a lock canal, the problem at Culebra had been solved. I calculated that within four years from the first of January 1888, one could probably reach an altitude of 101 feet above the sea at the bottom of the Canal, and with perfect certainty an altitude of 134 feet. By the end of 1888, we had reached an average altitude of 235 feet along the lowest points of the Culebra cut from end to end, a length of one nautical mile. We would have to go down 101 feet in three years. The increased hardness of the ground and the experience of our men gave us reason to believe that it would be possible in the next three years to double the speed attained in the first two. We had already quintupled the previous rate of excavation and we felt that not only would it be possible to go down at least another 100 feet in three years but perhaps thirty feet still lower. By the solution of this last and vital problem of Culebra,

it was possible to plan for the definite opening of the Panama Canal early in 1892.

I had finished the series of my technical contributions towards the realization of that century old dream. I had been able to draw a plan for a provisional lock canal that could be built with a minimum of expenditure and the maximum of certitude.

Based on this program, the Panama Canal could obtain the precious privilege of issuing lottery bonds for the sum of one hundred forty-four million dollars. Of that sum twenty-four million were to be devoted to the lottery and to the reimbursement of bonds, while one hundred and twenty million were to go to the Canal Company to pay for the work as well as for the interest on the shares and bonds.

The organization of the work on the Isthmus was completed by the choice of the celebrated constructor Eiffel for the construction of the locks. His masterpiece was rising at the "Champs de Mars" for the Exposition of 1889. The public mind was gradually becoming aware of the discoveries by which I had assured: first, a navigable waterway with locks within precise limits of time and expenditure, and second, the possibility of transforming this lock canal later into a veritable strait. All that made perfectly legitimate the financial help that was given to the great enterprise by the State's authorization to issue lottery bonds.

Such was the base of the legitimate confidence which surrounded the enterprise and assured the success of the subscriptions. Everything was regulated and success seemed assured when a traitorous blow destroyed the great conception. It was very likely one of the acts by which nations with a belligerent policy prepare their next aggression.

Every conception of Germany policy is based on plans prepared in advance: Germany, twenty years after her

victory, 1870-71, was to prepare her next campaign against France. This campaign was to give Germany complete security on the West, thanks to the permanent weakening of France, and, at the same time, an opening on the Atlantic, thanks to the conquest of a part of the Coast on the British Channel. The annexation of Belgium and the North of France was to be the price of this new military effort that was to free Germany of the western danger and permit her to look later towards the East, in order to prepare with greater ease her resistance to the yellow peril.

The ruin of the Panama enterprise dragging with it the partial or total ruin of 600,000 French families, was obviously a manoeuver to throw moral disorder into the French ranks. It created admirable conditions for an easy German victory. If you think of the power for careful preparation which characterizes this great nation you will find that she probably did not remain neutral in the fall of the Panama Company.

Her admirable service of information and intrigue, the direct action exercised by her socialist groups on the blundering socialists of France, have certainly maintained a fire lighted by the collapse of the vast enterprise.

The weak point in the financial structure of this last part of the life of the Panama Company was neglected by one of its financial advisers, by a man of great intellectual attainments, the creator of that superb banking organization called the Crédit Lyonnais. Mr. Germain, who greatly desired the success of Panama, had proposed that the lottery be constituted in view of attracting the greatest number of subscribers. For that very reason, big prizes were indispensable. Therefore it was necessary that the capital devoted to the drawings and to the reimbursement of amortized bonds should be as large as possible.

Mr. Germain, convinced as he was of the almost magnetic power of attraction of a lottery provided with very big prizes, recommended the issuance of the one hundred forty-four million dollars of bonds in one day.

Mr. Charles de Lesseps held a contrary opinion. Up to that time the subscribers had taken up much smaller amounts which corresponded to twenty-six million dollars a year. He proposed to emit the total sum of these securities in three issues of forty-eight million dollars each.

It was supposed that the attraction of the prizes would suffice to bring from twenty-six million to forty-eight million dollars—the usual annual power of subscription. This was evidently a prudent and sure evaluation. Had it been adopted, success had been certain.

Mr. Germain, whose moral authority among bankers consulted by the Company was very great, convinced them of the advisability of emitting the total issue on one day.

Mr. Charles de Lesseps was obliged to withdraw his proposal.

This decision exposed the life of the Company to a traitorous coup and to the criminal manoeuver by which it was mortally wounded.

The subscription was to last one day and the general enthusiasm was of such a nature that at half-past ten o'clock eight hundred thousand bonds of the two million offered were subscribed by three hundred and fifty thousand persons. It was the 26th of June, 1888.

The usual proportion of public subscriptions at different hours of the day led to the conclusion, with such a result an hour and a half after the opening, the end of the day would show a subscription much larger than the one hundred and forty-four million dollars offered.

The crime was prepared by offering Panama shares on the Exchange, from the 23rd of June on, which

caused a premonitory fall in their value. The infamous manoeuver, which took place on the 26th itself, began by the sending of telegrams to every city in France announcing the death of Ferdinand de Lesseps. Then came the mass sales of Panama shares on the market. The quotations fell almost immediately.

On the 23rd of June shares had been worth seventy-four dollars and on the 26th they fell to fifty-seven. The fall had been twenty-five per cent. The information, which was telegraphed all over France, announcing the fall of the shares seemed to confirm the false news of Ferdinand de Lesseps' death. It stopped the subscription. Panama was wounded to death.

Chapter II

THE DESTRUCTION OF THE CANAL PROJECT BY CALUMNY AND BLACKMAIL GRAFTED ON POLITICS

The Company had been struck a death blow. Before such abominable and obvious treason, if there had been a government with the superior interests of the country at heart, the criminals might easily have been discovered. Thus exposed to the just indignation of the public, the subscription might have been annulled and another one started a few days after the summary execution of the scoundrels.

But what has always been defective in the governments issued from the detestable constitution of 1875 is the courage to act without fear of the low insinuations of calumny. They are always afraid of the emotional reaction of the deputies in the Chamber and dare not act.

A judicial enquiry was begun, but, not being pushed with energy, it ended in a miscarriage.

The greatest enterprise of all times, which represented the honor and the life of France, had been publicly dealt a mortal blow. Before that crime, the men whose duty it was to take care of the salvation of the country had not the courage to defend it by arresting the assassins and castigating them.

They were too fearful that an act of energy would be pictured by the blackmailing papers as having been paid by the *millions of Panama.*

The Company received the blow on the 26th of June, 1888, and on the 14th of December following it col-

lapsed. Its liquidation began when all the problems had been resolved, an enormous mass of works carried out and a plan, based on experience, established which guaranteed the opening in three years and even, perhaps, in less time!

Then began a series of judicial transformations.

Provisional administrators were named on the 15th of December, 1888, who in their turn were replaced by a liquidator, Mr. Brunet, on the 4th of February, 1889. He formed a commission whose members were distinguished, expert engineers. But their experience was European and not American and, still less, Isthmian. Their work was disastrous.

Instead of choosing the most simple, the less costly of plans, the one that the Company had, in 1887, adopted on my suggestion, they drew another one, far more costly. Instead of three years and eighty million dollars, which my plan required, theirs was to last eight years and would cost one hundred and eighty million dollars.

They had not understood that only one thing was necessary, the quick establishment of a navigable waterway between the Pacific and the Atlantic. At the beginning, some imperfections could be tolerated, provided large possibilities for ameliorations during the operation could be carried out.

This absurd plan was of such a nature as to paralyze all initiative, but that was not the smallest of the wounds that the work of the technical commission inflicted on the project of the canal. Mr. de Lesseps had always, on the recommendation of the statisticians whom he consulted, spoken of a traffic of seven million tons in the first years, without indicating with precision when it would be obtained.

On the 5th of May, 1890, the technical commission of the liquidator, Brunet, acquired for itself an eternal

patent of intellectual blindness. It declared that, in the fourth year, a traffic of four million one hundred thousand tons would be reached, which in the twelfth year would attain six million tons. According to this commission, even after twelve years, the traffic would not attain the seven million tons, which Mr. de Lesseps had predicted for the first years. At the beginning the traffic would amount to one million one hundred thousand tons a year.

By exaggerating the cost and the time necessary for executing the project, by diminishing the prospects for business in the canal, the commission stupidly interred the enterprise forever in France. To protest against this frightful report, I then wrote the first of the twenty books, large and small, that I have printed during my long campaign to save the work in Panama.

After having recalculated the possibilities for canal traffic I advanced the following prediction on page twenty-nine of *Traffic,* in the supplement on *Panama, Past, Present and Future,* which appeared on September 20, 1892 (Masson, publishers):

"I estimate that the canal traffic will amount to at least ten million tons in the seventh year."

Twenty years afterwards, on September 25, 1912, in a book published by Plon in French and by Constable in English, entitled, *Panama: The Creation, Destruction and Resurrection,* I predicted (on page 666, French edition, and on page 401, English edition) that, after ten years:

"The annual traffic will total twenty-two million tons."

My two prophecies, the first one immediately after the failure of the de Lesseps company, the second one immediately before the opening of the Canal to traffic, on August 15, 1914, were verified by experience. The *Panama Canal Record* for January 5, 1921, notes a

traffic of ten million, three hundred seventy-eight thousand, two hundred sixty-five tons for 1920, seventh year of business.[1] The tonnage for the year following the tenth year of business from July, 1924, to June, 1925, was twenty-two million, eight hundred fifty-five thousand, one hundred fifty-one tons.

These figures show how correct Mr. de Lesseps and I were in our estimates. Ours were the prophecies of men who believed in the reality of the Canal, who looked for the whole truth and nothing but the truth in order to carry on the fight and win.

One of the members of the commission did not share his colleagues' views but could not impose his own. His ideas were practically my own. He was Mr. Nivoit, a highly intelligent man, Chief Mining Engineer, and father-in-law of Mr. Lebrun, now President of the French Republic.

The report of the technical commission to the liquidator, which was published on May 5, gave the support of men with honorable names to the howling pack of adversaries of the Panama Canal. They had spoken, terrorized by the fear of being accused of favoring the enterprise which a thousand lying voices had held up to public execration.

The campaign of calumny had begun on February 9, 1890, with a book by Mr. Drumont. His accusations seemed to be those of an hysterical man and were directed against the glorious and unfortunate Ferdinand de Lesseps, the man who had made a reality of the junction of the Mediterranean with the Indian Ocean, that

[1] A German objector said my prediction in 1892 was based on the opening of the Canal at the end of the century and that it was really opened later, in 1914, with a general trade correspondingly increased.

This objection is answered by the remark that the increase in general traffic was offset by the destruction of half England's commercial ships during the war.

dream of centuries of history. What he wrote is scarcely conceivable.

"This scoundrel walks as one who has triumphed . . . Never has anyone said to this man, 'What have you done with that money?' . . . The Senate to whom de Lesseps has given an untold quantity of presents hastens to vote a law on commercial failure so that this criminal can escape the mark of infamy. . . . The Chagres Dam has been demonstrated to be impracticable. . . . It would have been possible to write the history of this atrocious swindle with nothing but the deriding songs that they sang at Panama."

Attempts at blackmail are always to be expected by an enterprise like that of the Panama Canal, handling millions of francs constantly and depending upon public favor. It was the strict duty of the directors of the Panama Company to combat these practices. Ferdinand and Charles de Lesseps who were protected by their high integrity and their perfect disinterestedness never yielded but once. It was when a member of the government, Baïhaut, became a blackmailer, and then Ferdinand de Lesseps was not even informed because his son took upon himself all the load of moral distress and of shame.

But the same code of honor could not be imposed upon bankers who had charge of the emissions of bonds and upon their agents. The most celebrated of all, Baron Jacques de Reinach and his confidential agent, Arton, did not hesitate to act in a different way. Without the knowledge of the Company and of the two de Lesseps, they tried to influence the Deputies who were to vote on the law authorizing the lottery bonds.

The judicial debates demonstrated that they had not succeeded in bringing members of Parliament to agreement except on pretexts which wiped out any stain of dishonesty. However little they may have succeeded,

the thing was, in itself, eminently reprehensible, but national interest demanded that the heart and brains of the honest chiefs of the great work should not be mistaken for those of the guilty ones.

Exactly the contrary was the interest of calumny and behind it the interest of all of the forces working for the destruction of France and of her honor, that vital principle of the nation.

Therefore, on January 10, 1893, the noble and historic personalities of Ferdinand and Charles de Lesseps were dragged before the Court of Appeals of Paris with two directors, Fontane and Cottu and the general contractor of the locks, Gustave Eiffel.

The directors were accused of swindling in spite of the clearest and most obvious proofs of their absolute integrity. The contractor was indicted for abuse of confidence. All the accusations were based on the report of an expert accountant, Mr. Flory, who had made himself the judge of the contracts and of their stipulations, interpreting them without understanding.

"Ne Sutor Ultra Crepidam" [1]

Never was this rule more applicable than in this case! In order to conduct an investigation of this kind correctly, this being an affair of world importance, Justice ought to have consulted experts such as *"Ingénieurs des Ponts et Chaussées"* to correct the report of the expert accountant.

On the whole the prosecution was judged in advance by the report of the Attorney-General *Quesnay de Beaurepaire* to the Minister of Justice *Ricard.* On November 8, 1892, that high magistrate, who had, on January 11, 1891, ordered an investigation of the ac-

[1] "The shoemaker should not look higher than the sole." A Latin translation of Apelles' remark when, concealed behind a curtain, he heard the criticism of one of his pictures made by a shoemaker of Athens.

tions of the Directors of Panama, reached the following conclusions:

He proposed to abandon the prosecution *"because the Public Prosecutor would be powerless to demonstrate any fraudulent intention, which is an essential element of the misdemeanour. . . . Still, nothing has been neglected. All the revelations have been collected and investigated; all the history of the company has been dug into, but when people had to give actual facts before the Investigating Magistrate, the witnesses who had not disappeared presented nothing but hypotheses or had lost their memory."*

Mr. Ricard, at that time Minister of Justice, and Representative of Rouen, had, on March 5, 1885, invited Mr. de Lesseps to inaugurate a quay to which his name had been given. He had covered him with praises and said among other flattering things:

"Though living, you belong from now on to history, and as for Victor Hugo, we can, without reservation, give you a place that is usually accorded only to the illustrious who belong already to posterity."

Seven years and a half later, Ricard, Minister of Justice, received from the Attorney-General a report clearing the glorious figure of Ferdinand de Lesseps of all blame. He did not hesitate and twice violated his duty as a responsible member of the Cabinet and as the head of the French Magistrature. He ordered the prosecution to begin.

This abominable injunction made the completion of the Panama Canal by France henceforth impossible. It was carried out without the agreement of the Cabinet presided over by Mr. Loubet.

On November 10, 1892, eve of the day upon which Mr. Ricard sent his order to prosecute, an enigmatic article appeared in the *Petit Journal.* It was entitled, "We must see clearly." It was signed by Mr. Judet,

the same man who, at the end of the war, was condemned to death for high treason by default and was acquitted, several years later, by the Court of Assizes of the Seine.

This article appeared to have the secret aim of supporting Mr. Ricard in his attempt to prosecute Mr. de Lesseps for swindling and to disgrace his great undertaking. Thanks to that, the idea of the canal in France was wholly destroyed. Thanks to that, hundreds of thousands of French families were ruined. Thanks to that, a great wave of contempt and disgust was to sweep over all France. Thanks to that, at the time of the projected aggression, Germany was to find a France disunited, discouraged, having lost her confidence in her most illustrious sons.

It will be readily seen that this prosecution was advantageous for Germany in view of the expected conflict, because it resulted in the moral depression of the French nation.

I do not accuse of criminal intentions the men, whether living or dead, who played in that drama a nefarious part for our country. But I do accuse them of a lack of understanding of the part they were playing that almost came to high treason.

They were possibly nothing but puppets, the strings of which were pulled by a distant hand. The logical analysis of this situation and the lessons of history permit us to discover with some degree of probability the place from which this hand was acting. It was most probably Berlin.

When the trial of Ferdinand and Charles de Lesseps, Fontane, Cottu and Eiffel was begun before the Court of Appeals of Paris, the Court ran up against the difficulties of which the Attorney-General had spoken. Unfortunately it was presided over by a magistrate, Mr. Périvier, who had reached this eminent situation, thanks

to political favor, and to Mr. Grévy, President of the Republic. Mr. Périvier exercised on his colleagues a tyrannical influence. The sentence of this Court, always inspired by Justice had, this time, by exception, to invoke the most empty motives in order to formulate a condemnation.

As it found nothing to criticize in the enormous operations of the company, Mr. Périvier took refuge in the evaluation of the traffic. Here is an extract from this monstrous sentence:

"The Court . . . in what concerns the misdemeanour of swindling . . . considering . . . that the prosecution invokes, to sustain its arguments, the mendacious advertisement in the Panama Canal Company's Bulletin and in a great number of newspapers it paid . . . purporting that the immediate transit could be evaluated with certainty at seven million tons . . . considering that it is impossible that all of them have been seriously capable to believe . . . that the immediate transit could be loyally evaluated at seven million tons . . . sentences Ferdinand and Charles de Lesseps to five years' imprisonment."

To judge this abominable sentence rendered on February 9, 1893, it is necessary to ask for the supreme arbitration of the facts. I must repeat here what I have already written above.

I had, in 1892, announced that the Canal Traffic would be ten million tons after seven years of operation. On the seventh year of operation in 1920 (the canal was inaugurated in 1914) the traffic was ten million, three hundred seventy-eight thousand, two hundred sixty-five tons. I had announced, in 1912, that the canal traffic would be twenty-two million tons after ten years of operation. During the year 1925 it was twenty-two million, eight hundred fifty-five thousand, one hundred fifty-one tons.

Thus, it can be seen how completely the facts anni-

hilate the politically motivated sentence of Mr. Périvier. It takes its place among the great historical acts of injustice beside the sentence which condemned Joan of Arc to be burnt alive for the crime of sorcery. But to annul this sentence before the Superior Court of Historical Realities it was necessary that the Panama Canal itself become a reality. It was to that task, in order to preserve the honor of France, that I devoted my efforts henceforth. The unworthy Judge Périvier was perfectly convinced that the canal would never be resuscitated. For that reason he did not hesitate to say a thing which could never be contradicted.

If he had been right, if the Panama Canal had not become a reality, his sentence would have weighed on France like a load of lead. It would have become the proof of the dishonor of the national hero, de Lesseps. It would have made him one of a gang of malefactors, composed, for the rest, of all those engineers, bankers and contractors who had cooperated with him and thus become the accomplices of the swindle. Fortunately, I succeeded in wiping out this taint and the Panama Canal has been for twenty-three years a reality.

But that sentence was not annulled by the Supreme Court of Realities, alone. It was much earlier annulled, on June 15, 1892, by the Court of Cassation because it had violated the law of limitations.

The investigation which followed the denunciation by Jules Delahaye of one hundred and fifty members of Parliament for corruption, on November 21, 1892, in the Chamber of Deputies, did not lead to the discovery of any trace of corruption on the part of the administration of the Canal Company.

The only thing that came to public light was the attempt to blackmail the Company by Baïhaut, at that time Minister of Public Works, of which crime I have already spoken. It was revealed by Charles de Lesseps

as soon as he was arrested, on December 16, 1892. This arrest was the consequence of the commotion that had taken place on November 21 preceding, caused by the sudden death of Reinach and by the speech in the Chamber of Mr. Jules Delahaye. This speech had led to the decision to form a Parliamentary Commission of Enquiry of thirty-three members.

The efforts of the commission, the search made by the police, and the discovery of Baron de Reinach's checkbook brought before the Court of Assizes, on March 8, 1893, only six members of Parliament. They were a senator, two deputies, three former deputies, and ex-minister Baïhaut. At their side were Mr. Charles de Lesseps, Fontane and Blondin, who had worked as intermediary for Baïhaut in his culpable attempt at extortion. As I have already said this extortion had been qualified as corruption for political necessities and the victim was prosecuted as an accomplice of the criminal.

The jury acquitted Mr. Fontane and all the members and former members of Parliament, except Baïhaut. The latter was condemned to five years' imprisonment, with civic degradation, the maximum penalty, and a fine of seven hundred fifty francs. Blondin escaped with two years' imprisonment. As to Mr. Charles de Lesseps, since he was undeniably the victim of blackmail and obviously perfectly innocent of any act of corruption, the jury wanted to acquit him. It is said that they yielded to the deceptive reasoning of a member of the jury, an agent of a political personality, who wanted to obtain a condemnation against de Lesseps:

"It is not possible," he said, "to condemn a corrupted man, and to declare that there was no corruptor."

Charles de Lesseps was thus condemned to one year's imprisonment, which was the minimum penalty, and, consequently, a moral acquittal.

The Parliamentary Commission of Enquiry laid down its report on July 4, 1893. There were very grave errors in it, certain of which were recognized by the very commissioner who wrote it, Vallee. The latter mistakes were rectified during the printing.

But the scandal hunters still nourished the hope of finding the one hundred and fifty corrupted deputies whom Delahaye had denounced, while abstaining from naming them for the very simple reason that nobody knew them because they did not exist. Arton, the secret agent of Baron de Reinach, was in flight. He disappeared because he had been accused of having stolen funds from the Dynamite Company. They made much ado about this scoundrel and the government was denounced for preventing the discovery of his hiding place. On November 16, 1895, he was arrested in London and it was at last possible to pierce the mystery of the corruption of the one hundred and fifty deputies.

Arton, after having been extradited for a common law crime, could not be tried for corruption, a political crime. He renounced his immunity, during the debates, for the crime of stealing money from the Dynamite Company and ended by being sentenced to eight years' hard labor. A great lover of sensational publicity, Arton certainly denounced all those in Parliament who had accepted money on any pretext, whatever. Immediately the requests for authorizing the prosecutions of the members of Parliament he had named were granted and the Chamber formed, on March 29, 1897, a second Commission of Enquiry.

The second corruption suit brought Arton and eight members of Parliament before the Assizes, on December 18, 1897. They were all acquitted, including the one who could not come because of illness and whose trial was postponed to March, 1898.

Thus the enormous cyclone which Delahaye unchained on November 20, 1892, by his denunciation of the imaginary crime of one hundred and fifty deputies brought only thirteen members of Parliament before the Courts. Not one of these thirteen men failed in his demonstration that the money received had no criminal character and was not a bribe.

Thus was terminated this extraordinary succession of calumnious lies which poisoned France, and almost annihilated her confidence in herself during the last decade of the nineteenth century. It was the necessary consequence of the traitor's blow which had, in 1888, stopped the last subscription of the Panama Company and prevented the realization by France of her glorious conception.

We must excuse the governments which held the power during the Panama drama, because the Chamber of Deputies really invited them to play the coward's role. Here is the proof:

A judicial enquiry had been opened, on June 11, 1891, in order *"to know if penal responsibilities had been incurred in the Panama affair."* The Chamber, on June 5, 1892, took the abominable initiative of declaring that such things had taken place, thus withdrawing from the judge all liberty of conscience. It voted the unqualifiable resolution which follows:

"The Chamber, desiring that energetic and quick repressive measures be taken against all those who have incurred responsibilities in the Panama affair . . . . "

Thus, the house decided that penal responsibilities had been incurred. In a ridiculous fit of authority, it ordered an energetic and quick repression of misdemeanours which did not exist in fact, and which, up to that date, no judicial enquiry had yet established.

Only the abominable attacks of Drumont against Mr. de Lesseps and his son and the hysterical denunciations

of Jules Delahaye formed the basis for the repression. Delahaye claimed that he was invoking the declaration of an *indisputable,* technical authority. Delahaye's famous document did prove that its contemptible author was ignorant of everything about the Isthmus and the canal.

But the misdeeds of the House did not end there. A question of honor arose after the sentence of the Court of Cassation, which had annulled that of the Court of Appeals because it violated the law of limitation.

One of the condemned men was Mr. Eiffel whom the abominable sentence of Périvier had, against all truth and evidence, qualified as a *mandatory* of the Panama Company, though he was a *general contractor for the locks.* The fact of having received money for the payment of his works and supplies was transformed by President Périvier's diabolical invention into an embezzlement. The odious and imaginary pretext of the supposed abuse of confidence was necessary in order to condemn Eiffel to two years' imprisonment. Gustave Eiffel, though he was liberated by the sentence of the Court of Cassation, was, according to the law, submitted to another jurisdiction as Officer of the Legion of Honor.

The Council of the Order of the Legion of Honor had to judge if Eiffel had violated the law of honor which knows no limitation. It was the whole Eiffel contract suit which was brought again before a tribunal, this time impartial, formed by officers like General Février and Jurisconsuls like Aucoc. On May 20, 1895, a sentence was rendered which annihilated the odious one that Périvier had promulgated:

"Considering that the examination of Mr. Eiffel's conduct as a contractor of the Panama Canal works and of the documents submitted show that he has committed no breach of honor . . . ."

But the Chamber was exasperated by this sentence which, at last, had been inspired by the sense of duty and truth. It intervened and decided by 433 votes against two upon a new infamy. On July 16, 1895, it invited the government to propose a law reorganizing the board of the Order of the Legion of Honor. This request was preceded by the expression of the regret that *"in recent decisions that board had taken so little notice of the sentences of the law courts."*

The two commissions of enquiry were not better than the House from which they had sprung. It was a gathering terrorized by a psychosis of cowardice almost to the point of madness.

Chamber and commissions exhausted themselves in a sterile hunt for proofs of misdeeds which calumniators had invented to wound France and serve Germany's plans for invasion.

The first commission, which was formed after the explosion of Jules Delahaye's volcano of dirt, on November 21, 1892, concluded its report on July 4, 1893. It had naturally been unable to find anything reprehensible in the Company's administration. The report of the second commission, terminated on January 27, 1898, was equally devoid of any proofs of dishonesty.

Neither of the two commissions was able to discover anything about the gigantic but imaginary enterprise of corruption of one hundred and fifty deputies that Jules Delahaye had denounced. The financial affairs of Reinach and Arton with certain parliamentarians, as we have said, brought before the Assizes thirteen of the latter, only, and they were all acquitted.

The commissions sought information concerning a person, whose actions remained a mystery: Cornelius Herz. He was the financial backer of Clemenceau's paper *La Justice*. I myself could see the terror he inspired in Reinach.

One day in 1888, I was going down the Boulevard des Italiens with the latter when, at the corner of the rue Louis-le-Grand, Reinach saw Herz from afar. He suddenly took my arm and we went across the Boulevard in haste, without my guessing his motives. He explained his reason for the sudden change in direction when we arrived before the "Vaudeville" (now the Paramount Motion Picture Theatre). He had wanted to avoid passing before a café in front of which Herz was sitting.

On January 27, 1898, at the beginning of the final report of the second commission of enquiry, written by Mr. Vallée, its president, the magnificent enterprise, to which so many Frenchmen had gaily sacrificed their lives for the glory of France, was called a *gigantic swindle*. Viviani, a member of the commission, committed the same infamy in a secondary report of the same commission. He, also, called the glorious enterprise of Panama a gigantic swindle.

Suez had been treated in the same way by Lord Palmerston as I have already recounted. Patriotism, if not truth, inspired the latter statesman. Who can guess which nation Vallée and Viviani thought of serving when they dragged in the mud the immortal Panama undertaking, with its creator, de Lesseps, one of the purest glories of France.

This long period of historical agitation in Parliament and the love of the latter for the calumnious allegations which were made before it, lasted from June 21, 1890, to January 27, 1898.

It began when the Provost de Launay and Jules Delahaye brought their first calumnies before the Chamber. It ended with the report of the second commission of enquiry.

The struggle had begun with Drumont's book depicting Panama as a swindle. It finished with that expres-

sion of Vallée's and Viviani's: *"It is a gigantic swindle."*

Panama was a *gigantic swindle* according to Vallée and Viviani, who tried to veil with this vulgar lie the bright integrity of the two de Lesseps and their collaborators. If Vallée and Viviani were unable to find any proof of the ignominious calumnies they spread, on the contrary, a very evident proof can be brought forward to show that they lied. If they spoke the truth no work was accomplished on the Isthmus. If they lied gigantic excavations and an enormous quantity of machinery were to be found.

Who is going to speak in full independence eight years after the mendacious and public statement of Vallée and Viviani? The President of the United States, Theodore Roosevelt, began thus, in his message of December 17, 1906, giving an account of his visit to the Panama works:

"At the outset, I wish to pay a tribue to the amount of work done by the French Company under very difficult circumstances."

But Roosevelt was not the only witness publicly condemning Vallée and Viviani as calumniators. On June 17, 1910, the *London Standard* published an account of the conversations of its correspondent with the American Military Engineer Officers on the Isthmus. When speaking of Colonel Sibert, one of the most eminent engineers of the American army, whom I was to meet later on the Verdun front, this correspondent wrote:

"He and all other officials I met emphasized, not in any spirit of generosity, but with sincere professional appreciation, the excellence of the work done by the French engineers. According to most of the American officers in charge of the great canal departments, the foresight, skill and ability displayed by the French, un-

der the Lesseps regime, have never received the praise they deserved."

Here is the testimony of men who have succeeded the French, testimony that can be contrasted with that of the unworthy persons who, for low political reasons, have covered the servants of France with the dirt emanating from their criminal brains. Here is the testimony that brands with a red hot iron Vallée and Viviani, the rhetoricians who dared write that the Panama enterprise was a *gigantic swindle* for the purpose of their political ballyhoo.

Here is the testimony that brands Drumont with the mark of deceit. This person had written in his book, The Last Battle, on page 347:

"To understand Panama, it is necessary to imagine chaos, not the chaos of the first days of the world but a chaos with a semblance of civilization, a chaos of the nineteenth century: engineers, exploiters, innkeepers, owners of disreputable houses, down and outers, employees who have come from anywhere, workmen from all countries, all these in perpetual agitation without any direction and without any plans. . . . . "

Here the work of Parliament, from 1890 to 1898, is judged in the light of facts. Its ignorance and cowardice destroyed the greatest moral and material interest that France had ever had in the New World.

During those eight years, in spite of this frantic search, nothing could be found that could stain the honor of the Panama Company, either in Paris or in Panama. Never had the French Parliament more fully deserved the severe qualification of Benjamin Constant:

"An assembly which can neither be kept in check nor held, is, among all powers, the most blind in its movements . . . its activity bears indiscreetly on all objects . . . it desires to please the passionate part of the people . . . is irritated by the resistance it meets or the censure it

supposes to exist. Then comes its opposition to national sentiment and obstination in error!"

Never has a more exact and prophetic picture been drawn of the acts of the Assembly which dealt the Panama enterprise its death blow.

At the beginning of the nineteenth century, Benjamin Constant traced the portrait of the detestable Parliament which, less than a hundred years later, constantly worked to cover with shame the French name and to insure the ruin of an immortal enterprise of French genius.

CHAPTER III

MY SUCCESSIVE ATTEMPTS TO KEEP THE PANAMA ENTERPRISE FOR FRANCE

I had acted long before the blow which Judet's article, "We Must See Clearly," had foreshadowed in the *Petit Journal.*

I had tried to float again the great stranded enterprise before Mr. Ricard, Minister of Justice, gave the order to dishonor Mr. de Lesseps.

Mutual friends had put me in contact with Burdeau. I thought I had found in him my man. His penetrating judgment, his powerful eloquence, his undeniable integrity, his exceptional courage had made him the most important personality in the House.

After some conversation, I succeeded in convincing him of the monstrosity of the plot which was being prepared to hurt France through the Panama undertaking. A great intimacy was established between us. I could transmit to his generous mind all the sentiments which filled my own, sentiments developed by the double religion of France and Science. Alluding to my age, when I had led to victory the legions of workmen of the Isthmus, he called me the *"Bonaparte of Engineers."* He was finally convinced that the necessary reestablishment of the great enterprise would be the prize of the heroic devotion of a man of courage and intelligence. Obviously, the determination to succeed or perish in the task was necessary. He accepted the leadership of the movement.

He asked Mr. Rouvier to wish him good luck in his patriotic adventure and to offer him, in the name of the

government, from the tribune, its best wishes for success. Rouvier refused! What an eloquent testimony to the incredible cowardice of the governments in that degrading period of our history! Here was an undertaking which furnished a living to six hundred thousand French families. It was stranded on the rocks of finance and beaten by the waves of calumny which a storm blew from foreign lands. The government was asked to express a word of solidarity with the effort to be made for the rescue, a purely moral solidarity. The fear of calumny pales the cheeks of the silent ministers. They refused to raise their voices. How could an Assembly hold itself in check, enslaved by such cowardice! It was obviously impossible.

That is why our Assemblies, during that whole black period, conformed to Benjamin Constant's model. They were blind in their movements, and infected by the desire to please that part of the people ruled by passion. The scandalous cowardice of the government, thus expressed by Rouvier, prevented the help which Burdeau courageously wanted to lend to the great undertaking, even at the cost of self-sacrifice.

At the beginning of 1894, I went, one day, to Dortmund, in Westphalia, to examine certain new processes for washing coal in order to separate the schist from the useful matter. Returning in the shadows of a cold and misty morning, I went into the compartment of a railway carriage where a traveller was sleeping in a corner. The noise and the cold air woke him up. I apologized in bad German for having involuntarily disturbed him. He answered very courteously in admirably pure French with that Russian accent which makes our language so agreeable to hear. Very soon, without knowing each other, we were like old friends, and I confided to my companion the sorrow which the impossibility of refloating Panama caused me. As I suspected that he be-

longed to the high Russian aristocracy I imagined that he could render me an exceptional service. I told him that the intervention of one foreign power could break the spell which calumny had cast on the actions of our government, on the Panama question.

"Sir," said he, *"I can bring you the help which you desire."*

He gave me his card upon which I read:

"Prince Tatischeff."

It was the very well known name of a man belonging to the active group of the high society of Saint Petersburg. We were at the beginning of the Russian alliance. I then conceived a rational plan for materializing this alliance into actual fact by a Russian guarantee of interest payments on the loans to be floated in order to complete the canal.

Prince Tatischeff was coming back to Paris as I was. There, he received all the documents referring to the Panama affair, including my book published in 1892, which gave a clear and graphic description of the whole matter. We decided to leave for Saint Petersburg to carry out the splendid project.

On Saturday, March 24, 1894, at eight o'clock in the evening, I was in the office of Mr. de Witte, the all powerful Finance Minister of Alexander III. He had already been informed by Prince Tatischeff, who visited him freely, of the idea I was going to submit to him. The appointment, which had been fixed for the preceding day, had been postponed for twenty-four hours. Mr. de Tatischeff had heard this with pleasure, because during the interval, a cabinet meeting presided over by the Russian Emperor was to take place.

"When you speak of your project tonight to Mr. de Witte," he said, *"you will know what the Emperor thinks about it, and what answer he instructed Mr. de Witte to give you in case you convince him."*

I said to the celebrated Minister: *"The realization of the Panama Canal, thanks to the financial help of Russia, will give to your Empire, a situation almost without a parallel. It will possess the all Russian route, round the earth, by the trans-Siberian and by its complement, the canal through the American Isthmus. England, only, is the master of such a round the world passage through the trans-Canadian and the Suez Canal.*

"The acquisition of such a glorious privilege will cost nothing. The Panama Canal is practically finished. Alone, manoeuvres, the origin of which I attribute to Berlin, have stopped its construction at a time when all the unknown quantities of this great problem have been found, when no risk has to be taken, and when nothing but a free and unencumbered road is before us.

"I have brought to your Excellency a book which I wrote two years ago, in which the details of the great work are all given. The guarantee of interest payment given by Russia will stop the panic which is carefully maintained by anti-French interests. The Russian Empire can, without opening its purse, insure the execution of the Canal and obtain control of it by thus giving a clear opinion, based on reality, and by showing her confidence. As if by magic it will, thus, dissipate the cloud of lies spread by calumny, probably emanating from German intrigues and maintained by the weakness of our Parliament before scandal."

"Yes," answered the Minister, *"but to do such a thing, it is necessary to be strong, and Russia is weak!"*

I was nonplussed but answered jocularly:

"That is an objection which I didn't expect from a Minister of the most powerful Empire on earth. But, no matter! If you fear possible antagonism there is one easy thing to do. Invite England, America, and Germany to join you in your guarantee of interest payments."

After an exchange of remarks, Mr. de Witte, obviously surprised by the advanced state of the work, said in conclusion:

"I can say to you that His Majesty would gladly accept your suggestion if it was proposed by the French government."

I went out from Mr. de Witte's office, having made a long step towards the solution of the problem. Nothing remained but to persuade the French Government to adopt my idea. However difficult it appeared, the thing was not impossible. The Prime Minister was Mr. Casimir Périer, considered to be a man of upright and courageous character. Mr. Burdeau, the friend of whom I have already spoken, was his Finance Minister. Though he was younger than the Prime Minister, he acted as his mentor.

As Burdeau was absent from Paris, I asked Mr. Edouard Lebey, the powerful manager of the Havas News Agency, to introduce me to Casimir Périer whom I did not then know. When I told him the object of my visit, Lebey's emotion was so great that he became pale and was forced to sit down. It was maddening to think that Panama was going to become the axis of the Franco-Russian Alliance after having been denounced in France as a mountain of iniquities and after having been the butt of the inventions of hypocrisy and calumny of all political parties.

The presentation was made in the private office of the Prime Minister in the Department of Foreign Affairs. Mr. Lebey then withdrew. As I remained alone with Casimir Périer, I told him of my warm desire to preserve the Panama enterprise from annihilation and what an encouraging reception my proposition had received in Saint Petersburg. The Prime Minister appeared to be extremely interested in what I described to

him. After congratulating me on the boldness of my initiative he said:

"I always consult Mr. Burdeau on important questions. He is now at Arcachon where he is preparing the budget in the quiet of the country. As soon as he returns, I shall communicate with you."

No declaration could have enchanted me more. Burdeau was not only my friend; he knew the true situation of the Canal and his noble French heart and high intelligence commanded him to try everything in order to have it completed by the French. As soon as I went out of the department, I looked in the time-table to find out at what time I would leave for Arcachon.

On the afternoon of the following day, I reached Bordeaux where I had to take a local train for Arcachon. I was installed in a compartment and waiting for the departure of the train, when a traveller entered. It was Burdeau. He had come to spend the afternoon at Bordeaux and was returning to his country retreat. During the short journey I told him all about my soundings at Saint Petersburg and my visit to Casimir Périer. He said to me:

"Your proposition is of colossal importance as much from the national as from the international point of view. Will you stay here two or three days? We shall be able to study all the phases of the new Panama problem every time I can escape from the work of preparing the budget."

When I left, Burdeau was in full accord with me and told me that, in Paris, he would defend my project as if it were his own. A few days later, towards evening, a telephone call informed me that the Minister of Finance wanted to see me immediately. As soon as I entered his office, Burdeau took my hand and said:

"I have not the right to reveal what you are going to hear. It is not the minister who is speaking, it is the

friend, who begs you not to confide to anybody, whomsoever, the object of our conversation: Today, the cabinet has studied your proposition in all its aspects. It has been decided to adopt it with the following modification: France will join Russia in giving the necessary guarantee of interest payments. In addition, America will be offered the right to take whatever share it chooses in the guarantee."

I pressed the admirable man's hand and left, with my heart and head on fire. At last, I had succeeded in salvaging Panama. It was an apotheosis instead of the shameful death that the enemies of France had prepared for the great National enterprise. It was a great effort of French genius solemnly recognized by France and Russia.

Alas! What filled my heart with happiness filled the hidden saboteurs of French National greatness with wrath.

Their answer to the government's decision was immediate. A few days later an unexpected question was raised in Parliament, dealing with an utterly unimportant matter, put the government in a minority and forced a resignation. It was checkmate for my Franco-Russian solution for the salvage of Panama, and such had been the object of those who engineered the government's fall.

The successors of Casimir Périer and Burdeau had none of their noble qualities. It was absolutely useless to try to show them the importance of my scheme. They were people for whom electoral interests were above any other consideration and, especially, that of National interest, which is, moreover, the average politician's general rule of conduct.

I remained waiting for the wind to turn. Alas! After one year all those on whom I could rely either in France or in Russia had disappeared. The Emperor Alexander

III had been assassinated. President Carnot, who had certainly supported my proposition during the cabinet meetings, had been assassinated. Burdeau was dead and Casimir Périer, Carnot's successor, had given up politics and withdrawn from the Presidency of the Republic, after seeing that he played there a purely decorative role.

Were any of these dramas determined by the intention of suppressing those who might aid in the refloating of Panama? Were they all caused, in this same short period, simply by chance? Nobody will ever solve this problem. Everyone has the right to choose the hypotheses he prefers. At any rate, this failure and the death of all those who had participated in that last effort sealed the destiny of Panama in France and for France.

It was necessary to look for something else to salvage the great work.

The Inauguration of the Statue of Ferdinand de Lesseps on the Thirtieth Anniversary of the Suez Canal

The Suez Canal Company had resolved to celebrate the thirtieth anniversary of the opening of operations.

The inauguration had taken place on November 18, 1869, which was midway between November 17, 1869, date of the departure of the *Aigle,* the Empress Eugénie's yacht, from the Mediterranean and November 19, 1869, date of its arrival in the Red Sea.

The Suez Canal Company had chartered a big ship of the "Messageries Maritimes," and invited a great number of people who did not belong to the Company. I was one of them. As good luck would have it, I was sitting at table near a director of the Company, Sir Edwin Dawes, President of the British India. This extremely important navigation company had been prev-

iously presided over by Sir William Mackinnon, the founder of the British East Africa chartered company, today called Kenya Colony, who had been a member of the Board of Directors of the Congo railway with me.

We soon became excellent friends. I naturally told him what the real situation at Panama was and how easy it would be to complete this magnificent work. Sir Edwin Dawes shared my views completely and drew up a project for obtaining from the British government, without French cooperation, a guarantee of interest payment for the capital necessary to complete the canal.

After disembarking at Port Said a new guest, who had just arrived in Egypt, came to join us. He was George Plate, President of the North German Lloyd, who represented Germany on the Suez Canal Board. He was an intimate friend of Sir Edwin Dawes. He quickly became my friend and wholeheartedly adopted the ideas that Sir Edwin and myself had developed. We were soon united by a common bond: the ambition to complete the Panama Canal. Plate guaranteed that if England went ahead with the plan, he would obtain the same cooperation from the German government. The conversations were continued upon our return to Paris where George Plate and Sir Edwin Dawes used to come every month for the sitting of the Suez Canal Board. The Boer War in South Africa was at its height. This preoccupied the British government very much. When Sir Edwin Dawes submitted the project to Mr. Chamberlain, who, though the most important member of the British government, was not the Prime Minister, the latter thoroughly approved the idea. But he declared it impossible to submit the question to the cabinet before the end of the South African War.

This obstacle stopped the evolution of the project, which might otherwise have succeeded, owing to the importance of its two supporters.

At the suggestion of Mr. George Plate, as member of the board of directors of the Deutsche Bank, a delegate of the latter institution, Mr. Gwinner, came to Paris in order to see the principal persons interested in the new Panama company and those who were directing the liquidation of the old company.

But while the Transvaal War was paralyzing all possibility of persuading England to consider the problem of the completion of the Canal, a new danger was arising in America.

The United States had been anxious to open a canal through Nicaragua ever since the famous passage of the battleship *Oregon* from San Francisco to Cuba through the Straits of Magellan, during the Cuban War.

If that project was ever to become a reality, the Panama Canal was lost forever. No private financier would have dared to compete with the Nicaragua Route with the American Treasury behind it. On the other hand, the United States would never have tolerated a Panama Canal undertaken by a foreign Government.

The construction of the Nicaragua Canal meant, therefore, the final abandonment of Panama. This abandonment would have transformed into permanent truth all the lying tales invented by calumny to dishonor France and make her doubt herself.

I resolved to attempt everything to prevent the realization of this catastrophe, the result of which would have certainly been the destruction of France, herself. This disaster, which I foresaw, would have taken place, as I shall show, hereafter, had I not succeeded in inducing America to adopt Panama.

Chapter IV

THE FIGHT TO THE DEATH FOR THE TRIUMPH OF PANAMA AND THE DEFEAT OF NICARAGUA

The First Battle in the United States

A special commission had been created to establish the final plans for the Nicaragua Canal. Its work, in 1898, was almost complete. Everything seemed to indicate that after the report of that commission, the vote of Congress would soon approve the construction of the Nicaragua Canal. I wrote, then, to my dear and noble friend John Bigelow to inform him of the enormous danger his country ran in adopting Nicaragua before examining the Panama situation.

Mr. Bigelow had been minister plenipotentiary of the United States in Paris, in 1865, at the end of the Civil War. After President Lincoln's assassination, his private secretary, Colonel John Hay, had been sent to Paris as secretary under the orders of John Bigelow. John Hay remained modestly subordinated to his former chief, though he had become, at the end of the nineteenth century, Secretary of State, that is to say, the third most important personage in the United States.

In the middle of November, 1898, Bigelow wrote to the latter:

"... not to bind his hands in the matter of Nicaragua without investigating Panama, as he had done for Nicaragua."

Despite this, at the beginning of 1899, the fate of Panama would have been sealed for eternity by the

double adoption of Nicaragua in the Senate and House of Representatives, if a violent rivalry had not prevented its apparently inevitable triumph. The defender of that project in the Senate, a Democrat, Mr. Morgan, had, at the beginning of 1899, caused a project of construction of the Nicaragua Canal by a concessionary company to be adopted by the upper house.

In the House of Representatives a Republican member, Hepburn, defended, with the same passion, the Nicaragua Project. But he wanted the American Government to build it, itself, without resorting to what he called the "masquerade of a subventioned company." At the same time as John Bigelow's letter to John Hay sowed a seed of doubt in the mind of the Government, another parallel action was developed in the Congress. A very brilliant naval officer, Lieutenant-Commander Asher Baker, had been attached to the American section of the Universal Exposition of 1900 in Paris.

Lieutenant-Commander Asher Baker had become a warm partisan of Panama after several interviews with me. Through his friends, the Deerings, his warm conviction won over Reed, Speaker of the House of Representatives, and Cannon, Chairman of the Ways and Means Committee. The accumulated results of these two influences, favorable to Panama, resulted in a spectacular and unexpected decision.

On the eve of the end of the session, in March, 1899, a resolution was formulated and adopted to create a commission called the *Isthmian Canal Commission.* It was to decide upon either Panama or Nicaragua as an interoceanic and navigable route.

The Nicaragua Commission, whose favorable conclusion had already been known for a long time, delivered its report on May 9, 1899. President McKinley, on June 10, following, created the Isthmian Canal Commission. It was presided over by Admiral Walker, as

the Nicaragua Commission had been, and in it were included also two other members of the same commission. Its first decision was to send to Paris a delegation formed of three of its members, in order to examine the plans and archives of the New Panama Canal Company.

One of the delegates, Colonel Ernst, of the American Engineers, brought to me a letter of introduction from John Bigelow.

The two other members were George Morison and William Huber Burr, who were the friends of Frank Dunlap Pavey, eminent New York lawyer, who was travelling in Europe as a tourist. Mr. Pavey was already my friend, as he remains to this day. Thanks to him I met Morison and Burr, to whom I offered my book published in 1892. I said to them:

"You are going to study, successively, and, on the spot, Panama and Nicaragua. This book will give you the most ample information on the characteristics of these two projects. If you find only one point where the actual facts contradict what is written in it, tear it up and throw it away. But if you find that it represents the exact truth on all points, then you must make its conclusions yours, condemn Nicaragua and complete the construction of the Panama Canal."

Less than three years later my recommendation was an accomplished fact. This commission which, on June 9, 1899, the day of its formation, *had not a single member who was not certain of the impossibility of Panama, voted unanimously for Panama on January* 18, 1902.

But the evolution had been neither spontaneous nor rapid. At the end of 1899 a preliminary report was published giving the preference to Nicaragua. The voices of my friends, Morison, Burr and Ernst, had been drowned out by those of the enemies of Panama.

Towards the middle of 1900 all hope for the completion of Panama had died out in France and I tried to

look for a chance to intervene in America for Panama's victory. An extraordinary event gave me the opportunity. I found myself, one day, towards the dinner hour, alone on the left bank of the Seine and decided to take my evening meal at Foyot's. I entered the room opening on the Rue de Tournon. It was empty, except for a table occupied by three gentlemen. Everybody was then dining at the Exposition and the Parisian restaurants were deserted.

I had not paid any attention to the three diners when I saw one of them rise and come towards me. It was Lieutenant-Commander Asher Baker who had defended the Panama Canal so successfully at Washington and at Chicago. He came to invite me to take a seat at the table which he occupied with two Cincinnati friends: Watts Taylor and Thomas Procter. I accepted the cordial invitation and enchanted them by describing by what sheer chance the truth about Dreyfus had come out of the dark through the discovery of a forgotten letter he had years before sent to me. At the end of the meal, they would not allow me to pay my bill. I yielded, but nevertheless asked my new friends to accept an invitation to lunch with me at the Pavillon de l'Elysée, then the most fashionable restaurant in Paris.

When we met there I did not fail to speak to them of Panama and show them the dangers of Nicaragua.

They were extremely interested in what I said and asked me to come on the following day to lunch at the Laurent Restaurant, where several Americans who were interested in the Canal were to join them.

Among the latter was Mr. Wulsin, the President of the company making the well known Baldwin pianos. He was sitting on my left and seemed to be paying special attention to the question of canals through the Isthmus, which I was explaining. Finally he said, *"But we know nothing of all that in the United States."*

"Well," I replied, *"whenever you like I am willing to tell you all about it in the United States. You have only to give me the sign."*

The sign was given on December 11, through an invitation to come and speak of Panama before the Commercial Club of Cincinnati.

On January 5, 1901, I left from Havre and soon reached Cincinnati, where, on January 17, I gave a lecture, crowned with brilliant success. The listeners had come with the certitude of hearing me defend a condemned cause. They left with a completely different opinion.

During the luncheon which preceded my departure, I remembered a name which had been pronounced by a travelling companion on the *Champagne,* Monseigneur Schmitz Didier, a Catholic bishop. The name was that of Myron T. Herrick whom this prelate had seen at Rome the preceding year. He was, according to the Bishop, a great friend of President McKinley's.

During the luncheon which terminated my sojourn in Cincinnati, wishing to know whether this information was correct, I asked:

"Does anybody here know Mr. Myron T. Herrick of Cleveland?"

Everybody answered, "Yes!"

One of those present whom I had not yet met, Mr. Jake Schmidlapp, said, "You pass through Cleveland tomorrow, Saturday. You can see Herrick there. He is one of my best friends."

I did not notice that Mr. Schmidlapp had left after I consented to the proposed visit.

He came back a few minutes later and said: "Mr. Herrick will be delighted to see you. He will give a great luncheon in your honor, tomorrow. The twenty most prominent people in Cleveland will be invited."

On the following day I gave a lecture at the Union

Club of Cleveland, during a luncheon which lasted four hours. A blackboard was behind me, on which I drew the technical elements which words are insufficient to explain. Cleveland was Senator Hanna's town. He was the most prominent man in Cleveland politics and the great backer of President McKinley. All the guests were his friends.

When he came back several days later, he said to Herrick, "Tell me what has happened: Cleveland is a Panama town. It is just the contrary of what it was before."

I returned to New York, enchanted with such a promising beginning.

I hastened to write a booklet, entitled, "Panama or Nicaragua," fifteen thousand copies of which were published.

On page 31, I concluded an argument based on the dangers of the Nicaraguan volcanoes by these words:

"To prefer the Nicaraguan route to that of Panama, the unstable route to the stable one, is to prefer the stability of a pyramid on its point to the stability of a pyramid on its base, when the prosperity and happy life of a whole continent depend on that stability."

This paragraph was completed by a note at the foot of the page:

"To the people who think that I am exaggerating this capital point I shall say, 'Open any geographical dictionary, any encyclopedia and read the article entitled Nicaragua.' *I also say, 'Look at the arms of the Nicaraguan Republic, look at its postage stamps. Young nations like to put on their arms what best symbolizes their moral domain, or characterizes their soil. What have the Nicaraguans chosen to characterize their country on their national escutcheon? 'Volcanoes!'* "

When writing these lines in 1901 I did not foresee that they were later to seal the destiny of the century

old discussion between Panama and Nicaragua for the interoceanic junction. On the following year, they were going to determine the abandonment by America of the child of her genius and the adoption of the one of French genius.

After writing this booklet and before printing it, I went to give lectures before the Commercial Club of Boston; in Chicago, under the auspices of the National Business League, which Baker's friends, the Deerings and the McCormicks, inspired; before the University of Princeton and finally before the Chamber of Commerce of New York, the most important commercial association in the United States.

But one thing was missing. It was an interview with Senator Hanna. I observed this, one day, to Mr. Isaac Seligmann, an important banker of New York. He said to me:

"But that is very easy. Hanna is one of my best friends. I am going to give you a letter of introduction to him."

I went to Washington and left my card with my address at Senator Hanna's with Seligmann's letter. I waited three days, but received no answer to the request for an appointment written on my card.

I returned to New York with the intention of getting an introduction directly from Myron T. Herrick.

A few days later, as I had worked late in my room at the Waldorf Astoria, I went down to breathe the icy air of the night after having remained some hours in the over-heated atmosphere typical of New York hotels.

As I opened the door a landau filled with people in evening dress arrived. A small sized gentleman got down, with a slight limp. He was immediately followed by a gentleman who turned out to be my friend, Myron T. Herrick. The latter threw himself upon me and said:

"What luck to find you here! I am going to introduce you to Senator Hanna and the Comptroller of the Currency, Charles Dawes."

The introduction was quickly made.

"I have your card in my pocket, Mr. Bunau-Varilla," said Senator Hanna. "I wanted to pay you a visit here. But, when you desire to see me, do not hesitate to come to see me in my house. I shall always be glad to talk to you about the great question of the day, the Isthmian Canal."

After speaking to the Senator, I said to Charles Dawes:

"I have received from Sir Edwin Dawes. your distant cousin in England, a letter of introduction which I did not intend to present to you because Sir Edwin, knowing that I left in order to defend the Panama cause, writes that I come here to support that of the New Panama Canal Company. But I have nothing to do with that company, which has not made the slightest effort to finish the work of the old company. As a happy stroke of luck brings us face to face and I can explain the facts to you, I shall send you the letter and you will know what to disregard in it."

"All right," said Charles Dawes. "Do come to Washington and I shall introduce you to President McKinley. He will be delighted to hear you speak about the canal."

Everything was going on as if a fairy's magic wand were guiding me.

After my visit to the President of the United States and to Senator Hanna and after distributing the booklets and concluding my lectures, a sufficient quantity of the seeds of truth had been sown in America.

I came back to France. I had undertaken this compaign when everybody was certain that the power of calumny of the interior and exterior enemies of France

had finally killed Panama in our country. I asked myself if it were really true.

After all no efforts had been made by the new company in order to set up the undertaking again in France and to show it in its true light. The first manifestation of activity of the company had been to send a letter to President McKinley on November 19, 1898, offering to sell its properties to America.

These various considerations decided me to send two appeals: *"To all those who have exposed their lives or risked their savings for the realization of a great national idea. To all those who, being confident in the fecundity of the French genius, refuse to abandon what has cost so many efforts and so many sacrifices."*

The aim of these two appeals was to induce the interested persons to follow either the counsel of courage and subscribe the one hundred million dollars necessary for the completion of the canal or the counsel of cowardice and write to the liquidator that they preferred the sale to the United States.

I went to the Lagrange and Cerf Advertising Agency, now absorbed by Havas. I begged them to publish as an advertisement each one of the two appeals in a full page in every Parisian newspaper and in the most important provincial newspapers.

This double insertion cost me over twenty-one thousand dollars, which in present French money is worth about six hundred and fifty thousand francs. The first advertisement was published on April 25, 1901, by twenty-seven Parisian newspapers and two hundred and twelve provincial newspapers. *The Eclair,* Judet's [1] newspaper, refused the first appeal but accepted the

[1] Judet was the writer of whom I have already spoken and whose article in the *Petit Journal* under the caption "We Must See Clearly" had helped Minister Ricard when he gave the order to prosecute de Lesseps and thereby dishonor and condemn forever the Panama enterprise.

second. Twenty-eight Parisian newspapers and two hundred and twelve provincial ones consequently published the second appeal (on May 10, 1901).

To justify my initiative, I wrote:

"It is necessary to pierce the fog of calumnies and insults under cover of which the wreckers have concealed their crime. The clear light of truth must be projected on the great work which remains to be completed and must appear before the French people in all its gigantic proportions. The country must know that this page of its history, written in their own book by the conquistadores of Science, is not one of which she has to blush. One must cease to confuse the fighters, who gave their soul and their heart to France in their heroic struggle, with the scoundrels who robbed the corpses in the rear of the army, sounded the retreat after victory and preached lies and calumny to paralyze avenging truth and conceal their crime.

"Our generous race must henceforth consider, with indignation, that the chains with which Christopher Columbus was loaded have fallen, four centuries later, on Ferdinand de Lesseps and on his stoical and admirable son, and that our country made them weigh on these hearts, which had never beaten but for her."

I gave the example by offering to subscribe four hundred thousand dollars of the capital of one hundred million dollars, which the construction required.

In conclusion, I said in the second appeal:

"I have finally accomplished my whole duty. Let everybody now do his own by freely and completely expressing his preference in one of the two ways I have indicated.

"Let the counsel of the lion or the counsel of the hare be heard. We must have a decision. The solution I oppose, which the hare whispers, I infinitely prefer to the lethargy which ends in death. *The mother, before*

Solomon's tribunal, who preferred to abandon her child to a stranger rather than see it perish, was the true mother."

The *Libre Parole,* Drumont's paper, which was the first to sully Ferdinand de Lesseps and his work, refused to insert the two appeals. Drumont, however, devoted an article to each of them, one on April 29 and the other on May 23.

He began the first one in a bantering tone: "Mr. Bunau-Varilla published a fine piece of literature on the fourth page of all the newspapers, last week, a piece which shows an artistic hand, as Concourt might have said."

The opposition to the interest of the country was offset by the great number of moving letters received in which one felt the noble contagion of sincere patriotism. On the other hand the letters bringing promises of subscriptions were insignificant in number.

Panama was then really dead. Such was the opinion, for once correct, of Drumont, one of those who killed it. It was the opinion expressed by *The Times* of London, which, speaking favorably of my attempt, wrote that it tried to *"bring back to life the inert body of the Panama Canal which everybody supposed to be dead and interred forever."*

There was nothing more left to do except save the honor of France by obtaining the adoption by America of the French conception. The ground was free, henceforth, on the French side, and I had already constituted a solid base for the campaign to be undertaken on the other side of the Atlantic.

The echo of my lectures had stirred up considerable interest. On March 13, 1901, the Paris edition of the *New York Herald* printed in big letters, "Resurrection of the Panama Project" and five days later, on March 18, another article with the sensational caption, *"The*

Defenders of Nicaragua Are Alarmed. The Panama Canal Project Advances Rapidly."

Through my short American campaign, I had endangered the success of the Nicaragua project, hitherto considered to be invulnerable.

Instead of seizing the opportunity, the new Panama Company followed the policy of the oriental carpet vendor. It refused to answer the question, "How much?" Up to April 29, 1901 there was justification for that attitude—the fear that the Colombian government should interpose its veto as it was empowered to do by the law of the concession.

Then the situation changed: Colombia, through Mr. Martinez Silva, her minister at Washington, took the initiative of proposing the sale of the concession to America and therefore withdrew the interdiction.

But the company did not modify, on that account, its enigmatic attitude. The Isthmian Canal Commission was exasperated and decided to sign a final report, rejecting Panama. Morison refused to join his colleagues and threatened to make a minority report recommending Panama. This resolute attitude postponed the final decision. I returned to America, where I saw that it was indispensable to strike a blow. I went to see Senator Hanna and explained the situation, promising to act quickly. Immediately, I telegraphed to the *Matin*:

"In spite of adverse public opinion and the regrettable consequences of the conclusions of the Commission's report favoring Nicaragua, the situation may be entirely saved if the Canal Company abandons all ambiguous diplomacy and dangerous controversy."

The president of the new company, Mr. Hutin, was forced to resign after publication of my dispatch in the *Matin* of November 29, 1901.

My conversations with Senator Hanna had borne fruit. The Matin published, on December 29:

"Senator Hanna announces, in the name of the Republican members of the Canal Commission, that the latter are ready to examine anew the question of the route via Panama, in case the proprietors of the French works are disposed to sell their enterprise for forty million dollars."

This dispatch confirmed what I had said on my return from America to Mr. Germain, President of the Credit Lyonnais and to Mr. Bo, President of the New Panama Canal Company:

"It is too late to negotiate. You must telegraph that the company accepts forty million dollars, the amount the estimate of the Commission allots for machinery and utilizable works.

"Six months ago you could have obtained fifty-eight million dollars. But you have let the opportunity pass which I prepared by my lectures in America."

Their telegram was not sent, so on December 31, 1901, I published an explanation of the situation in all the great newspapers of Paris. I publicly summoned the Board of Directors to telegraph the American government an offer to sell the whole property for forty million dollars before January 7, 1902, the day Congress opened.

I assumed the responsibility and the really responsible persons were freed from the fear which had paralyzed their actions.

The summons was decisive. The telegram was sent and Panama was saved from the terrible danger of a simultaneous vote for Nicaragua in the two houses after Congress had met, according to the plan which had been prepared in advance. A great New York newspaper with which I had had hitherto no relations, *The Sun,* published, on December 28, 1901, a striking editorial:

"Panama—If the representatives of the French share-

holders really desire to obtain from Congress consideration of a reasonable proposition to sell out to this government, and if they have an attractive proposition to offer, the swiftest ship that crosses the Atlantic is none too fast for their service at this time. Perhaps the last opportunity of Panama has already gone. Certain it is that with every week and day it is going . . . the only move that can now gain a hearing for the Panama route must be nothing short of Napoleonic in conception and execution."

Mr. Mitchell who wrote this editorial was the greatest American journalist of his day.

I did not know him then. He was very glad when he heard that I was preparing in Paris the maneuver, the urgent necessity of which he was showing in New York. We acted simultaneously without any knowledge of each other's opinions.

On January 7, Congress met and, in spite of the company's telegram offering its properties for forty million dollars, the law selecting Nicaragua was approved by all except two members of the House.

It was the partial completion of the plot which I had planned to foil by the article I published in all the Paris newspapers. The House had done its part but Senator Hanna kept the Senate from following suit when, on July 14, Senator Morgan proposed a vote on the law which had passed the House.

Let us remember that, in 1899, the Senate had enthusiastically voted Morgan's bill for the construction of the Nicaragua Canal but that its vote by the House had been stopped by Hepburn's opposition.

On January 1902, Morgan proposed to the Senate adherence to the Hepburn plan. Without Hanna the high assembly would certainly have again followed its leader, Senator Morgan, in the canal question, as it had already done in 1899. On January 18, 1902, the Isth-

mian Canal Commission, reversing all its anterior conclusions, unanimously voted a recommendation for Panama.

It was a new step forward, made under the impulsion of Senator Hanna, but it did not make victory at all certain.

All the newspapers in the United States except the *Sun* remained faithful to the Nicaragua solution which everybody in politics and all the technical commissions had been promising for half a century.

The *New York Herald,* on January 14, 1902, expressed the unanimous opinion of the press, the *Sun* excepted:

"As much as it can be judged, the national sentiment in America is unanimous for Nicaragua. Such unanimity is so much more significant when you think that the Isthmian Canal Commission has frankly shown the disadvantages of the popular route. All the objections shown have been admitted by the competent scientific authorities but their weight is nil if compared with the instinctive conviction so profoundly rooted in the American nation that the Nicaragua canal project is a purely national affair, conceived by Americans, sustained by Americans, and, if later on constructed, operated by Americans according to American ideas and for American needs. In one word, it is a national enterprise. Sentiment must be reckoned with in national affairs, as in private ones. The American people prefer paying thirty per cent more for the construction of their ships than would be necessary if built in foreign countries. They prefer to pay that surplus of thirty per cent for having a fleet which is American from beginning to end. For that reason it is almost certain that if the people were consulted on the canal question they would simply drown under their votes the foreign canal, and extol the national canal in spite of its su-

perior cost. This is demonstrated by the nearly unanimous vote of the House in favor of Nicaragua.

"The question is this: Will the Senate be more permeable to foreign influence?"

On the other hand, an incident happened which showed the opinion of the French Embassy in the United States on that subject. It truthfully reflected the general sentiment at Washington.

Its head was Mr. Cambon, a man of great penetration and an investigating mind who, later on, showed his intellectual capacity, at Berlin, before the great war.

In April 1902, Mr. Delcassé, then Minister of Foreign Affairs, begged my brother to come and see him in order to tell him about the disquieting information sent by the Embassy at Washington about me. This information, which Mr. Bompard brought to the Minister's office, was about what follows:

"The persistence with which Mr. Philippe Bunau-Varilla maintains his faith in the final victory of Panama is so obviously in contradiction to the evidence that his friends fear greatly for the normalcy of his mental state. He is obviously deceived by certain persons who are positively making fun of him."

My brother was shocked by this official declaration on the abnormal condition of my mind. He decided to come immediately to America, where he was soon reassured and where he verified that I had not gone mad as the dispatch of the Embassy implied.

I took advantage of his presence to go to Cuba with him, in order to see the results of the admirable work of the American physicians for the extermination of yellow fever.

Returning to New York we learned of the terrible catastrophe at Martinique. The unexpected eruption of a dead volcano, Mont Pelé, had, on May 6, 1902, in less than five minutes, wiped out Saint Pierre, a town

of thirty thousand inhabitants. This was the sensational fact which, in the last quarter of an hour of the battle, won me the laurels of victory.

The destruction of Saint Pierre cost thirty thousand human lives, but that sacrifice insured the victory of Panama! At the same time, it determined a series of other incidents, from which resulted the preservation of France in 1905 from the greatest danger to which she ever had been exposed during her history. She never had a precise knowledge of the events which protected her from a fate analagous to that of Austria in 1919 or of Poland in 1772.

The hostile attitude against me of the French Embassy at Washington at that time, as the above dispatch demonstrates, was in perfect harmony with the instructions sent from Paris.

When I left, Mr. Delcassé had *communicated with Mr. Cambon by cable and recommended him to "receive me like any other French person and not to get mixed up in the Panama negotiations."*

In diplomatic language, this meant that I was not to be received as well as any other French person, a thing which I soon perceived and which made me avoid the French embassy until Mr. Jusserand became ambassador.

Mr. Cambon answered that *he had already received me like any other French person, and that he had recommended prudence and discretion to me.* I never knew whether the creation of a new American republic was truly within the limits of the prudence and discretion which the good Mr. Cambon had fixed.

The hour for the final discussion was approaching. I wished to spare the senators the unpleasant work of looking into the reports of the Isthmian Canal Commission for the figures giving the characteristics of the two canals. I wrote a booklet to show graphically these

characteristics. On the first page were two lines. The length of each was proportionate to the number of cubic yards to be excavated at Nicaragua and at Panama, respectively. Below, one could read: "Nicaragua . . . 227,711,605 cubic yards, Panama . . . 94,863,103 cubic yards."

The source of the figures was given at the foot of the page: "Report of the Isthmian Canal Commission, page ninety-nine."

A second page gave the graphic and numerical comparison between the quantities of steel to be employed in both projects: "40,500 tons for Nicaragua and 32,-624 for Panama."

A third one gave the comparison between the depths of the big cuts to be excavated: two hundred ninety-seven feet at Tamborcito, Nicaragua and one hundred and three feet at Culebra, Panama, etc.

Thirteen pages exhibited the striking and indisputable superiority of Panama, based on the figures of the report of the Commission. A fourteenth page, alone, corresponded to a question that could be expressed by a graph. It was the regulation of the summit level, which remained an unsolved problem for Nicaragua. Here, the lake was the summit level.

I just succeeded in enclosing in fourteen pages all the superiorities of the Panama Canal compared to that of Nicaragua. It was done in such a way that everybody could understand it, but it did not speak of the stability in case of seismic vibrations.

The document was dated June 4, 1902. It was the day on which the discussion began in the Senate, and less than a month after the Mont Pelé disaster. The booklet and the catastrophe were the two rams which were to overcome the resistance due to half a century of error, which my arrival in the United States had shaken for the first time. Senator Hanna ordered gigantic geo-

graphical maps hung on the walls of the Senate on which all the volcanoes of Nicaragua were marked.

The Nicaragua partisans, with Senator Morgan at their head, began to fear the effects of the two rams striking the gate of their fortress of errors. They resorted, at the last moment, to that most dangerous of manoeuvres, the official lie. They thought I would not have time to denounce their deceit. They managed to get Mr. Zelaya, President of Nicaragua, to send a telegram denying the danger from volcanoes:

"News published about recent eruptions of volcanoes in Nicaragua entirely false."

The Minister of Nicaragua at Washington, Mr. Corea, added, in transmitting the telegram, that *Nicaragua had had no volcanic eruptions since* 1835 and that, at the moment, Coseguina emitted smoke and ashes but no lava. It was all absolutely false, but it was official.

The Postage Stamp an Essential Factor in the Victory of Panama

Less than a week separated us from the vote. It was impossible, in that short space of time, to obtain the proof of the absolute lack of truth of these official declarations. On the other hand who would give it in Nicaragua? Suddenly, my thought went back to the allusion I had made to the arms and volcanic postage stamps of Nicaragua in my booklet published on March 15, 1901: "Nicaragua or Panama." Searching at a dealer's I discovered a Nicaraguan postage stamp representing a magnificent volcano, emitting smoke. It was the famous volcano Momotombo, which Victor Hugo had made famous. In the course of the afternoon, I bought ninety of these precious documents, one for each senator. At the same time a typist was cover-

ing ninety little sheets of paper with an appropriate explanation. Above the place reserved for the stamp was written: "Postage stamp of the Republic of Nicaragua." Below the stamp was a sub-title: "An official witness of the volanic activity of Nicaragua." Lower down was inscribed the following:

"On account of the earthquake consecutive to the eruption of the volcano (to be seen smoking in the background) the greater part of the wharf (to be seen in the foreground) went to the bottom of the lake with a large quantity of bags of coffee on March 24, 1902 at 1:55 p.m. (*Democracie de Managua.*) See also *New York Sun* of June 12, 1902)."

These bombs, loaded with explosive truth, burst on June 16, 1902, three days before the vote. A very important senator, Mr. Gallinger, asked, on the day following, if it were reasonable to select for such a precious highway a country which took volcanoes in eruption as the national symbol on its postage stamps.

The result of this distribution of postage stamps was enormous and it may be said that the Panama victory was due to it.

In the first vote, which served as a test in order to measure the power of the two antagonistic groups, Panama was preferred by a majority of eight votes only.

If five votes less had been taken away from the Nicaragua party, which, some months before, had included all the members of the Senate, Panama would have been finally beaten, for it had already been condemned in the House at the beginning of January by all the votes except two.

The House refused to follow the Senate, but I had then learned how to dissolve the opposition. I went by the first train to New York and bought the five hundred and odd Nicaraguan Volcano stamps which were necessary so that I could send one to each Representative.

On my return, I distributed them to the House, adding my booklet of 1901 to each of the sheets carrying the stamps. The result was immediate and final. The Spooner Bill giving the preference to Panama over Nicaragua was adopted by all the members of the House except eight, on the day following, June 26, 1902.

The law was approved on June 29 by the President.

Never had there been such a reversal of opinion in the House. On January 9 all but two votes for Nicaragua and on June 26 all but eight votes for Panama.

After the Senate vote I informed *The Matin* of the result in the following telegram:

> "After fifteen days of hard struggle the majority of the Senate while nobly listening to the voice of Science and Justice rather than to popular preference, half a century old, has adopted the Panama route, the French project, instead of the Nicaragua route, the American project. This unforgettable victory of French genius, misjudged and proscribed by France, is the eternal condemnation of the calumniator who poisoned public opinion and thus provoked a blind and criminal ostracism of the glorious Panama conception.
>
> (signed) PHILIPPE BUNAU-VARILLA."

Congratulations came from all sides—all the more sincere as they reflected intense surprise and astonishment. I shall reproduce three letters only, one from America and two from France.

The American letter was signed Myron T. Herrick, who, later on, when he was Ambassador of the United States, at the beginning of the war, played an unforgettable role in Paris. He wrote to me in July, 1902:

"Your *success* in Washington gave us great delight. We spent the fourth of July at the Hanna's and you were mentioned many times. Senator Hanna is, of

course, greatly pleased with your *success* and spoke in the highest terms of you."

The two French letters came, one from Mr. Regnault, President of the "Petit Parisien," the other from Mr. Edouard Lebey, General Manager of the Havas Agency.

Both were penetrating observers of political life. Their letters reflected the sentiments of joy and pride which they felt about the glorious victory of a French idea, killed in France by the infectious mosquitoes of calumny.

The French idea had been torpedoed in our very midst and the government, whose duty it was to support and defend it, had not dared to prevent the catastrophe. It was the most striking example of the paralysis of public authority at a moment when it had to fight lies in order to serve the national interest. This paralysis was the result of the Constitution of 1875 and the kaleidoscopic changes of ministries which are the consequences of portfolio hunting for private interest at the expense of public interest.

Here is Mr. Regnault's letter dated June 28, 1902:

"My dear friend:

"*The Matin* has published the vote of the American Senate. It gives today that of the House. This means that the Canal is finally lost for the French people, who have abandoned it. Humanity will owe this great work to you.

"When the evening comes for you, you will be able to say that you have not lost the day because you will be able to leave behind you the most colossal work and perhaps the most useful one that man has ever dreamt of until now.

"The importance and the nature of that enterprise probably did not allow private initiative to bring it to a satisfactory end under present day economic con-

ditions, without the intervention of the State. For political reasons the United States had inevitably to fill this role.

"Do not regret anything after having done the impossible to preserve for your country the glory and the profit of that renovation of the face of the world. Therefore I do not send you congratulations but I say simply and very sincerely: You are a great man.

E. REGNAULT."

The second French letter was from Mr. Edouard Lebey. He was then suffering from the sort of paralysis called Parkinson's sickness. It left intact his brilliant intelligence but prevented him from speaking freely and from walking. For many years the admirable letter which follows had been for me a problem. However perfect the man's intelligence still was, how could he have conceived such a masterpiece?

One day I discovered by chance who the writer had been. It was Paul Valéry, then Edouard Lebey's secretary.[1] Thus poor Edouard Lebey had, at his side, as the admirable interpreter of his sentiments, a great master of French literature, then unknown, but whose modesty has not been spoiled by international fame. Here is the letter written by Paul Valéry, expressing the thought of Edouard Lebey, its signatory:

Paris, July, 1902

"My dear friend:

"Your decisive booklet came to me on the day when the telegraph informed me of the memorable success which was exclusively due to your marvelous efforts.

"Though my faith in you has not vacillated for one

[1] The discovery of the person who wrote this letter and another one to be read later on was by no means determined by a coincidence on the part of Mr. Paul Valéry. It was due to certainty, based on facts. This page was written by me without the previous consent or knowledge of Mr. Paul Valéry.

moment, such were the obstacles that one could reasonably despair of seeing one isolated man overcome them. Every time I thought of the circumstances, I doubted, but every time I thought of you, the certainty came to me again of your triumph. It is because I know you as one of those rare men who are literally capable of doing the unfeasible and of realizing the impossible. You have just demonstrated that by resuscitating a thing which was wholly condemned, wholly forgotten and wholly dead—the Panama Canal. The state of absolute abandonment into which this admirable conception had fallen, the ferocity with which people had worked to make it miscarry and bury it in oblivion, the atmosphere of shame, powerlessness and disgust created around it did not make you shrink. I imagine that you have been stimulated by universal error as much as by the clear vision of the truth. Anyway, the campaign you have led in France in which you have spared neither effort nor money, in order to attack the insupportable resistance of public incomprehension and private inertia, is one of the finest attempts of our days and is unique in France. You have performed the extraordinary feat of substituting yourself for your country in an affair of capital importance, and you have saved what neither the nation nor the government, nor even the interested people were capable of safeguarding.

"But all the difficulties that a Frenchman may meet in France to accomplish a French work have not discouraged you.

"You hastened to go in person to the very battleground itself. There, though a foreigner in the midst of a rather jealous democracy, you opposed all adverse interests and prejudices and from there you had, at the same time, to watch the hazardous steps made by an indolent company. You had also to undertake delicate negotiations with the Colombian Republic.

"Looking over these few pages which you call the last shell fired and which, indeed, do not speak, but strike with the combined force of graphs and figures,

I felt the sensation of the last phase of the struggle, that supreme moment, when all eloquence is exhausted and blunted by contradiction and repetition. Everything being said, you have finally picked up on the battlefield the mightiest and most elementary of weapons: facts, measurements, and comparisons of measurements which exclude any possible discussion and force the adversary to surrender or take refuge in bad faith.[1]

"I do not know, my dear friend, whether France will be as proud of you as she ought to and whether, after having failed to listen to you, she will go so far as to neglect to applaud you, but your friends, at least, must tell you what they think of you.

EDOUARD LEBEY."

Edouard Lebey was right in asking whether France, after failing to listen to me, would neglect to applaud the salvaging and the realization of the greatest work in the world, the disdained fruit of her genius, blood and gold.

That was because France, badly defended by weak and transitory governments, had been, since 1875, given over to the poisonous propaganda of foreign countries. Systematically organized calumny had killed this great enterprise of French genius in order to destroy the confidence of the people in themselves and prepare a foreign invasion.

How could the instigators of that scientifically methodic calumny fail to try to maintain its effect in spite of the prodigious restoration which had been realized? It maintained it by a silence that applause was not allowed to trouble. In America, at the end of 1902, a great citizen and engineer, George Morison, wanted

[1] Mr. Lebey speaks here of the booklet I sent to the senators containing the graphic comparisons between the characteristics of Panama and those of Nicaragua.

to express how public sentiment appreciated my intervention there.

At the end of December 1902, Mr. Morison gave a lecture before the New York Geographical Society in which he described the various parts of the Panama project then adopted. On the subject of Lake Bohio,[1] for which Lake Gatun was later substituted, he said:

"It will be a beautiful body of water and in it will be an island of about four hundred acres, which I propose to call the Island of Bunau-Varilla in honor of the brilliant Frenchman who never despaired of the completion of the Panama Canal and to whose untiring energy we owe much."

Words of that nature, when pronounced by a man of the moral caliber of Morison form an ample counterweight to the calumnies of the scoundrels who had scuttled and sunk the Panama enterprise and who, after its resurrection, howled that the Americans always had the intention of carrying it out and that it was nothing but a bluff on their part.

The Second Battle in the United States and the Hostilities at Bogota

The vote of Congress was determined by the catastrophe of Saint Pierre (Martinique). Its interpretation in relation to Nicaragua was prepared by my lectures. The distribution of the Momotombo postage stamps provided the material demonstration.

It seemed as if the question was settled and that Panama was adopted while Nicaragua was finally eliminated from the field. But it was not so. To realize the Panama Canal and to vindicate the honor of France I was constrained to make myself responsible for the

[1] Lake Bohio played in the project then contemplated the part played by Lake Gatun at the present time.

creation of a new independent state in Central America. The necessity of breaking down the Colombian resistance by force had been forecast by certain incidents in 1902. The force of the pro-Nicaraguan current had resulted, as I have said, in the signing of a first provisory report of the Isthmian Canal Commission, in November, 1899. It rejected the construction of the Panama Canal. The Colombians began to be afraid and when they learned the results of my campaign of 1901, Marroquin, the President of the Colombian Republic, decided to send a minister-plenipotentiary to notify the American Government that it authorized the French company to sell its concession to the United States. Mr. Martinez Silva was chosen for this important mission.

But when the Isthmian Canal Commission was on the point of recommending Panama, in January 1902, a change of opinion followed at Bogota.

Mortinez Silva was recalled. He died upon his return. People said he had been assassinated to still his patriotic voice and because he had favored the grant of the Canal concession to the United States. Thus the advocate of a cause contrary to German policy was reduced to silence forever.

Must we see there an act of the Sainte-Vehme?

His successor, Mr. Concha, belonged to the party called *Historicos,* and seemed to be inspired by Phillip II. Everybody knows that the later prohibited the making of a canal between the two oceans because, he said, it would result in changing the order created by God.

Concha piled difficulty upon difficulty. On March 26, 1902, I was obliged to send a strong cablegram to the editor of the principal Panama newspaper announcing the death of the Panama Canal project if such a policy was continued.

I communicated the cablegram to Mr. Concha. I seized the opportunity to show him what disastrous consequences were to result for his country from his policy. This clear explanation softened his opposition, which was on the point of preventing the Senate from considering the Spooner Bill giving the preference to Panama. On March 31, Concha promised to accept satisfactory financial conditions. No obstacle, henceforth, prevented the discussion which ended in the Senate's voting the Spooner Law on June 19, 1902.

From June 1902 on, the time was spent in diplomatic discussions between Secretary of State Hay and Minister Concha about the treaty of concession. Concha always introduced many penetrations of Colombian sovereignty into the conceded zone. The financial conditions were being again exaggerated and made inacceptable.

At the end of the year 1902, I resolved to fix these financial conditions myself, as if I were the arbiter.

I decided that it would be just for the United States to pay, at the time of the ratification of the treaty, a sum of ten million dollars to Colombia, and, in addition, an annual rental of two hundred and fifty thousand dollars. On December 19, 1902, I telegraphed this proposition to President Marroquin. After communicating my solution, by letter, to Senator Hanna, on December 23, I sailed for France.

President Marroquin, as well as Hanna, and the American Government, accepted my proposition but Concha was exasperated and asked for a leave from his government. On June 22, 1903, Herran, secretary of the Colombian Legation, signed the so-called Hay-Herran Treaty with Secretary of State Hay. It was the first treaty of concession of the Panama Canal to the United States. The financial terms were those I had determined during the preceding December.

In conformity with the Constitution, Congress adjourned on March 4 without the Senate's being able to vote the ratification of the Hay-Herran Treaty.

Senator Morgan spoke up to the last minute in order to prevent the Senate from voting. President Roosevelt then convoked the Senate in an extraordinary session. Senator Morgan had to admit his defeat and the treaty was ratified by the Senate on March 17, 1903.

Victory seemed to be finally won, because both the dictatorial government of President Marroquin and the American Senate had accepted my financial solution. But it was not to be thus. Forces of international politics were to intervene in order to break up the structure which had been built up with so much difficulty.

Already, before that time, Emperor William II wanted to provide for the natural expansion of his people by seizing tropical zones of high altitude in America and in Africa. These regions are indeed very convenient for the white races which can live there just as well as in the temperate zones of Europe. It was for that purpose that, in 1902, an Anglo-German expedition came to the shores of Venezuela.

The energetic warning of President Roosevelt, who threatened war, made Germany yield. She renounced the plan of getting a lease on a section of Venezuelan territory as she had obtained one from China at Kiaochow. After this check she could not fail to see how the control of the Panama Canal would give her the power to acquire, later on, the desired territories.

In order to obtain the rejection of the treaty with the United States, Germany had only to arouse the bad feeling, always present however veiled, of the Americans living south of the Rio Grande for those living north of it. All those living between that river and the Straits of Magellan were nothing but "dagoes" to some northerners. This expression conveys a certain degree

of contempt for people with slightly darker skins. Those whom a few Americans of the United States called dagoes were hurt.

One day, at a reception in the White House, when I was Minister-Plenipotentiary of Panama, Secretary Hay came to me laughing and said:

"The Senator from New Hampshire just asked me to tell him where Mr. and Mrs. Bunau-Varilla were. When I pointed you out he exclaimed, stupefied:

" 'But they don't look like dagoes!' "

It is easily understood what reaction was caused among the Americans of Central and South America by this apparent—though not real—lack of esteem for their race.

It was consequently very easy to provoke in Colombia a wave of opposition to the Hay-Herran Treaty, the origin of which was the hostile feeling for the North Americans.

Marroquin, though he was the dictator, weakened before the violent antagonism of the irreconcilable enemies of the American solution.

The Senate of the new Colombian Congress selected as President, General Joaquin Velez. The latter had already shown his ultra-reactionary opinions by signing, a few years before, a Concordat with the Holy See, containing a clause which seemed to have been written in the sixteenth century.

Anterior Colombian legislation had placed civil and religious marriages on the basis of equality. The Velez Concordat stated that in order to annul an anterior civil marriage there was no necessity of resorting to a divorce. If one of the two wanted to annul a previous civil marriage, it was sufficient to contract a religious marriage with a third person. This new marriage annulled *ipso facto* the one existing before.

To be sure, such a legal arrangement is legitimate from the Catholic point of view, holding that a civil marriage does not exist. But how can it be conceived that a statesman should thus permit the unilateral repudiation of the most solemn of contracts, when it has been made under the authority of anterior laws?

Joaquin Velez formulated his sentiments in reference to the Panama Canal and to the Hay-Herran Treaty, on October 13, 1903, in the "Nuevo Tiempo" of Bogota. Here is an extract from that article:

"The Treaty (the Hay-Herran Treaty) is a violation of our fundamental institutions, a violation of our sovereignty. . . . I desire, as do my compatriots, that whatever canal may be built across the Isthmus be for all eternity, in the rigorous acceptation of the word, a Colombian Canal. If it cannot be a Colombian Canal, well, it will not be built."

Joaquin Velez was not stupid, he knew perfectly well that Colombia, a small country, which was poor, scientifically, technically and financially, could not build this enormous and difficult canal. A great nation alone such as France, Germany or the United States could realize it. The United States could not undertake it, except through open governmental action and were, consequently, excluded by Velez. France with a French company, but without the support of her Government, was also excluded because no money was to be expected from the public without a guarantee of interest payment made by the Government.

But Germany, thanks to the elasticity of its financial organization and to the secret support of its Government, could advance the necessary funds to a Colombian company. The latter could carry out, in collaboration with German engineers, the program I had submitted to Mr. de Witte some years before. This plan was well

known in Germany and its practical character had just been corroborated by the choice of the American Congress.

Let us not forget either that in view of international co-operation, I had communicated with Mr. Plate, President of the North German Lloyd of Bremen. Let us not forget that Mr. Gwinner, President of the Deutsche Bank, had come to Paris to study, at the headquarters of the French company, the technical plans of execution and the plan for the guarantee of interest payment by France, England and Germany.

When you associate all these facts you necessarily conclude that the Kaiser's diplomacy centered its aims and intrigues around the acquisition of the Panama Canal.

But people will say that the complicity of the French company, holder of the concession, was necessary for carrying out such a scheme. By no means, because the legal concession expired on October 31, 1904, that is to say, one year and four months after the meeting of the Congress at Bogota, which had to decide on the Hay-Herran Treaty.

A prolongation of six years had been granted against the payment of a sum of five million francs by the New Panama Canal Company. But the prolongation of the concession was given only by a decree. To become legal it had to receive the approval of the Colombian Congress.

The parliamentary documents and the report of the special commission which had been formed to that end and of which we shall speak later on, left no doubt that this approval would be refused. Sure enough the Congress of 1903 did not give it. As no congress would meet between the day of adjournment and October 31, 1904, the day on which the French concession expired, the latter was bound to be automatically cancelled.

It may be said that the Germano-Colombian combination had nothing to do but reject the Hay-Herran Treaty and wait one year more to attain its end, without meeting any obstacle whatever.

The violence which, in France, characterized the propaganda aimed at overthrowing the Canal enterprise in 1889, was met with again in Bogota in 1903, where the aim was to have the Hay-Herran Treaty rejected. In both cases this propaganda succeeded in frightening a timid government which was disarmed before calumny. The propagandists hoped to succeed using the same methods as in France.

The French Government tolerated with a heavy heart, though without protest, the destruction of the Panama enterprise in the last decade of the nineteenth century. The Colombian Government tolerated with a heavy heart and but timid protests, the destruction of the Hay-Herran Treaty at the beginning of the twentieth century. It took place when this treaty was on the point of saving the canal through its adoption by America and at the same time bringing great wealth to a Colombian province.

In 1890 Mr. Drumont in his book, *The Last Battle,* wrote these abominable words about the great Frenchman who had opened the Suez and achieved two-thirds of the excavation necessary for opening a lock canal [1] at Panama.

"This scoundrel walks like one who has triumphed."

Interests, hostile to France, aimed at the destruction of the French enterprise of Panama in 1890.

In 1903, Mr. Perez y Soto, wrote at Bogota, as though he were inspired by the same interests hostile

[1] This statement will perhaps seem exaggerated to those who do not know that the old Panama Company had excavated seventy-five million cubic yards and that there remained to be excavated about thirty-three million more when the work was stopped by lack of money.

to France, in order to plead for the rejection of the Hay-Herran Treaty:

"The Hay-Herran Treaty will be unanimously rejected in the two houses. *I have this hope because there will not be one single representative of the Nation who will listen to the call of the men who have sold themselves and who are impudent enough to recommend that shameful contract.* But whatever may happen the insult with which Herran has besmirched the Colombian name will never be wiped out. *Hanging would be much too light a punishment for a criminal of his class.*"

It can thus be seen that, at an interval of about thirteen years, at Paris and at Bogota, the literature serving anti-French interests was identical. Probably their authors were adroitly manoeuvred without suspecting it and were but unconscious agents of the redoubtable and subtle Germanic policy.

The consequences were the same at Bogota and in Paris. The Senate of Colombia which assembled on June 20, 1903, unanimously voted down the Hay-Herran Treaty on August 12.

As the suggestions I transmitted by telegram to President Marroquin had been thus far adopted by him, and followed by acts in accordance with them, I wanted to explain the situation to him.

On June 13, 1903, I sent the following telegram in Spanish from Paris with a request for telegraphic confirmation of the delivery:

"Marroquin
President Republic Bogota

"Beg to submit respectfully, following:

"1st—One must admit as a fundamental principle the only party that can now build the Panama Canal is the United States and neither European governments nor private financiers would dare to fight against

the Monroe Doctrine or American Treasury for building Panama Canal, in case Americans return to Nicaragua if Colombian Congress does not ratify treaty.

"2nd—It results from this evident principle that failure of ratifying only opens two ways: Either construction of the Nicaragua Canal and absolute loss to Colombia of the incalculable advantages resulting from construction, on her territory, of the great artery of universal commerce, or construction of the Panama Canal after secession and declaration of independence of the Isthmus of Panama under protection of the United States as has happened with Cuba.

"3rd—I hope that your high patriotic policy will save your country from the two precipices where would perish either the prosperity or the integrity of Colombia, and whither would lead the advice of blinded people or of evil doers, who wish to reject treaty or to modify it which would amount to the same thing.

PHILIPPE BUNAU-VARILLA,
53 Ave. d'Iéna,
Paris."

This despatch was sent on June 13, that is to say, one week before the Colombian Congress met, but could not be delivered before June 27. This delay was not extraordinary, because revolutions had destroyed telegraph lines in numerous places.

The despatch announcing the delivery arrived on July 2, dated June 27, Bogota, and said only:

"Marroquin delivered."

It is, however, singular that this despatch should have taken fifteen days to reach Bogota and the confirmation of its delivery only six days to come back. It may be thought that the President received it before June 20 and that he ordered that the official acceptance should be postponed for a week because he desired to utilize a part of the telegram in his message.

It is clear that I had openly notified President Marroquin of the impending secession of Panama more than four months before it took place. Thus, when the moment for final decision arrived I was quite free in my conscience to organize this secession and to fix the hour of its realization. I had given sufficient warning to Colombia so that she could not accuse me of disloyalty.

Timid Attitude of Dictator Marroquin

In his message Marroquin enunciated truths in harmony with and perhaps inspired by those contained in my telegram. He declared: "When the United States opens the canal our relations with her will be drawn closer and the result will be an incalculable gain to our industry, our commerce and our wealth."

He ended with these words: "Indeed it has been one of our indisputable diplomatic triumphs that the Senate and Executive of the United States, in spite of the strong efforts made to the contrary, declare the superiority of the Colombian route."

This passage may be placed beside the letter that Mr. Concha wrote to me in 1902, when the Senate gave the preference to Panama over Nicaragua.

It was such a surprising and unexpected event that the Minister of Colombia, Concha, forgot the somewhat bitter correspondence he had carried on with me. He wrote to me:

"I remain very grateful to you for the important work that you have accomplished. It is indisputable that in today's result, much is due to your effort. I congratulate you."

Mr. Concha must have informed President Marroquin of the origin of the improbable success of June 1902. But in June, 1903, when President Marroquin

read in my despatch what was said about the impending secession, he did not act accordingly. He obviously did not believe it possible.

It was however not the first time that I had sounded the alarm. In the second half of 1902, Mr. Concha's opposition made improbable the establishment of a satisfactory treaty. On November 23, 1902 I had wired to Marroquin:

> "Extremely perilous situation justifies my submitting to you following considerations:
> "Suspension of signature of Panama Canal Treaty on the eve of Congressional meeting creates a situation which has only three outlets for the vital interests of Colombia: Either the final choice of Nicaragua, as is ordered by the Spooner law, or the loss of all the ground conquered if, at the end of next February, when actual Congress is dissolved, everything is not voted and settled,
> "Or the *creation of international events of the highest gravity from which it might result that the Canal be made at Panama against Colombia's will instead of being made amicably with her consent.*"

One may say that President Marroquin was notified of the danger of the Panama secession, not only four months, but almost one year before it took place. One may say also that it is possible to find in that telegram the origin of the order which was given to Herran in January 1903, to sign the treaty, the financial conditions of which I had fixed during the preceding month.

After the Hay-Herran Treaty was condemned by the Colombian Senate on August 12, 1903 I tried to obtain a new debate.

I had known General Nel Ospina when he was banished from Colombia at the time of Marroquin's dictatorship.

He was in August, 1903, the most influential member of the Senate. I telegraphed him on August 17, 1903:

> "I appeal to your scientific spirit to deduce from contemporary history what would be the terrible and immediate consequences for Colombia of the rejection or of the amendment of the Panama Treaty. It would be equivalent to dealing your country a very grave blow destroying her prosperity and *integrity* whereas ratification insures a glorious future."

Nothing resulted. A new examination of the treaty did not ensue.

The Bogota politicians had but narrow views and did not insure a happy future for their country by accepting the treaty already ratified by the American Senate. They lost themselves in a maze of plans, unworthy of the nation's dignity. Some of them, those with the better intentions, wished to extract ten million dollars from the small sum of forty million dollars which was to be paid by the United States to the New Panama Canal Company. These forty million dollars were the only assets remaining at the disposition of the liquidators of the company after its expenditure of two hundred million dollars.[1]

The majority of the Senate at Bogota wanted to get the whole forty million dollars. They thought they had only to take possession of all the French property on the Isthmus, on October 31, 1904, by declaring the concession terminated according to contract, in order to obtain that sum.

These senators wanted a Colombian company to buy the canal with German money in order to have it made

[1] The total of the sums spent by the old Panama Company were two hundred and fifty-four million dollars. But if the interest paid to the share and bondholders be deducted, there remain about two hundred million dollars, total expenditure.

by German engineers. As we have already remarked, in order to construct the canal with a German company, having the counterfeit appearance of a Colombian one, it was necessary to declare null and void the six year prorogation accorded to the French company by a decree-law during the civil war that had just ended. A commission formed of three members, Messrs. Guillermo Quintero Calderon, Rivas Groot and Luis Maria Calvo, declared that the decision to validate or invalidate the decree-law was incumbent upon Congress. Consequently the decree-law had to be considered as non-existent so long as the decision had not been taken.

On October 31, 1903 Congress adjourned without contradicting this conclusion or validating the decree-law. It was thus to be considered as admitted, as I have already explained, that the decree-law was annulled because it had not been ratified. On the other hand the door was closed, on the American side, because no authorization had been given to the President to reopen negotiations in view of establishing a new treaty to be substituted for the Hay-Herran Treaty.

It resulted therefrom that the aim of the Colombian policy was the confiscation of the Canal with its ulterior completion by a German company masquerading as a Colombian one. Such was the situation on October 31, 1903. I followed it closely and had prepared the counter-offensive which began on November 3, 1903.

It was the moment when Bogota and Berlin thought they had won the victory and robbed the French company of its properties for the benefit of the Germano-Colombian combination.

This victory would have been, from the moral point of view, of enormous value to Germany.

If my projects were closely followed, four years and about one hundred million dollars were sufficient to open the canal.

The Germans would have followed my project instead of spending time and money as the Americans did in order to obtain a slow and costly transformation which required three hundred million dollars and ten years without great immediate advantages.

The work having ended so rapidly, the enemies of France would have proclaimed that Germany had carried out, in four years, a work that France had been unable to realize in twenty-four.

The exaltation of the German genius and the decrying of the French would have been terribly dangerous for France in the great war projected by Germany, which was due at the beginning of the twentieth century.

Chapter V

THE TRANSFER TO THE ISTHMUS OF THE STRUGGLE TO SAVE PANAMA

The Creation of the Republic of Panama Determined the Final Failure of the Germano-Colombian Project

Having seen that my double warning to President Marroquin, followed by an appeal to General Nel Ospina, had been of no use, I decided to make a public statement.

In an unsigned article, published by *The Matin,* I showed why the opposition of the Colombian Senate would not stop the progress of civilization. The article appeared on September 2, 1903 under the caption: "The Panama Question," with the sub-title: "The Revolution on the Isthmus."

I there established that the American Government, by a treaty signed in 1846, had acquired the *right of way* between the two oceans through the Isthmus.

As this "right of way" was material it included the right of building the road, if it did not exist, or if the national government did not carry it out.

The United States could invoke that right if Colombia refused to give them a concession. They could build the canal by force if necessary.

I also showed the possibility of another solution. It might happen, I said, that the exasperated Isthmians would take their case in their own hands, secede from Colombia and grant the concession required by the United States.

Such was the substance of the article in *The Matin.* I concluded thus:

"The right of property of people like that of nations has a limit which is the superior right of communication of the human collectivity."

I sent a copy of *The Matin* to President Roosevelt and to all the persons who were interested in my efforts in the United States. Then I left for America, where I arrived on September 22, 1903, a little earlier than I had expected, because of personal affairs.

From that trip resulted the most important events for Panama, for the United States, and later on for France herself. As soon as I arrived I learned, in Panaman circles, principally at the banking house of Mr. Lindo, of the Piza Lindo Bank of Panama, that a conspiracy had been formed in Panama to proclaim her independence.

As they were too weak to go ahead alone, the plotters had asked the attorney of the Panama Railroad and of the New Panama Company, Mr. William Nelson Cromwell, if they could obtain the help of the American government.

Captain Beers, an agent of the Panama Railroad, was sent to New York for that purpose, and, on his return, he said that Cromwell represented that the army, navy and treasury of the United States would be put at their disposal for whatever was necessary for the success of the revolution.

The conspirators were astonished and enchanted but a bit surprised at the amplitude of these assertions. They decided to send Amador Guerrero, a man of authority, to verify whether the promise had any real basis in fact. Amador was a former physician of the Panama Railroad Company. I had once been his chief as the head on the Isthmus of the Panama Canal Company, of which the Railroad was but a branch.

According to Lindo, the results of Amador's voyage had not been good:

"You might perhaps help him out of the hole he is in," added Lindo. "I am going to inform him of your arrival, and he will surely come and ask for your aid."

On the very same evening Amador came to see me at the Waldorf-Astoria and told me of his hopes and disappointments.

During the first conversations with Cromwell he had heard the same declarations of powerful cooperation which had been promised to the first delegate of the conspirators. Cromwell had suddenly stopped receiving him when he asked for definite statements.

At the moment he left his hotel to come to see me, an extremely grave letter had been delivered to him. They had written from the Isthmus that the key of the correspondence sent to the conspirators had been discovered and that the intermediary himself was known to the public. This fact might at any moment be disclosed to the Colombian authorities. To avoid that danger the plotters had *telegraphed to Cromwell to inform Amador to stop sending letters through the same intermediary.*

Amador stated that Cromwell had said nothing to him about the telegram received by him, more than a week before. He was thus ignorant of the danger of corresponding by an unsafe route which imperiled his life and property, as well as those of his friends.

His indignation was great. Cromwell put the ocean between Amador and himself and left for France during October.

This episode had an amusing conclusion. On the very day the manoeuvre I had engineered arrived at maturity and the independence of the Isthmus was proclaimed at Panama, Mr. Cromwell, who knew nothing of these events, was speaking at Paris. In an interview

given to a Parisian journal on November 3, 1903, he extolled the wisdom of waiting in silence for one year. As I have stated, at the end of one year, on October 31, 1904, the concession expired. No court of arbitration would have accepted the canal company's claim for a prolongation of the concession which had been given illegally by an authority devoid of constitutional power.

On the same day, I had succeeded in putting on its feet the new republic, the unexpected birth of which settled everything.

In my first conversation with Amador when he had unloaded his bitterness, I had said: "What are the chances for a revolution?"

He answered: "They depend upon the fact that the Colombian troops have been on the Isthmus for a long time and share with their general our resentment against Colombia. In the present state of affairs, if Panama revolts, the Colombian troops with General Huertas at their head will be on our side."

"How many have you?" I asked.

"About five hundred men including the officers, but Colombia may, at any moment, send new troops in greater number. We must prevent them from disembarking and, for that, we must buy gunboats as soon as possible, as well as weapons to arm the people on the Isthmus."

"How much do you estimate that the expenses will be?" I asked.

"Six million dollars, and we had hoped according to Mr. Cromwell's assurances that the Washington Government would give them."

"Let me reflect," I said, "I shall try to find a solution if it is at all possible."

When I heard Amador speaking of a possible six million dollar grant, I had the impression that the famous

conspiracy had as a primary aim the buying of ships and weapons in view of generous commissions for the intermediaries.

Colombia would certainly bring new troops long before the arrival of these ships and weapons. Consequently they could not be of any use. Their purchase was unnecessary. Later on, however, I became convinced that the commercial spirit had in no manner dictated these fantastic plans and that the imagination of the conspirators, alone, was guilty.

Before planning the revolution at Panama, the most important thing was to know what President Roosevelt thought and whether he had abandoned Nicaragua and was willing to go through with Panama. A chance event allowed me to determine with exactitude, and without any contact with the President, what his intimate sentiments were and what his future policy would be. This permitted me to direct my own policy.

One of the first persons whom I saw was Professor Burr, a former member of the Isthmian Canal Commission. He was Professor of Civil Engineering at Columbia University. I found a man who was not very warm for either of the two solutions which I had explained in my article in *The Matin.*

"The application of the 1846 treaty to build the Canal in spite of the Colombian opposition seems to me unrealizable," said he. "Do not forget that the Spooner Law obliges the President to adopt the Nicaragua Canal, if he cannot obtain a satisfactory treaty with Colombia. Do not forget, either, that the Presidential elections will take place next year in 1904.

"The nation is not cured of her love of the Nicaragua solution. If the President refuses to obey the Spooner Law, and tried to build the Panama Canal by force, his re-election would be condemned in advance. In my opinion this hypothesis must be dropped.

"However, one of my colleagues, a professor of International Law, spoke to me of the possibility of invoking the treaty of 1846 to force the hand of Colombia. What he said to me was similar to what had been written in *The Matin.*'

"Ho!" I exclaimed, "I should very much like to speak to your colleague."

"Nothing would be easier," said Professor Burr. "Come tomorrow at 10:30, to my office at Columbia University. Professor John Bassett Moore will be very glad to know you."

On the following day, I met Mr. Bassett Moore as agreed, and I explained my views on the implications of the 1846 treaty to him. I drew *The Matin* of December 3, from my pocket. Before I had unfolded it, Mr. Bassett Moore exclaimed, "I have seen your theory in that paper and my ideas are quite similar."

Glad to have such support, I asked if he did not think it would be useful to have these ideas published in some great American paper such as the *Sun.*

That paper had, since the first weeks of 1902, upheld the cause of Panama with great energy. As soon as I mentioned publicly, Mr. Bassett Moore's attitude changed. He said in a somewhat embarrassed way: "The conditions which led me to formulate these ideas on the 1846 treaty make it impossible for me to make them public."

I did not insist because I felt that I had just touched a grave political secret.

After the interview had ended, I hurried down town to the office of my friend, Frank D. Pavey.

After I had given an account of my interview I said: "Now I expect you to tell me who Bassett Moore is. How did he know of my *Matin* article? I sent it only to the President and to a few friends like you. Besides *The Matin* is not sold in New York?"

"Eh! He saw it at the President's summer residence.

"The President received many friends a few days ago, at Oyster Bay. On the return a terrible rain storm overtook the guests, who were leaving the Presidential yacht. Their names were published, and I remember seeing that of Bassett Moore.

"He is the highest American authority on international law. He was Assistant Secretary of State when Roosevelt was Assistant Secretary of the Navy, under McKinley. He has certainly been consulted on the application of the treaty of 1846."

Everything was becoming clear. President Roosevelt had been put on guard by the *Matin* article, and had immediately called in Bassett Moore, who had given his support to my ideas. It is also possible, if not probable, that he had uttered similar views before the publication of the article.

As Bassett Moore was unwilling to give publicity to these ideas, it was certainly because the President had made them his own. This demonstrated that he henceforth wanted Panama and not Nicaragua. I was soon to have the confirmation of this view from the President's own mouth without his suspecting it.

After these interesting discoveries as I wished to judge for myself of the Government's opinion, I went to Washington to see Mr. Francis B. Loomis, Assistant Secretary of State. He was an excellent friend of mine, whom I had known when he was Minister-Plenipotentiary of the United States at Lisbon. As soon as I arrived Mr. Loomis said: "You ought to go and present your compliments to the President. Do you know him already?"

"No," I answered.

"All the more reason for going to see him," said Mr. Loomis and taking the telephone receiver, he asked

the President to receive me. The request was immediately granted.

One hour later, at the time fixed, I was with Mr. Loomis in the Presidential office, at the White House.

The conversation first centered about the Dreyfus affair, but this did not further my purpose of sounding the President out on the Panama question.

I switched the subject by saying, "Dreyfus was not the only victim of opinion misled by the passions and ignorance of the people. Panama was another."

Suddenly the President reacted, obviously glad to hear me on this subject.

"Oh yes, indeed, Mr. Bunau-Varilla, you are an expert on that question. What do you think will take place, now?"

It was the moment to sound him out. In a slow, low voice I answered these four words:

"Mr. President, a revolution!"

This answer surprised the President very much. Turning to Loomis, he said:

"A revolution! But in that case, what will happen to what we have prepared?"

Loomis remained mute. Not a muscle of his face betrayed his regret that the President had revealed so much.

I wanted to say:

"What you have prepared, Mr. President, is the invocation of the Treaty of 1846 in order to make the Canal, by force if necessary, whatever Colombia may think of it. You decided that on the advice of Bassett Moore!!!"

I was henceforth certain that the President wanted Panama. It was during this visit to the President with Mr. Loomis, which took place on October 9, 1903, that the course of later events was implicitly decided upon by President Roosevelt and myself.

Without a word pronounced by him on this subject, without any proposal whatever being made by me, an alliance was formed between us. This alliance was forged entirely by our common ambition to make a reality of the Panama Canal. His intention before my visit was to build the canal on the strength of the 1846 Treaty. Was he to renounce it?

A great Cleveland lawyer, a friend of Hanna and of Herrick, Mr. Squire, gave me a very positive opinion on this subject.

"Even if Roosevelt wanted to enforce the 1846 Treaty today," he said, "he would recoil at the last moment before the evident violation of the Spooner Law and the consequent electoral danger, tomorrow."

The only issue was a revolution entailing the secession of Panama. Once the republic was established, the signing of a convention with the United States would grant the latter the rights of construction and of operation in perpetuity of the inter-oceanic canal. The new state, being the heir of the Colombian sovereignty, might then grant to the Canal Company the right to sell its concession to the United States, which might have been an insoluble problem if the United States had decided to complete the canal against Colombia's will, according to the treaty of 1846.

The Conception of a New American Republic

Evidently, the request for a subsidy of six million dollars made everything impossible. This sum was, moreover, unnecessary.

While the 1846 Treaty granted the right of way to the United States, it provided that she would maintain order so that communication would always remain open and traffic be undisturbed. Very often, the United States had been obliged to intervene. In 1885 I my-

self had seen the American troops prevent the Colombian army from disembarking at the Panama wharf in order to repress Aizpuru's insurrection.

Instead of purchasing warships for millions of dollars it was better to create conditions on the Isthmus such that the American fleet would have to fulfil her duty in case of revolution. But the American ships and the American army could not intervene except along the line of transit. It was then that the idea came to me to restrict the future Republic of Panama to the railroad zone which was also that of the canal. I suppressed all the populated part of Panama Province which adjoined the Republic of Costa Rica. I called this restricted Republic of Panama: the *Republic of the Isthmus.*

In the Isthmus proper the houses were all along the railroad. Outside of it, vast spaces covered with virgin forests formed the territory of the Republic of the Isthmus. To protect traffic was to protect the whole population of the new republic. In that manner everything was settled perfectly and the good will of the American Government was insured without its committing itself.

I summoned Amador on Tuesday, October 13, to room 1162 of the Waldorf Astoria Hotel. I unveiled my plan. He received it in a rather unfriendly way. Evidently the elimination of a monetary contribution by the United States was disagreeable to him. Furthermore, the abandonment of his compatriots, living near Costa Rica, seemed to him like treason.

Exasperated by his attitude, I said:

"There is no subsidy to be hoped for from the United States. Her honor forbids her from taking part in the revolution. It is for us to act. When we have acted they will be able to protect us."

"But," said he, "General Huertas' troops have not been paid for a long time, and no revolution can be made if we let them die of hunger."

"Yes, indeed," I answered. "but it is not necessary to have six million dollars for that. They are five hundred. Give them twenty dollars each. That makes ten thousand dollars."

"That is not enough," said Amador.

"Let them have forty dollars each, that makes twenty thousand dollars," I answered.

"It is not enough," replied Amador.

"Let us say two hundred. That makes one hundred thousand dollars. That will be enough I suppose."

"Yes, that will do," concluded Amador.

"Well, my dear sir," I said, "it is a relatively small sum which it will be easy to find at bankers, I suppose, and if it is not to be found there, I can provide it, myself, from my own personal fortune."

As he maintained his half unfriendly attitude I interrupted the conversation and said that he had come on September 23 to beg for aid and protection. I added that today was October 13. I had therefore solved the whole problem in twenty days. But he was not satisfied.

"In that case," I concluded, "I have nothing more to say."

We separated rather coldly.

On the following day two knocks at the door woke me up.

It was Amador whose features were drawn as if he had passed a sleepless night.

"Pardon me, Mr. Bunau-Varilla," he said, "I was very stupid yesterday. Now I have understood and I come here to place myself under your orders. You have only to command me."

"Today is Wednesday, October 14," I said. "The

steamer leaves for the Isthmus on next Tuesday, October 20. Be here at the end of the week, ready for final instructions. I will notify you and my name will be, for that purpose, 'Jones.' You shall take the name of 'Smith.' Between now and Saturday I am going back to Washington, where I hope to meet the Secretary of State John Hay and have a useful talk with him."

Amador went out, having finally decided to obey.

I left for Washington. There I met Mr. Hay, to whom I begged the Assistant Secretary of State, Mr. Loomis, to present me. I desired to see him in order to orient his actions in view of the impending revolution in Panama.

"What do you believe will take place?" he asked me.

"What I predicted to President Roosevelt, some days ago: Prepare yourself for the outbreak of a revolution. Have naval forces there ready to intervene according to circumstance.

"Yes," said Mr. Hay, "it is, unfortunately, the most probable eventuality. Orders have therefore been issued to send cruisers towards the Gulf of Panama."

As I was about to take leave, Mr. Hay added:

"These Central American affairs are very interesting. I have recently read a book, *Captain Macklin,* which you would like very much." He handed it to me. "It is the story of a young soldier of fortune who interrupted his studies at West Point. He put himself under the orders of an old French officer, who was conducting a war in Honduras, in order to protect the weak against the exactions of the powerful and bring about the reign of Justice."

I understood that Mr. Hay, when giving me this book, attached a concealed meaning to it. He wanted to tell me that he considered the French hero—the head of the Honduras revolution in the novel—as my per-

sonification in the expected Panama revolution. I came back to New York and, when passing through Baltimore, sent a telegram to Amador signed "Jones," inviting him to come on the following day, Saturday, to room 1162 at the Waldorf Astoria.

I said to Amador:

"I have discovered nothing at Washington to make me deviate from the plan I drew last Tuesday. I shall borrow the hundred thousand dollars in the name of the new republic. If I cannot do that I shall provide them myself, as soon as you have achieved the independence of the Isthmus from the Atlantic to the Pacific.

"When the new republic is proclaimed and its government established, you will appoint me Minister-Plenipotentiary. If you know another person who will better guarantee your protection and the final success of the Canal, appoint him in my place! I accept him in advance. But then I shall no longer be able to guarantee the success of the operation and I will not take part in it."

Amador's face darkened:

"The obligation to appoint a foreigner as Plenipotentiary of the Isthmus will not be accepted by our friends."

I answered: "I understand that very well. But I also understand that your life and property will be at stake as well as an important part of my personal fortune. Under those conditions, no decision must be taken except the one presenting the greatest chance of success.

"Any motive of vanity, of ambition, or even of national pride, must yield to the imperative necessity of succeeding. If you let yourself be guided by any of the former motives, do not reckon on me. I shall help you as much as I can, but I shall not walk in your ranks. You have your choice!"

"You are right," said Amador. "You are the only person who can act so efficaciously for the Canal and for ourselves at Washington.

"Our friends will be constrained to admit it. Furthermore Arango, the head of the conspiracy, knows very well who you are. He will let me persuade the other men that you are indispensable."

"Since you think as I do, dear Doctor," I replied, "come back at eight o'clock next Tuesday, on your way to the steamer. I shall give you, first, a code for our secret correspondence; second, a proclamation of independence; third, the draft of a constitution; fourth, a plan of military operations; fifth, a flag. You will be able to modify these different projects, according to your views, but if you are in a hurry, they will be satisfactory, just as you receive them."

"Ah! I was forgetting to give you the text of the cablegram after the receipt of which I shall wire you the necessary hundred thousand dollars. The text must not be changed. Otherwise I shall consider myself as freed from the obligation of sending you the money. If I get it as it is written here, you will receive the money two hours later at the Piza Lindo Bank."

Amador left in entire agreement with me.

I hastened to go to Macy's to buy the silk necessary for the flag. I expected to have it made on the following day, in the country, at the house of my venerable friend, Mr. Bigelow, at Highland Falls on the Hudson, near West Point.

I also expected that my noble and charming friend, Miss Bigelow, would help my wife make the flag of the new republic.

I spent the rest of the day in New York, writing the documents, in Spanish, that I had promised Amador.

On the following morning, I left for Highland Falls. I unfolded my great project to my host and friend, John

Bigelow, to his daughter Grace, to my wife and to my son Etienne, then thirteen and a half years old.

Miss Grace Bigelow and my wife took charge of the flag. It was soon sewn by them in a neighboring house, Stony Hurst, belonging to Mrs. Tracy, Miss Bigelow's sister, who was then travelling in Europe. The house was quite empty and absolute secrecy thus insured. For the typing Mr. Bigelow offered me the help of his secretary, who could copy my documents, as she was going, the next day, to New York. As the young secretary did not understand either French or Spanish, she was naturally to remain ignorant of what she had copied.

On Tuesday morning, October 20, at eight o'clock, Amador came to receive all those objects which were to enable him upon his arrival in the Isthmus to start the insurrectional movement for liberation.

"You will arrive on October 27 or 28," said I, "I give you three days to proclaim the independence of Panama."

"Oh!" replied Amador, "it will take more time than that. Fifteen days will be needed to allow everyone time to make propositions and counter-propositions. You know that my compatriots like speech-making very much."

"Then it would be better to drop the whole scheme," I said. "Everything depends on the loyalty of General Huertas and his five hundred men. If you waste time, the Bogota people will surely be informed. They will send fresh troops and re-embark Huertas and his soldiers. Everything will be lost."

After the discussion, we agreed that November 3, 1903 would be the last day and that, after that date, I would no longer incur any obligation of financial or political support if they had not acted.

October 27 arrived. From that day on, I expected the

famous telegram announcing the declaration of independence.

On my side, I was quite ready. I had at my disposition the necessary hundred thousand dollars at the Bank of Heidelbach, Ickelheimer and Co., the correspondents in New York of the Crédit Lyonnais.

I had first conceived the project of borrowing this money from American banks in the name of the future republic. I personally knew the leading members of J. P. Morgan and Company and of Seligmann and Company. I wrote to each of these houses for an interview. But after mature thought, I realized that this project was at once *chimerical* and *dangerous.*

Chimerical, because it was improbable that banks of such standing would accept being a party to such an operation, carrying with it such grave political responsibilities. *Dangerous,* because I would be obliged to unveil the project for the revolution which was going to break out. It would therefore be impossible to maintain secrecy.

In financial circles such news, circulating *sotto voce,* would cause purchases of Panama securities on the Paris Bourse and make them boom. This rise would attract the attention of the foreign representatives of Colombia. She would suspect the truth and immediately send fresh troops to Panama.

Finally, what was for me the most important thing, it would give to the revolution the appearance of a suspicious stock exchange speculation. This would destroy the patriotic and disinterested character which I wished, above all, to preserve. I then decided not to consult any banker and to protect from any indiscretion the secrecy of the audacious enterprise, and, for that reason, to provide the promised sum myself.

I sent cablegrams to two banking houses, Balser and Co. in Brussels, and Agence A. S. of the Crédit Lyon-

nais, in Paris, where I had deposits. I asked each of them for a loan of two hundred and fifty thousand francs on all my securities.

I instructed them, in case they approved, to credit me with the sum at the Agence B of the Crédit Lyonnais as soon as possible. I intended later on to instruct the Agence B to credit me with a hundred thousand dollars by wire at the office of its New York correspondents, Heidelbach, Ickelheimer and Co. It was one A. M. when the cablegrams were deposited at the telegraph office of the Waldorf Astoria. At eight the first answer came, announcing the execution of the order. The second answer followed almost immediately. The admirable resources of our day had permitted the realization during one night spent in New York of these complicated banking operations, thanks to the difference of time between Europe and America.

I was ready to fulfil my obligations when Amador landed at Colon, on October 27, 1903.

I waited anxiously for news because the press reports announced the impending sailing of General Tovar from Carthagena, with fresh troops for the Isthmus. Luckily a chance event caused him to postpone his departure for a few days. Suddenly, on October 29, I received a telegram, but it was not the one I was expecting. It was written partly in clear language, partly in code, was signed "Smith," meaning Amador, and was addressed to Mr. Lindo of the Piza Lindo Bank at New York.

It was understood that Mr. Lindo would transmit the dispatches signed "Smith" to me, without knowing the code I had given to Amador when he left.

In that manner the dispatches could not awaken any suspicion. The cablegram said, *"Fate news bad powerful tiger urge vapor Colon Smith."*

The first five words meant:

"Fate"—This telegram is for Bunau-Varilla.

"News"—Colombian forces arriving.

"Bad"—Atlantic.

"Powerful"—Five days.

"Tiger"—More than two hundred.

The landing of two hundred Colombian soldiers was thus expected five days after October 29, that is to say, on November 3.

It was the moment to make the revolution which everybody expected on the Isthmus. The admirable opportunity was going to be lost by the timid indecision of the conspirators. Instead of acting they were obviously asking that an American man-of-war be sent.

"Urge vapor Colon" meant hasten to send steamer to Colon.

It was absurd because a man-of-war would be a possible obstacle to the revolution and by no means a help.

I looked for the key to this absurdity and reached the following conclusion:

1st. The information about the arrival of the Colombians was a pure invention.

2nd. The request for a man-of-war had no other aim than to test my power of action on the Washington Government.

Amador had certainly not failed to testify that I had unlimited power over the American Government.

After many palavers, somebody must have said, "We shall believe you, Amador, and go ahead with the plan, on condition that Bunau-Varilla demonstrates his influence over Washington by some act. Let him send an American battleship to the Isthmus. That will suffice. The trial is an easy one. Wire him to send it on the pretext of an impending arrival of fresh Colombian troops."

Such was the analysis which I was able to make of the dispatch, which contradicted everything that had been agreed upon between Amador and myself.

One of the conspirators, Carlos Arosemena, who afterwards became my legation secretary and remained my faithful friend, told me later on, that my interpretation had been quite correct.

When I had discovered the hidden intentions of the plotters I said to myself, "Perhaps I can find the solution to the problem at Washington." I hurried to take the first train.

By the time I arrived I had found a satisfactory plan.

The fate of the whole Panama enterprise, the defeat or the triumph of the great French idea, depended, henceforth, upon one thing: "Shall I be able to bring about on some pretext, the sending of a man-of-war to the Isthmus?" Here is what I did:

At Washington my prestige was great on the Panama question, ever since I had obtained the adoption of the French canal by the American Government.

At this moment the Colombian Congress was going to be adjourned without ratifying the Hay-Herran Treaty, which had become valueless on September 23 —after being rejected on August 12. The press and political world lived in the expectation of violent events. Consequently, every time I met an American he asked, "Do you know what is going to take place on the Isthmus?"

My invariable answer was:

"Remember what I am going to say. On November 3, Colon will be burnt."

"But why?" I was asked.

"Because," I replied, "history always repeats itself. On November 3, 1903, what I saw at Colon on April 1, 1885, will be reproduced. The town was burnt after a battle in the streets between the forces of the Colom-

bian Government and the insurgents who had been the masters of the city for several weeks. It is the inevitable conclusion of a battle in a town built of wood. This same catastrophe will take place on November 3. Here is a telegram which I have just received. It says that Colombian troops will arrive on that day instead of the news of the ratification of the Hay-Herran Treaty, which would bring prosperity to the people of the Isthmus. This leaden present in place of a golden one will bring a leaden reply.

"The only difference between April 1, 1885, and November 3, 1903, is the following:

"In April 1885 the United States had a Democratic President whose character was anything but bellicose, as that of President Roosevelt seems to be. President Cleveland, however, sent a squadron on the Atlantic side of the Isthmus. President Roosevelt has not even sent a gun-boat. At Colon the captain of the *Galena,* Kean, commanding the Atlantic squadron, in 1885, was court-martialed for not having been able to foresee and prevent the conflict. The Government had done its whole duty. Today, when the battle is begun there will be a unanimous protest against Washington's lack of foresight."

I repeated more or less the same thing everywhere I met friends.

Admiral Walker, President of the Isthmian Canal Commission, seemed to be particularly concerned. It was the same with Mr. Loomis, Assistant Secretary of State. Walker and Loomis were to be the two principally responsible persons, if my prediction came to be true. I was consequently sure that the order would soon be given to a battle ship to sail for Colon immediately.

In the expectation of a conflict the newspapers were publishing the position of the battleships in the Carib-

bean Sea. The presence of the *Nashville* at Kingston, Jamaica, had been mentioned. It was the nearest place to the Isthmus and this ship had called at Colon, several weeks before. It was obviously kept there because troubles on the Isthmus were expected.

I was convinced that the *Nashville* would sail for Colon the following day, October 31.

In order to be absolutely sure of it, before answering Amador by cable, I thought of paying a visit to Secretary Hay before leaving for New York.

On the way, I met Mr. Loomis, who was also going to the Department of State. He said to me: "How happy I am to meet you and to express the gratitude of the Department for the information you gave yesterday.

"It is of the highest importance because the catastrophe of 1885 must be prevented at all costs."

My diplomatic manoeuvre had succeeded. The *Nashville* had received the order to leave for the Isthmus without anybody suspecting what secret aim had determined its departure. Its arrival was going to *demonstrate to the conspirators what did not exist: my authority in the councils of the American Government.* Under the spell of this illusion, they were going to go ahead with my insurrectional program. I left by the first train and stopped, an hour later, at Baltimore, to send an apparently innocent telegram to the Piza Lindo Bank in the Isthmus: "Pizaldo Panama all right will reach ton and a half obscure Jones."

This meant: "Pizaldo Panama"—Lindo's Bank.

"All right"—All right.

"Will reach"—Will arrive.

"Ton and a half"—Two days and half.

"Obscure"—This cable is for Amador.

"Jones"—Sent by Bunau-Varilla.

This historic cablegram was finally to cause the

Panama Secession, give victory to the French project and later, in 1905, save France from the projected German attack. I handed it in at 12:10 P. M. on October 30, at Baltimore.

The delay I had fixed for the arrival of the man-of-war was based on my estimate of the time which the *Nashville* would require to cover the five hundred miles from Kingston to Colon. I thought her velocity was less than ten knots an hour. Consequently, two days and a half were necessary for the voyage. On the other hand, I thought that the ship was just sailing when I sent my cablegram. As a matter of fact it left Kingston on the morning of the following day, October 31, that is, eighteen hours later than I had thought. But it covered the distance in the space of time I had anticipated.

The New York Times announced its departure in its issue of November 1, as follows:

Kingston, Jamaica, October 31. *The American cruiser Nashville left this morning with sealed orders. Its destination is believed to be Colombia."*

On October 30, at twelve o'clock, I had supposed that the orders had been given and that the cruiser would sail at about that time, and that she would require two and a half days for the voyage. Consequently if my presumptions had been correct, the *Nashville* ought to have arrived during the first hours of the morning of November 2. At that moment the conspirators were expecting to receive the news of the cruiser's arrival at Colon according to the terms of my telegram. The expectation of that great event had filtrated among the public owing to some reprehensible gossiping. Therefore the man-of-war was expected at the Isthmus on the morning of November 2 but did not appear. As the time wore on my star waned. In the afternoon people began to despair and curse me.

However, towards the end of the afternoon, far away in the direction of Jamaica, a light smoke appeared on the horizon. Less than an hour later the *Nashville* was casting anchor in the bay of Colon, with her American flag floating in the sky. A wave of gratitude and enthusiasm shook the whole Isthmus!

It was then true that Bunau-Varilla had obtained the powerful protection of America in order to give the Isthmus that wonderful organ of progress: the inter-oceanic canal!

The order, which was inserted in my military instructions, was to immediately occupy the wharves of Colon by armed force to prevent the Colombians from disembarking. According to the despatch which had been sent to me, Colombian troops were ordered to land on November 3. But as I have already said it was but an invention to support the demand for an American cruiser. For that reason, no precaution was taken.

By a strange trick of fate the landing which had been a pure invention, took place in reality. General Tovar, on the morning of November 3, landed with five hundred men near the *Nashville*. The Americn cruiser naturally did not interfere at all, because its Captain had not the slightest knowledge of what was taking place. But while the landing was being carried out, the whole Isthmus was boiling with enthusiasm.

Twenty-four hours earlier General Tovar would have found a passive and obedient people.

The arrival of the *Nashville* in approximate accordance with my information, had transformed them into an aggressive and bellicose people.

General Tovar went to Panama by ordinary train, in order to prepare lodgings for his troops, while the railroad management organized, without zeal, a train which was to carry the troops.

The arrival of the *Nashville* had transformed Ameri-

cans and Panamans into a group of men with a common determination to politely but energetically throw the Colombians out. As soon as he arrived in Panama, General Tovar was arrested by the forces of General Huertas, and the Isthmian Republic was proclaimed. Amador played an essential role on that day. His energy and spirit of self-sacrifice made the bomb explode.

I had received no news of the arrival of the *Nashville* and was beginning to fear that the conspirators would be paralyzed by hesitation and that all the beautiful plans would miscarry.

On the morning of Tuesday, November 3, election day in New York, I had tried to send a telegram to Amador in order to stimulate him. In that intention I had gone to Lindo's office, but as I could not compose it in the secret code, I returned to the Waldorf Astoria to complete it and send it. On the platform of the Elevated Railroad, a small newspaper dealer came to offer me the *Evening Telegram.* It announced in capital letters the landing of Colombian troops at Colon. It was a terrible blow for me!

My cablegram was henceforth useless. I spent the rest of the day, despairing, for the first time in my life, of being able to salvage the Panama Canal. My wife, alone, attempted to keep up my courage.

That evening, coming back from the house of my friends, the Bigelows, I found the redeeming cablegram:

"Independence of the Isthmus proclaimed without bloodshed."

I immediately replied:

"I hail with emotion the birth of a republic, small in extent, but great in the part she will play in the universe.

"I hail with respect the patriotism of its founders, the courage of its sons.

PHILIPPE BUNAU-VARILLA."

At this moment the town of Panama alone belonged to the Isthmian Republic. Colon remained in the hands of the Colombians. The American marines of the *Nashville* landed there and it semed at a given moment, that a bloody battle would take place between them and the Colombian troops. Fortunately, that did not happen. The Colombians having lost their general, who had been arrested in Panama, yielded, carried away by the course of events. They believed that a conflict existed between Colombia and the United States. The officers reasonably consented to return with their men to Carthagena, on a Royal Mail steamer.

As soon as the republic was proclaimed at Panama I sent fifty thousand pesos to Amador. I expected to send the rest of the hundred thousand dollars I had promised when the whole Isthmus had proclaimed its independence. My fifty thousand were usefully employed to buy some little presents for the poor soldiers, who were re-embarked after the disappointing failure of their mission, and to pay for their passages.

On Friday, November 6, at 10:14 a.m., I received the following telegram:

"Phillippe Bunau-Varilla
Waldorf Astoria
New York

"We are declaring today, November 6, to the Secretary of State that Colon and all the towns of the Isthmus have adhered to the Declaration of Independence proclaimed in our capital. The authority of the Republic of Panama is obeyed on all its territory. Press the recognition of the Republic by the Government.

ARANGO, ARIAS, BOYD."

The plan that I had given to Amador was well followed. The territory of the Republic of Panama was thus limited to the Isthmus proper.

But what did the recommendation mean to press for the recognition by the American Government, when no powers as Minister-Plenipotentiary had been delegated to me? Fearing some dubious manoeuvre, I put the question squarely in the following cablegram:

"Government,
Panama.

"Your telegram received. I answer:

"First: I cannot act usefully if you do not appoint me Minister Plenipotentiary of the Republic of Panama to the United States.

"Second: If you so decide, notify me by cable my appointment, and notify officially American Consul at Panama, so that he may cable to Washington what powers have been conferred upon me.

"Third: Give me also the power to appoint the official banker of the Republic in New York, so that I may open an immediate credit.

BUNAU-VARILLA."

At 6:40 p.m. on Friday, November 6, the same day, a governmental despatch arrived which concluded the series of acts which had been prepared in order to constitute the Isthmian Republic.

"Phillippe Bunau-Varilla
Hotel Waldorf Astoria,
New York

"The Junta of Provisional Government of Republic of Panama appoints you Envoy Extraordinary and Minister Plenipotentiary to the Government of the United States of America with full powers for political and financial negotiations.

FREDERICO BOYD,
J. A. ARANGO,
TOMAS ARIAS."

I hastened to fulfil my obligations and to have the rest of the hundred thousand dollars I had promised placed at the disposal of the "Junta."

This was the complete fulfilment of the agreement with Amador which I had condensed into the instructions given to him on October 20, at 9:30 A.M., in New York. Seventeen days only had elapsed between these instructions and their realization.

As soon as I had received my appointment as Plenipotentiary I sent to the "Junta" the following answer:

"Government, Republic,
Panama.

"I have fought for nineteen years for the triumph of the Panama Canal on every battlefield: against rebellious Nature and against Human Ignorance still more rebellious.

"I thank the Government for entrusting to me the high mission, which allows me to devote my energy to the defence of this newborn Republic, which will ensure the realization of the most heroic conception of human genius.

"As first official news, I have the honor of informing you of the official recognition of the Panama Republic by the Government of the United States. The latter has besides notified its decision to Bogota in terms equivalent to a formal prohibition of undertaking war operations against us.

BUNAU-VARILLA."

Here is how John Hay notified the Bogota authorities of future American policy regarding Panama, including the *de facto* recognition of the new republic, according to the afternoon papers:

"Department of State,
Washington, November 5, 1903

"The people of Panama having by an apparently unanimous movement dissolved their political connection with the Republic of Colombia and resumed their

independence, and having adopted a government of their own—republican in form—with which the Government of the United States of America had entered into relations, the President of the United States, in accordance with the ties of friendship which have so long and so happily existed between the respective nations, most earnestly commends to the Governments of Colombia and of Panama the peaceful and equitable settlement of all questions at issue between them. He holds that he is bound not merely by treaty obligations but by the interests of civilization, to see that the peaceful traffic of the world across the Isthmus of Panama shall not longer be disturbed by a constant succession of unnecessary and wasteful civil wars.

HAY."

On the following day, November 7, I received the following cablegram from the Panaman Department of Exterior Relations:

"Philippe Bunau-Varilla,
Minister Plenipotentiary of Republic of Panama,
Waldorf Astoria,
New York.

"The news of the official recognition of the Republic of Panama by the American Government, as well as the notification made at Bogota, which is equivalent to a formal prohibition to undertake a war against us, has been received here with joy and with an enthusiastic gratitude.

"The Government of Panama recognizes the importance and the efficacy of the services of Your Excellency, whose name will occupy a pre-eminent place on the first page of our history.

F. V. DE LA ESPRIELLA,
Minister of Exterior Relations."

On the morning of November 7, I notified the Department of State by telegram that I had been appointed Minister-Plenipotentiary of the Isthmian Republic:

"His Excellency John Hay,
Secretary of State.

"I have the privilege and the honor of notifying you that the Government of the Republic of Panama has been pleased to designate me as its Envoy Extraordinary and Minister Plenipotentiary to the Government of the United States.

"In selecting for its first representative at Washington a veteran servant and champion of the Panama Canal, my Government has evidently sought to show that it considers a loyal and earnest devotion to the success of that most heroic conception of human genius as both a solemn duty and the essential purpose of its existence.

"I congratulate myself, sir, that my first official duty should be respectfully to request you to convey to His Excellency the President of the United States on behalf of the people of Panama an expression of the grateful sense of their obligation to his Government.

"In extending her generous hand so spontaneously to her latest born, the Mother of the American Nations is prosecuting her noble mission as the liberator and educator of the peoples.

"In spreading her protecting wings over the territory of our Republic, the American Eagle has sanctified it. It has rescued it from the barbarism of unnecessary and wasteful civil wars to consecrate it to the destiny assigned to it by Providence, the service of Humanity and the progress of Civilization.

PHILLIPPE BUNAU-VARILLA."

All the foundations for my further action had been finally established by this telegram.

But I could not but regard with suspicion the attitude which the Panama Government had taken in not spontaneously appointing me Minister-Plenipotentiary. I knew its President, Arango, very well. He was a straightforward and loyal man. I knew by long ex-

perience that all men of good breeding at Panama are born politicians capable of imagining any trick to attain their aim.

The office of Minister-Plenipotentiary was certainly passionately desired by many of them; for instance, by Amador, himself, and by a very eminent orator, Pablo Arosemena. The latter had been President of Panama when it was a sovereign state of the Colombian Federation, and not yet a simple province of Colombia, which it became in 1886.

I therefore expected to find traps laid for me on my road.

To tell the truth, I did not want to fill my post for personal reasons but only in order to insure the adoption of Panama by the United States. I had resolved that this office would not be used to satisfy intrigues inspired by personal ambition.

After I received the telegram appointing me Minister Plenipotentiary, a manoeuvre was revealed which aimed at eliminating me from this office.

A telegram dated November 4, which had remained unopened, at my Washington hotel, reached me three days later, on November 7:

"Philippe Bunau-Varilla

"The Provisional Government appoints you Confidential Agent near the Government of Washington to negotiate the recognition of the Republic and contract a loan of two hundred thousand dollars to be deposited where Mm. Piza and Nephews will indicate.

"Please answer.

ARANGO, BOYD, ARIAS."

My telegram sent on November 6 could not have been better worded had I known of this impertinent message. As I had not made the slightest allusion to it, it seemed as if I had treated it contemptuously, as it deserved. I was given immediate satisfaction.

This second incident gave me the even greater conviction that they wanted my place.

A third manoeuvre came to my attention soon afterwards. On Monday, November 9, Mr. Hay, during a discussion of the treaty to be made, said to me:

"What is this commission coming from Panama?"

I had had no direct news of it but I read in the papers that morning that it was sent to discuss the treaty. I thought it was false news. But the dissatisfied air of Secretary Hay led me to suppose that he had received direct information from the United States Consul that a small conspiracy was developing in order to get rid of me.

At 4:30 P. M. I telegraphed to the Minister of Exterior Relations:

> "I have explicitly denied rumour to the effect that a special commission is coming to discuss and sign the Treaty, which produced a very bad impression, as it would be contradictory to my mission. I have given the assurance that nothing on our side would be done to prevent the rapid drafting of the Treaty.'
>
> . . . . . .
>
> "It is eminently necessary to act rapidly in order to paralyze the formation of an obstructionist group supported by Nicaraguan and Colombian intrigues."

At 6:50 on the same day a cablegram came which had been sent before the arrival of mine at Panama:

> "As it is thought convenient to avoid your request for advice on objects of urgent resolution, tomorrow (Tuesday, November 10), Amador and Boyd will leave, carrying your letters of credence."

The hypocritical tone of this cablegram confirmed the existence of the intrigue.

The so-called letters of credence were to contain instructions incompatible with my dignity, which would prompt me to resign. On the following day, Tuesday, November 10, an answer came to my telegram of the preceding day. Its tone was completely different from that of the first one:

> "We approve that you have denied that Commissioners go to discuss and sign Canal Treaty, all things that exclusively concern Your Excellency. Amador and Boyd have no mission to the American Government, but only the mission communicated to Your Excellency in yesterday's cablegram to avoid loss of time."

That gave me back complete liberty.

However, as I feared that the letter of credence would contain new restrictions, I resolved to cut the Gordian knot before the delegates arrived and showed me embarrassing instructions. I was encouraged in doing this by the Government of Panama which, on the following day, Wednesday, November 11, reiterated, with still more force, the terms of the above cablegram.

On November 11, Amador and Boyd had left. These two men evidently formed the hostile group. Arango and Arias, the other members of the Junta, who remained in Panama, were loyal. When alone they acted correctly. This very clear perception of the spider's web that was being spun, made me want to bring about the signing of the treaty as soon as possible.

To make Mr. Hay act quickly it was necessary that I be recognized by the American Government as Minister-Plenipotentiary. In other words the republic which was already recognized *de facto* would have to be recognized *de jure*. The President fixed the day for my official reception, as Minister, on Friday, November 13.

Going out of the White House, I said to Mr. Hay:

"For two years you have had difficulties in negotiating the Canal Treaty with the Colombians. Remember that ten days ago the Panamans were still Colombians and brought up to use the hair-splitting dialectic of Bogota. You have now before you a Frenchman. If you wish to take advantage of a period of clearness, in Panaman diplomacy, do it now! When I go out the spirit of Bogota will return."

"You are right," said Mr. Hay. "I wish to put the finishing touches to the project of the treaty. I shall send it to you as soon as possible."

Two days later, on Sunday, November 15, Mr. Hay sent me the treaty he proposed. It was a copy of the Hay-Herran Treaty in which the figures for the indemnity to be paid to Panama remained blank.

I read and reread it all day and found a number of articles making its rejection by the American Senate certain. True it is that the Hay-Herran Treaty had been ratified by the Senate in the preceding month of March. But, then, circumstances were different. At that time it was desired to finish with the Canal question. A treaty, even imperfect, had the great merit of ending a debate which had lasted since March 1899, that is to say, for three years.

Now we were on the eve of the Presidential elections. If it were possible to checkmate Mr. Roosevelt, by refusing his treaty, the Democratic Party might perhaps triumph. During the night, after a complete rest of two hours, I reconstructed in my mind a new treaty, from which I had removed all the thorns. I wanted, above all, to avoid any sharing of sovereignty in the Canal zone, a thing which always causes litigation on one point or another. This sharing was the weakness of the Hay-Herran Treaty. I then decided to make a radical innovation in international law.

I decided to grant to the United States, *in the interior of the zone, all rights, powers and authority that she would have if she were sovereign, to the entire exclusion of the use of any such rights, powers and authority by the sovereign Republic of Panama.*

The United States, *without becoming the sovereign,* received the *exclusive use* of the rights of sovereignty, while respecting the sovereignty itself of the Panama Republic.

At six o'clock in the morning I began to write the articles and, at eight o'clock, a stenographer began to type them out.

I had summoned my friend, the great American lawyer, Frank D. Pavey, to verify the correctness of my English and to give me legal advice if necessary. I had not much need of such advice but I had begged him to come in order to send to Mr. Hay the draft of a treaty which would need no modification, even of a secondary order.

At 10 P. M. on Monday, November 16, everything was completed. I then went to deliver the treaty to Mr. Hay's house, but it was closed. I took it back and sent it, the following morning.

Some hours later, I transmitted to Secretary Hay the corrections I thought it necessary to insert in his project. I assured him that my new version was nothing but a suggestion, and that I would sign whichever one of the projects he might prefer.

At the same time that these communications were delivered to Mr. Hay, the two commissioners, Amador and Boyd, landed at New York. They sent me a cordial telegram, but remained in New York.

This delay lasted until the following day, and the representatives of Panama did not leave for Washington until the afternoon.

On that same day, Mr. Hay invited me to come and see him at 6 P. M. at his home.

As soon as I arrived he spoke with a ceremonious tone which I had not yet heard him use.

"I have requested Your Excellency," he said, "to be so good as to keep the appointment in order to sign, if it is agreeable to Your Excellency, the Treaty which will permit the construction of the Interoceanic Canal."

I answered in the same tone:

"I am at the orders of Your Excellency to sign either of the two projects which, in Your Excellency's judgment, appears best adapted to the realization of that grand work."

"The one that appears best adapted to that end," replied the Secretary of State, "not only to myself, but also to the Senators, who will have to defend it in the Senate, is the one Your Excellency has prepared.

"In its text we have not found it necessary to make the slightest modification, save for an insignificant question of terminology on one single point.

"In Article III instead of the words 'leases in perpetuity' we have preferred to say: grants to the United States in perpetuity the use, occupation and control.' "

We signed the treaty after an abridged reading. Then came the question of the seal.

"Did you bring your seal, to put it upon the document?" asked Mr. Hay.

"I did not anticipate this occasion," I answered, smiling. "I am taken by surprise."

"Well, this is very curious," replied Mr. Hay. "It is exactly what happened to Lord Pauncefote two years ago, as it is exactly two years today that we signed the Hay-Pauncefote Treaty—on November 18, 1901.

"I then proposed to him to use as a seal the signet ring which Lord Byron wore when he died at Missol-

onghi, the ring I am now wearing. That is what he did. I now offer you either the same signet ring or another with my family arms. Which do you prefer?"

The choice was a difficult one. I had not a long time to think it over.

"The share which Your Excellency has in the accomplishment of this great act determines my choice. I shall be happy that the Treaty, due to your generous policy, should bear at the same time your personal seal and that of your family."

All being over, the Secretary of State took the pen which had been used to settle the destiny of the four centuries-old project, and said:

"As Your Excellency has written the treaty it is just that the pen used to sign it remain in your possession."

I thanked him for this precious souvenir, and hastened to return to the hotel to telegraph the news to the Minister of Exterior Relations and to the Commissioners, Amador and Boyd.

I did not doubt that it would be received with pleasure, because the treaty fulfilled all the hopes of Panama. In its first article it insured the protection by the United States of the new republic against all exterior attacks. Furthermore, it was extended to all Panama Province and no longer to the Isthmus only.

The secession which, at the origin, concerned the Isthmus exclusively, in order to oblige the United States to protect the rebels, according to the treaty of 1846, was generalized. It naturally comprised all the former province of Panama, now protected by the United States, according to Article I of the Hay-Bunau-Varilla Treaty.

It was not necessary to inform Amador and Boyd because, on my return, I found a telegram, announcing their arrival two hours later. I only sent the great news to Panama, at 7:15 P. M.

"De la Espriella,
Minister Exterior Relations,
Panama.

"Today, Wednesday at 6:40 p.m. I signed with Secretary of State Hay, the Panama Canal Treaty with same political and financial conditions as in the Hay-Herran Treaty, with necessary simplifications referring to jurisdictions and analogous stipulations.

"Amador, Boyd, Arosemena left New York for Washington at 4:50. They will arrive in about two hours.

"I congratulate Your Excellency, the Government, and the people on the happy termination of this difficult but great event.

BUNAU-VARILLA."

I went to the station to receive the delegates.

Amador got down from the train first and I greeted him with these words:

"The Republic of Panama is henceforth under the protection of the United States. The Canal treaty has just been signed."

Amador was positively overcome by the ordeal. He nearly fainted on the station platform. I had to hold him up. His emotion was not that of joy as it ought to have been if the signing of the treaty had not nipped his plot in the bud. On the following day, all the ramifications of the trap he had laid for me were brought to light. Foreseeing an unfavorable attitude on my part towards a diminution of my powers as Minister-Plenipotentiary, the delegates brought instructions which were truly insulting for me. The letters of credence reduced me to the state of a letter-carrier having to oscillate between the Department of State and the Panama delegation. It was forbidden to me to accept any article of the treaty without the previous agreement of the delegation.

Amador and Boyd had found a good trick. They knew that I would answer such instructions by throwing my appointment as Minister-Plenipotentiary, without powers, into their face and that I would resign immediately. For that reason they were provided with a decree allowing them to negotiate directly with the Government of the United States.

Their intense desire to get rid of me, and put their feet into my shoes, blinded them to the danger of the scandal that would result. They willingly forgot that all the work hitherto accomplished was exclusively mine. Everything, from the adoption of Panama in preference to Nicaragua to the sending of the *Nashville* and the loan of one hundred thousand dollars was the result of my persistent efforts.

They forgot that this long series of victorious fights had brought me friendships among the highest government officials, who would have been exasperated by the unworthy conduct of the Panama people. A dispatch from the Consul-General of the United States informed the State Department that Pablo Arosemena would sail for New York after the other members of the delegation. He was a cunning wolf who came to help the delegates to get rid of me and take my place afterwards.

But all these unworthy plots had been foiled by my request for explanations from Panama and by the government's answer after the sailing of Amador and Boyd. They had been foiled, above all, by the writing of the treaty in sixteen hours, two days before its signature. Despite the fact that it had been composed so quickly the treaty was so well adapted to the necessities of the two countries that it was preferred by the chiefs of the Republican Party to John Hay's American treaty.

I let the delegates, Amador and Boyd, read me the

instructions which allotted me the unworthy role of a simple intermediary. Then I said to them:

"The written instructions which you bring, and which tell me to do nothing without your consent about the Treaty, are now null and void, as everything is finished. Even if everything were not finished, the written instructions which you have brought should be considered as cancelled by the subsequent decisions of the Government as expressed in their repeated cablegrams to me. You have, therefore, neither in law nor in fact any reason for intervening, so long as I do not ask for your 'advice.'"

They saw their scheme ruined forever by quicker and more far-seeing diplomacy than their own. They were stunned. Dr. Amador was the first to overcome his despair. His professional physician's conscience roused him.

"After all, yellow fever will finally disappear from Panama, thanks to this treaty."

On the following day, November 19 at 10:55 P. M., I received a telegram from the Minister of Exterior Relations:

"Your Excellency is requested to inform us of the cause which led you to sign the Treaty before conferring with the delegates Amador and Boyd. Communicate to us the modifications introduced."

I postponed my answer until the following morning. I wanted to have the matter thoroughly thrashed out with Amador and Boyd before sending it.

I had no need to do so, as at 9:04 the next morning I received the following telegram:

"Explanation received from Amador-Boyd on the powerful reason which made you sign the Treaty annuls anterior cable sent today on this subject to Your Excellency—Espriella."

Very probably, after having seen that there was no legitimate objection to the treaty, Amador and Boyd had been forced to realize that discussion would only show that their opposition was unfounded. Most probably they spontaneously rectified their first telegram, which had provoked the demand for explanations from the Panama government.

Numerous intrigues were working, separately or conjointly, either for the Democratic Party hostile to Roosevelt, or for Colombia, or Nicaragua, or German interests. Had I not outplayed them the delegation, and with it, Pablo Arosemena, would have been their victims. The Panama Canal Project would once more have miscarried. The situation was so much more dangerous for all these inexperienced men, as the Colombian delegate, General Reyes, was going to arrive and start a campaign to win back Panama. I feared that, under his influence, the Panama people would try to wear out the American government by causing delays in the ratification of the treaty. Were I to let this policy of treason be grafted on the discomfiture of Amador and Boyd, the American Government might, at any moment, lend an ear to Reyes's propositions.

It was all the more probable as the Democratic opposition accused Roosevelt of having personally engineered the revolution and requested, in accord with many Republicans, an understanding with Colombia.

I sent a long telegram to my government from New York, where I went as soon as the delegates left Washington. I asked that the power to ratify the treaty be given to the delegates. I added a condensed extract of the principal articles of the treaty.

It was Saturday, November 21. On Monday evening the answer arrived. It was negative.

It was monstrous because Reyes was on the point of

arriving and the delegates, who had approved the treaty with their special powers, had no reason to refuse this mission of ratification.

Evidently inspired by the hidden enemies of the Panama project, they replied negatively, after consultation. They thus unconsciously aided General Reyes, giving him the necessary time to arrive, before the contract between Panama and the United States could be definitely established.

I decided to foil these moves. They might cause the failure of the precious work I had been carrying on for so many years, in the face of so many apparently insurmountable difficulties. I decided that the Panama Government had to face its own responsibility. I sent the following telegram on Wednesday evening, November 26.

"De la Espriella,
Minister of Exterior Relations,
Panama.

"Discipline makes me submit to decision of Government referring to immediate ratification requested by my long telegram of Saturday. However, my very high sense of need for vigilance obliges me to inform Your Excellency about peril every day increasing which results from coldness shown by Government of Panama at the signature of a Treaty which makes a reality of the three essential aims of the Revolution:

"First, the protection of the Republic by the United States;

"Second, the construction of the Panama Canal;

"Third, the grant of the financial advantages formerly awarded to Colombia.

"This coldness on the part of Panama after the signature of a Treaty, which the United States justly considered as generous for Panama, has caused surprise in the high spheres which, as hours are passing, degenerates into indignation.

"I know the extremely difficult ground of Washington. The peril may not be apparent for others, but I affirm it to be very great and that at any moment a brilliant victory may be transformed into a crushing defeat.

"I reiterate my cablegram of Saturday.

"If the Government maintains its decision I pressingly beg Your Excellency, in the name of the most essential, and of the most vital interests of the Republic, that the Government should at least cable me immediately, in the same form in which my powers were conferred upon me, the substance of what follows:

"Whereas the Treaty is accepted by Amador and Boyd, whereas the extract given by my telegram is eminently satisfactory for the vital interests of the Republic, the Government authorizes me officially to notify the Government of the United States that the Treaty will be signed and finally ratified by the Government of the Republic at Panama, on the arrival of the document at Colon.

"If the Government does not think possible to take this minimum but sufficient step, I do not wish to appear responsible for the calamities which certainly will result from this situation; the most probable being the immediate suspension of the protection and the signature of a final treaty with Bogota in accord with the constitutional laws of Colombia in case of war.[1]

"In such case I beg Your Excellency to present my resignation to the Government.

BUNAU-VARILLA."

My reasoned ultimatum pierced the thick fog of criminal intrigue, which was hanging over the situation, paving the way for the victory of General Reyes, thanks to the foolish attitude of the delegates.

[1] The plan which Reyes was bringing to Washington.

The following telegram was very likely sent to me thanks to Arango's wise advice. It arrived on Thursday, November 26:

"Bunau-Varilla,
Minister Plenipotentiary of the Republic of Panama,
Washington.

"In view of the approval given by the delegates Amador Boyd to the Canal Treaty, your Excellency is authorized to notify officially the Government of the United States that said Treaty will be ratified and signed as soon as it is received by the Provisional Government of the Republic.

"J. A. ARANGO,
"TOMAS ARIAS,
"MANUEL, ESPINOZA."

On the same day at 5 P. M. I wired to Mr. de la Espriella:

"The energetic provident decision of the Government saves an imperilled situation and assures triumph.

"I beg Your Excellency to transmit my respectful congratulations to the Government—BUNAU-VARILLA."

On November 27 I received the following telegram, which showed a complete change in the attitude of the Government.

It henceforth rejected the nefarious and foolish advice of Amador and Boyd, who had been deceived by dangerous and perfidious counselors.

I was, henceforth, intrusted with the whole matter.

"Bunau-Varilla,
Minister Plenipotentiary, Republic, Panama,
Washington.

"The situation is saved, the triumph is assured according to your cablegram of 26th.

"Please communicate whatever other question of affairs presents interest for Republic, so that we may help you to solve them by our cooperation and instructions.

ESPRIELLA."

On the same day, November 27, General Reyes arrived, followed by the Colombian delegation.

I succeeded in placing before him an accomplished fact, a treaty which had been ratified before its arrival on the Isthmus, on December 1.

The honor of the American Government was finally and doubly bound up with Panama:

First by the signature of the treaty; second by the ratification given in advance by Panama.

It is easy to imagine what would have happened if I had not guessed what criminal intrigue, grafted on human ignorance, was preparing in the dark. I had clearly seen what the situation was and spoken clearly to the Panama Government. It had understood!

All hope for the success of the Reyes mission was destroyed before its arrival but the conspirators had still one chance to win the game, by obliging the Panama Government to keep the treaty a week before sending it back and by organizing a campaign of censure to force the Government to go back on its decision to ratify.

Those were obviously the tactics being followed. I therefore demanded that the departure of the Panama Railroad Company's ship, which left on the day of the arrival of the treaty should be delayed some hours in order to take it back, duly ratified.

The Company refused through Mr. Drake, its Vice-President. I wired the Department of State at Washington advising it to make the same request. It was improbable that the Panama Railroad Company would dare to reject this request of the Government.

This showed the existence of a well thought out plot

to obtain the rejection of the treaty by the provisory government through the pressure of an ignorant mob, cleverly stimulated.

In order to parry this treacherous move, I begged the Panaman Government to deliver the treaty to the Consul-General of the United States at Panama, the highest representative of the United States there, as soon as it was ratified.

The solid ground on which these suppositions were based was later on clearly demonstrated.

During a Congressional enquiry, in 1912, a telegram was brought before the Commission, which had been sent by the same Drake, and was dated November 30, 1903, that is, just two days after the arrival of Reyes.

I had requested the State Department to order the detention for some hours of the steamer which left Colon on the same day as the Treaty arrived there. This telegram throws a clear light on the preparations made to destroy all that I had built in Washington. It explains why the Panama railroad had refused to obey the Government's order to detain the steamer which was going to leave Colon for New York, during the few hours that were necessary to sign the ratification of the Treaty. This telegram is included among the documents of Congress, in the group entitled "The Story of Panama." It was not only published there but also on page 406 of my book, "Panama: The Creation, Destruction and Resurrection" with the hope that the persons named in it would protest and say it was a forgery. But nobody did.[1] (*Italics* are mine.)

[1] This cablegram was reproduced under oath during the judicial enquiry made on the Isthmus in connection with the prosecution of "The World" by the government of the United States, and its text was brought before the committee of Foreign Affairs by a member of the staff of "The World." I reproduce this telegram as it was printed in the document of the Committee of Foreign Affairs in the House entitled "The Story of Panama."

"Beers,[2] Panama.

"Several cables urging immediate appointment of Pablo Arosemena [3] have been sent to the Junta (Government of Panama) since Friday. We are surprised that action had not been taken and suppose it is only because Minister of the Republic of Panama is trying to disturb the Junta by cabling that Washington will make a trade with Reyes and withdraw warships and urge his retention because of his alleged influence with President Roosevelt and Senators. This is absolutely without foundation.

"Mr. Cromwell has direct assurances from President Roosevelt, Secretary Hay, Senator Hanna, and other Senators that there is not the slightest danger of this.

"Evidently the Minister's pretense of influence is grossly exaggerated.

"We have the fullest support of Mr. Cromwell and his friends who have carried every victory for us for past six years.

"Junta evidently does not know that objection exists in Washington to the Minister of Panama, because he is not a Panaman, but a foreigner; and initially has displeased influential Senators regarding character of former Treaty.

"He is recklessly involving Republic of Panama in financial and other complications that will use up important part of indemnity. Delegates here are powerless to present all this, as Minister of Republic of Panama uses his position of Minister to go over their heads.

"He is sacrificing the Republic's interests and may at any moment commit Republic of Panama to portion of the debts of Colombia, same as he signed a Treaty omitting many points of advantage to Republic of

[2] Beers is the man who had been sent to New York by the originators of the revolution and who had consulted with Drake and Cromwell.

[3] To the office of Minister Plenipotentiary of Panama at Washington, then filled by myself.

Panama and which would have been granted readily—without waiting for delegates who were to his knowledge within two hours of arrival.

"With discretion inform Junta and cable me immediately synopsis situation and when Junta will appoint Pablo Arosemena. Answer today if possible.

"DRAKE" [1]

Beers, to whom Drake sent this telegram, was the first delegate of the conspirators sent to New York to consult Mr. Cromwell, counsel of the Panama Railroad Company, as to the possibility of obtaining the help of the American Government towards creating a revolution in Panama.

I have already described how this first attempt failed. It is surprising to see Mr. Cromwell's name associated in that telegram with the obvious effort to promote the rejection of the treaty and the recall of its signatory, because Mr. Cromwell was at that time the general counsel of the New Panama Canal Company, the only possible salvation of which was the ratification of the

[1] This cablegram falls directly under the jurisdiction of the American law, first, because its intent was to influence the Panama Government in connection with the dispute of the United States with Colombia as to the Panama Canal; and secondly, because its object was to defeat the measure taken by the U. S. Government in signing the Hay-Bunau-Varilla Treaty.

In the Revised Statutes of the United States may be found the Act of January 30, 1799, under the title, "Criminal Correspondence with Foreign Governments," of which an extract follows:

"Every citizen of the United States . . . who, without the permission or authority of the Government, directly or indirectly, commences or carries on any verbal or written correspondence or intercourse with any Foreign Government . . . with an intent to influence the measures or conduct of any foreign government . . . in relation to any disputes or controversies with the United States, or to defeat the measures of the Government of the United States, and every person being a citizen of . . . the United States and not duly authorized who counsels, advises, or assists, in any such correspondence, with any such intent, shall be punished by a fine of not more than five thousand dollars and by imprisonment during a term not less than three months, nor more than three years. . . ."

Treaty. It was therefore his duty to do everything to attain this latter aim. Since publication of Drake's letter in my book in 1913, I always hoped Mr. Cromwell would state that his name had been employed against his will by Drake.

The government of Panama gave that cablegram the treatment it deserved and ratified the treaty on December 2, soon after its arrival, and put it immediately into the hands of the American consul.

The plot had miscarried thanks to the measures it had been possible to take in advance.

In spite of the signing and ratification of the treaty by Panama, its enemies had not disarmed. They tried to have it rejected by the American Senate.

A great New York paper, *The Evening Post,* had begun a passionate campaign against the new republic as soon as the Panama revolution broke out.

Roosevelt was accused of the most cowardly of criminal attempts and I was accused of ignominious complicity.

On the other hand, *The Sun* supported us with energy.

As I wished to show my gratitude to "The Sun" I decided to offer it a royal present, the text of the treaty, long before it was to be officially made public.

I invited its correspondent to come and see me and made him wait alone in my drawing room for half an hour. The original copy of the treaty was on the table. It was a clear provocation to his indiscretion. I made my intention clear by saying: "I shall keep you waiting for a long time, perhaps. Read whatever you find here. Everything is at your disposal."

The correspondent understood and on the following day, the whole treaty was printed in *The Sun.*

This spontaneous publicity had the advantage of rendering any request for modification impossible.

As soon as Congress reopened, on December 7, 1903, the attacks began on the treaty which had been ratified five days before by Panama.

But Senator Morgan had not even waited for the regular session. Already on November 23, during a special session, in the course of which not a word should have been uttered on Panama, the intransigent defender of Nicaragua had expressed his exasperation.

He confessed that the treaty which was known, owing to "the publication by *The Sun*," granted to the United States all that could be asked for. The thing was expressed with the comical and impotent wrath of a pleader, when he discovers that all the arguments made in bad faith, with which he hoped to deceive the judge, have been eliminated from the case.

One may appreciate the wholly furious state of mind of this senator if one stops to think that public debate on treaties is prohibited. They must be examined behind closed doors.

The defenders of the treaty never spoke about it, except during secret sittings. I was, therefore, violently attacked in public sittings from November, 1903, to February, 1904, but defended only during secret sittings. I was in excellent company; President Roosevelt and Secretary of State John Hay were not on a bed of senatorial roses any more than I was.

In contrast with the attitude of Morgan and his friends, world opinion was beginning to look with favor on the *de jure* recognition of Panama by the United States.

Immediately after being received by President Roosevelt in my capacity as Minister-Plenipotentiary of Panama, I directed a circular letter to all the diplomatic

representatives of the foreign powers at Washington, requesting to be received.

France was the first one to answer. Through Ambassador Jusserand she asked that the French rights, including that of selling the Canal concession to the United States, be explicitly protected.

I asked the Panama Government to make that declaration, which it did immediately. On November 16, I communicated the decision of the Panama Government to Mr. Jusserand, who immediately answered that he would officially receive me on the following day, November 17.

The Panama Republic, born on the 3rd of November, had obtained the *de jure* recognition of the United States on the 13th, of France on the 16th, of China on the 22nd, and of Austria-Hungary on the 27th. It was the day General Reyes reached Washington. On the day of his arrival in Washington, the delegate of Colombia was thus confronted, not only with a treaty ratified in advance by Panama, but also with a *de jure* recognition of the new republic by the United States in America, by China in Asia, and by France and Austria-Hungary in Europe.

These manifestations of the opinion of the governments were seconded by the assent of public opinion as expressed by the great newspapers. Here is how Mr. Inman Barnard, the correspondent of the *New York Tribune,* described the sentiment in Paris on November 14, 1903.

"Paris, November 14.

"The announcement of President Roosevelt's reception of Philippe Bunau-Varilla as Minister of the Republic of Panama is accepted here as the final settlement of the international phase of the Panama question. M. Bunau-Varilla, who is widely known and exceedingly popular in Paris, is regarded as the

right man in the right place, and his acceptance as a guarantee that in the negotiations concerning the Canal legitimate French interests will be safeguarded.

"According to trustworthy information received from Berlin, Germany will follow the example of M. Delcassé and accord recognition to the Panama Republic. It has not done so already, as Emperor William is extremely desirous to avoid complications.

"The opinion expressed on all sides is that narrow-minded Colombia has only got what it deserves, and the Panama Canal, being built as an American undertaking, is firmly and emphatically approved by all French papers from the reactionary *Gaulois* to the socialist *Petite République*."

But the man who could best express general opinion in France was Edouard Lebey, the head of the Havas News Agency. Though almost paralyzed, as we have already said, his mind and heart were still active. The interpreter of his thought was his secretary, Paul Valéry.

Paris, November 1903.

"My dear Friend:

"You cannot believe how proud I am of you. I have known you and admired you for many years. I expected great things from you, and yet I am surprised, amazed, carried away, as everybody is, by what I might almost term the electric events of the last few days. This sudden change of scene, your official and significant entrance on the stage, the cutting of the Isthmus assured and almost achieved, the Bogota intrigues foiled, the partisans of Nicaragua in flight, my dear friend, it is, indeed, quite a Napoleonic week!

"You are the hero of the day. But such an expression is absurd. It is good for those who do not know. For me you are the hero of many years of will and thought.

"Nothing is more difficult than to keep alive for so

long a time a truth which oneself alone perceives, and to find in oneself only, the source and direction of energy.

"I imagine that you must have smiled at this public opinion which you have known so indifferent to your appeals of some months ago. Now it applauds you, but, as it must be always in the wrong, it is not your magnificent effort, your long tenacity, your certitude, which it cheers, it is your success and the marvel of your success. For me what is admirable in what you did is that it was rational and almost rigorous. You lead the Evident on to triumph, and the Evident itself gave you the power to make it triumph.

"I believe that history will specially remember having seen in accord, Logic, and Politics, Greatness and Utility, Intelligence and Energy. It is, indeed, a very rare harmony.

"Receive, my dear friend, with my best remembrances, my warmest congratulations and my wishes for the rest of the memorable campaign you undertook alone, and which you will finish with the whole world.

EDOUARD LEBEY."

After having examined the state of opinion in Europe let us go back to the desperate fight in America to wreck the Treaty before the Senate.

On January 14, 1904 Senator Stone submitted to the upper house a motion calling for a Congressional enquiry about me. Here is the beginning of the proposed resolution:

"Resolved:

"That the Committee on Foreign Affairs is hereby instructed to investigate and ascertain whether Bunau-Varilla or other persons residing in the United States, and subject to our laws, did aid or promote an insurrection in Panama against the Republic of Colombia."

The idea of opening a parliamentary inquiry into the acts of a man covered by diplomatic immunity—a thing regarded as sacred even by half-civilized peoples —is a sufficient proof of the frenzied aberration prevailing in certain minds.

I decided to answer by a jest. Those who were attacking me, Senator Morgan above all others, prided themselves publicly and constantly on having supported Palma when he had organized, on the territory of the United States, an insurrection against Spain.

I suggested to my friend Mr. Mitchell, the brilliant editor-in-chief of the *Sun,* to propose in his turn the following resolution, as a complement to Senator Stone's motion:

"Resolved:

"That the Committee on Foreign Affairs is hereby instructed to investigate and ascertain whether Estrada Palma and other persons residing in the United States, and subject to our laws, did aid or promote an insurrection in Cuba against the Kingdom of Spain." . . .

Edward P. Mitchell accepted the suggestion, and the following day in a caustic editorial he pricked the bubble.

Nobody spoke any longer of the resolution of Senator Stone. It had been sufficient to place a mirror in front of it. The names of Estrada Palma, Cuba, Spain, once reflected, rendered glorious the very same facts which, with the names of Bunau-Varilla, Panama, and Colombia, appeared so abominable in Senator Stone's mind.

But the efforts of the enemies of the Hay-Bunau-Varilla Treaty were not limited to the Stone resolution any more than to the frenzied speeches of Morgan, after the failure of the telegram sent to Beers by Drake.

They organized a military attack by Colombia on the Isthmus and, afterwards, a press campaign directed against me personally, in *The Evening Post* and *The World*. On the other hand I had the powerful, open and cordial support of President Roosevelt. He made it manifest on January 14, at the great reception of the diplomatic corps in the White House. Before the state dinner he came up to me and said:

"M. Bunau-Varilla, I have never been as astonished as I was when I read the article of September 2, where you described exactly what I was then preparing with Professor Bassett Moore at Oyster Bay."

"But, Mr. President," I answered, "it is purely a matter of logic. The same facts are bound to lead logical minds to the same conclusion, however far away from each other they may be."

"Well," said the President, "if that is so, you are the greatest logician I have ever known."

As the butler announced that dinner was served, the President left me, saying with his usual spontaneous generosity: "They say that I have inspired you. It would be much more true to say that you inspired me."

Such words show better than a long speech the noble and open character of Mr. Roosevelt. It will be admitted that no other head of a State would have had the audacity publicly to express that he had been inspired by a foreigner in a great political question. As the men were going out of the dining room into the smoking room he approached me and said:

"M. Bunau-Varilla, there is nobody I should desire to escort to the smoking room more than you, but I am the slave of the Protocol and must escort the dean of the diplomatic corps."

And the President took the arm of Count Cassini, the Russian ambassador.

During that time the enemies of the Treaty were redoubling their efforts to wreck it.

The Colombians, through General Reyes, threatened an attack on Panama by land. This would have placed President Roosevelt in a bad situation because it would have meant war, for which the authorization of Congress would have been necessary.

The same gravity was not attached to the act of the navy which was considered as a simple policing operation.

Reyes's threat was accompanied by the bribing offer to give away the canal concession for nothing.

This attempt at making a great nation go back on her word by the offer of ten million dollars was expressed in a *New York World* editorial on November 27, the day on which General Reyes arrived. The caption was "Why Ten Million Dollars." Mitchell answered in *The Sun* that, even if the concession by Colombia was assured, the overthrow of the little republic by the same hand that had welcomed her birth, for a bribe of ten million dollars or any number of millions of dollars, would be a national infamy of incalculable importance. He concluded in these words, putting an end to all discussion:

"That is the whole question of the ten million dollars."

The attempt at corruption having failed, Reyes kept the menace of war in reserve. I am scarcely mentioning the calumny which he also used in order to make people believe that the revolution was the work of speculators.

This unworthy lie could not get very far. The financial people in Wall Street knew that no speculation had accompanied the revolution. The head of a great bank, the Equitable Trust Co., came to compliment me on the complete absence of speculation before the revolution:

"What makes your name popular among us people of Wall Street is that no variation in the quotations of the Panama bonds at the Paris Bourse has shown any important purchases. As these bonds were to be enormously benefited by the realization of the canal which the revolution insures, it demonstrates that neither you, its organizer, nor your friends, have speculated on its probable outbreak."

The menace of war was producing a great impression at Washington.

The news of the assembling of a Colombian army at Titumati, on the banks of the Atrato, to march through the Isthmus had become official.

Mr. Hay begged me to come and see him on January 12, 1904 in order to get my opinion.

He said to me that the menace of war had made a number of senators think that it would be justifiable to give Colombia ten million dollars. It would be, they said, an economy as compared to the cost of mobilization, if war broke out, as it was certain to do.

Secretary Hay also asked me whether I would be willing to accept twenty million dollars instead of ten in order to transfer the surplus of ten million to Colombia later on.

"Allow me, Mr. Secretary, to express myself as freely as if you were not present."

"That is what I desire," answered the Secretary of State, smiling.

"Well," I continued, "here are the principles which govern my answer:

"First, invasion of the Isthmus by land forces coming on foot from Colombia is a mere bugaboo. It can only frighten birds, or men with birds' brains. It is impracticable, it will never take place.

"Second, such an invasion, were it possible, would be infinitely preferable to the commission of a dishonorable act.

"Third, it is a dishonorable act to purchase tranquility by submitting to blackmail; and a man submits to blackmail when, under threat, he pays something he does not owe.

"Fourth, an act, if dishonorable, does not cease to be so—on the contrary—when an intermediary is employed to commit it.

"Here, then, Mr. Secretary, is my answer based on the foregoing principles: If the Government of the United States decided to admit of a solution which I consider to be incompatible with honor, and if it asked me to co-operate, I would refuse. Therefore, if the plan you have outlined were to be substantiated, I would have to resign beforehand."

Mr. Hay replied: "It is exactly the answer which I expected from you."

This new attempt of Reyes's friends had failed, but Secretary Hay's proposal showed me the emotion produced in Congress and in the Government by the menace of war.

Assistant Secretary of State Loomis advised me to talk to the Secretary of War, Mr. Root. I did so on January 28.

I spoke during a whole hour without Mr. Root's having said a word. He was evidently nonplussed to hear me say that it was impossible to send an armed force across the Isthmus from Colombia to Panama. He thought it possible to bring an army over the distance of about two hundred miles which separated Panama from the Atrato River.

"Never has that taken place since the discovery of America," said I. "If the explorers failed to pass, what can the army do?"

On January 28, that is to say, less than three weeks after my visit to Mr. Root, *The New York Herald* announced the recall of the Colombian forces which had been gathered at Titumati on the banks of the Atrato.

Before advancing one mile toward the Isthmus, the army had been dissolved because almost all the soldiers were ill with fever. What I predicted had taken place!

Reyes's scarecrow failed, as his attempt at corruption had.

There remained only one hope for him. It was to attack me publicly with such virulent perfidy that I would have to withdraw.

This libellous campaign was carried on in *The Evening Post* and in *The World.*

The Evening Post collected all that the imagination of the calumniators had published in France against the Panama undertaking. This reproduction was itself unfaithful. New and subtle poisons had been added to the original ones.

I suspected the origin of these ignoble articles which were presented in a hypocritical form as irreproachable documents.

I sued *The Evening Post* for libel. After two years of waiting, I decided to sentence the culprits myself as my lawyer could not see any possibility of having a date fixed for the trial. I published my declaration as a paid advertisement in all the great newspapers of New York. It contained the grounds upon which an impartial sentence would have been based.

The Evening Post, probably no longer under the same influence, raised but a weak protest.

As to the campaign of *The World,* I was later officially informed of its origin.

On January 17, 1904, the ignominious conspiracy came to a head in a scandalous article in *The World,*

a widely read paper. It covered seven out of the nine columns of the front page. It was entitled in big letters: "THE PANAMA REVOLUTION, A STOCK-GAMBLER'S PLAN TO MAKE MILLIONS."

It echoed the calumnious assertion inserted in the letter of General Reyes, of December 23 preceding, to Secretary Hay: "The Panama Revolutionists counselled by speculators," etc. It developed with impudent precision the outrageous fabrication that the revolution of Panama had been made by a gang of low speculators of whom I was the moving spirit.

This unqualified invention formed the warp of the tissue. The weft was made of true facts, hereto unknown, referring to the episodes of the conspiracy which had prepared the revolution in Panama.

As I thought, judging from its attitude, that *the World* had been in this circumstance the victim of an odious invention but not its author, I requested it to declare whence it had obtained its information. *The World* refused to state its source. For a moment I thought of bringing an action against this paper to obtain it. On the advice of my counsel, however, and owing to the slight probability of forcing *The World* by judicial procedure to reveal the origin of the article, I dropped the matter.

Time alone was to raise a corner of the veil concealing the truth.

The hand which brought to *The World* this scurrilous article was exposed before a Committee of the House of Representatives nine years later. In the document of Congress to which I have already referred, *The Story of Panama,** is found the following sentence referring to the article of January 17, 1904:

"The facts were brought to *The World* by Jonas

* "Exhibit K"—Compilation of Facts by Earl Harding—a staff correspondent of *The World*—pages 630 and 730.

Whitley, of Mr. Cromwell's staff of press agents, and *The World* holds Mr. Whitley's receipt for $100 for the 'tip.' "

No protest from the person designated had, so far as I know, reached the Committee on Foreign Affairs up to the end of the session, six months later.

Mr. Cromwell's name was thus pronounced by a staff correspondent of *The World* in the same connection as in Drake's deceitful telegram, which we have reproduced above, and in which the former is represented as supporting those who wrote that telegram. I should still like Mr. Cromwell's denial that he had anything to do with these two assertions, contained in the documents of Congress.

Of course when this scandalous attack appeared in *The World* all the Washington reporters sought me out at the State Department and asked me what I would answer.

I said smilingly:

"Remember the fable of the snake and the file. You will find it in the *Fables* of La Fontaine. Better than anything else it will give you a picture of the future and of the result of the attack. One by one, you will see the broken fangs of the exasperated snakes and their powerless jets of venom falling on the ground. Nothing is more amusing than the comedy of enraged and impotent wickedness. Buy your seats at the theater.

"As to the one among you who represents *The World,* I shall never receive a person coming on behalf of your paper until it has sent me beforehand the name of the scoundrel who provoked this infamous article."

About five years later, *The World* charged Mr. Lindsay, a promiment New York lawyer, to deliver a letter to me in Paris answering my question about the origin of the article of January 17. This letter contained practically the identical statement made before the Con-

gressional committee in 1912, and included in the so-called *Story of Panama.*[1]

Such were the venomous attacks which marked the last attempts of the defeated enemies of the Hay-Bunau-Varilla Treaty to prevent its ratification.

Their poisoned arrows glanced harmlessly off the invulnerable armour of the Panama Revolution. The nation then became impatient. The Legislatures of the Southern States, which were almost all Democratic, ordered their senators to vote for the ratification of the Hay-Bunau-Varilla Treaty. A vote was decided upon for February 23, 1904. The ratification was voted by seventy-five to seventeen, a much greater majority than was necessary. Senator Money explained on February 20, as will be seen, why he was going to vote in favor of the Treaty. His justification was that of all the Democratic senators. It was a vote forced by the people.

"So this Treaty comes to us negotiated by a *de facto* Government; perhaps the people there having no voice in it whatever. Perhaps the people, if a vote were taken, would be exceedingly hostile to it.

"But it comes to us more liberal in its concessions to us and giving us more than anybody in this Chamber ever dreamed of having.

"We have approved over and over and over again treaties with Costa Rica and Nicaragua and other countries for a canal, but we have never had a concession so extraordinary in its character as this.

"In fact it sounds very much as if we wrote it ourselves; and I should believe that we did write it ourselves, except for the fact that the Administration had before, having *carte blanche,* written such very bad ones

[1] I answered various allegations contained in *The Story of Panama* by a pamphlet entitled, "Statement on *Behalf of Historical Truth*" which the Committee of Foreign Affairs of the House on February 19, 1913, ordered to be printed in the Hearings on the Rainey resolution, entitled *The Story of Panama.*

that I do not believe it could write such a good one for us."

After this expression of his grief at the perfection of the Treaty by which I had removed the only possible pretext for rejecting it, Senator Money explained his vote by the pressure of an exterior force:

"There is another reason, why I shall support the Treaty. The Legislature of my State, that has lately honored me with a re-election, passed a resolution requesting me and my colleagues to vote for this measure.

"I do not mean to say that I prefer the Panama route to the Nicaragua route, for I do not."

Before the vote, Senator Carmack of Tennessee let loose on my head the furious torrent of all that an accumulated hatred may inspire in a defeated enemy. It was a kind of literature familiar to him. Some time later, on November 9, 1908, he was to receive his due in the shape of a revolver shot from one of his exasperated victims, Colonel Duncan Brown Cooper.

As soon as the ratification became a fact I hastened to the telegraph office to send the news to the government of Panama. Their loyalty and fidelity during the absence of Amador and Boyd deserved this happy issue. I concluded the telegram announcing the great event, by associating the name of Ferdinand de Lesseps, the initiator of this effort of mankind, with this beginning of a new era:

"While defending the great French enterprise, which was almost killed by falsehood and calumny, I acted in the capacity of a French citizen defending a great moral interest of France.

"This excludes all idea of material remuneration.

"Therefore I request the Government of the Republic of Panama to withhold the salary of my office. It should form the nucleus of a fund for the erection of a

monument, by the grateful Republic of Panama, to Ferdinand de Lesseps, the great Frenchman whose genius has consecrated its territory to the progress of the World for the honor of Panama and for the glory of France and of the United States.—Philippe Bunau-Varilla."

When the moment came to erect the monument and a subscription was opened, an event occurred which I do not want to let fall into oblivion. I wrote to the President of the Republic of Panama and asked him to give my salary as Minister-Plenipotentiary to the committee in charge of erecting the monument. He replied that a law would be necessary to authorize such a payment and that it was not possible therefore.

The monument was put up and the history of the canal, which is that of the Isthmus, is written on a marble tablet forming part of it. Two names are omitted in the history of the canal: the name of the creator of the Republic, Bunau-Varilla, who, as its diplomatic representative, had signed the document insuring its birth, protection and well being, and that of Amador, the first President of the young republic who at the critical moment, had, more than anybody, the magnificent courage to start the revolution.

But the consequences of the lowness and cowardice of the people in power are of little importance. The glory of the great Emperor Napoleon was not dimmed by the writings of historians like Loriquet, who never learned that Bonaparte had ceased to be one of King Louis XVI's officers. What counts are facts and acts. What remains and shall ever remain is the fact that, on February 26, 1904, I signed with Secretary Hay the act of ratification of the treaty which we had accepted on November 18, 1903, after I had written it alone, two days before.

We thus rang the hour of the resurrection of the Panama Canal.

It was for him and for myself one of those moments which remain engraved in the memory for the rest of one's life. We were both of us deeply moved.

Two strokes of a pen were sealing forever the Destiny of the Great Thought which had haunted Humanity during four centuries.

In an instant I beheld, focussed before my eyes, the efforts and the struggles of the centuries to wring from Nature its mystery, from Man his prejudices.

I thought of all those heroes, my comrades in the deadly battle, worthy grandsons of those Gauls who conquered the Ancient World, worthy sons of those Frenchmen who conquered the Modern World, who fell in the struggle against Nature, a smile on their lips, happy to sacrifice their lives to this work which was to render still more dazzling the glory of French genius.

I thought of the shameful league of all the passions, of all the hatreds, of all the jealousies, of all the cowardices, of all the ignorances, to crucify this great idea, and with it all those who had hoped, through its realization, to give France one more glorious page in the history of Humanity.

I thought of my solitary work, when I went preaching the Truth on the highways.

I thought of the untold number of stupidities I had had to destroy, of prejudices I had had to disarm, of insults I had had to submit to, of interests I had had to frustrate, of conspiracies I had had to thwart, in order to celebrate the Victory of Truth over Error and mark at last the hour of the *Resurection of the Panama Canal.*

Mr. Hay silently shared my deep emotion, because he had been the witness of the last four months of efforts,

and his mind travelled back with mine over the twenty years which had preceded them.

The two signatures once appended we shook hands and I left him simply saying: "It seems to me as if we had together made something great."

I went on, having at last unburdened my heart of the load which had so long weighed on it.

I had fulfilled my mission, the mission I had taken on myself; I had safeguarded the work of the French genius; I had avenged its honor; I had served France.

Chapter VI

THE COMPLETION OF THE PANAMA CANAL

I Prevent the Adoption of a Disastrous Plan

The exchange of the ratifications of the Hay-Bunau-Varilla Treaty was the end of the struggle for the triumph of the Panama Canal. But one thing remained to be done. It was to complete the canal itself. In conformity with the pledge given by the New Panama Canal Company, at the beginning of 1902, the United States had an option on the company's property on the Isthmus.

For a payment of forty million dollars the American Republic could buy concessions, studies, plans, machinery and work carried out.

To be sure the whole thing had cost five times more than that, but there was no purchaser for it. On the other hand its timid policy and its lack of faith had deprived the New Company of any possibility of completing its task.

Furthermore, had a generous multi-millionaire provided it with all the millions necessary it would not have had time! The concession was to end on October 31, 1904. The real value of the company's property had fallen much below forty million dollars when I took the responsibility of advising the company to sell at that price. This purchase price was extremely advantageous for the New Panama Canal Company but it was even more so for the United States. If she had not purchased the company's property before the end of the concession she would never have got it from

Colombia, even at a much higher price, on account of the Germano-Colombian plan of carrying out the canal with a German company, camouflaged as a Colombian one.

After the exchange of ratification of the Hay-Bunau-Varilla Treaty, the purchase contract of the company's properties was signed at Paris.

Two Assistant Attorneys General, W. A. Day and Charles W. Russel, came to Paris to sign the contract. They invited me to witness the ceremony.

I refused because I did not want to allow people to confuse my work, which was to make the Panama conception triumph, with this painful consequence, the sale of a thing the French people had created.

With that sale went all the treasures of heroic energy of the pioneers, which an ungrateful country and a government deprived of will power had allowed to be transformed into a monument of shame.

To be sure it was the beginning of that brilliant justification that final triumph was to consecrate for eternity.

At that historical moment lawyer Cromwell begged to be authorized to place his signature on the purchase contract. Assistant Attorney General W. A. Day refused because he did not see any good reason for it.

On May 4 the American Government took possession of the ground. On August 3, 1914, ten years and three months later, the *Cristobal,* a ship of ten thousand tons, passed from the Atlantic to the Pacific.

It was the technical inauguration, in which I took part, and which coincided with the declaration of war by Germany against France.

At the beginning of this decade of magnificent realization people hesitated as to the nature of the canal to be created. Was the canal to be carried out as a sea-level canal as de Lesseps had conceived? Everybody thought that its high cost alone had prevented its re-

alization by the old company. Was the canal to be projected with perpetual locks as Godin de Lepinay had proposed before the International Congress which Ferdinand de Lesseps had convoked in 1879? Was my solution to be adopted as it had been by the old company? It provided for a canal with provisory locks which was later on to be gradually transformed into a veritable strait, freely opening onto the two oceans.

That was the grave question placed before the American Government.

A commission of three experts was named.

According to the information published by the press, about a year after the canal had become the property of the United States, I understood that the sea-level canal solution had been adopted by the Commission.

I foresaw a grave danger, necessitating immediate action. I cabled to Secretary of State Hay, towards the middle of March, asking whether President Roosevelt could receive me.

He answered that the President was leaving on April 1 but would be free until that date.

I left immediately for New York.

Between this exchange of cablegrams and my arrival, an amusing incident took place. The present head of the American Government, Franklin Roosevelt, a distant cousin of Theodore Roosevelt, married the charming daughter of a brother of the latter. President Theodore Roosevelt came to New York to be present at the marriage of his niece.

It was a great social event which brought to the church the élite of New York society. When the President came to shake hands with the distinguished guests, he stopped before Miss Bigelow, an intimate friend of the two branches of the Roosevelt family, and said:

"Do you know that Mr. Bunau-Varilla is coming to see me? Has he got another revolution up his sleeve?"

"I know that he is coming," answered Miss Bigelow. "He telegraphed to my father, but I do not know what he has got up his sleeve."

I had indeed, as the presidential sagacity had presumed, a revolution up my sleeve, but it was a technical revolution, this time, not a political one.

Had I not made that revolution, the sea-level canal solution would have been been welcomed with joy, because it was a simple idea, appealing to the ignorant masses. It seemed indisputably good to them. In fact, it was the contrary.

As soon as I arrived in Washington, President Roosevelt invited me to come and lunch at the White House. Before sitting down to the table, he said to me:

"We shan't be able to speak at lunch of what brings you here. As soon as lunch is over we shall have a quarter of an hour's talk."

In those few minutes I gave to that superior intelligence a condensed version of the whole question, so imperfectly understood, generally.

"Mr. President," said I, *"your advisers have been deceived by the apparent stability of the sides of the Culebra Cut, the bottom of which has been lowered by us from three hundred and sixty feet above sea level to one hundred and fifty feet above sea level. The rocks of hard clay hold terrible surprises in reserve as you will find when you try to lower the cut from one hundred and fifty feet above sea level to forty feet below sea level.*

"America, in spite of her immense intellectual and material wealth, will be beaten as Ferdinand de Lessep's private company was.

"To obtain the sea level canal it is necessary to use dredges which will excavate the sea level canal while floating on the water of the lock canal.

"It will be possible to do that as soon as a lock canal is created.

"Make yours the ideas which experience has inspired in me, the ideas which Ferdinand de Lesseps himself adopted when I formulated them. They would have saved the undertaking if it had not been scuttled by the piracy of France's enemies."

"I am very grateful to you for your initiative," said the President. "Will you come tomorrow to my office in order to meet Mr. Taft and tell him of your ideas?"

This new interview very likely did not convince Mr. Taft. I received a message from him that evening. He begged me, on behalf of the President, to come to lunch at the White House with himself and the two most important members of the commission, Professor Burr and Mr. W. Barclay Parsons.

After we sat down, President Roosevelt invited me to give a short outline of what I had submitted to him. He then begged Mr. Parsons to explain his ideas.

"Mr. Bunau-Varilla," said the latter, "is still under the influence of the superhuman difficulties he met with during the excavation of the higher strata of Culebra Cut, there composed of soft, slippery clay, but the lower strata are much more solid. It will be possible to excavate deeper down with sharper slopes than were used before."

Mr. Parsons' great reputation as Chief Engineer of the New York Subway gave very great weight to his words. They were plausible, because I had been away from the Isthmus of Panama for the last sixteen years.

I felt that President Roosevelt's opinion was influenced by that of the greatest American Engineer of the moment.

"My dear Mr. Parsons," said I, "you believe in the stability of the sides of the cut which has been dug down to one hundred and sixty feet above sea level.

It is not the hardness of the rock which is the cause of it, as you think, but the slight inclination of the slopes. On the other hand you say that this hard clay will, henceforth, remain without sliding. Will you allow me to ask you two questions? First, is not the clayish nature of the rocks in the Culebra Cut most dangerous from the point of view of the slides to be feared, according to your experience?"

"Certainly," answered Mr. Parsons loyally. "It is the worst rock one can meet with."

"This is my second question," I said. "Once finished, will not the Culebra Cut be the deepest in the world? Do you know any other cut of a similar depth, anywhere?"

"No," answered Mr. Parsons. "No cut can be compared in any way with Culebra from the point of view of depth."

"Mr. Parsons," I said, "how can you then be confident of the stability of a trench which is, at the same time, the deepest in the world and opened in the most unstable of rocks in the world?

"Do you not remember what has just taken place during the construction of your New York subway? There you have not a cut of several hundred feet in depth but of only about twenty feet. Is it not opened in the hardest rock in the world, gneiss? In spite of this small depth and great hardness have you not recently seen some houses in Fourth Avenue sliding towards the trench? How, after such an example, can you have faith in the security of a trench twenty times deeper, to be opened in ground a hundred times more slippery?"

Mr. Parsons had nothing to say. The accident of which I spoke was the object of universal interest in the United States, and everybody knew of it. It was an object lesson which finally demonstrated to President Roosevelt the wisdom of my solemn warning.

Events were later on to confirm my predictions. The lock-canal, which was chosen, passed through a cut lower than the one I had thought it prudent to adopt. The bottom was forty feet above sea level, while I had recommended a passage with a bottom at one hundred feet. This would have necessitated four locks with a fall of thirty-five feet instead of three with an average fall of twenty-eight feet, such as now exist. But if my plan had been followed, slides would never have been heard of.

Colonel Goethals who directed the canal construction on the Isthmus, had, in common with everyone except me, believed that the Culebra Cut was to be excavated on dry ground, that is by steam-shovels, on rails, loading dump-trains.

One year before the completion, he had to acknowledge himself beaten. He was constrained to use dredgers to carry out the excavation begun on dry ground.

Gatun Lake was then formed and the change of method became easy.

But if the sea level canal plan had been adopted there would have been no Gatun Lake formed by the building of a dam across the Chagres valley at Gatun. It would have been impossible to fill the Culebra Cut with water and float the dredges which were to excavate the twenty or thirty feet of ground remaining to be removed above the bottom of the proposed cut.

The excavation on dry ground, already impossible for a lock-canal, the bottom of which was forty feet above sea level, would have paralyzed the work for a sea level canal with a bottom fifty feet below sea level.

After this memorable discussion at the White House luncheon, the President decided to make a canal with temporary locks, as I had recommended.

In order to educate the public to the idea he decided

to form an international technical commission to fix the canal plan according to my principles. He begged England, France and Germany to send a delegate to that commission.

It was a marked innovation for the United States.

When I arrived in Paris the French Government had acted, as our governments always act, in entirely mechanical fashion. Instead of looking for an engineer who was intellectually qualified for this great task it was content to choose according to seniority. Mr. Guérard, *Inspecteur-Général des Ponts et Chaussées,* and at that time Dean of the *Conseil Général des Ponts et Chaussées,* if I remember rightly, was chosen. He had formerly had a brilliant career in the construction of the Mediterranean harbors. But he was completely ignorant of the progress in excavation made by dredging of rocks which I had realized at Panama and which later on had been adopted at Suez with another method of breaking up the rock bed.

Furthermore, advanced age had dimmed his formerly brilliant intelligence.

I was naturally sorry to see this new proof of the absence of directive capacity on the part of our governments, due to the constant changing of departmental heads.

In order not to see France represented by an engineer having no practical competence in the problem to be studied, I wrote to President Roosevelt. I told him that if the Department of Public works had consulted me, which would have been quite a logical thing to do, I would have recommended Mr. Quellennec, the Chief Engineer of the Suez Canal, who was specially competent to judge the question.

By return mail, Mr. Roosevelt sent me the nomination of Mr. Quellennec, as a member of the Consulting Board, and requested me to forward it to the nominee.

When the Board was called together this eminent engineer had exactly the same ideas as I had on the subject to be examined.

Unfortunately Mr. Guérard sat next to him and was his hierarchical superior. Mr. Guérard's opinion was totally different.

Mr. Quellennec, without abandoning his ideas, limited himself to having them recorded in the minutes of one of the sittings. They were submerged in the general report, in which the dredging of the rock was declared impracticable. This killed the project of transforming the lock-canal in accordance with my plan, to which the only competent engineer on the Board in such mattters, Mr. Quellennec, had adhered. Later experience, in the Panama Canal construction and maintenance proved, as we have shown, that the Board's decision on this question of rock dredging was entirely false.

The majority of the board voted for a sea level canal to be excavated on dry ground. But Presidential influence had caused a project for a lock-canal to be presented by the minority. It was accompanied by my formula of transformation but was not qualified as a canal with temporary locks. However, it was said that if, in the future, it should be thought desirable to eliminate the locks, the proper method would then be determined. Thus, the locks were implicitly considered as temporary.

Naturally the project for a sea level canal had the preference of those who were ignorant of the technicalities of the question. It was also favored by Congress. Finally, a reconsideration of my project led to the passage in the Senate of a bill approving the minority report.

Senator Knox settled the difficulty by repeating all my arguments. He said that by choosing the lock-canal

the true sea level canal would in reality be adopted, a canal five hundred feet in width at the bottom and fifty feet in depth at the lowest stages of the tide. He added that this canal would be obtained by successive elimination of the locks according to necessity.

This decided the rejection of the sea level canal majority report. Thus the rational idea issuing from my long experience of canal works was finally adopted in America. It had been adopted one year too late by Ferdinand de Lesseps but still at a time when his enterprise could have been saved, if the conspiracy had not been hatched in 1889 to kill it, as I have above related.

For a second time it was victorious in the American Senate, thanks to President Roosevelt's support and in spite of the vote of the majority of the International Consulting Board.

The construction of the canal was first entrusted to railway engineers and finally put into the hands of the military engineering service. It was carried out directly without the intervention of contractors, as I had advised the President to do.

Various errors in the plan adopted by the minority were successively corrected.

A projected dam across the Rio Grande Valley near the Pacific end of the canal was suppressed.

The height of the dam projected at Gatun, on the *Atlantic* side, was diminished. The method of construction employed there was the one which I had minutely traced for the dam foreseen in my plan, about ten miles higher, across the *Chagres,* at *Bohio-Soldado.* Finally, as I have already said, the excavation on dry ground at Culebra was abandoned by Colonel Goethals who thereby went back on his anterior declarations concerning rock excavations.

On May 10, 1911, *The Canal Record,* speaking of the rock slides at Culebra, printed the following:

"This amount may be increased but this causes no apprehension as, after the locks are completed, it will be possible to concentrate dredges for removal of the material that remains and which may slide in, enabling the work to proceed much more expeditiously and much more economically."

It was exactly what I had always maintained and what the Consulting Board and the American technical authorities had formerly denied explicitly. In 1913, when I came to witness the destruction of the dam which prevented the waters of the lake then formed from flooding the cut, I asked this question of Colonel Goethals:

"Why have you waited so long before recognizing the power and economy of dredges for excavating loose ground as well as rocks covered with water?"

He answered: *"We are living in a democracy incapable of hearing the revelation of a truth, which contradicts its anterior beliefs, without reacting dangerously."*

It is not only on the question of the elevation of the summit cut nor on the method of excavation to be employed that Nature was to justify my opinions. I had not made any error on the evaluation of the expenses or of the traffic to be expected. The estimated cost of the lock-canal project of the minority of the Consulting Board was about one hundred and forty million dollars.

On December 12, 1908, *The New York Herald* published a declaration I had made to its Paris correspondent. I had told him that the expenditure would be greater than two hundred and eighty million dollars. A few days later the Canal Administration, probably moved by public opinion, announced that the revised estimate would reach a sum slightly more than two hundred and eighty million dollars.

As to the traffic, my estimates made in contradiction to the ideas generally admitted were verified by facts in a surprising manner. I have given them in Chapter II when speaking of the abominable sentence which condemned the two de Lesseps and Mr. Eiffel.

The figures, verified by facts, remove the stigma of the odious sentence of five years' imprisonment. The moral revenge of the de Lesseps which the facts brought out was for me a magnificent reward for the solitary efforts I devoted for fifteen years to the salvation of the great enterprise conceived by French genius. During that struggle of one man only against so many obstacles I often found comfort in reading these verses of Victor Hugo:

"One Frenchman is France, one Roman contains Rome.
And what breaks a nation expires at the feet of one man."

Chapter VII

HOW FRANCE WAS PRESERVED IN 1905 FROM THE FATE OF POLAND IN 1772 BY THE SALVAGING OF PANAMA

Few people on the earth suspect the terrifying danger to which France was exposed in 1905.

The only military alliance which then counterbalanced the German menace was the Russian alliance.

The Russo-Japanese War had broken out before the ratification of the Hay-Bunau-Varilla Treaty with the attack on Port Arthur by the Japanese navy. From February, 1904, to July, 1905, it had exhausted Russia.

In the middle of 1905 this great nation was no longer able to send a regiment to the German frontier in case the Franco-Russian Alliance made it necessary.

Mr. Von Bülow, a man of action, as well as a keen observer, was at the head of the Imperial Chancery at Berlin. He was a pupil of Bismarck. He dreamed of surpassing his master and of finally crushing France, an achievement that Bismarck had not completely realized.

Von Bülow wanted to do with France what Frederick II had done with Poland, in combination with Catherine II of Russia and Maria Theresa of Austria.

Burgundy and Flanders, as far as Calais, seemed to him to be the minimum amount of territory which ought to be annexed to the Empire. Thus the German Family would include the Burgundian and Flemish races with which it is related by blood.

Who could offer an effective resistance? Russia, alone, might have done it two or three years before!

For her it was now too late. For England, on the contrary, it was too early. Even if German influence on the Liberal Party and on the morally affiliated Labor Party did not prevent a declaration of war by England, she would be powerless. She would not be ready to fight until long after the signing of the peace treaty. France, with the point of the German sword on her throat would be constrained to accept all the German conditions three months after her entrance on our territory.

Von Bülow's idea was that France would not offer any serious resistance.

Our nation had been, for a decade, the prey of two civil wars, the Dreyfus Case and the Panama affair, thanks to the combination of German intrigue and governmental weakness.

She had lost all confidence in herself. It had been possible to make her believe, after the Panama scandal, that all those whom she respected were contemptible scoundrels. It had been possible to convince her that the most glorious enterprise of the nation was nothing but a symbol of shame and prevarication.

The Dreyfus case had been used to make France believe that treason was infecting the officers of our army who, up to that time, had been above all suspicion. By bad chance, two queer men were at the head of the War and Navy Departments.

General André, at the War office, had inaugurated the system of mutual spying on political opinions.

Pelletan, head of the Navy Department, had a tendency to protect those officers who complained most. In consequence he had made bad nominations, as shown by the number of battleships stranded or lost.

"They say that I don't order reforms," said Pelletan to his visitors. "You are going to see!"

He rang a bell and an usher brought in a tray loaded with glasses, bottles of absinthe, vermouth, and other liqueurs which he laid on Colbert's table.

Mr. Von Bülow did not fail to observe the national disintegration, which these loose morals exhibited and which was encouraged by the seductive, chimerical, and destructive eloquence of Jaurès.

On the one hand there was the French nation, morally anemic, discouraged, doubting her chiefs and herself, without any useful alliance and abandoned to her own political weakness. On the other hand there was the German nation, superior in numbers, solidly regimented, powerfully armed and strictly disciplined.

At whatever period of history such a situation exists only one solution is possible: Finis Poloniae in the eighteenth century. Finis Galliae at the beginning of the twentieth.

Von Bülow could not fail to seize this great opportunity to complete Bismarck's work in a few weeks' time and strike out France from the list of great nations.

He, therefore, resolved to attain his aim as soon as the disintegration of the Russian Empire was sufficiently advanced, owing to Japanese efforts. Von Bülow began by making two spectacular moves of which we shall speak later. At the moment he was preparing to strike the third one, extraordinary luck enabled me to stay his hand. It must be remembered that the attack on Port Arthur by the Japanese was made some weeks before the exchange of ratifications of the Hay-Bunau-Varilla Treaty, which took place on February 26, 1904. It was during the evening of the eighth of February and the morning of the ninth that the Japanese fleet, without any declaration of war, torpedoed three big Russian battleships which were riding at anchor outside the harbor of Port Arthur.

Roosevelt had gained incomparable popularity owing to his final solution of the Canal problem which had been keeping America in suspense for half a century.

The election of 1904 had therefore given him an enormous majority for the Presidency. Up to that time he had only been president as McKinley's substitute.

He was very grateful to me, because his lively intelligence had shown him that his prodigious success was due to my systematic and persistent efforts. One day, on the morrow of the signature, on September 5, 1905, of the Treaty of Portsmouth, which ended the Russo-Japanese War, when my wife and I were his guests at Oyster Bay, he said to me:

"Mr. Bunau-Varilla, everybody is acclaiming me at this hour because I have been able to stop the war between Russia and Japan. Everywhere people say that it is the culminating point of my presidential career. Everybody is mistaken. The culminating point is marked by what we realized together, each one doing his part: the Panama Canal. It is this fact which will engrave my name in the History of the United States. The end of the Russo-Japanese War, which I have brought about, seems an enormous accomplishment today, but it will be forgotten tomorrow. Other great wars, greater than this one, will take place which will wipe out even its trace from the minds of the people. But the Panama Canal will remain an eternal monument, ever present in the minds of men recalling the names of the creators of its final phase: you and me."

The president spoke thus, several weeks after the events I am going to narrate, the colossal importance of which he did not perhaps realize at that time.

The dangerous position of France which Von Bülow counted on was spontaneously brought about by circumstances in the middle of 1905.

Since the beginning of 1905 Von Bülow had been taking measures to prepare a *casus belli* in order to declare war on France the moment her Russian support crumbled.

He found the desired point of friction in Morocco.

It was arranged that William II would go on a pleasure cruise in the Mediterranean. He was to throw the first firebrand at Tangier in order to light the general conflagration.

The German Emperor was certainly sincere when, going through the military cemeteries during the Great War, he said:

"Ich habe es nicht gewollt." ("I did not will this.")

He did not like war and its bloody sacrifices! His state of mind was the same in March 1905.

When his ship arrived before Tangier the Emperor refused to go ashore.

Von Bülow being informed had recourse to the mysterious mechanism which submits the sovereigns of Germany to a superior will.

This superior will, which appears active in all the critcal phases of the history of Germany, probably emanates from the remnants of the orders of Teutonic Knights.

It is believed that these founders of the German power have disappeared. The fusion between the Dukedom of Prussia, fief of the Teutonic Knights, and the Margraviate of Brandenburg, the sovereign of which was the Grand Master of the Teutonic Order, took place in 1619.

The order then disappeared as a political entity, but its invisible presence alone can explain the prodigious progress of Prussia during these three centuries.

Without the American intervention, Germany would have won the Great War in 1918.

Had the final victory happened it would have been possible to say that, in the relatively insignificant space of time of three centuries, the two no less insignificant provinces of the Dukedom of Prussia and of the Margraviate of Brandenburg had conquered Europe.

The present phase of *Hitlerism* is, in my opinion, a new manifestation of that masked power, the force of which is derived from the intelligence and perennity of its directing organism.

The offer of a twenty-five years' peace, guaranteed to France, made slyly by Hitler bears the seal of the mysterious power which is directing the destinies of Germany.

Indeed, from 1619 to 1914, not more than fifty-nine years and not less than twenty years elapsed, without the Prussian power making a new conquest. The first step in the present century was to take place in 1905, thanks to the victory of Japan over Russia, and to insure the German predominance over France, Russia and the rest of the continent. It would have meant hegemony over Europe.

Let us come back to the disembarking of Emperor William at Tangier on March 31, 1905, which was to be the first step in the three acts of the tragedy.

Von Bülow, when informed of the imperial resistance by William II's telegram refusing on March 21, 1905, to disembark at Tangier, sent him a long message. It was taken aboard the *Hamburg* by Von Kühlmann, German *Chargé d'Affaires* at Tangier. He arrived like Lohengrin with a helmet bearing a spread eagle. He came to deliver to the Emperor the message peremptorily inviting His Majesty to land.

William II obeyed on March 31, 1905. The scenario had been prepared in advance. Tangier was covered with posters celebrating the Kaiser's glory. In his speech, pronounced before the authorities, William II

claimed the right to extend his protection to the Sultan of Morocco.

It was a challenge to France which shared the protectorate over Morocco with Spain, by treaty. It was also a gesture of defiance to England, which had cooperated to establish the new order of things.

None of the nations thus hurt by William II's act protested.

Two months and some days later, a new step forward was accomplished.

Chancellor Von Bülow informed Mr. Rouvier, President of the French Cabinet, through a friend of the latter who was not French though deeply and sincerely devoted to France, that it was necessary to dismiss Delcassé from the Cabinet if he wished to avoid an immediate declaration of war. Germany reproached Delcassé with carrying out an intolerable policy of encirclement.

On account of the strained diplomatic situation, Mr. Delcassé withdrew. Mr. Rouvier took his place at the Department of Foreign Affairs, at the same time remaining as Prime Minister.

On the day Delcassé was forced to resign, without any protest being raised by France and England, Count Von Bülow was created Prince by William II. It was June 6, 1905. His elevation to the highest rank of the nobility was announced on the day of the marriage of the Crown Prince.

Prince Von Bülow, wishing to remove the impression that this title was due to his preparations for war, pretends in his memoirs that it was bestowed on account of the marriage. This coincidence of dates will deceive nobody. It was the progress made towards German hegemony that Emperor William rewarded. In the same book Prince Von Bülow cannot completely conceal the war plan visible in all his acts.

He says on page 132 of the French edition:

"I did not fear to place France before the possibility of war. I trusted my ability and energy to prevent matters from reaching a crisis."

A Chancellor of Prussia cannot admit warlike policies without running up against the tradition of German diplomacy and shocking the naivety of the people.

The German people must always be persuaded that they are engaged in a defensive war. It is always necessary to tell them that everything has been attempted to avoid hostilities though everything demonstrates that they have been sought.

Let us get to the third phase, the last of all, which was to bring about the outbreak of war.

It was probably to be the formal invitation to France to dismantle the fortresses of Toul and Verdun on the hypocritical pretext of avoiding war. Germany might also have demanded that a part of the French army be disbanded. In order to make the warlike reaction more certain, Von Bülow might have exacted the occupation by German troops of Toul and Verdun on the pretext of making peace more certain.

That was what Germany was ready to demand in 1914 if we had declared our neutrality in the Germano-Russian conflict.

Whatever may be supposed about the German demands, it is certain that, at the beginning of July, 1905, the military ruin of Russia had reached its final stage. The hour of action had rung for Prince Von Bülow. The Franco-German war was going to break out.

At this moment, a mission from the American government arrived in Paris in order to bring back to the Annapolis Naval Academy the body of the celebrated creator of the American Navy, John Paul Jones.

The coffin of Admiral Paul Jones had been found in an old Parisian cemetery, in the *rue Grange-aux-Belles,* by Horace Porter, the American Ambassador.

This mission had as head the Honorable Francis B. Loomis, First Assistant Secretary of State to whom the title of Ambassador-Extraordinary had been given. A company of marines escorted the mission. As I have already said, Mr. Loomis was a friend of mine. He was on his way to Lisbon where he had been named Minister Plenipotentiary. Passing through Paris he brought me a letter of introduction from Mr. Charles Dawes who afterwards became a General, Vice-President of the United States and Ambassador to Great Britain. We had had constant meetings during the hectic period of the Panama revolution, when I was Minister Plenipotentiary of the new republic.

One year and several months after the Hay-Bunau-Varilla Treaty had been ratified, Mr. Loomis came to Paris as Ambassador Extraordinary.

He was there to play a role of exceptional importance. On the first day of his arrival he asked me to dine with him at the Hotel Brighton, where he was stopping. At the same time he had invited a mutual friend, Senator Lodge, who had always been the highest authority on questions of foreign policy in the American Senate. He was then Chairman of the Committee on Foreign Affairs.

As soon as we sat down my two friends asked the same question almost simultaneously. "How will the Franco-German crisis end?"

I simply answered, "By war!"

Remarking their pained astonishment, I added:

"Yes, there will be war! The moment is propitious for Germany. The War of 1870 took place thirty-five years ago. It is the average length of the period of rest that Prussia has taken between two wars of ex-

pansion since 1619. On the other hand, we can now expect no military help from Russia whose power has been completely broken down by the disastrous Japanese War which has been lasting more than a year. We are consequently deprived of any exterior help and our interior situation has destroyed our military power for some years to come. The two moral civil wars of Panama and of Dreyfus have wholly disarmed us. War is going to be declared on any pretext. Already two of the three Biblical words have been written on the wall: 'Mene' is the landing of William II at Tangier on March 31, 1905; 'Tekel' is the removal of Delcassé, the French minister, by the German Government, on June 6, 1905. When will 'Upharsin' be written? It is a question of days, perhaps of hours.

"Up to the present time we have ignored the provocations. The third one will be so arranged as to oblige us to answer it and it will mean war.

"When it breaks out we shall hope to be killed so as never to see the dismemberment of France.

"As to the victory it would be foolish to hope for it with those two victims of their own illusions, André in the War Office and Pelletan in the Navy Department, to prepare for the war.

"Our army will do its duty and will save our honor but nothing else."

I saw how sad my two friends were at hearing this because they had complete confidence in my judgment. Mr. Loomis with his quick mind was the first to react. He asked me a question which positively stupefied me. *"Do you not see some way of preventing this war from taking place?"*

I heard this question, as astounded as if he had asked me whether I had conceived of a way to make the sun stay in place. Suddenly an inspiration came. I had before me the two most important men in Washington

on questions of foreign policy, the advisers to whom President Roosevelt always listened. They were asking me a question to which no solution could be found in Europe. Why should I not transfer it to America? In much less time than is necessary to write it, my resolution took form:

"Yes," said I, "there is a means, the only one, which recent history points out to us. In 1902 President Roosevelt obliged Germany to retreat in the matter of her Venezuelan blockade. He did this by openly threatening war if Germany did not lift it. The same thing might happen today. Let the United States renounce their isolation. Let them come to the side of France and England to answer Germany as she deserves. You will then see the thick cloud of war dissipated. Germany will click her heels together, salute, and withdraw peacefully."

When I spoke thus, I thought in theoretical terms only, because I believed the principle of American neutrality in European affairs to be unshakable.

What was my astonishment when I heard Mr. Loomis say to me with Senator Lodge's tacit approval:

"You are right. That is what we ought to do."

I could not believe my ears, such was my surprise.

My reaction was sudden:

"My dear friends, allow me to tell you that what you have just said is of tremendous importance. On its realization, the life or death of millions of men may depend tomorrow, because it will mean peace or war between France and Germany.

"But this opinion loses all its significance if I, alone, hear it. Will you repeat the same thing tomorrow before Mr. Rouvier, Premier and head of the Department of Foreign Affairs."

After glancing at each other, the Ambassador Extraordinary of the United States, Mr. Loomis, and the

Chairman of the Committee of Foreign Affairs of the Senate, acquiesced.

On the following day, the Premier, whom I had consulted by telephone, consented to receive the three of us together, at four P. M. at the Quai d'Orsay.

My friends went in to see Mr. Rouvier with me and a sudden change for the better resulted from this conversation, in the bellicose German attitude. I learned, many years later, that Mr. Loomis and Mr. Lodge had sent a cable to President Roosevelt during the night that followed our conversation, asking for permission to pay this visit to Rouvier. President Roosevelt was glad to take this opportunity to render France a service in return for the one France had rendered the United States in the Panama Canal question.

In the absence of all deliberation by his cabinet and of the chiefs of the Republican Party he had simply recommended that the presidential authority should not be invoked during the declaration of Loomis and Lodge to Rouvier.

It was to be presented as the brain-child of the two American statesmen. But it was obvious that these two important personages could not speak in this way without the previous authorization of the President.

Mr. Rouvier, ever since June 6, the date on which Delcassé had resigned, had lived in the constant fear of a declaration of war. When I translated the declaration of Loomis and Lodge, he appeared to me like a man just awakened from a nightmare.

I was naturally extremely indiscreet as soon as I left the Department of Foreign Affairs. I wanted the thousand voices of public rumour to transmit to Berlin the object of the visit of the two eminent Americans to Rouvier.

The newspapers were filled with details concerning the personality of the Ambassador Extraordinary Loomis and his mission in Paris.

The astonishing character of the absence of the regular American Ambassador during this visit, as well as my presence, was a new cause for political curiosity.

I gave it full satisfaction by revealing everywhere that America would not remain neutral in case Germany attacked England and France. I added that the declaration of that firm intention on the part of the Washington Government had been the object of the visit of the two American statesmen to the Quai d'Orsay.

This visit was accompanied by a letter which President Roosevelt sent by cable to Emperor William II. He told him that an attack on France would be a crime against civilization.

Mr. Roosevelt showed me that letter when I went some weeks later with Mrs. Bunau-Varilla to dine and spend the evening with his family at Oyster Bay.

Unfortunately I neglected to take note of the date of that important document, which, together with the visit of Loomis and Lodge, changed the course of contemporary history.

Fortunately its existence is guaranteed by testimony parallel to mine. Mr. Roosevelt probably showed that letter to his future historian, Mr. Thayer. The latter spoke of it in these terms in his book, *"Theodore Roosevelt, an Intimate Biography."*

"The situation grew very angry and Von Bülow, the German Chancellor, did not hide his purpose of *upholding the German pretensions, even at the cost of war. President Roosevelt then wrote—privately—to the Kaiser, impressing it upon him that for Germany to make war on France would be a crime against civilization. . . ."*

Unfortunately, the date is not given in Mr. Thayer's book. In my opinion the letter was written after Loomis's cablegram, expressing his intention to visit Rouvier with Lodge and myself, in order to express American solidarity in case of a German aggression.

The result of the visit of July 3, 1905, was soon visible. It was made manifest by the acceptance by Germany of all that Roosevelt had recommended in his letter to the Kaiser.

On July 7, the Havas News Agency announced a radical transformation in the attitude of Germany. She was now willing to go to the Algeciras conference peacefully while recognizing France's privileged position in Morocco. It was the collapse of the structure erected by Germany in Morocco to cause a *casus belli.*

Such were the conditions which permitted France to escape an otherwise inevitable war, when her strength had been sapped by the weak policy of her Government and she was deprived of all support from Russia.

The military cooperation of Great Britain was uncertain but, even had it materialized, the destiny of France would not have been changed. Within a few weeks the war would have been finished between France and Germany, and England would not have had the time to complete an efficient military organization.

The war which had been prevented in 1905 burst out in 1914. The history of the Great War shows that the Marne would have been a German victory if Hindenburg with his numerous divisions had not been kept at Tannenberg by the Russian armies in East Prussia.

It is thus easy to conceive of the disastrous defeat France would have undergone in 1905 when the enormous German war machine could have been entirely concentrated on her on account of the Russian defeat by Japan.

Our enemies would not then have had to keep one single division on their Eastern frontier as a defence against Russian invasion. It can thus be asserted that the transfer of the Panama enterprise to America in 1904 was, in the following year, the only cause of the American intervention to preserve France from the German attack which Von Bülow had prepared.

This political aid offered spontaneously to France at this most critical moment of her contemporary history prevented her from falling from a precipice which could not otherwise have been avoided. It was gratuitously given by President Roosevelt in acknowledgment of the great service France had rendered America in the task of uniting the two oceans. She had pointed out the way, the only way adaptable to the gigantic undertaking of creating a strait between the Atlantic and the Pacific Oceans.

My fidelity to the great enterprise of French genius had this most unexpected consequence. By persuading America that the Panama solution was unquestionably the better, the great disaster that menaced France was changed into a diplomatic victory which saved her from the most eminent peril.

It was the only reward I received for my service but a much greater one than I had dreamt of.

Chapter VIII

THE DREYFUS CASE

In 1878 I entered the École Polytechnique. Her pupils never forget the day they put on her glorious uniform. It marks the achievement of a goal, representing years of intellectual labor.

At that moment the pupil comes into contact with more than two hundred comrades among whom he knows about ten coming from the same *lycée*.

Among these unknown young men, I still remember the impression that one of them made on me, though it was almost sixty years ago. He was Alfred Dreyfus.

He was obviously a Hebrew and one of those that Nature had loaded with the ugly features of the race. Every race has beautiful and ugly types. Among the Jews there is that of Solomon and that of Judas.

But this first impression soon vanished because he was a comrade who had nothing bad about him to distinguish him from the others apart from his features. No special antagonism existed against him. Anti-Semitism had not yet been born in France.

He went out as an artillery officer, a position of which he was extremely proud. He came from a Jewish family of Mulhouse where his father, who arrived as a peddler, had become an important manufacturer. Like all the Alsatian Jews he looked on the position of officer in the army with respect and admiration, because it was a career to which these people had no access. If he had not left Alsace even the will of the King of Prussia would have been impotent to make him an officer in a regiment corresponding to that in which he served in France.

Our relations were not close at the École Polytechnique and ceased altogether when we left it.

I went from the School into the State Engineering Corps of *Ponts et Chaussées* and therefore remained in Paris while he, having been graduated as an Artillery Officer, went to the Special Artillery School of Fontainebleau. One day, however, we met each other in the Avenue Montaigne and walked together for ten or fifteen minutes. It was probably in 1891 or 1892. While waiting for the reopening of the Panama undertaking, I had, in the middle of 1890, become interested in the construction of the Belgian Congo Railroad of which I was a director. At that time I had the idea of creating a company to make explorations in the unknown territories of the French Congo, in order to employ there some of my Panama engineers who were without employment.

I spoke of this to Dreyfus who, on his side, told me of his military ambitions, of his prospective entrance at the War College and like matters.

Some time later I received the following undated letter:

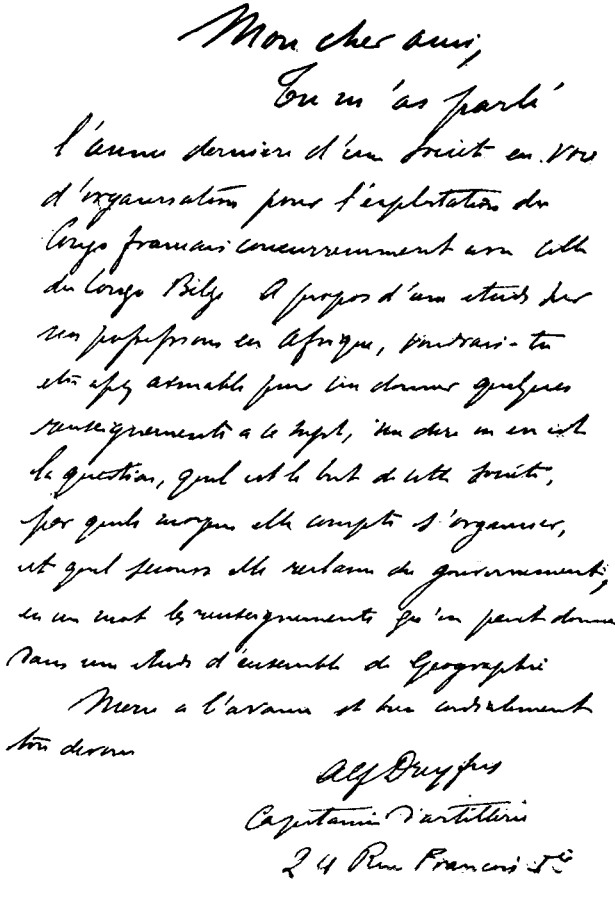
"My dear Friend:

"You spoke to me last year of a company in course of formation for the exploitation of the French Congo simultaneously with that of the Belgian Congo. Would you be kind enough to give me some information on the subject for a study on our African possessions. Let me know the state of the question. What is the aim of this company? By what means is it to be organized? What help does it expect from the Government? In one word, the information which might be given in a study of its general geography.

"Thanks in advance.

"Very cordially yours,

ALFRED DREYFUS,
Captain of Artillery,
24 rue François I."



Mon cher ami,

Tu m'as parlé l'année dernière d'une société en vue d'organisation pour l'exploitation du Congo français concurremment avec celle du Congo Belge. A propos d'une étude de ma profession en Afrique, voudrais-tu être assez aimable pour me donner quelques renseignements à ce sujet, me dire ce qu'est le but de cette société, par quels moyens elle compte s'organiser, et quel secours elle réclame du gouvernement, en un mot les renseignements que tu pourrais donner dans une étude d'ensemble de Géographie.

Merci à l'avance et bien cordialement à toi

Alf Dreyfus
Capitaine d'artillerie
24 Rue Francis de

PERSONAL LETTER OF DREYFUS

To his comrade of the "Ecole Polytechnique," Bunau-Varilla, comparison of which with the "Bordereau" was the initial point in the Dreyfus vindication campaign.

The events of the moment made me forget the request. I do not know why exactly.

About that time I was obliged to go suddenly to Mexico. I suppose that is why the letter slipped from my memory. What is certain is that I never remembered Dreyfus' request until 1896 as I am going to relate.

On October 15, 1894, he was arrested on a charge of high treason. The fact was made public at the beginning of the following month in *The Matin*. My first impression was that he had been the victim of his very Semitic features and of the anti-Semitic fury that had been unchained in France.

The memory of our first meeting came back to my memory, with the impression of his ugliness.

I naturally bowed before the sentence of the Military Court as I could not imagine that the debates which lasted from the 19th of December, 1894, to the 22nd could have resulted in a condemnation without the most flagrant proofs.

I supposed that Dreyfus was affected by some sort of insanity and I thought no more about it.

But almost two years later, in 1896, a most curious incident took place.

My brother who during that time had acquired a large part of *The Matin* property, said to me, one evening after dinner:

"I have just received the most curious of documents. It is the photograph of a letter declared by experts to be written in a hand identical to that of Dreyfus. This was so true that Dreyfus could not deny his guilt. This letter was written to the military attaché of Germany, Colonel Von Schwartzkoppen. It shows that Dreyfus furnished him with military information.

"This photograph has been kept, contrary to his duty, by one of the experts, who had to identify Dreyfus' handwriting.

"This expert is old, in bad health, and desires that this obvious proof of the traitor's guilt be given publicity that no doubt may any longer exist as to his crime.

"This publication would be dangerous for him because he would incur grave responsibilities, even a condemnation, if he were discovered.

"A mutual friend who knows what is troubling him told him that with me he would be sure to remain under cover if I published his letter.

"That is why I am the only man in Paris who has at his disposal this unique and decisive document which throws a strong light on this dramatic case. But I am not going to publish it. A nation, like a family, must throw the veil of oblivion over a stain on its honor. The treason of a captain in the French army graduated from the *École Polytechnique* is a stain on the honor of France. *The Matin,* however sensational and unique the document may be, will not publish it and will not stir up this filth."

"You are a hundred times right," said I to my brother. "It would certainly be a wonderful scoop for the *Matin* to publish this unique and unknown document, but national interest must not be subordinated to sensationalism."

When coming back home I thought how interesting it would be if I had something written by Dreyfus in order to compare his handwriting with that of the document.

I searched in my mind for some incident which might have made Dreyfus write to me. The mental effort I thus made brought back a distant and half-effaced memory. Had he not asked me for information about the Congo?

As soon as I came home I opened the file which contained Congo documents. The first one which came to

hand was the letter which Dreyfus had written to me to obtain information about the Congo and which I had completely forgotten.

As soon as I saw the letter I seized the telephone and asked my brother to send me the photograph of Dreyfus' criminal letter to Schwartzkoppen, if he still had it.

On the following day, when the photograph arrived I was struck with the resemblance between the two handwritings.

I placed them on my desk, prepared to discover a large number of identical characters in the two letters.

On the contrary, after half an hour's scrupulous examination under the magnifying glass, I discovered none at all.

I could even find striking differences.

At that moment the door opened. My brother came in. He also wished to make the comparison which the military judges, lawyers and handwriting experts, alone, had made during the secret trial.

I concealed my surprise at discovering the differences I had found.

He looked at the two documents without having the least knowledge of my impression. After two minutes of examination, my brother jumped to his feet and exclaimed:

"The two documents have not been written by the same man."

I had no longer any reason to conceal what I had found. I showed him the differences of which I have spoken.

Then a really dramatic scene ensued. It was as if we were struck by lightning.

In fact this sudden annihilation of a conviction which had been engraved in our minds for two years gave us a violent shock.

"My God!" said my brother, *"what if this unfortunate man is innocent and the victim of an idiotic expert!*

"That changes my decision. Yesterday I saw nothing but the perspective of a scandal. Today I see the possibility of exposing and correcting the possible error of a judicial expert. I am going to order that the document be published with the article which its owner wants to have printed around it. It will be a new proclamation of Dreyfus' guilt, to be sure, but that doesn't matter. The essential fact will be the publication of the only material proof brought against him.

"The demonstration of Dreyfus' innocence or the confirmation of his guilt will result from the publication even if made for the purpose of proving the crime.

"The matter is settled. I shall publish this."

The decision that my brother took was at once courageous and prudent. It may be considered to be one of the most meritorious acts of his career, as editor, for more than forty years of one of the most important political organs of France, the *Matin*

What he had foreseen took place. The whole Dreyfus affair had its origin in the publication in the *Matin,* on November 10, 1896, of the document, later on dubbed the *bordereau.*

Its publication caused a series of events which shook the world and which ended in the rehabilitation of Captain Dreyfus in July, 1906, almost ten years later.

We are going to enumerate successively these events, the sum total of which is called the Dreyfus Case.

First: It was discovered that an officer, named Esterhazy, had a handwriting identical with that in the *bordereau.*

Second: Dreyfus' brother Mathieu Dreyfus wrote a letter to the Premier of France, in which he asserted

that Esterhazy was guilty of the crime of high treason for which his brother had been erroneously condemned.

This letter was published by *The Matin* of November 16, 1897.

It will be remarked that more than a year elapsed between November 10, 1896, the day on which the *bordereau* was published, and the date of Mathieu Dreyfus' letter. *The Dreyfus family was therefore obliged to wait more than one year before daring to proclaim his innocence publicly.*

This simple fact is a sufficient answer to bad intentioned or weak-minded people who are indignant because the publication of the *bordereau* was not coupled with the proclamation by the *Matin* of Dreyfus' innocence.

Third: Esterhazy was acquitted on January 11, 1898, by the court-martial based on the report of three experts, who denied any identity between the handwriting of that officer and that of the *bordereau.*

Fourth: Émile Zola wrote the celebrated article, entitled "I accuse" on January 18, 1898, in the *Aurore* to protest again this acquittal.

Fifth: Émile Zola was successively convicted of libel by the Court of Assizes of the Seine in February, 1898, and afterwards by the Court of Assizes of Seine-et-Oise, on July 18, 1898, after the first verdict was annulled by the Supreme Court.

Sixth: Colonel Picquart was recalled from his post on the frontier of Tunis and later on arrested on the charge of having given the *bordereau* to the *Matin.* This erroneous accusation liberated him from the formal obligation of keeping silent on everything he knew as former chief of the Secret Service Bureau in the War Department. He was thus allowed to reveal how he had been led to presume that Dreyfus was innocent and Esterhazy guilty.

Seventh: Minister of War Cavaignac committed the involuntary but enormous mistake of exhibiting before the House, on July 7, 1898, a document which was demonstrated to have been falsified. This caused the arrest and finally the suicide of Colonel Henry on August 30, 1898.

Eighth: President Loubet pardoned Dreyfus on September 19, 1899, after he had been sentenced a second time, on September 9, 1899, by the Military Court of Rennes.

Ninth: Esterhazy confessed in London that he had written the *bordereau.* *The Matin* published this confession on June 3, 1899, and Esterhazy certified it to be correct on the following day.

Tenth: The Supreme Court pronounced a general acquittal of Dreyfus on July 13, 1906.

All the events that have been enumerated above have only one origin—the publication of the *bordereau.* Without that, Dreyfus would have died a convict on Devil's Island.

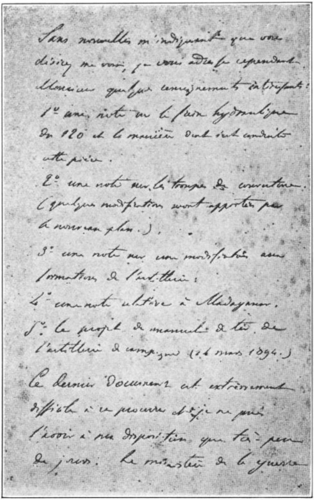
All the credit for this great act of justice is due to my brother. The fact that I had forgotten a letter addressed to me by a former comrade of the École Polytechnique was the small obstacle which turned the current of opinion away from error towards the truth.

This was not the last error having its origin in the Dreyfus case.

In the New York *Times* of May 9, 1937, there is a review of a book written by Pierre Dreyfus, the son of the Captain. The book mentions the forgotten letter of which I have spoken.

The author of the review criticizes Pierre Dreyfus in these unbelievable words.

"He also permits certain enemies of his father to pose as active friends. There is the case of Philip Bunau-


Sans nouvelles m'indiquant que vous désirez me voir, je vous adresse cependant Monsieur quelques renseignements intéressants:

1° une note sur le frein hydraulique du 120 et la manière dont s'est conduite cette pièce.

2° une note sur les troupes de couverture. (quelques modifications seront apportées par le nouveau plan.)

3° une note sur une modification aux formations de l'artillerie;

4° une note relative à Madagascar.

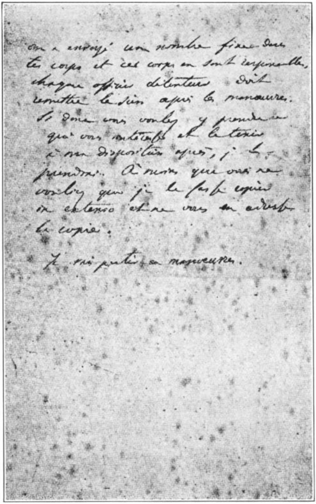
5° le projet de manuel de tir de l'artillerie de campagne (14 mars 1894.)

Ce dernier document est extrêmement difficile à se procurer et je ne puis l'avoir à ma disposition que très peu de jours. Le ministère de la guerre

THE FAMOUS "BORDEREAU"

Letter written by Esterhazy, to the German Military Attaché von Schwartzkoppen, which was attributed to Dreyfus.

(Over)



on a envoyé un nombre fixe dans
les corps et ces corps en sont responsables,
chaque officier détenteur doit
remettre le sien après la manœuvre.
Si donc vous voulez y prendre ce
que vous intéresse et le tenir
à ma disposition après, je le
prendrai. À moins que vous ne
vouliez que je le fasse copier
in extenso et ne vous en adresse
la copie.

Je suis parti en manœuvres.

Varilla who maintains that he caused to be published a photograph of the bordereau in the Matin of November 10, 1896."

This quotation, in which I am treated as a hypocritical enemy posing as a friend, shows that the era of false accusations and insults which characterized the Dreyfus case is not closed. Everybody now knows how Providence allowed my lack of memory to contribute to the discovery of Dreyfus' innocence.

Chapter IX

THE GREAT WAR

I went to the Isthmus in 1914 in order to pass through the Canal on the first great steamer which arrived in the waters of the Pacific on August 3, a few hours after having floated in those of the Caribbean Sea. On the same day, August 3, 1904, war was declared by Germany on France.

I had my return ticket on a United Fruit Co. boat. Though this company is wholly American, it navigates under the British flag on account of the American labor laws. These laws protect American sailors so well that they allow them no employment and force American companies to sail under the British flag.

I feared that a British boat would be stopped by a German cruiser. I asked Colonel Goethals to have a stateroom reserved for me on the *Cristobal,* the ship which inaugurated the Canal navigation and sailed on August 6th for New York. At the same time I cabled to the noble and faithful friend of my family and myself, Miss Bigelow, to reserve a passage on the *City of Paris,* American ship leaving for Liverpool on August 14.

I thus reached England and France without difficulty.

As soon as I reached Paris on August 24, I wrote to the Minister of War and asked to re-enter the army, my military service having been completed in 1902.

It was after the departure of the French government for Bordeaux that General Gallieni, Military Governor of Paris, answered me. He named me Assistant to the Chief Engineer of the Paris Military Government and

at the same time gave me back the Captaincy, which I had had on leaving the army.

The head of the engineering department of the Paris Military Government, whose assistant I became, was General Hirschauer, two years older than I, and a former cadet of the *École Polytechnique.*

He entrusted me with the reconstruction of the bridges destroyed in the neighborhood of Paris. The one which was most important was on the Marne, at Lagny.

The Germans never came nearer than ten miles to Lagny. After the retreat of Charleroi the English army destroyed the bridges at Lagny after passing the river, as if the enemy were on its heels.

This premature destruction of bridges is quite contrary to French military rules. The latter specify that an order from the commanding general is necessary. Such an early destruction of the bridges demonstrates a surprising lack of mental equilibrium in a nation renowned for its imperturbable phlegm. It was also made manifest in the famous letter of Marshal French, Commander-in-chief of the British army, to Kitchener, Minister of War, after the first battle of the war.

He wrote that he had lost all hope of ever seeing victory crown the efforts of the French generals. He said that he had therefore decided to withdraw to his bases.

As the latter were Havre and La Rochelle such a decision was equivalent to a refusal to fight.

When Kitchener received this letter he hastened to leave for France. When he arrived at Paris he met General Joffre and Marshal French. The latter yielded to the double pressure of Kitchener and Joffre. He consented to occupy a position at Coulommiers in view of the great battle which had been projected by Joffre on the Seine but which finally was fought on the Marne.

Though I had no company at my orders to rebuild the bridge at Lagny, I rapidly made a very good pontoon bridge with civilian carpenters and Flemish barges, which were to be found in the neighborhood. During the building of the bridge, explosions of shells were heard from behind Meaux as a battle had been going on there since September 6, 1914.

After the construction of the Lagny Bridge, General Hirschauer gave me the bridges on the Oise, at Creil, Pont St.-Maxence and Verberie to build.

The bridge at Creil was needed at once but was very difficult to construct, because the demolished bridges at Creil and Pont St.-Maxence were barring the *Oise* above and below the only place where a new bridge could be built. It was therefore impossible to bring boats there. I had to be satisfied with a few scows which were already in this isolated section of the Oise. Because of their small number it was necessary to leave open spaces of twenty-seven feet between them. My only materials were pieces of wood, seven inches and a half high.

A company of marines, who a few days later were to acquire immortality at Dixmude, were trying to construct a bridge there.

When I arrived, a cart loaded with hay was trying to utilize the bridge which had been built. Its weight caused the platform to sink almost below the level of the water. I took charge and said to the officers of the Marines:

"You have everything that is needed to make a bridge on which ten-ton vehicles can easily pass without causing any perceptible movement. With your cooperation and some pieces of iron it will be finished within seventy-two hours."

They set to work with enthusiasm and less than three days later a perfectly rigid and solid bridge connected

the two sides of the *Oise* with the same number of supporting scows.

I faced the same problem at Pont St.-Maxence and at Verberie but at Pont St.-Maxence I put up the bridge on piles.

I had the active cooperation of a company of *pontonniers* from the Army of Paris. It was absolutely necessary to build the bridge at Verberie, on the *Oise,* in a short time. The impending arrival of the British troops coming from the *Aisne* (a tributary of the *Oise*) made its quick construction indispensable. They were participating in that great displacement of troops towards the north called the "Race to the Sea." There also I was short of floating supports and obliged to separate the scows by more than three times the normal distance.

I used the same solution as at *Creil.* Once built, the bridge frightened people on account of the thinness of the platform between the scows which were about thirty feet distant. I was to witness the consequences of that fear twice. When my soldiers were hammering the last nails I decided to open the bridge to circulation at two P.M. An English artillery column was to cross the river at about three P.M. As I returned after lunch to inspect the final work, I passed near a parked auto, where two English officers were taking their meal. In order not to interrupt their repast I pretended not to see them. The bridge being completed, I walked over it and waited for the artillery column. The two officers arrived. One was a Lieutenant-Colonel with a somewhat timid air. He apparently limped slightly. The other one was a Major with an open face and rather distinguished figure.

We approached one another and they asked me in French: *"Do you believe that this bridge is strong enough to allow the passage of an artillery column, sir?"*

I answered in English: "If your guns are siege-guns I shall have to know their weight. If they are field-guns, the bridge is made for that. Vehicles may weigh up to ten tons."

"Could you tell us who built the bridge?"

"I did," I answered in English.

"But, sir," they said, still in French, "it is rather amusing to see the Englishmen speaking French when you, the Frenchman, answer in English. We congratulate you on your knowledge of our language."

Wishing to continue the joke, I answered in English, "There is nothing surprising in that, gentlemen, because I am a British author. I have just had a book published by Constable in London. It is a big volume which I wrote entirely by myself: Panama: Creation, Destruction and Resurrection."

Up to that moment, in contradiction to the French custom during the war, they had not introduced themselves and I had followed their example.

At this point the Anglo-French conversation was interrupted by the arrival of the artillery column.

Heavy field guns weighing more than our admirable 75's, each one pulled by six enormous horses, rolled onto the bridge. My two interlocutors were evidently very anxious as they expected this thin sheet of wood thrown between the scows to crash through. Nothing moved and the artillery column passed over as if the bridge had been made of masonry. Their features relaxed and their expression showed joy and relief.

"It's marvellous and incomprehensible!" they said in English. *"Can you explain to us the secret of the rigid solidity of this bridge, so fragile in appearance?"*

"It's very simple," I said, this time in French. I explained the combination of pieces of iron and of planks which I had imagined at Creil to solve the problem.

After they had congratulated me again, the Major said:

"It is now time for us to introduce ourselves, sir." Then, nodding to his companion he added, "His Royal Highness, The Prince of Connaught." He then gave his own name, with his rank of Major. I bowed and said, "I am Major Bunau-Varilla." We shook hands cordially and they went away enchanted.

Here is the second incident which shows the false impression of weakness given by the same bridge.

After two or three days of service without accident, General Hirschauer said to me: "What is the matter with Verberie Bridge? I have received a telegram from General Maunoury sent from his headquarters at *Villers-Cotterets* forbidding the use of it."

I replied, "Tell him to send a competent officer to Verberie Bridge tomorrow at seven A. M. and that I shall be there to give all necessary explanations."

On the following morning, at about six o'clock, I was at Pont St.-Maxence where I stopped to have a look at the bridge which was being built there on piles. A Lieutenant-Colonel of Engineers whom I did not know looked at the works.

I approached him and introduced myself as was the custom. I then explained the new method I was putting into execution and which allowed me to throw a bridge across the *Oise* with eighteen piles.

He congratulated me on the originality of the conception. On taking leave I said:

"I must go to Verberie, where I have an appointment at seven A. M."

"I also," he said. "Is it you by any chance who built the bridge at Verberie? If so, it is useless for us to go, because the closing of that bridge, which I advised yesterday, is certainly unjustified if you are its creator."

"I see what has deceived you," I said. "If you had

looked under the bridge you would have been reassured." I then explained the method I employed to throw a platform between scows thirty feet distant with planks seven and a half inches high.

About this time General Hirschauer was called by the Governor of Bordeaux to command the Aviation. He was replaced at the head of the Military Government of Paris by General Petibon (small good). He said himself that he was neither small nor good.

Having finished the bridges on the Oise below Compiegne by new and rapid methods, I proposed to him to use our excellent company of *pontonniers* on another river. It was necessary to throw a great number of bridges on piles across the Aisne between Soissons and Choisy-au-Bac (which latter place is at the junction of the Aisne and the Oise). We had troops on the right hand side of the Aisne in the Forest of l'Aigle, which a flood of the Aisne would have deprived of communications. The bridges there were established on floating objects such as barrels, etc.

I was able to build at least one good bridge on piles, a week, with my company of *pontonniers* of the Government of Paris. After having proposed my idea to General Petitbon, I was sent by him to Villers-Cotterets in order to see General Maunoury. The latter received me warmly, and I went to visit the whole valley of the Aisne with General Levy, commanding the engineers in Maunoury's army.

Things were going to take an eminently favorable turn for our soldiers on the right bank of the Aisne when General Petitbon said to me:

"The chief engineer of the Paris-Lyon-Mediterranean Railroad Company, Colonel Séjourné, keenly desires an active post. What would you say if I gave him a post with you rebuilding bridges?"

"He cannot be with me. He will be above me because he is my hierarchical superior," I answered. "Without a doubt, Séjourné is one of our most eminent engineers. The question is: Does he know how to adapt himself to war?"

"Oh," said General Petitbon, "you will have no trouble working together.

What I foresaw took place. We began the bridge on the Aisne at Choisy-au-Bac near Compiegne, quite near the point where the river flows into the Oise.

I intended to use about twenty piles, which could be cut in the Forest of Compiegne where we were, and to finish it in less than a week, with my company of *pontonniers,* then at liberty.

Such was not Séjourné's idea. He left the company of *pontonniers* without work and displaced a company of engineers which was doing useful work in the upper part of the Aisne Valley.

Two hundred and fifty piles instead of twenty, which were all that were really necessary, were used. They had to be sent from Auvergne. The whole bridge construction took six weeks instead of one.

To be sure, the bridge built in this way was much more permanent than the one I wished to build, but it was no longer a war bridge. The bridge at Choisy-au-Bac was the only one made. The other communications consisted of the light bridges on barrels, of which I have already spoken. Had a flood taken place, a disaster would have followed. A little later on, a fundamental divergence of views separated General Petitbon and myself on the matter of the aerodrome at Le Bourget which he wanted to cover with slag. The silicious dust coming from this material would have soon damaged the motors of our aeroplanes. I refused to lend myself to this dangerous fantasy. The General put me at the disposal of the Secretary of War and I was enchanted.

Paris had then ceased to be the aim of the German attacks. I asked to be sent to the front. I could not stand inaction in Paris. I was named Assistant to the Colonel commanding the Engineers of the Fourteenth Army Corps, Second Army, at Caix in the Somme. I arrived there at the beginning of April, 1915. The front was not five miles away. My chief was an officer of great merit, Colonel, later on General, Braconnot. The headquarters were transferred to Villers-Bretonneaux a few weeks later. The new headquarters were twice as far away from the front as the old ones. It was there that, on May 27, the wireless station caught a German message of the fall near Mannheim of the aeroplane piloted by Adjutant Bunau-Varilla. It carried Major, later on General, de Goys, chief of the squadron of eighteen aeroplanes which had left Nancy to bombard the *Badische Anilin und Soda Fabrik* at Ludwigshafen, near Mannheim.

The motor suddenly stopped and my son made a forced landing, Major de Goys' efforts to start the motor again having failed. As the formal order was to drop the bombs only on military objectives, they landed with their loaded bombs, risking an explosion of their dangerous cargo.

The exasperation that both felt was such that they would have preferred such an end to their aerial excursion. As nothing happened they took immediate measures to set the aeroplane on fire. My son lit a match and threw it into the gasoline tank. The expected explosion did not occur and the match went out. Seizing a wrench he broke the gasoline feed pipe. The fire was really started this time. It soon reached the wings and body of the aeroplane. Then the bombs began to explode. By a real miracle neither aviator was hit. Soon afterwards, some peasant arrived from a neighboring field and led them to the town hall. The mayor arrived

and, to their astonishment, made them a welcoming speech, as if their arrival had not coincided with the bombardment of the Ludwigshafen Chemical Works, from which explosions could still be heard. A short time later German officers arrived. Our men were prisoners of war. The seventeen other aeroplanes came back to Nancy without accident but French aviation had lost two precious fighters. Had they not been cut off from the French army their passion, aerial bombardment, would have taken an enormous part in the war. After this brilliant beginning at Ludwigshafen, the loss of the two leaders practically put a stop to the development and general use of aerial bombardment. We had to wait until the Italo-Ethiopian war to see the part it could play. It is aerial bombardment which will be the dominating factor in the next war, on condition that mustard or other sorts of poisonous gases be employed. Another condition is to shelter aeroplanes and gasoline tanks in order to prevent their destruction by the enemy before the declaration of war. The aerial bombardment of Ludwigshafen, which Major de Goys had organized with my son Étienne as assistant and pilot, would have been the beginning of a terrible aerial war. The impression that this heroic expedition made was such that the G. H. Q. abandoned the principle, hitherto always observed, not to give either promotions or decorations to prisoners of war.

Major de Goys was promoted to a higher grade in the Legion of Honor and my son, who had been noncommissioned officer in the Dragoons, when he left Nancy, was made Second Lieutenant.

The Spanish Embassy at Berlin, under the energetic and cordial impulsion of King Alphonso XIII, notified the Imperial Government at Berlin of this promotion. My son, who was interned with Major de Goys in a fort at Würzburg in Bavaria, received from the Com-

manding Officer the notification of his promotion, but at the same time was informed of the absolute refusal of the German Government to accept this change in his military situation.

"As long as you stay in Germany you will be considered to have the same rank as you had when you were made prisoner. We shall hold you as long as the war lasts as a non-commissioned officer with the rank of adjutant. It is an absolute principle of German military legislation to ignore the acts of an enemy government concerning an officer in captivity."

This took place in June, 1915, because the fall of the aeroplane my son piloted had taken place on May 27 of the same year.

But one year later the German Government needed ten French officers among the prisoners of war for reprisals. My son was taken from the fortress of Würzburg without the knowledge of his comrades. He was put in a cell of the military prison of Nuremberg. There he was submitted to the regime of military men condemned to long captivity with all intellectual occupations prohibited. For a time he ran the danger of being shot in reprisal for a condemnation to death pronounced by a military court in France against a German adjutant named Metz.

Fortunately this sentence was not carried out in France and the cruel reprisal did not have to be put into effect.

The fact is, my son was imprisoned with nine other French officers, including General Castelnau's son, in different parts of Germany. They were treated as common law criminals. It was done as a reprisal for a sentence pronounced in France against a German officer who had been made prisoner after being wounded. The following words were found in his diary among the

pages relating to the beginning of the war: *"Two houses burnt at Creil."*

Our theorists on International Law had caused the notion to prevail during the war that the destruction of a house was equally punishable in time of war and in time of peace. In accordance with this absurd principle a military court at Avignon, if I remember rightly, condemned this German officer to twenty years of hard labor.

He pretended in vain that he had received the order and could not act otherwise without failing in his military duty. The natural result of this monstrous theory which in war allowed murder, but punished destruction of property severely, was soon visible. Ten French officers, who were prisoners of war, were *ipso facto* condemned to suffer the equivalent penalty in Germany in reprisal.

My son Étienne, though officially considered as a non-commissioned officer in the Dragoons, was held as a suitable person for the reprisals. At his first interview with the commanding officer of the military prison of Nuremberg he protested. He pointed out that the German military authorities considered him to be a non-commissioned officer and that he could not therefore be the object of reprisals for a supposed injustice suffered by a German officer in France.

"I am going to ask the Kriegsministerium," replied the commanding officer.

After two days he was notified that his rank as Second Lieutenant of Dragoons would henceforth be recognized in Germany. But, at the same time, he was accused of having attempted to escape and of having offered ten thousand marks to the sergeant who kept the prison keys.

By an extraordinary coincidence such as is only seen in novels, the door of Étienne's cell was half opened dur-

ing the course of cleaning operations, when he saw a prisoner being led through the corridor by two military policemen. It was his friend and companion in misfortune, Major de Goys, who had escaped from Würzburg but had been recaptured. The latter repressed his joy at seeing Étienne living when he had thought him shot in reprisal. Étienne, taking advantage of a moment of inattention on the part of the guards, pointed to the grilled window, opening onto the prisoners' promenade. De Goys understood that a means of communication was being indicated. Indeed, some minutes later he was brought to one of the sectors of the promenade. He saw his friend's head at one of the little windows.

Étienne, at the risk of being severely punished, had put a chair on a table to reach the narrow window. After exchanging a look with de Goys he began to sing a French song at the top of his voice. It was not a song despite appearances because it told de Goys that he was to be tried by court-martial and that he would cite de Goys as a witness. At the same time he explained his system of defense.

Major de Goys made a sign of approval and, soon afterwards, my son disappeared, after having removed all traces of his illegal excursion.

To be sure it is difficult to believe that such a series of circumstances belongs to the domain of reality and not of imagination.

Immediately afterwards my son sent a formal request to the prison commander to have Major de Goys called as a witness. It was answered that his request was rejected because any testimony invoked by him could but lead to the casting of a doubt on the existence of the crime denounced by the military authorities. This unbelievable answer was communicated in writing to my

son and if I had not read it myself, after his return from captivity, I would think that he had dreamed it. My son immediately asked for the counsel of the head of the bar at Nuremberg, offering to pay whatever fee he asked.

This time the request was granted and soon afterwards the head of the bar arrived. He became indignant when he read that de Goys' testimony had been rejected. Later on he refused to accept any fees for his services. Soon afterwards the court-martial was held to judge my son. De Goys was duly called as a witness.

A short time before, by a happy chance, a brilliant uniform of a Second Lieutenant of Dragoons, in time of peace, had arrived. He had ordered it to obtain his acquittal, if he were tried by a court-martial for having attempted to escape.

When my son entered the courtroom he was clothed in the brilliant uniform of an officer in the Dragoons. He wore his war decoration on his breast. He made a spectacular, though strictly military, salute to the court with a mechanical and automatic precision worthy of an officer in the Prussian Guard.

At this unusual sight the President, Judges and secretaries rose and returned the salute, while the guards took the position of attention, with heels together.

The psychological foresight which had inspired my son's order for a uniform of an officer in the Dragoons in time of peace had insured the success of the day. He was easily acquitted.

One day, when I was in Paris on military business, I was informed of the imprisonment of my son at Nuremberg. The idea that this young man of delicate health would receive the poor nourishment of common law criminals, and be deprived of any reading or other intellectual occupation, worried me.

If such a thing were to last, his life would be menaced by this physical and mental torture. But I thought it so absurd to inflict a penalty of twenty years' hard labor on a German officer for a military act that I expected the sentence to be suppressed, after having served as an admonition.

I was on the Champs-Elysées when, close to the Presidential Palace, a Second Lieutenant joined me. It was Hederman, the brilliant foreign editor of *The Matin,* who, despite the fact that he was a Dutchman, volunteered in the French army at the beginning of the war. At that moment he was Second Lieutenant and Flag-bearer of his regiment. He was, a few weeks afterwards, killed in one of the counter-attacks which followed the capture of Fort de Vaux by the Germans.

I told him what I had just learned. He took me by the arm and almost forced me to come to the Elysée.

"You must inform the President of the Republic of the fact that ten French officers, including your son, are submitted to reprisals on account of the sentence of the Military Court at Avignon," he said. "It is a subject which concerns the whole army and Mr. Poincaré must be informed of it."

Despite my reluctance to make the visit, I yielded. The President received me most amiably, as soon as the Secretary-General had handed him my name.

Hederman then left me. I was never to see him again. His last expression of faithful friendship was a postal card in which he said to me: *"I am entering the furnace."* Alas, a few days later, General Hirschauer informed me of his death.

As soon as Mr. Poincaré heard the object of my visit, he said, *"You understand that, today, Mr. Bunau-Varilla, there have already been two cabinet meetings, during which the question of the ten officers,*

including your son, who are the object of reprisals, has been examined."

I answered, *"It is very certain that among the crimes which war makes lawful the burning of two houses, is only a peccadillo. A German prisoner has been sentenced to twenty years' hard labor for this petty offense. It is very obvious that you have only wished to establish a principle and will pardon the man."*

Then Mr. Poincaré uttered a refusal which positively stupefied me and made me believe, for one moment, that he was the victim of an hallucination.

"No," said he, *"we shall not pardon the German officer, because they have not destroyed any houses since we have begun condemning for that crime."*

I was literally overcome with astonishment. It was 1916 and for almost two years the front had been fixed and the destruction due to troop movements had consequently ceased.

I could not help saying: "Mr. President, *it is not judicial procedure which has prevented the destruction of houses. Our soldiers' bayonets have done it."*

My remark seemed to hurt the President very much.

I returned to Verdun after having lost all hope of seeing the end of the reprisals of which my son was a victim. His suffering, and that of his nine comrades, was due to the crazy conceptions of patriotic lawyers who thought they could use their ordinary weapon: *procedure,* to defend France against Germany.

As soon as I arrived in Verdun I informed General Pétain of the matter.

After listening to me he said, "Can you think of any solution?"

I answered, "Such trials, General, are monstrous from the point of view of the accepted conventions of war. Suppose that a German is guilty according to conceptions which are not in harmony with these conven-

tions, it means that ten Frenchmen will be condemned to hard labor in Germany for one guilty German in France. The consequences are just as regrettable as the principle itself, because if the principle were just, all prisoners ought to be prosecuted or condemned to death for murder or complicity in murder!

"From the point of view of the rights of the defense in court you run up against another shocking abnormality.

"It is universally admitted that obedience to an order exonerates a military man from all responsibility. The condemned officer asserts that he received the order from his superior to burn the two houses at Creil.

"Is he able, at this time, to have the witnesses cited who would exonerate him? No, and that gives me the clue to a solution.

"Bring all the belligerents to accept a convention, by which all enemy prisoners condemned for a punishable act of war will be liberated, and postpone the trial until the conclusion of peace."

"Yes," said General Pétain, in his straight-forward way, *"that is what must be done. Write me a report, concluding to that effect. I shall transmit it to General Headquarters with my approval."*

This humane solution was accepted by General Joffre. The convention was adopted by all the belligerents, thanks to the generous activity of King Alphonso XIII of Spain.

That is how I owe to Marshal Pétain, to Marshal Joffre and to King Alphonso XIII the great happiness of seeing my son liberated from horrible captivity, after four months of suffering, which if prolonged would probably have ended in his death.

When he left the prison they had to settle his account. He noticed that it was based on his salary as a non-commissioned officer.

"Why!" he said to the commander of the prison, "you told me when I entered the prison that my rank as an officer would be recognized and you have established my account as if I were still a non-commissioned officer."

"I am going to ask the *Kriegsministerium,*" said the embarrassed commander. The following day the decision came: *Mr. Bunau-Varilla will be recognized as an officer when he leaves the Nuremberg Prison. During his sojourn there he will be considered as a non-commissioned officer and his account will be established accordingly.*"

My son took the money and his account, saying to the commander: "This account is a precious document. I shall preserve it carefully. It establishes that the German authority has *subjected to reprisals a French non-commissioned officer for a supposed injustice done to a German officer in France. As reprisals cannot be exercised, except on peers of the supposed victims, this demonstrates that, in the opinion of the German Military Authority, a French non-commissioned officer is the peer of a German officer.*"

Having thus expressed himself, he left Nuremberg Prison for a camp of war prisoners at Heidelberg. But he was soon selected again for new reprisals.

At this time, in order to prevent the torpedoing of hospital ships bringing back the wounded from Macedonia, it was decided to embark, on board these ships, German officers who were prisoners of war. Immediately, the Germans selected French officers who were prisoners of war and imprisoned them in the neighborhood of iron mines in Lorraine, which were frequently bombarded by our aeroplanes. About fifty French officers, including my son, were interned to the north of Metz, at the Mézières-les-Metz Mine. Here is how

my son described these reprisals in a letter dated June 7, 1917, written to his mother:

"The reprisals consist in being kept in a region which is visited during the night by our aeroplanes. The Germans say that, in principle, we are no worse off than anywhere else. In fact, the visit of our planes is the only pleasure that we get. Our material situation has so much changed for the worse that I think it well for you to know it, so that, outside of the hospital ship question, measures of reciprocity may be taken in consequence.

"We are about fifty piled up in a very narrow space in which the beds are placed four side by side, and in superimposed stages.

"Now that I have described the bad side of our situation, I am going to describe its advantages. . . ."

"Never has the morale been better. During the night we are awakened by the beloved noise of the cannon, which sprinkle our roof with small particles of iron. (Here a passage was stricken out by the censor.) It is the gayest moment of all, recompensing us for all our small miseries."

On June 8, 1917, the day following, a new letter said: "Yesterday and, principally, last night was very monotonous. We have been deprived by the weather of our only distraction, which takes place during the night. Here is how it was. In the middle of the night the whistles from the Central Electric Station informed us of the possible arrival of aeroplanes. Then they shut off all exterior lights and lit red lamps on the pretext of wanting to see what was going on, in our rooms. A few minutes later a magnificent cannonade filled the sky with exploding shells."

But this was not going to last long. The French aviation was informed of the meaning of these red

lamps and as I am going to relate, ceased to drop bombs on Mézières-les-Metz. On the other hand my son was seized with a severe attack of asthma produced by the dust of the slag forming the pavement of the court in their little prison. He was transferred to the hospital at Metz, then to Heidelberg, where a commission thought it necessary to send him to Switzerland, on account of the very grave breakdown of his health which had resulted from the four months' convict life at Nuremberg, which was followed by a new trial at Mérières-les-Metz.

On June 19, 1917, a dispatch to *The Matin* from Berne gave the names of the sick French officers sent to Switzerland, in exchange for German prisoners who were also interned in Switzerland. Among these names was that of Mr. Bunau-Varilla of Paris.

Here is how the red lamps which were lighted to attract our bombs were, on the contrary, useful in preventing the bombardment of places where they were lit.

As I came one day to Paris I read the first three letters announcing the new tortures to which my son was submitted.

When I read about the red lamps I hastened to go to the Central Telephone Station of the Military Government of Paris. I asked to speak to the Commander of Aviation of the Second Army at Souilly. They connected him with me almost immediately and I described the trap that had been laid and the red lamps in the rooms of the French officers, which constituted the bait. The officer answered that they had indeed seen the red lamps, and were trying to discover what they meant.

From that moment on the red lamps which had been placed to attract our bombs became warning signals instructing our aviators where not to drop bombs.

During my son's trip to Mézières-les-Metz an interesting incident happened which showed the state of mind of the people of Lorraine during the war.

The train which took the French officers to their camps near the iron mines was stopped as it was crossing a street in Metz.

When they saw the train filled with French officers, the people flocked from all sides and expressed the most lively affection from a distance. The young girls threw them enthusiastic kisses. A German policeman, when he saw this manifestation of cordiality, approached to put an end to it. An old woman left the group and spoke to the policeman with such violence that he turned upon his heels and went off because the whole crowd supported the old patriot.

Such was the popular sentiment in Metz in the middle of 1917 when it was still under the Prussian boot.

The same state of mind was expressed, in my presence, at the end of the following year, after we had just occupied Metz. I had been to Strasburg to see the entrance of the French troops. I returned by way of Metz, as I wanted to visit General Franiatte who commanded the artillery of the Tenth Army. He had been my friend since the Battle of Verdun, where he commanded the artillery of the Second Army.

As I was walking in one of the fine squares of Metz I passed three peasant women coming in the opposite direction. After they had gone by I heard one of them say to the others: *"There is an officer who has lost his leg for us."*

This was a spontaneous and delicate expression of gratitude on the part of the people for those who had liberated them from the military tyranny of Germany.

I have related how I was able to intervene and obtain the cessation of the odious regime of trials of prisoners

of war incapable of defending themselves. I said that I obtained this result thanks to General Pétain, General Joffre and King Alphonso XIII. It only remains to give Mr. Poincaré's version of my visit to him. When Mr. Poincaré published the book entitled "Verdun" I was told that he spoke of my visit in 1916.

He relates a story which is just as astounding as the one he told about judicial procedure having stopped the destruction of houses by the Germans.

"Saturday, April 9.....

"Philippe Bunau-Varilla, who is still mobilized as a Major, came to see me about his son, kept as a hostage by the Germans who want me to pardon Major Ecler, the incendiary of Creil. I tried to make him understand the impossibility of concluding such a bargain, and added that the Germans had taken one of my relatives as a hostage also. This had been revealed to me by a deciphered telegram."

This short passage is full of errors. I was not mobilized for the simple reason that I was not mobilizable. Twelve years before the outbreak of the great war I had fulfilled all my military obligations.

If I was an officer it was because I had volunteered at the beginning of the war.

My son was not a hostage, a term applicable only to civilians, arrested by the Germans to guarantee the obedience of the inhabitants of occupied territory. Such was probably the condition of the relative of whom Mr. Poincaré spoke. My son was not a hostage, he was a French officer in the Aviation, who had been made prisoner during an aerial attack on Ludwigshafen. I never said that the Germans wanted the President *to pardon Major Ecler.* I did not say it for the simple reason that I did not know it. I had believed that the sentence of twenty years' hard labor pronounced against

a German officer for an act of war such as the burning of houses, an act quite normal in time of war, was nothing but a simple admonition. This admonition had the great disadavantage of condemning ten French officers to the same penalty in Germany. Furthermore Mr. Poincaré represents me as having come to offer him a bargain in the name of the Germans. No greater insult could have been proffered in regard to a French officer. If Mr. Poincaré ever wrote that, it is because the disease which was soon to carry him away had altered his mental faculties. If that is true, he acted because he was irritated by my remark that the cessation of the destruction of houses by the Germans had not been caused by his procedure, but by the bayonets of our soldiers.

I wrote Mr. Poincaré a letter of protest, as it was proper to do. The news of his bad state of health prevented my sending it. Soon afterwards he died.

We left the history of my war adventures at the point where the German wireless message was caught, on May, 1915, at Villers-Bretonneaux. It announced the forced landing of de Goys and Bunau-Varilla near Wilhelmshafen on the Rhine. I shall hereafter continue the account of my own war souvenirs after joining the Fourteenth Army Corps as Assistant Commander of the Engineers.

The Somme front was fairly inactive in 1915. The Second Army was taking a rest after its rapid displacement from Nancy to the Channel called *"the race to the sea."*

In August, the Fourteenth Army Corps left for an unknown destination. We arrived at the new G. H. Q. at Somme-Suippe, on the Champagne Front, to prepare the offensive, planned for September, in which we had to take part.

A great cavalry force was to go through the German lines as soon as the hoped-for rupture was effected. Very extensive troughs were needed. It was also necessary to have sufficiently deep trenches for the horses to be entirely concealed when led by the bridle to the front line. Nine such trenches opening onto the German lines were foreseen in that small part of the front, about a mile and a half in length, held by the Fourteenth Army Corps. The trenches were three miles long and their section was 42 feet square. Thus there were 250,000 cubic yards to be excavated. The work was done in two weeks by two divisions of infantry put at the disposal of the engineering service. As soon as the trenches were opened it was necessary to throw bridges across the road from Suippes to Perthes-les-Hurlus. The latter place was on the front and all the trenches giving access to it cut the road.

The bridges could only be built at night, without any lights, because we were in view of the Germans and under their fire. In order to insure the construction of these bridges in the obscurity, I established a saw-mill on the road from Chalons to Menehould. All the pieces of wood cut there were one or two meters long and had a section each side of which measured 10 centimeters. The bridge projects were traced so that these two pieces only were utilized. The nine bridges were built in ten nights without lighting a match.

The great question was that of providing water for the horses. At that time this service was incumbent upon the engineers.

In that season the Suippe had an abundant flow near its source at Somme-Suippe. But it was necessary to make the water pass from the river bed into the trough. I had no pump and there was no possibility of buying one. Machinery could only be bought on the territory

occupied by the army. But that territory was a desert. In such cases we had to ask for supplies from the rear and administrative procrastination prevented us from receiving satisfaction before a month and a half elapsed. It was too long!

I imagined that, failing ordinary pumps, I could utilize centrifugal pumps put into action by locomobiles, generally used for pumping water from excavations made for foundations. I went to Chalons, a town belonging to the Fourth Army. I visited some building contractors and found locomobiles and centrifugal pumps for drainage, in greater number than I needed. To be sure, one army was not allowed to take military machinery on the territory of another, but nobody considered drainage machinery could be employed for an army, as it was exclusively used to erect buildings. Therefore it did not constitute military machinery.

So they let me load the locomobiles and centrifugal pumps on trucks belonging to the Second Army.

Two days afterwards everybody was surprised to see the troughs abundantly provided with water coming from centrifugal pumps driven by locomobiles. This rapid solution of an apparently insoluble difficulty had very important consequences because its strangeness attracted general attention. At that moment a special service was created to take charge of the water supply, which funcion had previously been performed by the Engineering Service. The head of the water supply of the Second Army, Mr. Guillet, had just irritated that G. H. Q. by asking that the offensive prepared for the 25th of September be postponed for two months. This was in order to have sufficient time to create the various water supply stations. The locomobile solution attracted attention to me.

A delegate of General Pétain, commanding the Second Army, came to offer me the command of the Water

Supply Service of the Second Army. Guillet was to become my assistant. I refused, as I did not want to give up my part in the expected offensive.

To this the officer replied, "But suppose it is an order?"

"If it is an order, why do you ask whether it suits me or not?"

"Well," said my interlocutor, "you may consider it as an order."

I pulled out my watch, looked at the time and said:

"All right. Tell General Pétain that I have assumed my duties today, September 10, 1915, at 11:15 A. M."

As he was going away, I called him back to say: "There is an essential question to be settled. If the G. H. Q. wants the offensive to take place on September 25, I have only fifteen days ahead of me. I have a chance of success if I can obtain from Paris the important machinery which is necessary. This is strictly prohibited by a rule which is often insisted upon. If General Pétain wishes this rule to be respected, I shall need two months and a half. Go and ask the General if he tacitly authorizes me to violate this rule."

One hour later I was told over the telephone:

"I have asked the General your question. Here is what he answered: 'Let Major Bunau-Varilla violate all he likes provided he gives us water on the 25th.'"

I immediately went all over the front of the Second Army from St.-Menehould to Suippe in order to trace a plan of action. I left for Paris where I bought almost thirty thousand dollars' worth of pumps, pipes and big casks in which to transport the water by lorry.

It was rather easy to buy but very difficult to send. Would the Supply Service cooperate with me in transporting the goods to the front when its purchase was forbidden in Paris? I sent my card to the General in

charge of the Supply Service with these words below my name:

"Chief of the Water Supply Service of the A. G. A. C. Army."

"What is this A. G. A. C. Army?" said the astonished general. I answered: "It is a mysterious masked army being constituted in secret. The letters which precede the word mean Adjoined (A) to the Group (G) of the Army (A) of the Center (C).

"The secrecy which surrounds its creation makes it necessary to forego the ordinary rules. I need an important quantity of machinery which only exists at Paris. I shall come or rather I shall send somebody to ask for orders to transport the machinery which the secret army needs. My representative, Miss Dallet, has come with me. She has been my secretary for twenty years. I should like to introduce her to you."

The general answered:

"It's agreed. You may introduce Miss Dallet. I shall give her whatever transportation orders she may ask for."

Everything was settled. I returned in haste to my personal headquarters at Courtisols. In haste, I put up water distributing apparatus which allowed the simultaneous loading of lorries, carrying three big casks of one hundred and fifty gallons' capacity each. Nearby wells were being dug night and day. On September 25, fifteen days after my nomination, there were five hundred thousand gallons of water ready to flow every day and follow the army if it advanced. The problem had been solved thanks to the French people's capacity for action when the right way is pointed out. It is worthy of notice that these automatic distributors of water to lorries were the origin of the automatic distributors of gasoline to automobiles. At Verdun I put up one hundred and twenty-five water distributors and, when

the American army arrived later on the idea of using the same principle to feed automobiles with gasoline was conceived by one of the newcomers.

This rapid equipment of the Second Army insured its water supply on three routes during the northward advance which, it was hoped, would follow the rupture of the German front. This advance through the German lines took place only at Perthes-les-Hurlus, but was stopped a few miles farther on at Tahure. The system functioned very well and a center of water distribution was organized on the crest above Perthes. It consisted of fifty casks of one hundred and fifty gallons capacity each. Lorries brought water to replace what had been consumed. The front having been stabilized, the cost of this method of transportation became too high and I proposed the establishment of a pipe-line between Somme-Suippe and the center of distribution above Perthes.

Within fifteen days the cast iron pipe, three miles long, was brought from Bar-le-Duc and everything was functioning. It had been necessary to create a trench, one meter and a quarter in depth, to protect it from the cold. Pumps were established near the wells on the shores of the Suippe. They had to send water two hundred feet above their level for a distance of three miles. At the end of the pipe a reservoir had also been built. Water was distributed at various places in the forest through which the pipe was established, for the convenience of the troops quartered there.

The founders of Bar-le-Duc said that, to their knowledge, no such speed had ever been attained in the completion of any like enterprise.

The successful solution of these different problems ended by permanently detaching me from the Engineering Service which I had thought to leave only temporarily. I was henceforth considered in the Second

Army as indispensable to the Water Supply Service. I deplored it then. I do not regret it now, because that link with a service, which I thought to be only half military, allowed me to make a discovery of incalculable importance for France.

I speak of *Verdunization,* which I discovered during the bloody battle of Verdun, and which will redeem France from racial decadence if some energetic government realizes its importance and enforces its application in all France.

Before finishing with the Battle of Champagne, it is interesting to relate an anecdote showing Mr. Clémenceau in quite a new light, completely at variance with the legendary one which gained him the name of "Tiger."

The offensive, begun on September 15, 1915, practically ended a few days later. We had four or five thousand German prisoners in a camp near Croix-en-Champagne, a few miles south of Somme Tourbe.

General de Lamothe, commanding the services of the rear of the Second Army at Vitry-le-Francois, called me up at Courtisols to know whether I would be willing to dine with Mr. Clémenceau. All the officers at headquarters were invited.

The relations between Clémenceau and my brother Maurice were extremely strained after having been, a few years before, very cordial. When he was asked by Lamothe whether he would like to meet me, the celebrated politician, known for his varying moods, said that he would be delighted.

The conversation began between him and a small number of the guests. He described his excursion along the front and his return through Somme-Tourbe.

I asked, "If you came by way of Somme-Tourbe, Mr. President, you necessarily passed through Croix de Champagne."

"Yes, indeed," replied Clémenceau.

I added, "You must have seen the great attraction of that region, our five thousand prisoners near La Croix."

"Yes," answered Clémenceau, "they offered to show me that sight when I passed, but I refused."

Seeing everybody's astonished look, he added, *"I do not like to see people's misfortunes."*

This shows that the nickname of "Tiger" which had been given to him because of his apparently cruel character and Mongolian appearance was not always justified.

When one has made war and seen thousands of Frenchmen falling under the shells of a powerful enemy, concealed behind inaccessible entrenchments, it is an unequalled satisfaction to see these brutal invaders disarmed and rendered inoffensive.

Neither in myself nor in any of those I saw during the hostilities was this satisfaction mixed with hatred. That did not prevent the satisfaction from being intense. To my knowledge, Clémenceau is the only person who has ever carried the principle of the forgiveness of enemies so far as to fear the sight of their unhappiness and sadness because they have no arms with which to harm his people.

The reason is that Clémenceau, though he said, *"I am making war,"* never actually fought at the front and could not feel the sentiments of those who live in the midst of soldiers who fight and really make war.

Let us go back to the history of the war. In the late days of 1915, General Gouraud, commander of the Fourth Army, succeeded General Pétain as commander of the territory of the Second Army. The latter left the Champagne front with his staff to prepare the battlefield between the Somme and the Oise. The British were to cooperate with him in the proposed offensive. My resi-

dence was Clermont en Beauvoisis, the town in which the Bourbon family originated.

Studies for the offensive were being made on the ground when, on February 21, 1916, during very cold weather and a heavy fall of snow, the news arrived of the German attack on Verdun.

A few days later General Joffre sent the hero of the Champagne offensive, General Pétain, to the rescue of the northeast corner of our defenses. He was the only General who had given us the comforting sight of thousands of German prisoners since the Marne battle.

He had captured many in Champagne. It was not the first time, because as commander of the Thirty-third Army Corps he had given the same tangible proofs of victory north of Arras.

I am not going to attempt the complicated task of describing the Battle of Verdun. I shall confine myself to a few anecdotes relating to the Water Supply Service of which I had charge.

As soon as I arrived on the battlefield of Verdun I requested that the brave and intelligent officers who had admirably organized the service on the Champagne front be sent to me. Thanks to them I was able to prosecute actively the organization of a coherent method for supplying water to the carts of the companies holding the line. I also provided all the troughs necessary for the horses.

On the Verdun front I succeeded in rapidly establishing one hundred and twenty-five stations for the automatic distribution of water to men and horses. I arranged for the springs to give water without pollution.

On every road, well painted boards of red, white and blue gave the troops all the indications necessary for arriving rapidly at the nearest water station. During this very active period I had to make very interesting observations.

The Fort of Douaumont was in time of peace provided with water which was pumped from the Fortress of Verdun. The bombardments having destroyed the pipes, which had been laid near the surface, the fort no longer received water from Verdun. When we retook Douaumont, which had been taken by the Germans at the outset of the Battle of Verdun, we found an incalculable number of bottles of mineral water. They evidently indicated the method employed by the Germans to get healthful water.

I imagined that it was proper to give them a lesson in hydrology. I had seen a spring in the village of Douaumont below the fort. I concluded that it came from a water-carrying layer of limestone above a layer of clay. This water-carrying limestone probably passed beneath the fort.

I ordered a well opened at the lowest point in the fort. When the well was seventeen meters deep, clear water came abundantly. It sufficed for the garrison as long as I was at Verdun, and was pumped out clean and fresh, by hand.

I was pleased to note that our enemies had not found that solution during their long period of occupation of the fort, from February 26 to October 25, 1916, a period of eight months.

I also concentrated my attention on the problem of supplying water to the defenders of the Front of Moulainville.

It was said that this fort had received four hundred and twenty Austrian projectiles, each with a diameter of four hundred and twenty millimeters. These figures are probably exaggerated but they give an idea of the importance of the bombardment. Every time one of these enormous projectiles fell it caused the masonry to tremble like a dead leaf. The walls of the cisterns were filled with fissures which let the water escape. In

spite of that the fort continued to resist, but how was water to be supplied? Here is how I solved the problem. It had been observed that the enemy artillery men rested between three and five A. M. A truce was established under the sign of Morpheus which I made use of. I repaired an old pipe up to within four hundred yards of the fort. I made a pumping station function again. It had been placed in a narrow ravine a few miles from the fort and abandoned for several years. Everybody had forgotten the pumping station and the iron pipe through which it had formerly sent water. Up to within four hundred yards of the fort only an accident could hurt the pipe. Every day at three A. M. the extremity of a fire hose was attached to the end of the iron pipe. The hose was then unrolled and the loose end dropped into a cistern which had been repaired. At the same time the pumping station was set to work and, a few minutes afterwards, water flowed abundantly. At half-past four the hose was rolled up and brought back to the end of the iron pipe.

The shells could again fall on this intervening space without hurting the hose because it had disappeared from the bombarded zone. This regular service was never troubled by the heavy fall of projectiles and the water supply was always ample.

In Champagne, and at the beginning of the Battle of Verdun, I never paid attention to the purification of the water because the whole army had been vaccinated against typhoid during the first part of 1915.

On the other hand, the chlorination prescribed by the G. H. Q. gave the water a repugnant smell and taste which unfortunately recalled the smell of the disinfectant used in the camp toilets. The soldiers absolutely refused to drink the water thus disinfected, or to take soup or coffee prepared with it. Consequently, I did not enforce these inapplicable prescriptions which were

useless after the vaccination of the army against typhoid. But toward July, 1916, great numbers of Indo-Chinese soldiers arrived. They brought two other intestinal diseases called Ambian Dysentery and Bacillery Dysentery.

Against them anti-typhoid vaccinations had no action. A new solution had therefore to be found. This solution, *Verdunization,* is described in the last chapter of this book. Its history is not finished at the present time. After taking root during the Battle of Verdun itself, the new method is spreading all over France. It will save the country from the physical decadence caused by the infectious microbes of its waters. *Verdunization* transforms these microbes into vitamin-carriers which insure the growth of children (Vitamin A) and cure rickets (Vitamin D).

But before opening this last chapter I shall tell how the Battle of Verdun finished for me.

After General Pétain had repulsed the gigantic attack of the Germans on Verdun, which began on February 21, 1916, he was, on the first of May following, promoted to the grade of Commander-in-Chief of the armies of the center.

General Nivelle replaced him at the head of the Second Army and on December 12, 1916, became the successor of the great Marshal Joffre, the illustrious victor of the Marne, as Commander-in-Chief of the Armies. General Nivelle organized a great offensive to take place on April 16, 1917. It was to be fought on either side of Reims, on the hills north of the Aisne, to the west, and on the Champagne mountains, to the east. This offensive did not give the expected results. At the end, mutinies broke out among the troops. Finally Mr. Painlevé, the Minister of War, replaced General Nivelle by General Pétain. A few days later,

lunching at my brother's house with Mr. Briand, the former Premier, I asked him why he had preferred Nivelle, a little known General, to Pétain, as Commander-in-Chief, when the latter had held first rank in the affection and devotion of the army ever since the offensive of Artois and Champagne and the Battle of Verdun.

"It's very simple," answered Briand, "Nivelle promised to break the German front before one year was out. Pétain had begged to wait a year more before giving me the date of the victory. I could not hesitate between the two. I chose Nivelle and I regret it."

Briand astonished me when he said that. I saw in his answer a tendency to neglect the lessons of experience and to prefer the chimeras of vague promises, which are so often used as so-called Democratic policy.

However, it is only just to say that Nivelle, when he commanded the Second Army at Verdun, organized two successful offensives, that of October 24, which gave us back Douaumont, and that of December 15, which enlarged our front around this fort. He was replaced as head of the Second Army by a General of the highest military and moral value, General Guillaumat, who crowned the French sucess at Verdun with the glorious offensive of August 20, 1917, which compensated for the shock suffered by the morale of the army due to the unfruitful results of Nivelle's offensive on April 16.

It is to General Guillaumat that we owe the magnificent preparation for the Macedonian campaign which he carried out as Commander-in-Chief of the International Army of the Orient. His Chief of Staff, Colonel, later General, Dosse cooperated largely in that preparation as well as in the execution of the plan, which was made by General Franchet d'Esperey, now a Marshal. General Dosse was later to gain fame in the Moroccan campaign against Abd el Krim.

Our country owes the high rank of Marshal of France to General Guillaumat for his magnificent services. This debt has not yet been paid.

The last offensive of Verdun, in August, 1917, gave us back Samogneux, Le Mort Homme, and Hill 304.

During this great offensive of 1917, during the early hours of September 3, in an aerial bombardment near Souilly, I was severely wounded. My friend, Major Devaux, was killed at my side at the same time. My right thigh and leg were shattered. My left foot was opened from side to side and its artery cut. A splinter from the bomb entered the flesh on my right side near the hip and opened an enormous wound which extended down to the base of the vertebral column where the coccyx was fractured. The marvellous cure invented by Carrel kept me from a death which would certainly have taken place, three or four days later, without it.

It is worthy of remark that the Carrel fluid, which saved innumerable war wounded, is a solution of chlorine containing twenty-five thousand times more of that gas than is required by Verdunization to purify water.

On Christmas Day, 1917, that is a little more than one hundred and ten days after the date I received my wounds, I went out of the Carrel Hospital at Compiegne* with my left foot in good order and my enormous hip wound sewn up and healed over, but with a wooden leg which the amputation of my right thigh had made indispensable. The war was finished for me but I could still serve France usefully, as will be shown in the next and last chapter.

* It had been here, in October of that year, that I was honored by a call from General John J. Pershing, Commander-in-Chief of the American Expeditionary Force, and my old friend. In his great book, "My Experiences in the World War," General Pershing refers to this visit, and to myself as one "who organized and developed the system of water supply and purification for the French armies."

Chapter X

VERDUNIZATION

Writing this book I have neglected two interesting phases of my life between Panama and Verdun. I must first mention the period when I was President and Chief Engineer of the company building the Western Spanish Railroad. This is the line which permitted General Franco to establish railroad communication between Seville and Salamanca after taking Badajoz. I must also say a word about my cooperation, as director of the Belgian Congo Railway, in the building of the first railway from the ocean to the heart of Equatorial Africa.

Many interesting anecdotes could be related about these two great undertakings, the success of which was due to two of my Panama engineers whom I sent there to direct the work. The first one was led by LeFevre, a graduate of the *École Centrale,* and the second by Espanet, a former cadet of the *École Polytechnique,* who after graduation became an officer in the Navy.

I pass over these two great enterprises because they are not linked, as the other chapters of my career were, to facts of national and international importance. I am going to say a few words about the most extraordinary adventure in my life: the discovery, during the Battle of Verdun, of a biological phenomenon of incalculable importance for France. I have designated by the word *Verdunization* the new method of water purification, based on a hitherto unknown natural law. In order to make people understand its importance let me show the transformations which *Verdunization* has caused

in lives of the inhabitants of Paris and Lyons. These two French capitals are mentioned on account of the great importance of their respective populations and on the perfect accuracy of their statistical records. The beneficial effects of *Verdunization* are everywhere the same.

These two towns and especially Paris have always had a higher mortality than the two neighboring capitals, London and Berlin. If we look up the average annual death rate, during the five years from 1925 to 1929, which preceded the year when *Verdunization* was adopted, we find that it is equal to 14.4 per thousand inhabitants. During the same time it was 12.2 for London and 11.4 for Berlin.

From the day of its application in Paris, that is to say, from the beginning of 1932, the death rate has regularly decreased. Here are the figures per thousand inhabitants: 13 in 1932, 12.8 in 1933, 12.2 in 1934, 12 in 1935 and 11.9 in 1936.

The average during the decade from 1925 to 1934 for London and Berlin is approximately the same as during the five-year period from 1925 to 1929. It was 12.2 in London and 11.3 in Berlin.

This clearly demonstrates that nothing in the general circumstances affected the health of Europe for the better during this period. The gradual improvement in health at Paris is therefore exclusively due to *Verdunization.*

In 1935 and 1936 the Parisian mortality rate had become inferior to the average rate in London from 1925 to 1934, which was 12.2.

Verdunization has thus put an end to the regrettable inferiority of Paris to London in mortality. It is to be expected that once *Verdunization* is applied to all of France, the inferiority of Paris to Berlin will also disappear. This silences the pessimists who pretended that

this high mortality was the unavoidable consequence of our low birth-rate in the past and was therefore incurable.

This reduction in the general mortality is still more valuable from the national point of view because of the part of the population which is particularly favored. If this prolongation of life benefits old people the benefit for France will be small!

On the contrary, it will be great, if children and young men are especially benefited. This is precisely the case.

In 1936 there was a reduction of 17 per cent in the mortality at Paris compared to the average from 1925 to 1929. But for children and young people below the age of twenty this reduction has reached the unlikely figure of 49 per cent.

The reduction in deaths from infantile diarrhœa reached 71 per cent in 1936.

It would not be correct to say that these marvellous results are limited to Paris. At Lyons the progress made was identical.

After the great epidemic of typhoid in 1928 in the suburbs of Lyons, *Verdunization* was adopted in the town itself. The general mortality there was 13 per thousand before 1928. It fell to 10.35 by successive reductions, as in Paris. The fall in the death rate for children and young people below the age of twenty has diminished by 47 per cent, that is to say, by about one-half, just as in Paris.

Can a clearer demonstration be given that national interest requires the generalization of *Verdunization?* It would mean the reduction or even the entire wiping out of the diseases transmitted by water to men and animals: typhoid, dysentery, Malta fever, glanders, hoof and mouth disease. Human and bovine tuberculosis would probably diminish considerably.

Verdunization is also of the highest importance for tropical countries because it stops yellow fever. It does this not because it destroys infectious microbes but because the stegomyia, the mosquito which transports the yellow fever germs, refuses to lay eggs in water deprived of colibacilli. As Verdunized water does not contain these germs and as the stegomyia lives exclusively in men's habitations, the reproduction of these dangerous mosquitoes is hampered by the use of Verdunized water.

I established this fact in a communication to the Academy of Sciences which was read, on November 26, 1928, by Professor Calmette, Assistant Director of the Pasteur Institute. My communication was based on the fact that yellow fever was stopped at Dakar as soon as *Verdunization* was adopted though everybody expected its annual return in the summer of 1928.

The victory thus obtained at Dakar over the most dangerous of tropical diseases without the heavy armament of quarantines and sanitary police surveillance is undoubtedly one of the greatest advances made by man towards protecting human life in the tropics.

History of the Discovery of Verdunization and of the Cause of Its Life-Giving Virtues

In 1915 typhoid fever which had done much damage in the French army at the beginning of the Great War, was stopped by hypo-cutaneous injections of dilutions of dead typhoid microbes. Dr. Wright had found this method to fight the terrible epidemic of typhoid which decimated the garrison of Ladysmith during the Boer War.

In 1916 the French army enjoyed complete protection against typhoid because all the soldiers had been immunized by Dr. Wright's injections.

No attention was therefore paid to the prescriptions of the G. H. Q. to sterilize water with chlorine in order to prevent typhoid.

At this time the method called *Javelization* consisted in putting one to four milligrams of chlorine per liter in the water, that is to say, a quantity giving a detestable taste to the water.

In order to eliminate that bad taste the water was to be treated three to six hours afterwards with hypersulphite of soda in order to eliminate excess chlorine.

The impossibility of carrying out this second treatment during the war made the G. H. Q. suppress it. It only prescribed that one or two decimilligrams of chlorine should remain in the water twenty to thirty minutes after treatment. The surplus chlorine was so detested by the soldiers that they never hesitated throwing the water away and filling their casks with water taken from the nearest shell hole.

The neglect of the prescriptions of G. H. Q. had no inconvenience as the army was protected against typhoid by the injections discovered by Wright at Ladysmith.

Then Indo-Chinese soldiers arrived at Verdun to work in the rear of the first line. They were all carriers of amoebas, which cause dysentery. Against them the anti-typhoid injections were powerless. It was necessary to purify the water but this process was, in fact, inapplicable as I have just said. I then tried to escape from the dilemma, either to let the army be fed with infectious water or to disinfect it in such a way that the soldiers would cease to use the water from the shell holes rather than the purified water with a disgusting taste. I then asked myself whether the heavy doses of chlorine prescribed were really necessary to make the water healthful.

It was known that the really dangerous microbes, such as the Eberth bacilli, the amoebas, etc., were much

less resistant than the colibacilli. The whole system of purification by chlorine was based on the fact that the total destruction of the colibacilli was demonstrating that the weaker and really dangerous microbes had already been wiped out.

As this certainly could only be obtained by making the water distasteful, I decided to look for a proportion of water inferior to that giving the bad taste and to see what proportion of the colibacilli would be destroyed thereby. If I could obtain a substantial reduction of the number of colibacilli, say forty or fifty per cent, I would be sure that the greater part, if not the totality of the dangerous microbes had disappeared, as they are much weaker than the colibacilli. I then ordered the laboratory of the army to employ one-tenth of the minimum quantity of chlorine, in successive tests, and see what the results were. I recommended that they violently agitate the bottle in which the test was being made. The physician in charge of the laboratory evidently thought that such experiments would lead to nothing, but as he was a military man, faithful to his duty, he carried them out conscientiously.

Forty-eight hours later he came back and reported that to his intense surprise, not only a part, but the totality of the *colibacilli* had disappeared. Further experiments, immediately carried out, showed that the same total disappearance of colibacilli took place with one-fiftieth of the minimum of chlorine then prescribed by the G. H. Q. These results can be expressed in ordinary laboratory language by saying that I was obtaining the complete purification of clear water with one part of chlorine for fifty million of water, instead of the quantity prescribed, which was one part per million of water or even one part per two hundred and fifty thousand, in case of great impurity of the water.

I was puzzled myself by this result and immediately thought out the reason for it. My hypothesis was later on demonstrated to be correct. Up to that time the destruction of microbes by chlorine was conceived as resulting from the direct attack of chlorine on the microbes themselves. As the quantity of chlorine used was from fifty to two hundred times smaller than the quantity prescribed by the chemical theory, I imagined that there was another cause for the destruction of the microbes outside of the chemical one. I supposed that the chlorine distributed by the violent agitation of the water would attack only a small percentage of the particles of organic matter disseminated in the water. I further thought that when one of the particles was touched by the chlorine a chemical action took place resulting in the emission of ultra-violet rays all around, and that these ultra-violet rays destroyed all the colibacilli which had had no contact with the chlorine. Of course I had no time to verify that during the war.

But later on, in 1924, Professor Téchomeyers treated the waters of Reims by the new method, which I called *Verdunization* on account of the place of its origin. He made a number of experiments to verify what I had found at Verdun in 1916. When it was fully demonstrated that *Verdunization* was perfectly and easily adaptable to the requirements of a town of one hundred thousand inhabitants, I begged him to end these practical experiments with a purely theoretical one. I asked him to see if quartz tubes, containing polluted water, plunged into water treated by *Verdunization* would undergo its effects. In other words, if, as I thought, ultra-violet rays were developed by the *Verdunization* process they would penetrate the quartz tubes and kill a part of the microbes existing in the polluted water. After sixty experiments it was found that 29.96 per cent of the microbes inside the quartz tubes had disap-

peared. This was the subject of a communication to the Academy of Science by Mr. Jean Perrin, the great theorist of the atom, on May 25, 1925.

This extremely important fact led me to another discovery of capital interest, which I published in a booklet entitled *Radiolyse Chimique* on November 11, 1926. It was a new deduction from the fact that the purification of clear water by *Verdunization* is effected by the emission of ultra-violet rays.

It is known that the marvellous action on health of cod-liver oil is due to the fact that the ultra-violet rays of the sun strike the plankton floating on the surface of the sea. The ultra-violet rays, when they strike a certain substance called ergosterol, existing in the bodies of these animalcules, generate vitamin A (growth) and vitamin D (rickets). These vitamins lodge in the livers of the small fishes feeding on plankton. These small fishes, when eaten by larger ones, transmit to the livers of the latter vitamins A and D. This transfer continues until they arrive in the liver of the cod. This being known and demonstrated, it is clear that the ultra-violet rays generated by *Verdunization* not only kill the microbes but transform them into vitamin carriers. The truth of this conception could not be established until *Verdunization* was applied to great cities. If it were true, the death rate of children and young people would be decreased in much larger proportions than the general death rate. That is precisely what happened in Paris with its population of almost three million inhabitants and in Lyons with its population of almost six hundred thousand. The death rate of children and young people in both these towns was diminished by about half by *Verdunization* while the death rate in general was diminished by 17 per cent in Paris and 20 per cent in Lyons. It is thus perfectly well established, by indisputable statistics, that the phenomenon I discovered

in 1916 during the Battle of Verdun, for the protection of the French army, is the greatest step forward made not only for the eradication of typhoid, dysentery, Malta fever and yellow fever but also for the uplifting of the human race by providing the vitamins necessary for giving robust health to the young.

These marvellous results of *Verdunization* are accompanied by extreme simplicity of operation. The violent agitation of the water essential to the realization of the phenomenon, is automatically accomplished by the passage of the water through the pumps.

It therefore suffices to have the Verdunizing liquid introduced into the suction pipe of the pump.

Such a pump, sucking polluted water from a well, gives perfectly pure water, which can immediately be used for drinking. No laboratory is any longer necessary to measure the exact proportion of chlorine which has to be used, according to the amount of organic matter in the water.

Thus, all the drawbacks of the old system, called chlorination in England and America, and *Javelization* in France, which are based on the use of an excess of chlorine and on a second treatment with hyposulphite of soda, disappear entirely. Though the *Conseil Supérieur d'Hygiène* and the Department of Public Health, following the example of Dr. Roux, Director of the Pasteur Institute, have always opposed the recommendation of *Verdunization,* the most striking demonstrations of its wonderful utility have been made in many places.

The attitude of the towns has been made manifest in many ways. The towns of Paris and Lisbon have awarded me gold medals, their highest decorations. The towns of Carcassonne, Reims, Lyons and Dieppe have had a medal coined for me, the three first ones with my effigy. The towns of Auxerre, Bar-le-Duc, Dieppe,

Carcassonne and Calvi, in Corsica, have granted me the title of Citizen of Honor. Two cities, Calvi and Carcassonne, have each named one of their finest avenues after me.

One of the testimonies to which I attach the greatest importance comes from the illustrious Dr. Carrel:

"September 12, 1936
Saint-Martin en Haut Rhone.

"My dear friend:

"I have just returned home from Italy and found the invitation of the President of the Board of Aldermen of Paris to attend the ceremony of September 10 at which you received the Great Medal of Paris. I regret very much that my absence has prevented me from witnessing that ceremony. It would have been a great pleasure for me to have been among those who applauded the public recognition of your great work.

"Nobody, more than you, deserved this token of the appreciation of your compatriots. Indeed the consequences of the campaign that you have led to propagate your ideas on the sterilization of water are immense. All over the country you have attacked one of the most common causes of disease and death.

"You will thus save more human beings from disease and death than all the physicians of France together.

Yours most cordially,
ALEXIS CARREL."

The testimony of a man who saved so many human lives, including my own, during the war by his marvellous method is a fitting end to the chapter devoted to *Verdunization.*

It is in striking contrast to the indifference shown by the government. How can a government be qualified as such when it does not take advantage of a method of

improving the general health of the nation, and putting a stop to the excess of deaths over births, characteristic of recent years?

CONCLUSION

I have now finished the true story of the fights I carried on to protect my beloved France from the errors due to the governments born from the defective constitution of 1875. Many men were at the rudder of the ship of state whose intelligence and high capacity would have been of immense utility to the country if they had had sufficient time to till the ground and cultivate what they planted. But what could be expected of these men when, for sixty-two years, they had only an average of eight months of power?

Let this book show France what is defective in her political organization. It will be the supreme reward of my life, if she sees it through these pages.

THE END

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